172.101 App A

Appendix A to §172.101 - List of Hazardous Substances and Reportable Quantities

1. This Appendix lists materials and their corresponding reportable quantities (RQ's) that are listed or designated as "hazardous substances" under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601(14) (CERCLA; 42 U.S.C. 9601 *et seq*). This listing fulfills the requirement of CERCLA, 42 U.S.C. 9656(a), that all ``hazardous substances," as defined in 42 U.S.C. 9601(14), be listed and regulated as hazardous materials under 49 U.S.C. 5101-5127. That definition includes substances listed under sections 311(b)(2)(A) and 307(a) of the Federal Water Pollution Control Act, 33 U.S.C. 1321(b)(2)(A) and 1317(a), section 3001 of the Solid Waste Disposal Act, 42 U.S.C. 6921, and section 112 of the Clean Air Act, 42 U.S.C. 7412. In addition, this list contains materials that the Administrator of the Environmental Protection Agency has determined to be hazardous substances in accordance with section 102 of CERCLA, 42 U.S.C. 9602. It should be noted that 42 U.S.C. 9656(b) provides that common and contract carriers may be held liable under laws other than CERCLA for the release of a hazardous substance as defined in that Act, during transportation that commenced before the effective date of the listing and regulating of that substance as a hazardous material under 49 U.S.C. 5101-5127.

2. This Appendix is divided into two TABLES which are entitled "TABLE 1-HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES" and "TABLE 2-RADIONUCLIDES." A material listed in this Appendix is regulated as a hazardous material and a hazardous substance under this subchapter if it meets the definition of a hazardous substance in §171.8 of this subchapter.

3. The procedure for selecting a proper shipping name for a hazardous substance is set forth in §172.101(c)(8).

4. Column 1 of TABLE 1, entitled "Hazardous substance", contains the names of those elements and compounds that are hazardous substances. Following the listing of elements and compounds is a listing of waste streams. These waste streams appear on the list in numerical sequence and are referenced by the appropriate "D", "F", or "K" numbers. Column 2 of TABLE 1, entitled "Reportable quantity (RQ)", contains the reportable quantity (RQ), in pounds and kilograms, for each hazardous substance listed in Column 1 of TABLE 1.

5. A series of notes is used throughout TABLE 1 and TABLE 2 to provide additional information concerning certain hazardous substances. These notes are explained at the end of each TABLE.

6. TABLE 2 lists radionuclides that are hazardous substances and their corresponding RQ's. The RQ's in Table 2 for radionuclides are expressed in units of curies and terabecquerels, whereas those in Table 1 are expressed in units of pounds and kilograms. If a material is listed in both Table 1 and Table 2, the lower RQ shall apply. Radionuclides are listed in alphabetical order. The RQ's for radionuclides are given in the radiological unit of measure of curie, abbreviated ``Ci", followed, in parentheses, by an equivalent unit measured in terabecquerels, abbreviated ``TBq".

7. For mixtures of radionuclides, the following requirements shall be used in determining if a package contains an RQ of a hazardous

substance: (i) if the identity and quantity (in curies or terabecquerels) of each radionuclide in a mixture or solution is known, the ratio between the quantity per package (in curies or terabecquerels) and the RQ for the radionuclide must be determined for each radionuclide. A package contains an RQ of a hazardous substance when the sum of the ratios for the radionuclides in the mixture or solution is equal to or greater than one; (ii) if the identity of each radionuclide in a mixture or solution is known but the quantity per package (in curies or terabecquerels) of one or more of the radionuclides is unknown, an RQ of a hazardous substance is present in a package when the total quantity (in curies or terabecquerels) of the mixture or solution is equal to or greater than the lowest RQ of any individual radionuclide in the mixture or solution; and (iii) if the identity of one or more radionuclides in a mixture or solution is unknown (or if the identity of a radionuclide by itself is unknown), an RQ of a hazardous substance is present when the total quantity (in curies or terabecquerels) in a package is equal to or greater than either one curie or the lowest RQ of any known individual radionuclide in the mixture or solution, whichever is lower.

List of Hazardous Substances and Reportable Quantities

Table 1.-Hazardous Substances Other Than Radionuclides

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Acenaphthene	100 (45.4)
Acenaphthylene	5000 (2270)
Acetaldehyde	1000 (454)
Acetaldehyde, chloro-	1000 (454)
Acetaldehyde, trichloro-	5000 (2270)
Acetamide	100 (45.4)
Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	100 (45.4)
Acetamide, N-fluoren-2-yl-	1 (0.454)
Acetamide, 2-fluoro-	100 (45.4)
Acetic acid	5000 (2270)
Acetic acid (2,4-dichlorophenoxy)-	100 (45.4)
Acetic acid, ethyl ester	5000 (2270)
Acetic acid, fluoro-, sodium salt	10 (4.54)
Acetic acid, lead (2+) salt	10 (4.54)
Acetic acid, thallium(I+) salt	1000 (454)
Acetic anhydride	5000 (2270)
Acetone	5000 (2270)
Acetone cyanohydrin	10 (4.54)
Acetonitrile	5000 (2270)
Acetophenone	5000 (2270)

2-Acetylaminofluorene	1 (0.454)
Acetyl bromide	5000 (2270)
Acetyl chloride	5000 (2270)
1-Acetyl-2-thiourea	1 (0.454)
Acrylamide	5000 (2270)
Acrylic acid	5000 (2270)
Acrylonitrile	100 (45.4)
Adipic acid	5000 (2270)
AldicarbD1 (0.454)	
Aldrin	1 (0.454)
Allyl alcohol	100 (45.4)
Allyl chloride	1000 (454)
Aluminum phosphide	100 (45.4)
Aluminum sulfate	5000 (2270)
4-Aminobiphenyl	1 (0.454)
5-(Aminomethyl)-3-isoxazolol	1000 (454)
4-Aminopyridine	1000 (454)
Amitrole	10 (4.54)
Ammonia	100 (45.4)
Ammonium acetate	5000 (2270)
Ammonium benzoate	5000 (2270)
Ammonium bicarbonate	5000 (2270)
Ammonium bichromate	10 (4.54)
Ammonium bifluoride	100 (45.4)
Ammonium bisulfite	5000 (2270)
Ammonium carbamate	5000 (2270)
Ammonium carbonate	5000 (2270)
Ammonium chloride	5000 (2270)
Ammonium chromate	10 (4.54)
Ammonium citrate, dibasic	5000 (2270)
Ammonium dichromate @	10 (4.54)
Ammonium fluoborate	5000 (2270)
Ammonium fluoride	100 (45.4)
Ammonium hydroxide	1000 (454)
Ammonium oxalate	5000 (2270)
Ammonium picrate	10 (4.54)
Ammonium silicofluoride	1000 (454)
Ammonium sulfamate	5000 (2270)
Ammonium sulfide	100 (45.4)
Ammonium sulfite	5000 (2270)
Ammonium tartrate	5000 (2270)
Ammonium thiocyanate	5000 (2270)
Ammonium vanadate	1000 (454)

Amyl acetate	5000 (2270)
iso-Amyl acetate	
sec-Amyl acetate	
tert-Amyl acetate	
Aniline	5000 (2270)
o-Anisidine	100 (45.4)
Anthracene	5000 (2270)
Antimony ¢	5000 (2270)
Antimony pentachloride	1000 (454)
Antimony potassium tartrate	100 (45.4)
Antimony tribromide	1000 (454)
Antimony trichloride	1000 (454)
Antimony trifluoride	1000 (454)
Antimony trioxide	1000 (454)
Argentate(1-), bis(cyano-C)-, potassium	1 (0.454)
Aroclor 1016	1 (0.454)
Aroclor 1221	1 (0.454)
Aroclor 1232	1 (0.454)
Aroclor 1242	1 (0.454)
Aroclor 1248	1 (0.454)
Aroclor 1254	1 (0.454)
Aroclor 1260	1 (0.454)
Arsenic ¢	1 (0.454)
Arsenic acid	1 (0.454)
Arsenic acid H3AsO4	1 (0.454)
Arsenic disulfide	1 (0.454)
Arsenic oxide As203	1 (0.454)
Arsenic oxide As205	1 (0.454)
Arsenic pentoxide	1 (0.454)
Arsenic trichloride	1 (0.454)
Arsenic trioxide	1 (0.454)
Arsenic trisulfide	1 (0.454)
Arsine, diethyl-	1 (0.454)
Arsinic acid, dimethyl-	1 (0.454)
Arsonous dichloride, phenyl-	1 (0.454)
Asbestos ¢¢	1 (0.454)
Auramine100 (45.4)	
Azaserine	1 (0.454)
Aziridine	1 (0.454)
Aziridine, 2-methyl-	1 (0.454)
Azirino[2',3':3,4]pyrrolo(1,2-a)indole-4,7-dione,6- amino-8-[[(aminocarbonyl)oxy] methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-, [1aS-[aalpha,8beta,8aalpha,8balpha)]-	10 (4.54)

Barium cyanide	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	10 (4.54)
Benz[c]acridine	100 (45.4)
3,4-Benzacridine	100 (45.4)
Benzal chloride	5000 (2270)
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)	5000 (2270)
Benz[a]anthracene	10 (4.54)
1,2-Benzanthracene	10 (4.54)
Benz[a]anthracene, 7,12-dimethyl-	1 (0.454)
Benzenamine	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	100 (45.4)
Benzenamine, 4-chloro-	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	100 (45.4)
Benzenamine, N,N-dimethyl-4-(phenylazo)-	10 (4.54)
Benzenamine, 2-methyl-	100 (45.4)
Benzenamine, 4-methyl-	100 (45.4)
Benzenamine, 4,4'-methylenebis(2-chloro-	10 (4.54)
Benzenamine, 2-methyl-, hydrochloride	100 (45.4)
Benzenamine, 2-methyl-5-nitro-	100 (45.4)
Benzenamine, 4-nitro-	5000 (2270)
Benzene	10 (4.54)
Benzene, 1-bromo-4-phenoxy-	100 (45.4)
Benzene, chloro-	100 (45.4)
Benzene, chloromethyl-	100 (45.4)
Benzene, 1,2-dichloro-	100 (45.4)
Benzene, 1,3-dichloro-	100 (45.4)
Benzene, 1,4-dichloro-	100 (45.4)
Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro	1 (0.454)
Benzene, dichloromethyl-	5000 (2270)
Benzene, 1,3-diisocyanatomethyl	100 (45.4)
Benzene, dimethyl-	100 (45.4)
Benzene, m-dimethyl-	1000 (454)
Benzene, o-dimethyl-	1000 (454)
Benzene, p-dimethyl-	100 (45.4)
Benzene, hexachloro-	10 (4.54)
Benzene, hexahydro-	1000 (454)
Benzene, hydroxy-	1000 (454)
Benzene, methyl-	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	10 (4.54)
Benzene, 2-methyl-1,3-dinitro-	100 (45.4)
Benzene, 1-methylethyl-	5000 (2270)
Benzene, nitro-	1000 (454)
Benzene, pentachloro-	10 (4.54)

Benzene, pentachloronitro-	100 (45.4)
Benzene, 1,2,4,5-tetrachloro-	5000 (2270)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	1 (0.454)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy)-	1 (0.454)
Benzene, (trichloromethyl)	10 (4.54)
Benzene, 1,3,5-trinitro-	10 (4.54)
Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	10 (4.54)
Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	10 (4.54)
Benzenediamine, ar-methyl-	10 (4.54)
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester	100 (45.4)
1,2-Benzenedicarboxylic acid, dibutyl ester	10 (4.54)
1,2-Benzenedicarboxylic acid, diethyl ester	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	5000 (2270)
1,2-Benzenedicarboxylic acid, dioctyl ester	5000 (2270)
1,3-Benzenediol	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	5000 (2270)
Benzeneethanamine, alpha,alpha-dimethyl-	5000 (2270)
Benzenesulfonic acid chloride	100 (45.4)
Benzenesulfonyl chloride	100 (45.4)
Benzenethiol	100 (45.4)
Benzidine	1 (0.454)
1,2-Benzisothiazol-3(2H)-one,1,1-dioxide	100 (45.4)
Benzo[a]anthracene	10 (4.54)
1,3-Benzodioxole, 5-(2-propenyl)-	100 (45.4)
1,3-Benzodioxole, 5-(1-propenyl)-	100 (45.4)
1,3-Benzodioxole, 5-propyl-	10 (4.54)
Benzo[b]fluoranthene	1 (0.454)
Benzo[k]fluoranthene	5000 (2270)
Benzo[j,k]fluorene	100 (45.4)
Benzoic acid	5000 (2270)
Benzonitrile	5000 (2270)
Benzo[g,h,i]perylene	5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%	100 (45.4)
Benzo[a]pyrene	1 (0.454)
3,4-Benzopyrene	1 (0.454)
p-Benzoquinone	10 (4.54)
Benzo [rst]pentaphene	10 (4.54)
Benzotrichloride	10 (4.54)
Benzoyl chloride	1000 (454)
1,2-Benzphenanthrene	100 (45.4)
Benzyl chloride	100 (45.4)

Beryllium ¢	10 (4.54)
Beryllium chloride	1 (0.454)
Beryllium dust ¢	10 (4.54)
Beryllium fluoride	1 (0.454)
Beryllium nitrate	1 (0.454)
alpha - BHC	10 (4.54)
beta - BHC	1 (0.454)
delta - BHC	1 (0.454)
gamma - BHC	1 (0.454)
2,2'Bioxirane	10 (4.54)
Biphenyl	100 (45.4)
(1,1'-Biphenyl)-4,4'-diamine	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethoxy-	10 (4.54)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethyl-	10 (4.54)
Bis(2-chloroethoxy) methane	1000 (454)
Bis(2-chloroethyl) ether	10 (4.54)
Bis(2-ethylhexyl)phthalate	100 (45.4)
Bromoacetone	1000 (454)
Bromoform	100 (45.4)
4-Bromophenyl phenyl etherD100 (45.4)	
Brucine	100 (45.4)
1,3-Butadiene	10 (4.54)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1 (0.454)
1-Butanamine, N-butyl-N-nitroso-	10 (4.54)
1-Butanol	5000 (2270)
2-Butanone	5000 (2270)
2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl] oxime	100 (45.4)
2-Butanone peroxide	10 (4.54)
2-Butenal	100 (45.4)
2-Butene, 1,4-dichloro-	1 (0.454)
2-Butenoic acid, 2-methyl-,7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*, 3R*), 7aalpha]]-	10 (4.54)
Butyl acetate	5000 (2270)
iso-Butyl acetate	
sec-Butyl acetate	
tert-Butyl acetate	
n-Butyl alcohol	5000 (2270)
Butylamine	1000 (454)
iso-Butylamine	
sec-Butylamine	
tert-Butylamine	

Butyl benzyl phthalate	100 (45.4)
n-Butyl phthalate	10 (4.54)
Butyric acid	5000 (2270)
iso-Butyric acid	
Cacodylic acid	1 (0.454)
Cadmium ¢	10 (4.54)
Cadmium acetate	10 (4.54)
Cadmium bromide	10 (4.54)
Cadmium chloride	10 (4.54)
Calcium arsenate	1 (0.454)
Calcium arsenite	1 (0.454)
Calcium carbide	10 (4.54)
Calcium chromate	10 (4.54)
Calcium cyanamide	1000 (454)
Calcium cyanide	10 (4.54)
Calcium cyanide Ca(CN)2	10 (4.54)
Calcium dodecylbenzene sulfonate	1000 (454)
Calcium hypochlorite	10 (4.54)
Camphene, octachloro-	1 (0.454)
Captan	10 (4.54)
Carbamic acid, ethyl ester	100 (45.4)
Carbamic acid, methylnitroso-, ethyl ester	1 (0.454)
Carbamic chloride, dimethyl-	1 (0.454)
Carbamide, thio-	10 (4.54)
Carbamimidoselenoic acid	1000 (454)
Carbamothioic acid, bis (1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	100 (45.4)
Carbaryl	100 (45.4)
Carbofuran	10 (4.54)
Carbon bisulfide	100 (45.4)
Carbon disulfide	100 (45.4)
Carbonic acid, dithallium (I+)	100 (45.4)
Carbonic dichloride	10 (4.54)
Carbonic difluoride	1000 (454)
Carbonochloridic acid, methyl ester	1000 (454)
Carbon oxyfluoride	1000 (454)
Carbon tetrachloride	10 (4.54)
Carbonyl sulfide	100 (45.4)
Catechol	100 (45.4)
Chloral	5000(2270)
Chloramben	100 (45.4)
Chlorambucil	10 (4.54)
Chlordane	1 (0.454)
Chlordane, alpha & gamma isomers	1 (0.454)

Chlordane, technical	1 (0.454)
Chlorine	10 (4.54)
Chlornaphazine	100 (45.4)
Chloroacetaldehyde	1000 (454)
Chloroacetic acid	100 (45.4)
2-Chloroacetophenone	100 (45.4)
p-Chloroaniline	1000 (454)
Chlorobenzene	100 (45.4)
Chlorobenzilate	10 (4.54)
4-Chloro-m-cresol	5000 (2270)
p-Chloro-m-cresol	5000 (2270)
Chlorodibromomethane	100 (45.4)
Chloroethane	100 (45.4)
2-Chloroethyl vinyl ether	1000 (454)
Chloroform	10 (4.54)
Chloromethane	100 (45.4)
Chloromethyl methyl ether	1 (0.454)
beta-Chloronaphthalene	5000 (2270)
2-Chloronaphthalene	5000 (2270)
2-Chlorophenol	100 (45.4)
o-Chlorophenol	100 (45.4)
4-Chlorophenyl phenyl ether	5000 (2270)
1-(o-Chlorophenyl)thiourea	100 (45.4)
Chloroprene	100 (45.4)
3-Chloropropionitrile	1000 (454)
Chlorosulfonic acid	1000 (454)
4-Chloro-o-toluidine, hydrochloride	100 (45.4)
Chlorpyrifos	1 (0.454)
Chromic acetate	1000 (454)
Chromic acid	10 (4.54)
Chromic acid H2CrO4, calcium salt	10 (4.54)
Chromic sulfate	1000 (454)
Chromium ¢	5000 (2270)
Chromous chloride	1000 (454)
Chrysene	100 (45.4)
Cobaltous bromide	1000 (454)
Cobaltous formate	1000 (454)
Cobaltous sulfamate	1000 (454)
Coke Oven Emissions	1 (0.454)
Copper ¢	5000 (2270)
Copper chloride @	10 (4.54)
Copper cyanide	10 (4.54)
Copper cyanide CuCN	10 (4.54)

Coumaphos	10 (4.54)
Creosote	1 (0.454)
Cresols (isomers and mixture)	100 (45.4)
m-Cresol	100 (45.4)
o-Cresolo	100 (45.4)
p-Cresol	100 (45.4)
Cresylic acid (isomers and mixture)	100 (45.4)
m-Cresylic acid	100 (45.4)
o-Cresylic acid	100 (45.4)
p-Cresylic acid	100 (45.4)
Crotonaldehyde	100 (45.4)
Cumene	5000 (2270)
Cupric acetate	100 (45.4)
Cupric acetoarsenite	1 (0.454)
Cupric chloride	10 (4.54)
Cupric nitrate	100 (45.4)
Cupric oxalate	100 (45.4)
Cupric sulfate	10 (4.54)
Cupric sulfate ammoniated	100 (45.4)
Cupric tartrate	100 (45.4)
Cyanides (soluble salts and complexes) not otherwise specified	10 (4.54)
Cyanogen	100 (45.4)
Cyanogen bromide	1000 (454)
Cyanogen bromide (CN)Br	1000 (454)
Cyanogen chloride	10 (4.54)
Cyanogen chloride (CN)Cl	10 (4.54)
2,5-Cyclohexadiene-1,4-dione	10 (4.54)
Cyclohexane	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	1 (0.454)
Cyclohexanone	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	10 (4.54)
Cyclophosphamide	10 (4.54)
2,4-D Acid	100 (45.4)
2,4-D Ester	100 (45.4)
Daunomycin	10 (4.54)
DDD	1 (0.454)
4,4'-DDD	1 (0.454)
DDE	5000 (2270)
4,4'-DDE	5000 (2270)
DDE	1 (0.454)
4,4'-DDE	1 (0.454)

DDT	1 (0.454)
4,4'-DDT	1 (0.454)
Diallate	100 (45.4)
Diamine	1 (0.454)
Diazinon	1 (0.454)
Diazomethane	100 (45.4)
Dibenz[a,h]anthracene	1 (0.454)
1,2:5,6-Dibenzanthracene	1 (0.454)
Dibenzo[a,h]anthracene	1 (0.454)
Dibenzofuran	100 (45.4)
Dibenz[a,i]pyrene	10 (4.54)
1,2-Dibromo-3-chloropropane	1 (0.454)
Dibutyl phthalate	10 (4.54)
Di-n-butyl phthalate	10 (4.54)
Dicamba	1000 (454)
Dichlobenil	100 (45.4)
Dichlone	1 (0.454)
Dichlorobenzene	100 (45.4)
1,2-Dichlorobenzene	100 (45.4)
1,3-Dichlorobenzene	100 (45.4)
1,4-Dichlorobenzene	100 (45.4)
m-Dichlorobenzene	100 (45.4)
o-Dichlorobenzene	100 (45.4)
p-Dichlorobenzene	100 (45.4)
3,3'-Dichlorobenzidine	1 (0.454)
Dichlorobromomethane	5000 (2270)
1,4-Dichloro-2-butene	1 (0.454)
Dichlorodifluoromethane	5000 (2270)
1,1-Dichloroethane	1000 (454)
1,2-Dichloroethane	100 (45.4)
1,1-Dichloroethylene	100 (45.4)
1,2-Dichloroethylene	1000 (454)
Dichloroethyl ether	10 (4.54)
Dichloroisopropyl-ether	1000 (454)
Dichloromethane @	1000 (454)
Dichloromethoxy ethane	1000 (454)
Dichloromethyl ether	1 (0.454)
2,4-Dichlorophenol	100 (45.4)
2,6-Dichlorophenol	100 (45.4)
Dichlorophenylarsine	1 (0.454)
Dichloropropane	1000 (454)
1,1-Dichloropropane	
1,3-Dichloropropane	

1,2-Dichloropropane	1000 (454)
Dichloropropane - Dichloropropene (mixture)	100 (45.4)
Dichloropropene	100 (45.4)
2,3-Dichloropropene	
1,3-Dichloropropene	100 (45.4)
2,2-Dichloropropionic acid	5000 (2270)
Dichlorvos	10 (4.54)
Dicofol	10 (4.54)
Dieldrin	1 (0.454)
1,2:3,4-Diepoxybutane	10 (4.54)
Diethanolamine	100 (45.4)
Diethylamine	1000 (454)
N,N-diethylaniline	1000 (454)
Diethylarsine	1 (0.454)
1,4-Diethylenedioxide	100 (45.4)
Diethylhexyl phthalate	100 (45.4)
N,N´-Diethylhydrazine	10 (4.54)
O,O-Diethyl S-methyl dithiophosphate	5000 (2270)
Diethyl-p-nitrophenyl phosphate	100 (45.4)
Diethyl phthalate	1000(454)
O,O-Diethyl O-pyrazinyl phosphorothioate	100 (45.4)
Diethylstilbestrol	1 (0.454)
Diethyl sulfate	10 (4.54)
Dihydrosafrole	10 (4.54)
Diisopropyl fluorophosphate	100 (45.4)
1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1alpha,4alpha,4abeta,5abeta,8beta,8abeta)-	1 (0.454)
1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-	1 (0.454)
2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-	1 (0.454)
2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-	1 (0.454)
Dimethoate	10 (4.54)
3,3´-Dimethoxybenzidine	10 (4.54)
Dimethylamine	1000 (454)
p-Dimethylaminoazobenzene	10 (4.54)
N,N-dimethylaniline	100 (45.4)
7,12-Dimethylbenz[a]anthracene	1 (0.454)
3,3´-Dimethylbenzidine	10 (4.54)
alpha,alpha-Dimethylbenzylhydroperoxide	10 (4.54)
Dimethylcarbamoyl chloride	1 (0.454)
Dimethylformamide	100 (45.4)

1,1-Dimethylhydrazine	10 (4.54)
1,2-Dimethylhydrazine	1 (0.454)
Dimethylhydrazine, unsymmetrical @	10 (4.54)
alpha,alpha-Dimethylphenethylamine	5000 (2270)
12,4-Dimethylphenol	100 (45.4)
Dimethyl phthalate	5000 (2270)
Dimethyl sulfate	100 (45.4)
Dinitrobenzene (mixed)	100 (45.4)
m-Dinitrobenzene	
o-Dinitrobenzene	
p-Dinitrobenzene	
4,6-Dinitro-o-cresol and salts	10 (4.54)
Dinitrogen tetroxide @	10 (4.54)
Dinitrophenol	10 (4.54)
2,5-Dinitrophenol	
2,4-Dinitrophenol	10 (4.54)
Dinitrotoluene	10 (4.54)
3,4-Dinitrotoluene	
2,4-Dinitrotoluene	10 (4.54)
2,6-Dinitrotoluene	100 (45.4)
Dinoseb	1000 (454)
Di-n-octyl phthalate	5000 (2270)
1,4-Dioxane	100 (45.4)
1,2-Diphenylhydrazine	10 (4.54)
Diphosphoramide, octamethyl-	100 (45.4)
Diphosphoric acid, tetraethyl ester	10 (4.54)
Dipropylamine	5000 (2270)
Di-n-propylnitrosamine	10 (4.54)
Diquat	1000 (454)
Disulfoton	1 (0.454)
Dithiobiuret	100 (45.4)
Diuron	100 (45.4)
Dodecylbenzenesulfonic acid	1000 (454)
2,4-D, salts and esters	100 (45.4)
Endosulfan	1 (0.454)
alpha-Endosulfan	1 (0.454)
beta-Endosulfan	1 (0.454)
Endosulfan sulfate	1 (0.454)
Endothall	1000 (454)
Endrin	1 (0.454)
Endrin, & metabolites	1 (0.454)
Endrin aldehyde	1 (0.454)
Epichlorohydrin	100 (45.4)

Epinephrine	1000 (454)
1,2-Epoxybutane	100 (45.4)
Ethanal	1000 (454)
Ethanamine, N-ethyl-N-nitroso-	1 (0.454)
Ethane, 1,2-dibromo-	1 (0.454)
Ethane, 1,1-dichloro-	1000 (454)
Ethane, 1,2-dichloro-	100 (45.4)
Ethane, hexachloro-	100 (45.4)
Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	1000 (454)
Ethane, 1,1'-oxybis-	100 (45.4)
Ethane, 1,1'-oxybis(2-chloro-	10 (4.54)
Ethane, pentachloro-	10 (4.54)
Ethane, 1,1,1,2-tetrachloro-	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	100 (45.4)
Ethane, 1,1,2-trichloro-	100 (45.4)
Ethane, 1,1,1-trichloro-	1000 (454)
1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'- (2-thienyl-methyl)-	5000 (2270)
Ethanedinitrile	100 (45.4)
Ethanenitrile	5000 (2270)
Ethanethioamide	10 (4.54)
Ethanimidothioic acid, N-[[(methylamino)carbonyl] oxy]-, methyl ester	100 (45.4)
Ethanol, 2-ethoxy-	1000 (454)
Ethanol, 2,2'-(nitrosoimino)bis-	1 (0.454)
Ethanone, 1-phenyl-	5000 (2270)
Ethanoyl chloride	5000 (2270)
Ethene, chloro-	1 (0.454)
Ethene, 2-chloroethoxy-	1000 (454)
Ethene, 1,1-dichloro-	100 (45.4)
Ethene, 1,2-dichloro- (E)	1000 (454)
Ethene, tetrachloro-	100 (45.4)
Ethene, trichloro-	100 (45.4)
Ethion	10 (4.54)
Ethyl acetate	5000 (2270)
Ethyl acrylate	1000 (454)
Ethylbenzene	1000 (454)
Ethyl carbamate (Urethan)	100 (45.4)
Ethyl chloride @	100 (45.4)
Ethyl cyanide	10 (4.54)
Ethylene dibromide	1 (0.454)
Ethylene dichloride	100 (45.4)
Ethylene glycol	5000 (2270)
Ethylene glycol monoethyl ether	1000 (454)
Ethylene oxide	10 (4.54)

Ethylenebisdithiocarbamic acid	5000 (2270)
Ethylenebisdithiocarbamic acid, salts and esters	5000 (2270)
Ethylenediamine	5000 (2270)
Ethylenediamine tetraacetic acid (EDTA)	5000 (2270)
Ethylenethiourea	10 (4.54)
Ethylenimine	1 (0.454)
Ethyl ether	100 (45.4)
Ethylidene dichloride	1000 (454)
Ethyl methacrylate	1000 (454)
Ethyl methanesulfonate	1 (0.454)
Ethyl methyl ketone @	5000 (2270)
Famphurdimethylester	1000 (454)
Ferric ammonium citrate	1000 (454)
Ferric ammonium oxalate	1000 (454)
Ferric chloride	1000 (454)
Ferric fluoride	100 (45.4)
Ferric nitrate	1000 (454)
Ferric sulfate	1000 (454)
Ferrous ammonium sulfate	1000 (454)
Ferrous chloride	100 (45.4)
Ferrous sulfate	1000 (454)
Fluoranthene	100 (45.4)
Fluorene	5000 (2270)
Fluorine	10 (4.54)
Fluoroacetamide	100 (45.4)
Fluoroacetic acid, sodium salt	10 (4.54)
Formaldehyde	100 (45.4)
Formic acid	5000 (2270)
Fulminic acid, mercury(2+)salt	10 (4.54)
Fumaric acid	5000 (2270)
Furan	100 (45.4)
Furan, tetrahydro-	1000 (454)
2-Furancarboxaldehyde	5000 (2270)
2,5-Furandione	5000 (2270)
Furfural	5000 (2270)
Furfuran	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	1 (0.454)
D-Glucose, 2-deoxy-2-[[methylnitrosoamino)-carbonyl]amino]-	1 (0.454)
Glycidylaldehyde	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	10 (4.54)
Guthion	1 (0.454)
Heptachlor	1 (0.454)
Heptachlor epoxide	1 (0.454)

Hexachlorobenzene	10 (4.54)
Hexachlorobutadiene	1 (0.454)
Hexachlorocyclohexane (gamma isomer)	1 (0.454)
Hexachlorocyclopentadiene	10 (4.54)
Hexachloroethane	100 (45.4)
1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene	1 (0.454)
Hexachlorophene	100 (45.4)
Hexachloropropene	1000 (454)
Hexaethyl tetraphosphate	100 (45.4)
Hexamethylene-1,6-diisocyanate	100 (45.4)
Hexamethylphosphoramide	1 (0.454)
Hexane	5000 (2270)
Hydrazine	1 (0.454)
Hydrazine, 1,2-diethyl-	10 (4.54)
Hydrazine, 1,1-dimethyl-	10 (4.54)
Hydrazine, 1,2-dimethyl-	1 (0.454)
Hydrazine, 1,2-diphenyl-	10 (4.54)
Hydrazine, methyl-	10 (4.54)
Hydrazinecarbothioamide	100 (45.4)
Hydrochloric acid	5000 (2270)
Hydrocyanic acid	10 (4.54)
Hydrofluoric acid	100 (45.4)
Hydrogen chloride	5000 (2270)
Hydrogen cyanide	10 (4.54)
Hydrogen fluoride	100 (45.4)
Hydrogen phosphide	100 (45.4)
Hydrogen sulfide	100 (45.4)
Hydrogen sulfide H2S	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	10 (4.54)
Hydroquinone	100 (45.4)
2-Imidazolidinethione	10 (4.54)
Indeno(1,2,3-cd)pyrene	100 (45.4)
1,3-Isobenzofurandione	5000 (2270)
Isobutyl alcohol	5000 (2270)
Isodrin	1 (0.454)
Isophorone	5000 (2270)
Isoprene	100 (45.4)
Isopropanolamine dodecylbenzene sulfonate	1000 (454)
Isosafrole	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	1000 (454)
Keponedecachloroc-tahydro-	1 (0.454)
Lasiocarpine	10 (4.54)

Lead ¢	10 (4.54)
Lead acetate	10 (4.54)
Lead arsenate	1 (0.454)
Lead, bis(acetato-O)tetrahydroxytri	10 (4.54)
Lead chloride	10 (4.54)
Lead fluoborate	10 (4.54)
Lead fluoride	10 (4.54)
Lead iodide	10 (4.54)
Lead nitrate	10 (4.54)
Lead phosphate	10 (4.54)
Lead stearate	10 (4.54)
Lead subacetate	10 (4.54)
Lead sulfate	10 (4.54)
Lead sulfide	10 (4.54)
Lead thiocyanate	10 (4.54)
Lindane	1 (0.454)
Lithium chromate	10 (4.54)
Malathion	100 (45.4)
Maleic acid	5000 (2270)
Maleic anhydride	5000 (2270)
Maleic hydrazide	5000 (2270)
Malononitrile	1000 (454)
MDI	5000 (2270)
Melphalan	1 (0.454)
Mercaptodimethur	10 (4.54)
Mercuric cyanide	1 (0.454)
Mercuric nitrate	10 (4.54)
Mercuric sulfate	10 (4.54)
Mercuric thiocyanate	10 (4.54)
Mercurous nitrate	10 (4.54)
Mercury	1 (0.454)
Mercury, (acetato-O)phenyl-	100 (45.4)
Mercury fulminate	10 (4.54)
Methacrylonitrile	1000 (454)
Methanamine, N-methyl-	1000 (454)
Methanamine, N-methyl-N-nitroso	10 (4.54)
Methane, bromo-	1000 (454)
Methane, chloro-	100 (45.4)
Methane, chloromethoxy-	1 (0.454)
Methane, dibromo-	1000 (454)
Methane, dichloro-	1000 (454)
Methane, dichlorodifluoro-	5000 (2270)
Methane, iodo-	100 (45.4)

Methane, isocyanato-	10 (4.54)
Methane, oxybis(chloro-	1 (0.454)
Methane, tetrachloro-	10 (4.54)
Methane, tetranitro-	10 (4.54)
Methane, tribromo-	100 (45.4)
Methane, trichloro-	10 (4.54)
Methane, trichlorofluoro-	5000 (2270)
Methanesulfenyl chloride, trichloro-	100 (45.4)
Methanesulfonic acid, ethyl ester	1 (0.454)
Methanethiol	100 (45.4)
6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	1 (0.454)
Methanoic acid	5000 (2270)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-a,4,7,7a-tetrahydro-	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1 (0.454)
Methanol	5000 (2270)
Methapyrilene	5000 (2270)
1,3,4-Metheno-2H-cyclobutal[cd]-pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloroctahydro-	1 (0.454)
Methomyl	100 (45.4)
Methoxychlor	1 (0.454)
Methyl alcohol	5000 (2270)
Methylamine @	100 (45.4)
Methyl bromide	1000 (454)
1-Methylbutadiene	100 (45.4)
Methyl chloride	100 (45.4)
Methyl chlorocarbonate	1000 (454)
Methyl chloroform	1000 (454)
Methyl chloroformate	1000 (454)
Methylchloromethyl ether @	1 (0.454)
3-Methylcholanthrene	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	10 (4.54)
Methylene bromide	1000 (454)
Methylene chloride	1000 (454)
4,4'-Methylenedianiline	10 (4.54)
Methylene diphenyl diisocyanate	5000 (2270)
Methylene oxide	100 (45.4)
Methyl ethyl ketone (MEK)	5000 (2270)
Methyl ethyl ketone peroxide	10 (4.54)
Methyl hydrazine	10 (4.54)
Methyl iodide	100 (45.4)
Methyl isobutyl ketone	5000 (2270)
Methyl isocyanate	10 (4.54)

2-Methyllactonitrile	10 (4.54)
Methyl mercaptan	100 (45.4)
Methyl methacrylate	1000 (454)
Methyl parathion	100 (45.4)
4-Methyl-2-pentanone	5000 (2270)
Methyl tert-butyl ether	1000 (454)
Methylthiouracil	10 (4.54)
Mevinphos	10 (4.54)
Mexacarbate	1000 (454)
Mitomycin C	10 (4.54)
MNNG	10 (4.54)
Monoethylamine	100 (45.4)
Monomethylamine	100 (45.4)
Muscimol	1000 (454)
Naled	10 (4.54)
5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	10 (4.54)
Naphthalenamine, N,N-bis(2-chloroethyl)-	100 (45.4)
Naphthalene	100 (45.4)
Naphthalene, 2-chloro-	5000 (2270)
1,4-Naphthalenedione	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl-(l,1'-biphenyl)-4,4' -diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	10 (4.54)
Naphthenic acid	100 (45.4)
1,4-Naphthoquinone	5000 (2270)
alpha-Naphthylamine	100 (45.4)
beta-Naphthylamine	1 (0.454)
1-Naphthylamine	100 (45.4)
2-Naphthylamine	1 (0.454)
alpha-Naphthylthiourea	100 (45.4)
Nickel ¢	100 (45.4)
Nickel ammonium sulfate	100 (45.4)
Nickel carbonyl	10 (4.54)
Nickel carbonyl Ni(CO)4,(T-4)-	10 (4.54)
Nickel chloride	100 (45.4)
Nickel cyanide	10 (4.54)
Nickel cyanide Ni(CN)2	10 (4.54)
Nickel hydroxide	10 (4.54)
Nickel nitrate	100 (45.4)
Nickel sulfate	100 (45.4)
Nicotine and salts	100 (45.4)
Nitric acid	1000 (454)

Nitric acid, thallium(1+) salt	100 (45.4)
Nitric oxide	10 (4.54)
p-Nitroaniline	5000 (2270)
Nitrobenzene	1000 (454)
4-nitrobiphenyl	10 (4.54)
Nitrogen dioxide	10 (4.54)
Nitrogen oxide NO	10 (4.54)
Nitrogen oxide NO2	10 (4.54)
Nitroglycerine	10 (4.54)
Nitrophenol (mixed)	100 (45.4)
m-	
o-	
p-	
o-Nitrophenol	100 (45.4)
p-Nitrophenol	100 (45.4)
2-Nitrophenol	100 (45.4)
4-Nitrophenol	100 (45.4)
2-Nitropropane	10 (4.54)
N-Nitrosodi-n-butylamine	10 (4.54)
N-Nitrosodiethanolamine	1 (0.454)
N-Nitrosodiethylamine	1 (0.454)
N-Nitrosodimethylamine	10 (4.54)
N-Nitrosodiphenylamine	100 (45.4)
N-Nitroso-N-ethylurea	1 (0.454)
N-Nitroso-N-methylurea	1 (0.454)
N-Nitroso-N-methylurethane	1 (0.454)
N-Nitrosomethylvinylamine	10 (4.54)
n-Nitrosomorpholine	1 (0.454)
N-Nitrosopiperidine	10 (4.54)
N-Nitrosopyrrolidine	1 (0.454)
Nitrotoluene	1000 (454)
m-Nitrotoluene	
o-Nitrotoluene	
p-Nitrotoluene	
5-Nitro-o-toluidine	100 (45.4)
Octamethylpyrophosphoramide	100 (45.4)
Osmium oxide OsO4 (T-4)-	1000 (454)
Osmium tetroxide	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	10 (4.54)
Oxirane	10 (4.54)
Oxiranecarboxyaldehyde	10 (4.54)

Oxirane, (chloromethyl)-	100 (45.4)
Paraformaldehyde	1000 (454)
Paraldehyde	1000 (454)
Parathion	10 (4.54)
Pentachlorobenzene	10 (4.54)
Pentachloroethane	10 (4.54)
Pentachloronitrobenzene (PCNB)	100 (45.4)
Pentachlorophenol	10 (4.54)
1,3-Pentadiene	100 (45.4)
Perchloroethylene	100 (45.4)
Perchloromethyl mercaptan @	100 (45.4)
Phenacetin	100 (45.4)
Phenanthrene	5000 (2270)
Phenol	1000 (454)
Phenol, 2-chloro-	100 (45.4)
Phenol, 4-chloro-3-methyl-	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	100 (45.4)
Phenol, 2,4-dichloro-	100 (45.4)
Phenol, 2,6-dichloro-	100 (45.4)
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	1 (0.454)
Phenol, 2,4-dimethyl-	100 (45.4)
Phenol, 2,4-dinitro-	10 (4.54)
Phenol, methyl-	100 (45.4)
Phenol, 2-methyl-4,6-dinitro-	10 (4.54)
Phenol, 2,2'-methylenebis[3,4,6-trichloro-	100 (45.4)
Phenol, 2-(1-methylpropyl)-4,6-dinitro	1000 (454)
Phenol, 4-nitro-	100 (45.4)
Phenol, pentachloro-	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	10 (4.54)
Phenol, 2,4,5-trichloro-	10 (4.54)
Phenol, 2,4,6-trichloro-	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	10 (4.54)
L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]	1 (0.454)
p-Phenylenedimine	5000 (2270)
1,10-(1,2-Phenylene)pyrene	100 (45.4)
Phenyl mercaptan @	100 (45.4)
Phenylmercuric acetate	100 (45.4)
Phenylthiourea	100 (45.4)
Phorate	10 (4.54)
Phosgene	10 (4.54)
Phosphine	100 (45.4)
Phosphoric acid	5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester	100 (45.4)

Phosphoric acid, lead(2+) salt (2:3)	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2 (methylamino)-2-oxoethyl] ester	10 (4.54)
Phosphorofluoridic acid, bis(1-methylethyl) ester	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	10 (4.54)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	100 (45.4)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	100 (45.4)
Phosphorothioic acid, O,[4-[(dimethylamino)sulfonyl] phenyl] O,O-dimethyl ester	1000 (454)
Phosphorus	1 (0.454)
Phosphorus oxychloride	1000 (454)
Phosphorus pentasulfide	100 (45.4)
Phosphorus sulfide	100 (45.4)
Phosphorus trichloride	1000 (454)
Phthalic anhydride	5000 (2270)
2-Picoline	5000 (2270)
Piperidine, 1-nitroso-	10 (4.54)
Plumbane, tetraethyl-	10 (4.54)
POLYCHLORINATED BIPHENYLS (PCBs)	1 (0.454)
Potassium arsenate	1 (0.454)
Potassium arsenite	1 (0.454)
Potassium bichromate	10 (4.54)
Potassium chromate	10 (4.54)
Potassium cyanide	10 (4.54)
Potassium cyanide K(CN)	10 (4.54)
Potassium hydroxide	1000 (454)
Potassium permanganate	100 (45.4)
Potassium silver cyanide	1 (0.454)
Pronamide	5000 (2270)
Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	1 (0.454)
1-Propanamine	5000 (2270)
1-Propanamine, N-nitroso-N-propyl-	10 (4.54)
1-Propanamine, N-propyl-	5000 (2270)
Propane, 1,2-dibromo-3-chloro-	1 (0.454)
Propane, 1,2-dichloro-	1000 (454)
Propane, 2-nitro-	10 (4.54)
Propane, 2,2'-oxybis [2-chloro-	1000 (454)
1,3-Propane sultone	10 (4.54)
Propanedinitrile	1000 (454)
Propanenitrile	10 (4.54)
Propanenitrile, 3-chloro-	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	10 (4.54)

1,2,3-Propanetriol, trinitrate-	10 (4.54)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	10 (4.54)
1-Propanol, 2-methyl-	5000 (2270)
2-Propanone	5000 (2270)
2-Propanone, 1-bromo-	1000 (454)
Propargite	10 (4.54)
Propargyl alcohol	1000 (454)
2-Propenal	1 (0.454)
2-Propenamide	5000 (2270)
1-Propene, 1,3-dichloro-	100 (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	1000 (454)
2-Propenenitrile	100 (45.4)
2-Propenenitrile, 2-methyl-	1000 (454)
2-Propenoic acid	5000 (2270)
2-Propenoic acid, ethyl ester	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	1000 (454)
2-Propen-1-ol	100 (45.4)
beta-Propioaldehyde	1000 (454)
Propionic acid	5000 (2270)
Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100 (45.4)
Propionic anhydride	5000 (2270)
Propoxur (baygon)	100 (45.4)
n-Propylamine	5000 (2270)
Propylene dichloride	1000 (454)
Propylene oxide	100 (45.4)
1,2-Propylenimine	1 (0.454)
2-Propyn-1-ol	1000 (454)
Pyrene	5000 (2270)
Pyrethrins	1 (0.454)
3,6-Pyridazinedione, 1,2-dihydro-	5000 (2270)
4-Pyridinamine	1000 (454)
Pyridine	1000 (454)
Pyridine, 2-methyl-	5000 (2270)
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)	100 (45.4)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	10 (4.54)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	10 (4.54)
Pyrrolidine, 1-nitroso-	1 (0.454)
Quinoline	5000 (2270)
RADIONUCLIDES	See Table 2
Reserpine	5000 (2270)
Resorcinol	5000 (2270)
Saccharin and salts	100 (45.4)

Safrole	100 (45.4)
Selenious acid	10 (4.54)
Selenious acid, dithallium(1+) salt	1000 (454)
Selenium ¢	100 (45.4)
Selenium dioxide	10 (4.54)
Selenium oxide	10 (4.54)
Selenium sulfide	10 (4.54)
Selenium sulfide SeS2	10 (4.54)
Selenourea	1000 (454)
L-Serine, diazoacetate (ester)	1 (0.454)
Silver ¢	1000 (454)
Silver cyanide	1 (0.454)
Silver cyanide Ag(CN)	1 (0.454)
Silver nitrate	1 (0.454)
Silvex(2,4,5-TP)	100 (45.4)
Sodium	10 (4.54)
Sodium arsenate	1 (0.454)
Sodium arsenite	1 (0.454)
Sodium azide	1000 (454)
Sodium bichromate	10 (4.54)
Sodium bifluoride	100 (45.4)
Sodium bisulfite	5000 (2270)
Sodium chromate	10 (4.54)
Sodium cyanide	10 (4.54)
Sodium cyanide Na(CN)	10 (4.54)
Sodium dodecylbenzene sulfonate	1000 (454)
Sodium fluoride	1000 (454)
Sodium hydrosulfide	5000 (2270)
Sodium hydroxide	1000 (454)
Sodium hypochlorite	100 (45.4)
Sodium methylate	1000 (454)
Sodium nitrite	100 (45.4)
Sodium phosphate, dibasic	5000 (2270)
Sodium phosphate, tribasic	5000 (2270)
Sodium selenite	100 (45.4)
Streptozotocin	1 (0.454)
Strontium chromate	10 (4.54)
Strychnidin-10-one	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	100 (45.4)
Strychnine and salts	10 (4.54)
Styrene	1000 (454)
Styrene oxide	100 (45.4)
Sulfur chloride @	1000 (454)

Sulfur monochloride	1000 (454)
Sulfur phosphide	100 (45.4)
Sulfuric acid	1000 (454)
Sulfuric acid, dimethyl ester	100 (45.4)
Sulfuric acid, dithallium(I+) salt	100 (45.4)
2,4,5-T	1000 (454)
2,4,5-T acid	1000 (454)
2,4,5-T amines	5000 (2270)
2,4,5-T esters	1000 (454)
2,4,5-T salts	1000 (454)
TDE	1 (0.454)
1,2,4,5-Tetrachlorobenzene	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1 (0.454)
1,1,1,2-Tetrachloroethane	100 (45.4)
1,1,2,2-Tetrachloroethane	100 (45.4)
Tetrachloroethane @	100 (45.4)
Tetrachloroethene	100 (45.4)
Tetrachloroethylene	100 (45.4)
2,3,4,6-Tetrachlorophenol	10 (4.54)
Tetraethyl lead	10 (4.54)
Tetraethyl pyrophosphate	10 (4.54)
Tetraethyldithiopyrophosphate	100 (45.4)
Tetrahydrofuran	1000 (454)
Tetranitromethane	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	100 (45.4)
Thallic oxide	100 (45.4)
Thallium ¢	1000 (454)
Thallium(I) acetate	100 (45.4)
Thallium(I) carbonate	100 (45.4)
Thallium(I) chloride	100 (45.4)
Thallium chloride TlCl	100 (45.4)
Thallium(I) nitrate	100 (45.4)
Thallium oxide T1203	100 (45.4)
Thallium selenite	1000 (454)
Thallium(I) sulfate	100 (45.4)
Thioacetamide	10 (4.54)
Thiodiphosphoric acid, tetraethyl ester	100 (45.4)
Thiofanox	100 (45.4)
Thioimidodicarbonic diamide [(H2N)C(S)]2NH	100 (45.4)
Thiomethanol	100 (45.4)
Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-	10 (4.54)
Thiophenol	100 (45.4)
Thiosemicarbazide	100 (45.4)

Thiourea	10 (4.54)
Thiourea, (2-chlorophenyl)-	100 (45.4)
Thiourea, 1-naphthalenyl-	100 (45.4)
Thiourea, phenyl-	100 (45.4)
Thiram	10 (4.54)
Titanium tetrachloride	1000 (454)
Toluene	1000 (454)
Toluenediamine	10 (4.54)
Toluene diisocyanate	100 (45.4)
o-Toluidine	100 (45.4)
p-Toluidine	100 (45.4)
o-Toluidine hydrochloride	100 (45.4)
Toxaphene	1 (0.454)
2,4,5-TP acid	100 (45.4)
2,4,5-TP acid esters	100 (45.4)
1H-1,2,4-Triazol-3-amine	10 (4.54)
2,4,6-Tribromophenol	100
Trichlorfon	100 (45.4)
1,2,4-Trichlorobenzene	100 (45.4)
1,1,1-Trichloroethane	1000 (454)
1,1,2-Trichloroethane	100 (45.4)
Trichloroethene	100 (45.4)
Trichloroethylene	100 (45.4)
Trichloromethanesulfenyl chloride	100 (45.4)
Trichloromonofluoromethane	5000 (2270)
Trichlorophenol	10 (4.54)
2,3,4-Trichlorophenol	
2,3,5-Trichlorophenol	
2,3,6-Trichlorophenol	
2,4,5-Trichlorophenol	
2,4,6-Trichlorophenol	
3,4,5-Trichlorophenol	
2,4,5-Trichlorophenol	10 (4.54)
2,4,6-Trichlorophenol	10 (4.54)
Triethanolamine dodecylbenzene sulfonate	1000 (454)
Triethylamine	5000 (2270)
Trifluralin	10 (4.54)
Trimethylamine	100 (45.4)
2,2,4-Trimethylpentane	1000 (454)
1,3,5-Trinitrobenzene	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	1000 (454)
Tris(2,3-dibromopropyl) phosphate	10 (4.54)
Trypan blue	10 (4.54)

Uracil mustard	10 (4.54)
Uranyl acetate	100 (45.4)
Uranyl nitrate	100 (45.4)
Urea, N-ethyl-N-nitroso-	1 (0.454)
Urea, N-methyl-N-nitroso-	1 (0.454)
Vanadic acid, ammonium salt	1000 (454)
Vanadium oxide V205	1000 (454)
Vanadium pentoxide	1000 (454)
Vanadyl sulfate	1000 (454)
Vinyl acetate	5000 (2270)
Vinyl acetate monomer	5000 (2270)
Vinylamine, N-methyl-N-nitroso-	10 (4.54)
Vinyl bromide	100 (45.4)
Vinyl chloride	1 (0.454)
Vinylidene chloride	100 (45.4)
Warfarin, & salts, when present at concentrations greater than 0.3%	100 (45.4)
Xylene	100 (45.4)
m-Xylene	1000 (454)
o-Xylene	1000 (454)
p-Xylene	100 (45.4)
Xylene (mixed)	100 (45.4)
Xylenes (isomers and mixture)	100 (45.4)
Xylenol	1000 (454)
Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta,16beta,17alpha,18beta,20alpha)-	5000 (2270)
Zinc ¢	1000 (454)
Zinc acetate	1000 (454)
Zinc ammonium chloride	1000 (454)
Zinc borate	1000 (454)
Zinc bromide	1000 (454)
Zinc carbonate	1000 (454)
Zinc chloride	1000 (454)
Zinc cyanide	10 (4.54)
Zinc cyanide Zn(CN)2	10 (4.54)
Zinc fluoride	1000 (454)
Zinc formate	1000 (454)
Zinc hydrosulfite	1000 (454)
Zinc nitrate	1000 (454)
Zinc phenolsulfonate	5000 (2270)
Zinc phosphide	100 (45.4)
Zinc phosphide Zn3P2, when present at concentrations greater than 10%	100 (45.4)
Zinc silicofluoride	5000 (2270)
Zinc sulfate	1000 (454)

Zirconium nitrate	5000 (2270)
Zirconium potassium fluoride	1000 (454)
Zirconium sulfate	5000 (2270)
Zirconium tetrachloride	5000 (2270)
D001 Unlisted Hazardous Wastes Characteristic of Ignitability	100 (45.4)
D002 Unlisted Hazardous Wastes Characteristic of Corrosivity	100 (45.4)
D003 Unlisted Hazardous Wastes Characteristic of Reactivity	100 (45.4)
D004-D043 Unlisted Hazardous Wastes Characteristic of Toxicity	
D004 Arsenic	1 (0.454)
D005 Barium	1000 (454)
D006 Cadmium	10 (4.54)
D007 Chromium	10 (4.54)
D008 Lead	10 (4.54)
D009 Mercury	1 (0.454)
D010 Selenium	10 (4.54)
D011 Silver	1 (0.454)
D012 Endrin	1 (0.454)
D013 Lindane	1 (0.454)
D014 Methoxychlor	1 (0.454)
D015 Toxaphene	1 (0.454)
D016 2,4-D	100 (45.4)
D017 2,4,5-TP	100 (45.4)
D018 Benzene	10 (4.54)
D019 Carbon tetrachloride	10 (4.54)
D020 Chlordane	1 (0.454)
D021 Chlorobenzene	100 (45.4)
D022 Chloroform	10 (4.54)
D023 o-Cresol	100 (45.4)
D024 m-Cresol	100 (45.4)
D025 p-Cresol	100 (45.4)
D026 Cresol	100 (45.4)
D027 1,4-Dichlorobenzene	100 (45.4)
D028 1,2-Dichloroethane	100 (45.4)
D029 1,1-Dichloroethylene	100 (45.4)
D030 2,4-Dinitrotoluene	10 (4.54)
D031 Heptachlor (and hydroxide)	1 (0.454)
D032 Hexachlorobenzene	10 (4.54)
D033 Hexachlorobutadiene	1 (0.454)
D034 Hexachloroethane	100 (45.4)
D035 Methyl ethyl ketone	5000 (2270)
D036 Nitrobenzene	1000 (454)
D037 Pentachlorophenol	10 (4.54)
D038 Pyridine	1000 (454)

D039 Tetrachloroethylene	100 (45.4)
D040 Tricholorethylene	100 (45.4)
D041 2,4,5-Trichlorophenol	10 (4.54)
D042 2,4,6-Trichlorophenol	10 (4.54)
D043 Vinyl chloride	1 (0.454)
F001 The following spent halogenated solvents used in degreasing; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the below listed halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	10 (4.54)
(a) Tetrachloroethylene	100 (45.4)
(b) Trichloroethylene	100 (45.4)
(c) Methylene chloride	1000 (454)
(d) 1,1,1-Trichloroethane	1000 (454)
(e) Carbon tetrachloride	10 (4.54)
(f) Chlorinated fluorocarbons	5000 (2270)
F002 The following spent halogenated solvents; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the below listed halogenated solvents or those listed in F001, F004, F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	10 (4.54)
(a) Tetrachloroethylene	100 (45.4)
(b) Methylene chloride	1000 (454)
(c) Trichloroethylene	100 (45.4)
(d) 1,1,1-Trichloroethane	1000 (454)
(e) Chlorobenzene	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	5000 (2270)
(g) o-Dichlorobenzene	100 (45.4)
(h) Trichlorofluoromethane	5000 (2270)
(i) 1,1,2 Trichloroethane	100 (45.4)
F003 The following spent non-halogenated solvents and solvents:	100 (45.4)
(a) Xylene	1000 (454)
(b) Acetone	5000 (2270)
(c) Ethyl acetate	5000 (2270)
(d) Ethylbenzene	1000 (454)
(e) Ethyl ether	100 (45.4)
(f) Methyl isobutyl ketone	5000 (2270)
(g) n-Butyl alcohol	5000 (2270)
(h) Cyclohexanone	5000 (2270)
(i) Methanol	5000 (2270)
F004 The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:	100 (45.4)
(a) Cresols/Cresylic acid	1000 (454)

(b) Nitrobenzene	100 (45.4)
F005 The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:	100 (45.4)
(a) Toluene	1000 (454)
(b) Methyl ethyl ketone	5000 (2270)
(c) Carbon disulfide	100 (45.4)
(d) Isobutanol	5000 (2270)
(e) Pyridine	1000 (454)
F006 Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbonsteel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum	10 (4.54)
F007 Spent cyanide plating bath solutions from electroplating operations	10 (4.54)
F008 Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process	10 (4.54)
F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	10 (4.54)
F010 Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process	10 (4.54)
F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)	10 (4.54)
F012 Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process	10 (4.54)
F019 Wastewater treatment sludges from the chemical conversion coating of aluminum-except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process	10 (4.54)
F020 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	1 (0.454)
F021 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	1 (0.454)

F022 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	1 (0.454)
F023 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	1 (0.454)
F024 Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatichydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges,spent catalysts, and wastes listed in 40 CFR 261.32.)	1 (0.454)
F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution	1 (0.454)
F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	1 (0.454)
F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	1 (0.454)
F028 Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	1 (0.454)

F032	1 (0.454)
F034	1 (0.454)
F035	1 (0.454)
F037	1 (0.454)
F038	
F039 Multi source leachate	1 (0.454)
K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol	
K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments	10 (4.54)
K003 Wastewater treatment sludge from the production of molybdate orange pigments	
K004 Wastewater treatment sludge from the production of zinc yellow pigments	10 (4.54)
K005 Wastewater treatment sludge from the production of chrome green pigments	
K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	10 (4.54)
K007 Wastewater treatment sludge from the production of iron blue pigments	
K008 Oven residue from the production of chrome oxide green pigments	10 (4.54)
K009 Distillation bottoms from the production of acetaldehyde from ethylene	10 (4.54)
K010 Distillation side cuts from the production of acetaldehyde from ethylene	10 (4.54)
K011 Bottom stream from the wastewater stripper in the production of acrylonitrile	10 (4.54)
K013 Bottom stream from the acetonitrile column in the production of acrylonitrile	10 (4.54)
K014 Bottoms from the acetonitrile purification column in the production of acrylonitrile	5000 (2270)
K015 Still bottoms from the distillation of benzyl chloride	10 (4.54)
K016 Heavy ends or distillation residues from the production of carbon tetrachloride	1 (0.454)
K017 Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	10 (4.54)
K018 Heavy ends from the fractionation column in ethyl chloride production	1 (0.454)
K019 Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	1 (0.454)
K020 Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	1 (0.454)
K021 Aqueous spent antimony catalyst waste from fluoromethanes production	10 (4.54)
K022 Distillation bottom tars from the production of phenol/acetone from cumene	1 (0.454)
K023 Distillation light ends from the production of phthalic anhydride from naphthalene	5000 (2270)
K024 Distillation bottoms from the production of phthalic anhydride from naphthalene	5000 (2270)
K025 Distillation bottoms from the production of nitrobenzene by the nitration of benzene	10 (4.54)

K026 Stripping still tails from the production of methyl ethyl pyridines	1000 (454)
K027 Centrifuge and distillation residues from toluene diisocyanate production	10 (4.54)
K028 Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	1 (0.454)
K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane	1 (0.454)
K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	1 (0.454)
K031 By-product salts generated in the production of MSMA and cacodylic acid	1 (0.454)
K032 Wastewater treatment sludge from the production of chlordane	10 (4.54)
K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	10 (4.54)
K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	10 (4.54)
K035 Wastewater treatment sludges generated in the production of creosote	1 (0.454)
K036 Still bottoms from toluene reclamation distillation in the production of disulfoton	1 (0.454)
K037 Wastewater treatment sludges from the production of disulfoton	1 (0.454)
K038 Wastewater from the washing and stripping of phorate production	10 (4.54)
K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	10 (4.54)
K040 Wastewater treatment sludge from the production of phorate	10 (4.54)
K041 Wastewater treatment sludge from the production of toxaphene	1 (0.454)
K042 Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	10 (4.54)
K043 2,6-dichlorophenol waste from the production of 2,4-D	10 (4.54)
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	10 (4.54)
K045 Spent carbon from the treatment of wastewater containing explosives	10 (4.54)
K046 Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	10 (4.54)
K047 Pink/red water from TNT operations	10 (4.54)
K048 Dissolved air flotation (DAF) float from the petroleum refining industry	10 (4.54)
K049 Slop oil emulsion solids from the petroleum refining industry	10 (4.54)
K050 Heat exchanger bundle cleaning sludge from the petroleum refining industry	10 (4.54)
K051 API separator sludge from the petroleum refining industry	10 (4.54)
K052 Tank bottoms (leaded) from the petroleum refining industry	10 (4.54)
K060 Ammonia still lime sludge from coking operations	1 (0.454)
K061 Emission control dust/sludge from the primary production of steel in electric furnaces	10 (4.54)
K062 Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry	10 (4.54)
K064 Acid plant blowdown slurry/sludge resulting from thickening of blowdoen slurry	10 (4.54)

from primary copper production.	
K065 Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	10 (4.54)
K066 Sludge from treatment of process wastewater and /or acid plant blowdown from primary zinc production.	10 (4.54)
K069 Emission control dust/sludge from secondary lead smelting	10 (4.54)
K071 Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	1 (0.454)
K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	10 (4.54)
K083 Distillation bottoms from aniline extraction	100 (45.4)
K084 Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)
K085 Distillation or fractionation column bottoms from the production of chlorobenzenes	10 (4.54)
K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	10 (4.54)
K087 Decanter tank tar sludge from coking operations	100 (45.4)
K088 B>10 (4.54)	
Spentotliners from primary aluminum reduction.	
K090 B>10 (4.54)	
Emissn control dust or sludge from ferrochromiumsilicon production	
K091 B>10 (4.54)	
Emissn control dust or sludge from ferrochromium production	
K093 Distillation light ends from the production of phthalic anhydride from ortho-xylene	5000 (2270)
K094 Distillation bottoms from the production of phthalic anhydride from ortho-xylene	5000 (2270)
K095 Distillation bottoms from the production of 1,1,1-trichloroethane.	100 (45.4)
K096 Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	100 (45.4)
K097 Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	1 (0.454)
K098 Untreated process wastewater from the production of toxaphene	1 (0.454)
K099 Untreated wastewater from the production of 2,4-D	10 (4.54)
K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	10 (4.54)
K101 Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)
K102 Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)

K103 Process residues from aniline extraction from the production of aniline	100 (45.4)
K104 Combined wastewater streams generated from nitrobenzene/aniline chlorobenzenes	10 (4.54)
K105 Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	10 (4.54)
K106 Wastewater treatment sludge from the mercury cell process in chlorine production	1 (0.454)
K107 Column bottoms from product seperation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines	10 (4.54)
K108 Condensed column overheads from product seperation and condensed reator vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	10 (4.54)
K109 Spent filter cartidges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydazides	10 (4.54)
K110 Condensed column overheads from intermediate seperation from the production of 1,1-dimethylhydrazines (UDMH) from carboxylic acid hydrazides	10 (4.54)
K111 Product washwaters from the production of dinitrotoluene via nitration of toluene.	10 (4.54)
K112 Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K113 Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K114 Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K115 Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K116 Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	10 (4.54)
K117 Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene.	1 (0.454)
K118 Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide.	1 (0.454)
K123 Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K124 Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K125 Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K131 Waste water from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide	100 (45.4)
K132 Spent absorbent and wastewater solids from the production of methyl bromide	1000 (454)
K136 Still bottoms from the purification of ethylene dibromide in the production of	1 (0.454)

ethylene dibromide via bromination of ethene.	
K140	100
K141	1 (0.454)
K142	1 (0.454)
K143	1 (0.454)
K144	1 (0.454)
K145	1 (0.454)
K147	1 (0.454)
K148	1 (0.454)
K149	10 (4.54)
K150	10 (4.54)
K151	10 (4.54)
K156	1
K157	1
K158	1
K169	10
K170	1
K171	1
K172	1

Footnotes:

¢ The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches)

¢¢ The RQ for asbestos is limited to friable forms only

@ Indicates that the name was added by RSPA because (1) the name is a synonym for a specific hazardous substance and (2) the name appears in the Hazardous Materials Table as a proper shipping name.

Table 1.-**Hazardous Substances Other Than Radionuclides Hazardous substance**

Reportable quantity (RQ) pounds (kilograms)	
F001 The following spent halogenated solvents used in degreasing; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the below listed halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	10 (4.54)
(a) Tetrachloroethylene	100 (45.4)
(b) Trichloroethylene	100 (45.4)
(c) Methylene chloride	1000 (454)
(d) 1,1,1-Trichloroethane	1000 (454)
(e) Carbon tetrachloride	10 (4.54)
(f) Chlorinated fluorocarbons	5000 (2270)
F002 The following spent halogenated solvents; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more	10 (4.54)

of the below listed halogenated solvents or those listed in F001, F004, F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	
(a) Tetrachloroethylene	100 (45.4)
(b) Methylene chloride	1000 (454)
(c) Trichloroethylene	100 (45.4)
(d) 1,1,1-Trichloroethane	1000 (454)
(e) Chlorobenzene	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	5000 (2270)
(g) o-Dichlorobenzene	100 (45.4)
(h) Trichlorofluoromethane	5000 (2270)
(i) 1,1,2 Trichloroethane	100 (45.4)
F003 The following spent non-halogenated solvents and solvents:	100 (45.4)
(a) Xylene	1000 (454)
(b) Acetone	5000 (2270)
(c) Ethyl acetate	5000 (2270)
(d) Ethylbenzene	1000 (454)
(e) Ethyl ether	100 (45.4)
(f) Methyl isobutyl ketone	5000 (2270)
(g) n-Butyl alcohol	5000 (2270)
(h) Cyclohexanone	5000 (2270)
(i) Methanol	5000 (2270)
F004	100 (45.4)
The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:	
(a) Cresols/Cresylic acid	1000 (454)
(b) Nitrobenzene	100 (45.4)
F005 The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:	100 (45.4)
(a) Toluene	1000 (454)
(b) Methyl ethyl ketone	5000 (2270)
(c) Carbon disulfide	100 (45.4)
(d) Isobutanol	5000 (2270)
(e) Pyridine	1000 (454)
F006 Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbonsteel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of	10 (4.54)

aluminum	
F007 Spent cyanide plating bath solutions from electroplating operations	10 (4.54)
F008 Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process	10 (4.54)
F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	10 (4.54)
F010 Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process	10 (4.54)
F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)	10 (4.54)
F012 Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process	10 (4.54)
F019 Wastewater treatment sludges from the chemical conversion coating of aluminum-except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process	10 (4.54)
F020 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	1 (0.454)
F021 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	1 (0.454)
F022 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	1 (0.454)

F023 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	1 (0.454)
F024 Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatichydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges,spent catalysts, and wastes listed in 40 CFR 261.32.)	1 (0.454)
F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution	1 (0.454)
F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	1 (0.454)
F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	1 (0.454)
F028 Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	1 (0.454)
F032	1 (0.454)
F034	1 (0.454)

F035	1 (0.454)
F037	1 (0.454)
F038	
F039 Multi source leachate	1 (0.454)
K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol	
K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments	10 (4.54)
K003 Wastewater treatment sludge from the production of molybdate orange pigments	
K004 Wastewater treatment sludge from the production of zinc yellow pigments	10 (4.54)
K005 Wastewater treatment sludge from the production of chrome green pigments	
K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	10 (4.54)
K007 Wastewater treatment sludge from the production of iron blue pigments	
K008 Oven residue from the production of chrome oxide green pigments	10 (4.54)
K009 Distillation bottoms from the production of acetaldehyde from ethylene	10 (4.54)
K010 Distillation side cuts from the production of acetaldehyde from ethylene	10 (4.54)
K011 Bottom stream from the wastewater stripper in the production of acrylonitrile	10 (4.54)
K013 Bottom stream from the acetonitrile column in the production of acrylonitrile	10 (4.54)
K014 Bottoms from the acetonitrile purification column in the production of acrylonitrile	5000 (2270)

K015 Still bottoms from the distillation of benzyl chloride	10 (4.54)
K016 Heavy ends or distillation residues from the production of carbon tetrachloride	1 (0.454)
K017 Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	10 (4.54)
K018 Heavy ends from the fractionation column in ethyl chloride production	1 (0.454)
K019 Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	1 (0.454)
K020 Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	1 (0.454)
K021 Aqueous spent antimony catalyst waste from fluoromethanes production	10 (4.54)
K022 Distillation bottom tars from the production of phenol/acetone from cumene	1 (0.454)
K023 Distillation light ends from the production of phthalic anhydride from naphthalene	5000 (2270)
K024 Distillation bottoms from the production of phthalic anhydride from naphthalene	5000 (2270)
K025 Distillation bottoms from the production of nitrobenzene by the nitration of benzene	10 (4.54)
K026 Stripping still tails from the production of methyl ethyl pyridines	1000 (454)
K027 Centrifuge and distillation residues from toluene diisocyanate production	10 (4.54)
K028 Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	1 (0.454)
K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane	1 (0.454)

K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	1 (0.454)
K031 By-product salts generated in the production of MSMA and cacodylic acid	1 (0.454)
K032 Wastewater treatment sludge from the production of chlordane	10 (4.54)
K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	10 (4.54)
K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	10 (4.54)
K035 Wastewater treatment sludges generated in the production of creosote	1 (0.454)
K036 Still bottoms from toluene reclamation distillation in the production ofdisulfoton	1 (0.454)
K037 Wastewater treatment sludges from the production of disulfoton	1 (0.454)
K038 Wastewater from the washing and stripping of phorate production	10 (4.54)
K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	10 (4.54)
K040 Wastewater treatment sludge from the production of phorate	10 (4.54)
K041 Wastewater treatment sludge from the production of toxaphene	1 (0.454)
K042 Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	10 (4.54)
K043 2,6-dichlorophenol waste from the production of 2,4-D	10 (4.54)
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	10 (4.54)
K045 Spent carbon from the treatment of wastewater containing explosives	10 (4.54)

K046 Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	10 (4.54)
K047 Pink/red water from TNT operations	10 (4.54)
K048 Dissolved air flotation (DAF) float from the petroleum refining industry	10 (4.54)
K049 Slop oil emulsion solids from the petroleum refining industry	10 (4.54)
K050 Heat exchanger bundle cleaning sludge from the petroleum refining industry	10 (4.54)
K051 API separator sludge from the petroleum refining industry	10 (4.54)
K052 Tank bottoms (leaded) from the petroleum refining industry	10 (4.54)
K060 Ammonia still lime sludge from coking operations	1 (0.454)
K061 Emission control dust/sludge from the primary production of steel in electric furnaces	10 (4.54)
K062 Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry	10 (4.54)
K064 Acid plant blowdown slurry/sludge resulting from thickening of blowdoen slurry from primary copper production.	10 (4.54)
K065 Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	10 (4.54)
K066 Sludge from treatment of process wastewater and /or acid plant blowdown from primary zinc production.	10 (4.54)
K069 Emission control dust/sludge from secondary lead smelting	10 (4.54)
K071 Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	1 (0.454)

K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	10 (4.54)
K083 Distillation bottoms from aniline extraction	100 (45.4)
K084 Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)
K085 Distillation or fractionation column bottoms from the production of chlorobenzenes	10 (4.54)
K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	10 (4.54)
K087 Decanter tank tar sludge from coking operations	100 (45.4)
K088 B>10 (4.54) Spentotliners from primary aluminum reduction.	
K090 B>10 (4.54) Emissn control dust or sludge from ferrochromiumsilicon production	
K091 B>10 (4.54) Emissn control dust or sludge from ferrochromium production	
K093 Distillation light ends from the production of phthalic anhydride from ortho-xylene	5000 (2270)
K094 Distillation bottoms from the production of phthalic anhydride from ortho-xylene	5000 (2270)
K095 Distillation bottoms from the production of 1,1,1-trichloroethane.	100 (45.4)
K096 Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	100 (45.4)
K097 Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	1 (0.454)

K098 Untreated process wastewater from the production of toxaphene	1 (0.454)
K099 Untreated wastewater from the production of 2,4-D	10 (4.54)
K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	10 (4.54)
K101 Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)
K102 Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	1 (0.454)
K103 Process residues from aniline extraction from the production of aniline	100 (45.4)
K104 Combined wastewater streams generated from nitrobenzene/aniline chlorobenzenes	10 (4.54)
K105 Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	10 (4.54)
K106 Wastewater treatment sludge from the mercury cell process in chlorine production	1 (0.454)
K107 Column bottoms from product seperation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines	10 (4.54)
K108 Condensed column overheads from product seperation and condensed reator vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	10 (4.54)
K109 Spent filter cartidges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydazides	10 (4.54)
K110 Condensed column overheads from intermediate seperation from the production of 1,1-dimethylhydrazines (UDMH) from carboxylic acid hydrazides	10 (4.54)
K111 Product washwaters from the production of dinitrotoluene via nitration of toluene.	10 (4.54)

K112 Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K113 Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K114 Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K115 Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	10 (4.54)
K116 Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	10 (4.54)
K117 Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene.	1 (0.454)
K118 Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide.	1 (0.454)
K123 Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K124 Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K125 Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	10 (4.54)
K131 Waste water from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide	100 (45.4)
K132 Spent absorbent and wastewater solids from the production of methyl bromide	1000 (454)

K136 Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	1 (0.454)
K141	1 (0.454)
K142	1 (0.454)
K143	1 (0.454)
K144	1 (0.454)
K145	1 (0.454)
K147	1 (0.454)
K148	1 (0.454)
K149	10 (4.54)
K150	10 (4.54)
K151	10 (4.54)

Footnotes:
¢ The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches)
¢¢ The RQ for asbestos is limited to friable forms only
@ Indicates that the name was added by RSPA because (1) the name is a synonym for a specific hazardous substance and (2) the name appears in the Hazardous Materials Table as a proper shipping name.

Table 2. - Radionuclides

(1) - Radionuclide	(2) - Atomic Number	(3) - Reportable Quantity (RQ) Ci(TBq)

Actinium-224	89	100 (3.7)
Actinium-225	89	1 (.037)
Actinium-226	89	10 (.37)
Actinium-227	89	0.001 (.000037)
Actinium-228	89	10 (.37)
Aluminum-26	13	10 (.37)
Americium-237	95	1000 (37)
Americium-238	95	100 (3.7)
Americium-239	95	100 (3.7)
Americium-240	95	10 (.37)
Americium-241	95	0.01 (.00037)
Americium-242	95	100 (3.7)
Americium-242m	95	0.01 (.00037)
Americium-243	95	0.01 (.00037)
Americium-244	95	10 (.37)
Americium-244m	95	1000 (37)
Americium-245	95	1000 (37)
Americium-246	95	1000 (37)
Americium-246m	95	1000 (37)
Antimony-115	51	1000 (37)
Antimony-116	51	1000 (37)
Antimony-116m	51	100 (3.7)
Antimony-117	51	1000 (37)
Antimony-118m	51	10 (.37)
Antimony-119	51	1000 (37)
Antimony-120 (16 min)	51	1000 (37)
Antimony-120 (5.76 day)	51	10 (.37)
Antimony-122	51	10 (.37)
Antimony-124	51	10 (.37)
Antimony-124m	51	1000 (37)
Antimony-125	51	10 (.37)
Antimony-126	51	10 (.37)
Antimony-126m	51	1000 (37)
Antimony-127	51	10 (.37)
Antimony-128 (10.4 min)	51	1000 (37)
Antimony-128 (9.01 hr)	51	10 (.37)
Antimony-129	51	100 (3.7)
Antimony-130	51	100 (3.7)
Antimony-131	51	1000 (37)
Argon-39	18	1000 (37)
Argon-41	18	10 (.37)
Arsenic-69	33	1000 (37)
Arsenic-70	33	100 (3.7)

Arsenic-71	33	100 (3.7)
Arsenic-72	33	10 (.37)
Arsenic-73	33	100 (3.7)
Arsenic-74	33	10 (.37)
Arsenic-76	33	100 (3.7)
Arsenic-77	33	1000 (37)
Arsenic-78	33	100 (3.7)
Astatine-207	85	100 (3.7)
Astatine-211	85	100 (3.7)
Barium-126	56	1000 (37)
Barium-128	56	10 (.37)
Barium-131	56	10 (.37)
Barium-131m	56	1000 (37)
Barium-133	56	10 (.37)
Barium-133m	56	100 (3.7)
Barium-135m	56	1000 (37)
Barium-139	56	1000 (37)
Barium-140	56	10 (.37)
Barium-141	56	1000 (37)
Barium-142	56	1000 (37)
Berkelium-245	97	100 (3.7)
Berkelium-246	97	10 (.37)
Berkelium-247	97	0.01 (.00037)
Berkelium-249	97	1 (.037)
Berkelium-250	97	100 (3.7)
Beryllium-10	4	1 (.037)
Beryllium-7	4	100 (3.7)
Bismuth-200	83	100 (3.7)
Bismuth-201	83	100 (3.7)
Bismuth-202	83	1000 (37)
Bismuth-203	83	10 (.37)
Bismuth-205	83	10 (.37)
Bismuth-206	83	10 (.37)
Bismuth-207	83	10 (.37)
Bismuth-210	83	10 (.37)
Bismuth-210m	83	0.1 (.0037)
Bismuth-212	83	100 (3.7)
Bismuth-213	83	100 (3.7)
Bismuth-214	83	100 (3.7)
Bromine-74	35	100 (3.7)
Bromine-74m	35	100 (3.7)
Bromine-75	35	100 (3.7)
Bromine-76	35	10 (.37)

Bromine-77	35	100 (3.7)
Bromine-80	35	1000 (37)
Bromine-80m	35	1000 (37)
Bromine-82	35	10 (.37)
Bromine-83	35	1000 (37)
Bromine-84	35	100 (3.7)
Cadmium-104	48	1000 (37)
Cadmium-107	48	1000 (37)
Cadmium-109	48	1 (.037)
Cadmium-113	48	0.1 (.0037)
Cadmium-113m	48	0.1 (.0037)
Cadmium-115	48	100 (3.7)
Cadmium-115m	48	10 (.37)
Cadmium-117	48	100 (3.7)
Cadmium-117m	48	10 (.37)
Calcium-41	20	10 (.37)
Calcium-45	20	10 (.37)
Calcium-47	20	10 (.37)
Californium-244	98	1000 (37)
Californium-246	98	10 (.37)
Californium-248	98	0.1 (.0037)
Californium-249	98	0.01 (.00037)
Californium-250	98	0.01 (.00037)
Californium-251	98	0.01 (.00037)
Californium-252	98	0.1 (.0037)
Californium-253	98	10 (.37)
Californium-254	98	0.1 (.0037)
Carbon-11	6	1000 (37)
Carbon-14	6	10 (.37)
Cerium-134	58	10 (.37)
Cerium-135	58	10 (.37)
Cerium-137	58	1000 (37)
Cerium-137m	58	100 (3.7)
Cerium-139	58	100 (3.7)
Cerium-141	58	10 (.37)
Cerium-143	58	100 (3.7)
Cerium-144	58	1 (.037)
Cesium-125	55	1000 (37)
Cesium-127	55	100 (3.7)
Cesium-129	55	100 (3.7)
Cesium-130	55	1000 (37)
Cesium-131	55	1000 (37)
Cesium-132	55	10 (.37)

Cesium-134	55	1 (.037)
Cesium-134m	55	1000 (37)
Cesium-135	55	10 (.37)
Cesium-135m	55	100 (3.7)
Cesium-136	55	10 (.37)
Cesium-137	55	1 (.037)
Cesium-138	55	100 (3.7)
Chlorine-36	17	10 (.37)
Chlorine-38	17	100 (3.7)
Chlorine-39	17	100 (3.7)
Chromium-48	24	100 (3.7)
Chromium-49	24	1000 (37)
Chromium-51	24	1000 (37)
Cobalt-55	27	10 (.37)
Cobalt-56	27	10 (.37)
Cobalt-57	27	100 (3.7)
Cobalt-58	27	10 (.37)
Cobalt-58m	27	1000 (37)
Cobalt-60	27	10 (.37)
Cobalt-60m	27	1000 (37)
Cobalt-61	27	1000 (37)
Cobalt-62m	27	1000 (37)
Copper-60	29	100 (3.7)
Copper-61	29	100 (3.7)
Copper-64	29	1000 (37)
Copper-67	29	100 (3.7)
Curium-238	96	1000 (37)
Curium-240	96	1 (.037)
Curium-241	96	10 (.37)
Curium-242	96	1 (.037)
Curium-243	96	0.01 (.00037)
Curium-244	96	0.01 (.00037)
Curium-245	96	0.01 (.00037)
Curium-246	96	0.01 (.00037)
Curium-247	96	0.01 (.00037)
Curium-248	96	0.001 (.000037)
Curium-249	96	1000 (37)
Dysprosium-155	66	100 (3.7)
Dysprosium-157	66	100 (3.7)
Dysprosium-159	66	100 (3.7)
Dysprosium-165	66	1000 (37)
Dysprosium-166	66	10 (.37)
Einsteinium-250	99	10 (.37)

Einsteinium-251	99	1000 (37)
Einsteinium-253	99	10 (.37)
Einsteinium-254	99	0.1 (.0037)
Einsteinium-254m	99	1 (.037)
Erbium-161	68	100 (3.7)
Erbium-165	68	1000 (37)
Erbium-169	68	100 (3.7)
Erbium-171	68	100 (3.7)
Erbium-172	68	10 (.37)
Europium-145	63	10 (.37)
Europium-146	63	10 (.37)
Europium-147	63	10 (.37)
Europium-148	63	10 (.37)
Europium-149	63	100 (3.7)
Europium-150 (12.6 hr)	63	1000 (37)
Europium-150 (34.2 yr)	63	10 (.37)
Europium-152	63	10 (.37)
Europium-152m	63	100 (3.7)
Europium-154	63	10 (.37)
Europium-155	63	10 (.37)
Europium-156	63	10 (.37)
Europium-157	63	10 (.37)
Europium-158	63	1000 (37)
Fermium-252	100	10 (.37)
Fermium-253	100	10 (.37)
Fermium-254	100	100 (3.7)
Fermium-255	100	100 (3.7)
Fermium-257	100	1 (.037)
Fluorine-18	9	1000 (37)
Francium-222	87	100 (3.7)
Francium-223	87	100 (3.7)
Gadolinium-145	64	100 (3.7)
Gadolinium-146	64	10 (.37)
Gadolinium-147	64	10 (.37)
Gadolinium-148	64	0.001 (.000037)
Gadolinium-149	64	100 (3.7)
Gadolinium-151	64	100 (3.7)
Gadolinium-152	64	0.001 (.000037)
Gadolinium-153	64	10 (.37)
Gadolinium-159	64	1000 (37)
Gallium-65	31	1000 (37)
Gallium-66	31	10 (.37)
Gallium-67	31	100 (3.7)

Gallium-68	31	1000 (37)
Gallium-70	31	1000 (37)
Gallium-72	31	10 (.37)
Gallium-73	31	100 (3.7)
Germanium-66	32	100 (3.7)
Germanium-67	32	1000 (37)
Germanium-68	32	10 (.37)
Germanium-69	32	10 (.37)
Germanium-71	32	1000 (37)
Germanium-75	32	1000 (37)
Germanium-77	32	10 (.37)
Germanium-78	32	1000 (37)
Gold-193	79	100 (3.7)
Gold-194	79	10 (.37)
Gold-195	79	100 (3.7)
Gold-198	79	100 (3.7)
Gold-198m	79	10 (.37)
Gold-199	79	100 (3.7)
Gold-200	79	1000 (37)
Gold-200m	79	10 (.37)
Gold-201	79	1000 (37)
Hafnium-170	72	100 (3.7)
Hafnium-172	72	1 (.037)
Hafnium-173	72	100 (3.7)
Hafnium-175	72	100 (3.7)
Hafnium-177m	72	1000 (37)
Hafnium-178m	72	0.1 (.0037)
Hafnium-179m	72	100 (3.7)
Hafnium-180m	72	100 (3.7)
Hafnium-181	72	10 (.37)
Hafnium-182	72	0.1 (.0037)
Hafnium-182m	72	100 (3.7)
Hafnium-183	72	100 (3.7)
Hafnium-184	72	100 (3.7)
Holmium-155	67	1000 (37)
Holmium-157	67	1000 (37)
Holmium-159	67	1000 (37)
Holmium-161	67	1000 (37)
Holmium-162	67	1000 (37)
Holmium-162m	67	1000 (37)
Holmium-164	67	1000 (37)
Holmium-164m	67	1000 (37)
Holmium-166	67	100 (3.7)

Holmium-166m	67	1 (.037)
Holmium-167	67	100 (3.7)
Hydrogen-3	1	100 (3.7)
Indium-109	49	100 (3.7)
Indium-110 (4.9 hr)	49	10 (.37)
Indium-110 (69.1 min)	49	100 (3.7)
Indium-111	49	100 (3.7)
Indium-112	49	1000 (37)
Indium-113m	49	1000 (37)
Indium-114m	49	10 (.37)
Indium-115	49	0.1 (.0037)
Indium-115m	49	100 (3.7)
Indium-116m	49	100 (3.7)
Indium-117	49	1000 (37)
Indium-117m	49	100 (3.7)
Indium-119m	49	1000 (37)
Iodine-120	53	10 (.37)
Iodine-120m	53	100 (3.7)
Iodine-121	53	100 (3.7)
Iodine-123	53	10 (.37)
Iodine-124	53	0.1 (.0037)
Iodine-125	53	0.01 (.00037)
Iodine-126	53	0.01 (.00037)
Iodine-128	53	1000 (37)
Iodine-129	53	0.001 (.000037)
Iodine-130	53	1 (.037)
Iodine-131	53	0.01 (.00037)
Iodine-132	53	10 (.37)
Iodine-132m	53	10 (.37)
Iodine-133	53	0.1 (.0037)
Iodine-134	53	100 (3.7)
Iodine-135	53	10 (.37)
Iridium-182	77	1000 (37)
Iridium-184	77	100 (3.7)
Iridium-185	77	100 (3.7)
Iridium-186	77	10 (.37)
Iridium-187	77	100 (3.7)
Iridium-188	77	10 (.37)
Iridium-189	77	100 (3.7)
Iridium-190	77	10 (.37)
Iridium-190m	77	1000 (37)
Iridium-192	77	10 (.37)
Iridium-192m	77	100 (3.7)

Iridium-194	77	100 (3.7)
Iridium-194m	77	10 (.37)
Iridium-195	77	1000 (37)
Iridium-195m	77	100 (3.7)
Iron-52	26	100 (3.7)
Iron-55	26	100 (3.7)
Iron-59	26	10 (.37)
Iron-60	26	0.1 (.0037)
Krypton-74	36	10 (.37)
Krypton-76	36	10 (.37)
Krypton-77	36	10 (.37)
Krypton-79	36	100 (3.7)
Krypton-81	36	1000 (37)
Krypton-83m	36	1000 (37)
Krypton-85	36	1000 (37)
Krypton-85m	36	100 (3.7)
Krypton-87	36	10 (.37)
Krypton-88	36	10 (.37)
Lanthanum-131	57	1000 (37)
Lanthanum-132	57	100 (3.7)
Lanthanum-135	57	1000 (37)
Lanthanum-137	57	10 (.37)
Lanthanum-138	57	1 (.037)
Lanthanum-140	57	10 (.37)
Lanthanum-141	57	1000 (37)
Lanthanum-142	57	100 (3.7)
Lanthanum-143	57	1000 (37)
Lead-195m	82	1000 (37)
Lead-198	82	100 (3.7)
Lead-199	82	100 (3.7)
Lead-200	82	100 (3.7)
Lead-201	82	100 (3.7)
Lead-202	82	1 (.037)
Lead-202m	82	10 (.37)
Lead-203	82	100 (3.7)
Lead-205	82	100 (3.7)
Lead-209	82	1000 (37)
Lead-210	82	0.01 (.00037)
Lead-211	82	100 (3.7)
Lead-212	82	10 (.37)
Lead-214	82	100 (3.7)
Lutetium-169	71	10 (.37)
Lutetium-170	71	10 (.37)

Lutetium-171	71	10 (.37)
Lutetium-172	71	10 (.37)
Lutetium-173	71	100 (3.7)
Lutetium-174	71	10 (.37)
Lutetium-174m	71	10 (.37)
Lutetium-176	71	1 (.037)
Lutetium-176m	71	1000 (37)
Lutetium-177	71	100 (3.7)
Lutetium-177m	71	10 (.37)
Lutetium-178	71	1000 (37)
Lutetium-178m	71	1000 (37)
Lutetium-179	71	1000 (37)
Magnesium-28	12	10 (.37)
Manganese-51	25	1000 (37)
Manganese-52	25	10 (.37)
Manganese-52m	25	1000 (37)
Manganese-53	25	1000 (37)
Manganese-54	25	10 (.37)
Manganese-56	25	100 (3.7)
Mendelevium-257	101	100 (3.7)
Mendelevium-258	101	1 (.037)
Mercury-193	80	100 (3.7)
Mercury-193m	80	10 (.37)
Mercury-194	80	0.1 (.0037)
Mercury-195	80	100 (3.7)
Mercury-195m	80	100 (3.7)
Mercury-197	80	1000 (37)
Mercury-197m	80	1000 (37)
Mercury-199m	80	1000 (37)
Mercury-203	80	10 (.37)
Molybdenum-101	42	1000 (37)
Molybdenum-90	42	100 (3.7)
Molybdenum-93	42	100 (3.7)
Molybdenum-93m	42	10 (.37)
Molybdenum-99	42	100 (3.7)
Neodymium-136	60	1000 (37)
Neodymium-138	60	1000 (37)
Neodymium-139	60	1000 (37)
Neodymium-139m	60	100 (3.7)
Neodymium-141	60	1000 (37)
Neodymium-147	60	10 (.37)
Neodymium-149	60	100 (3.7)
Neodymium-151	60	1000 (37)

Neptunium-232	93	1000 (37)
Neptunium-233	93	1000 (37)
Neptunium-234	93	10 (.37)
Neptunium-235	93	1000 (37)
Neptunium-236 (1.2 E 5 yr)	93	0.1 (.0037)
Neptunium-236 (22.5 hr)	93	100 (3.7)
Neptunium-237	93	0.01 (.00037)
Neptunium-238	93	10 (.37)
Neptunium-239	93	100 (3.7)
Neptunium-240	93	100 (3.7)
Nickel-56	28	10 (.37)
Nickel-57	28	10 (.37)
Nickel-59	28	100 (3.7)
Nickel-63	28	100 (3.7)
Nickel-65	28	100 (3.7)
Nickel-66	28	10 (.37)
Niobium-88	41	100 (3.7)
Niobium-89 (122 min)	41	100 (3.7)
Niobium-89 (66 min)	41	100 (3.7)
Niobium-90	41	10 (.37)
Niobium-93m	41	100 (3.7)
Niobium-94	41	10 (.37)
Niobium-95	41	10 (.37)
Niobium-95m	41	100 (3.7)
Niobium-96	41	10 (.37)
Niobium-97	41	100 (3.7)
Niobium-98	41	1000 (37)
Osmium-180	76	1000 (37)
Osmium-181	76	100 (3.7)
Osmium-182	76	100 (3.7)
Osmium-185	76	10 (.37)
Osmium-189m	76	1000 (37)
Osmium-191	76	100 (3.7)
Osmium-191m	76	1000 (37)
Osmium-193	76	100 (3.7)
Osmium-194	76	1 (.037)
Palladium-100	46	100 (3.7)
Palladium-101	46	100 (3.7)
Palladium-103	46	100 (3.7)
Palladium-107	46	100 (3.7)
Palladium-109	46	1000 (37)
Phosphorus-32	15	0.1 (.0037)
Phosphorus-33	15	1 (.037)

Platinum-186	78	100 (3.7)
Platinum-188	78	100 (3.7)
Platinum-189	78	100 (3.7)
Platinum-191	78	100 (3.7)
Platinum-193	78	1000 (37)
Platinum-193m	78	100 (3.7)
Platinum-195m	78	100 (3.7)
Platinum-197	78	1000 (37)
Platinum-197m	78	1000 (37)
Platinum-199	78	1000 (37)
Platinum-200	78	100 (3.7)
Plutonium-234	94	1000 (37)
Plutonium-235	94	1000 (37)
Plutonium-236	94	0.1 (.0037)
Plutonium-237	94	1000 (37)
Plutonium-238	94	0.01 (.00037)
Plutonium-239	94	0.01 (.00037)
Plutonium-240	94	0.01 (.00037)
Plutonium-241	94	1 (.037)
Plutonium-242	94	0.01 (.00037)
Plutonium-243	94	1000 (37)
Plutonium-244	94	0.01 (.00037)
Plutonium-245	94	100 (3.7)
Polonium-203	84	100 (3.7)
Polonium-205	84	100 (3.7)
Polonium-207	84	10 (.37)
Polonium-210	84	0.01 (.00037)
Potassium-40	19	1 (.037)
Potassium-42	19	100 (3.7)
Potassium-43	19	10 (.37)
Potassium-44	19	100 (3.7)
Potassium-45	19	1000 (37)
Praseodymium-136	59	1000 (37)
Praseodymium-137	59	1000 (37)
Praseodymium-138m	59	100 (3.7)
Praseodymium-139	59	1000 (37)
Praseodymium-142	59	100 (3.7)
Praseodymium-142m	59	1000 (37)
Praseodymium-143	59	10 (.37)
Praseodymium-144	59	1000 (37)
Praseodymium-145	59	1000 (37)
Praseodymium-147	59	1000 (37)
Promethium-141	61	1000 (37)

Promethium-143	61	100 (3.7)
Promethium-144	61	10 (.37)
Promethium-145	61	100 (3.7)
Promethium-146	61	10 (.37)
Promethium-147	61	10 (.37)
Promethium-148	61	10 (.37)
Promethium-148m	61	10 (.37)
Promethium-149	61	100 (3.7)
Promethium-150	61	100 (3.7)
Promethium-151	61	100 (3.7)
Protactinium-227	91	100 (3.7)
Protactinium-228	91	10 (.37)
Protactinium-230	91	10 (.37)
Protactinium-231	91	0.01 (.00037)
Protactinium-232	91	10 (.37)
Protactinium-233	91	100 (3.7)
Protactinium-234	91	10 (.37)
RADIONUCLIDES $ †		1 (.037)
Radium-223	88	1 (.037)
Radium-224	88	10 (.37)
Radium-225	88	1 (.037)
Radium-226 **	88	0.1 (.0037)
Radium-227	88	1000 (37)
Radium-228	88	0.1 (.0037)
Radon-220	86	0.1 (.0037)
Radon-222	86	0.1 (.0037)
Rhenium-177	75	1000 (37)
Rhenium-178	75	1000 (37)
Rhenium-181	75	100 (3.7)
Rhenium-182 (12.7 hr)	75	10 (.37)
Rhenium-182 (64.0 hr)	75	10 (.37)
Rhenium-184	75	10 (.37)
Rhenium-184m	75	10 (.37)
Rhenium-186	75	100 (3.7)
Rhenium-186m	75	10 (.37)
Rhenium-187	75	1000 (37)
Rhenium-188	75	1000 (37)
Rhenium-188m	75	1000 (37)
Rhenium-189	75	1000 (37)
Rhodium-100	45	10 (.37)
Rhodium-101	45	10 (.37)
Rhodium-101m	45	100 (3.7)
Rhodium-102	45	10 (.37)

Rhodium-102m	45	10 (.37)
Rhodium-103m	45	1000 (37)
Rhodium-105	45	100 (3.7)
Rhodium-106m	45	10 (.37)
Rhodium-107	45	1000 (37)
Rhodium-99	45	10 (.37)
Rhodium-99m	45	100 (3.7)
Rubidium-79	37	1000 (37)
Rubidium-81	37	100 (3.7)
Rubidium-81m	37	1000 (37)
Rubidium-82m	37	10 (.37)
Rubidium-83	37	10 (.37)
Rubidium-84	37	10 (.37)
Rubidium-86	37	10 (.37)
Rubidium-87	37	10 (.37)
Rubidium-88	37	1000 (37)
Rubidium-89	37	1000 (37)
Ruthenium-103	44	10 (.37)
Ruthenium-105	44	100 (3.7)
Ruthenium-106	44	1 (.037)
Ruthenium-94	44	1000 (37)
Ruthenium-97	44	100 (3.7)
Samarium-141	62	1000 (37)
Samarium-141m	62	1000 (37)
Samarium-142	62	1000 (37)
Samarium-145	62	100 (3.7)
Samarium-146	62	0.01 (.00037)
Samarium-147	62	0.01 (.00037)
Samarium-151	62	10 (.37)
Samarium-153	62	100 (3.7)
Samarium-155	62	1000 (37)
Samarium-156	62	100 (3.7)
Scandium-43	21	1000 (37)
Scandium-44	21	100 (3.7)
Scandium-44m	21	10 (.37)
Scandium-46	21	10 (.37)
Scandium-47	21	100 (3.7)
Scandium-48	21	10 (.37)
Scandium-49	21	1000 (37)
Selenium-70	34	1000 (37)
Selenium-73	34	10 (.37)
Selenium-73m	34	100 (3.7)
Selenium-75	34	10 (.37)

Selenium-79	34	10 (.37)
Selenium-81	34	1000 (37)
Selenium-81m	34	1000 (37)
Selenium-83	34	1000 (37)
Silicon-31	14	1000 (37)
Silicon-32	14	1 (.037)
Silver-102	47	100 (3.7)
Silver-103	47	1000 (37)
Silver-104	47	1000 (37)
Silver-104m	47	1000 (37)
Silver-105	47	10 (.37)
Silver-106	47	1000 (37)
Silver-106m	47	10 (.37)
Silver-108m	47	10 (.37)
Silver-110m	47	10 (.37)
Silver-111	47	10 (.37)
Silver-112	47	100 (3.7)
Silver-115	47	1000 (37)
Sodium-22	11	10 (.37)
Sodium-24	11	10 (.37)
Strontium-80	38	100 (3.7)
Strontium-81	38	1000 (37)
Strontium-83	38	100 (3.7)
Strontium-85	38	10 (.37)
Strontium-85m	38	1000 (37)
Strontium-87m	38	100 (3.7)
Strontium-89	38	10 (.37)
Strontium-90	38	0.1 (.0037)
Strontium-91	38	10 (.37)
Strontium-92	38	100 (3.7)
Sulfur-35	16	1 (.037)
Tantalum-172	73	100 (3.7)
Tantalum-173	73	100 (3.7)
Tantalum-174	73	100 (3.7)
Tantalum-175	73	100 (3.7)
Tantalum-176	73	10 (.37)
Tantalum-177	73	1000 (37)
Tantalum-178	73	1000 (37)
Tantalum-179	73	1000 (37)
Tantalum-180	73	100 (3.7)
Tantalum-180m	73	1000 (37)
Tantalum-182	73	10 (.37)
Tantalum-182m	73	1000 (37)

Tantalum-183	73	100 (3.7)
Tantalum-184	73	10 (.37)
Tantalum-185	73	1000 (37)
Tantalum-186	73	1000 (37)
Technetium-101	43	1000 (37)
Technetium-104	43	1000 (37)
Technetium-93	43	100 (3.7)
Technetium-93m	43	1000 (37)
Technetium-94	43	10 (.37)
Technetium-94m	43	100 (3.7)
Technetium-96	43	10 (.37)
Technetium-96m	43	1000 (37)
Technetium-97	43	100 (3.7)
Technetium-97m	43	100 (3.7)
Technetium-98	43	10 (.37)
Technetium-99	43	10 (.37)
Technetium-99m	43	100 (3.7)
Tellurium-116	52	1000 (37)
Tellurium-121	52	10 (.37)
Tellurium-121m	52	10 (.37)
Tellurium-123	52	10 (.37)
Tellurium-123m	52	10 (.37)
Tellurium-125m	52	10 (.37)
Tellurium-127	52	1000 (37)
Tellurium-127m	52	10 (.37)
Tellurium-129	52	1000 (37)
Tellurium-129m	52	10 (.37)
Tellurium-131	52	1000 (37)
Tellurium-131m	52	10 (.37)
Tellurium-132	52	10 (.37)
Tellurium-133	52	1000 (37)
Tellurium-133m	52	1000 (37)
Tellurium-134	52	1000 (37)
Terbium-147	65	100 (3.7)
Terbium-149	65	100 (3.7)
Terbium-150	65	100 (3.7)
Terbium-151	65	10 (.37)
Terbium-153	65	100 (3.7)
Terbium-154	65	10 (.37)
Terbium-155	65	100 (3.7)
Terbium-156	65	10 (.37)
Terbium-156m (24.4 hr)	65	1000 (37)
Terbium-156m (5.0 hr)	65	1000 (37)

Terbium-157	65	100 (3.7)
Terbium-158	65	10 (.37)
Terbium-160	65	10 (.37)
Terbium-161	65	100 (3.7)
Thallium-194	81	1000 (37)
Thallium-194m	81	100 (3.7)
Thallium-195	81	100 (3.7)
Thallium-197	81	100 (3.7)
Thallium-198	81	10 (.37)
Thallium-198m	81	100 (3.7)
Thallium-199	81	100 (3.7)
Thallium-200	81	10 (.37)
Thallium-201	81	1000 (37)
Thallium-202	81	10 (.37)
Thallium-204	81	10 (.37)
Thorium (Irradiated)	90	***
Thorium (Natural)	90	**
Thorium-226	90	100 (3.7)
Thorium-227	90	1 (.037)
Thorium-228	90	0.01 (.00037)
Thorium-229	90	0.001 (.000037)
Thorium-230	90	0.01 (.00037)
Thorium-231	90	100 (3.7)
Thorium-232 **	90	0.001 (.000037)
Thorium-234	90	100 (3.7)
Thulium-162	69	1000 (37)
Thulium-166	69	10 (.37)
Thulium-167	69	100 (3.7)
Thulium-170	69	10 (.37)
Thulium-171	69	100 (3.7)
Thulium-172	69	100 (3.7)
Thulium-173	69	100 (3.7)
Thulium-175	69	1000 (37)
Tin-110	50	100 (3.7)
Tin-111	50	1000 (37)
Tin-113	50	10 (.37)
Tin-117m	50	100 (3.7)
Tin-119m	50	10 (.37)
Tin-121	50	1000 (37)
Tin-121m	50	10 (.37)
Tin-123	50	10 (.37)
Tin-123m	50	1000 (37)
Tin-125	50	10 (.37)

Tin-126	50	1 (.037)
Tin-127	50	100 (3.7)
Tin-128	50	1000 (37)
Titanium-44	22	1 (.037)
Titanium-45	22	1000 (37)
Tungsten-176	74	1000 (37)
Tungsten-177	74	100 (3.7)
Tungsten-178	74	100 (3.7)
Tungsten-179	74	1000 (37)
Tungsten-181	74	100 (3.7)
Tungsten-185	74	10 (.37)
Tungsten-187	74	100 (3.7)
Tungsten-188	74	10 (.37)
Uranium (Depleted)	92	***
Uranium (Irradiated)	92	***
Uranium (Natural)	92	**
Uranium Enriched 20% or greater	92	***
Uranium Enriched less than 20%	92	***
Uranium-230	92	1 (.037)
Uranium-231	92	1000 (37)
Uranium-232	92	0.01 (.00037)
Uranium-233	92	0.1 (.0037)
Uranium-234 **	92	0.1 (.0037)
Uranium-235 **	92	0.1 (.0037)
Uranium-236	92	0.1 (.0037)
Uranium-237	92	100 (3.7)
Uranium-238 **	92	0.1 (.0037)
Uranium-239	92	1000 (37)
Uranium-240	92	1000 (37)
Vanadium-47	23	1000 (37)
Vanadium-48	23	10 (.37)
Vanadium-49	23	1000 (37)
Xenon-120	54	100 (3.7)
Xenon-121	54	10 (.37)
Xenon-122	54	100 (3.7)
Xenon-123	54	10 (.37)
Xenon-125	54	100 (3.7)
Xenon-127	54	100 (3.7)
Xenon-129m	54	1000 (37)
Xenon-131m	54	1000 (37)
Xenon-133	54	1000 (37)

Xenon-133m	54	1000 (37)
Xenon-135	54	100 (3.7)
Xenon-135m	54	10 (.37)
Xenon-138	54	10 (.37)
Ytterbium-162	70	1000 (37)
Ytterbium-166	70	10 (.37)
Ytterbium-167	70	1000 (37)
Ytterbium-169	70	10 (.37)
Ytterbium-175	70	100 (3.7)
Ytterbium-177	70	1000 (37)
Ytterbium-178	70	1000 (37)
Yttrium-86	39	10 (.37)
Yttrium-86m	39	1000 (37)
Yttrium-87	39	10 (.37)
Yttrium-88	39	10 (.37)
Yttrium-90	39	10 (.37)
Yttrium-90m	39	100 (3.7)
Yttrium-91	39	10 (.37)
Yttrium-91m	39	1000 (37)
Yttrium-92	39	100 (3.7)
Yttrium-93	39	100 (3.7)
Yttrium-94	39	1000 (37)
Yttrium-95	39	1000 (37)
Zinc-62	30	100 (3.7)
Zinc-63	30	1000 (37)
Zinc-65	30	10 (.37)
Zinc-69	30	1000 (37)
Zinc-69m	30	100 (3.7)
Zinc-71m	30	100 (3.7)
Zinc-72	30	100 (3.7)
Zirconium-86	40	100 (3.7)
Zirconium-88	40	10 (.37)
Zirconium-89	40	100 (3.7)
Zirconium-93	40	1 (.037)
Zirconium-95	40	10 (.37)
Zirconium-97	40	10 (.37)

$ The RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

† The RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in TABLE 1-HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES and this table conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have RQs shown in TABLE 1 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 in this table.

** The method to determine the RQs for mixtures or solutions of radionuclides can be found in paragraph 7 of the note preceding TABLE 1 of this appendix. RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

*** Indicates that the name was added by RSPA because it appears in the list of radionuclides in 49 CFR 173.435. The reportable quantity (RQ), if not specifically listed elsewhere in this appendix, shall be determined in accordance with the procedures in paragraph 7 of this appendix.

INSTALLATION EMERGENCY MANAGEMENT PLAN

(IEMP)

EAFB 10-2

October 2019

96TH TEST WING
EGLIN AIR FORCE BASE

OPR: 96 CEG

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 96TH TEST WING (AFMC)
EGLIN AIR FORCE BASE LORIDA

MEMORANDUM FOR INSTALLATION COMMANDER

FROM: 96 CEG/CC

SUBJECT: Eglin AFB Installation Emergency Management Plan 10-2, Short Title EAFB 10-2 IEMP

1. Subject plan has been reviewed and coordinated IAW the Contingency Plans review process. It is deemed accurate, complete and necessary to the execution of unit mission.

2. This plan supersedes EAFB 10-2 dated Jan 18, and is effective upon receipt for planning purposes and for implementation on Eglin Main, Duke Field, 20 SPCS, 6th RTB and 7th SFG(A) compounds as directed by the Installation Commander (96 TW/CC).

3. Each installation unit, including all DoD and Non-DoD tenants, must use this plan to develop unit-specific checklists to support this plan within **60** days of publication. Checklists must tell who, what, when, where and how unit actions will be accomplished. Once checklists are complete and before implementation, they must be coordinated through 96 CES/CEX and approved by the unit commander.

4. The office of primary responsibility for this document is 96 CES/CEX, Readiness and Emergency Management Flight, at 882-9382.

SCHULIGER.JOHN.D.1044860313 Digitally signed by SCHULIGER.JOHN.D.1044860313 Date: 2019.10.03 17:10:01 -06'00'

JOHN D SCHULIGER, Colonel, USAF
Commander, 96th Civil Engineer Group

1st Ind, INSTALLATION COMMANDER **29 Oct 19**

MEMORANDUM FOR ALL EGLIN ORGANIZATIONS

Concur. Subject plan will be posted on the Eglin Installation Plans SharePoint Site.

SCOTT A. CAIN
Brigadier General, USAF
Commander

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EAFB 10-2 IEMP
TABLE OF CONTENTS

EAFB 10-2 IEMP
SECURITY INSTRUCTIONS AND RECORD OF CHANGES

1. The long title of this document is the Eglin AFB Installation Emergency Management Plan (IEMP) 10-2. The short title is EAFB 10-2 IEMP.

2. This plan is unclassified but it is **FOR OFFICIAL USE ONLY (FOUO)**.

3. Tasked units and friendly forces may extract and reproduce the portions of this document essential for planning.

4. Annual review of this plan will be initiated in February of each year, for continuity. All tasked units will submit concurrence or changes IAW Contingency Plans Management.

5. OPERATIONS SECURITY (OPSEC): OPSEC has been considered in the development of this plan. All organizations tasked by this plan will ensure necessary action is taken to safeguard any operational and communication information that might fall within the scope of the OPSEC program. OPSEC guidelines are contained in AFI 10-701, *Operations Security (OPSEC)*, which will:

5.1. Identify those actions that can be observed (indicators) by potential adversaries.

5.2. Determine indicators that could be interpreted or pieced together to derive critical information (CI) in time to be useful to an adversary.

5.3. Select and execute measures that totally eliminate or reduce to an acceptable level vulnerability created by friendly actions which an adversary can exploit.

6. COMMUNICATIONS SECURITY (COMSEC): All personnel must practice good COMSEC at all times.

6.1. Maintain good radio discipline – use designated call signs.

6.2. Always use prescribed checklist numbering and alpha character schemes when reporting any accident/disaster casualties via Land Mobile Radio (LMR) or phones.

6.3. Protect all classified or sensitive information by using specified security/encryption measures.

7. All approved changes should be posted and recorded below.

Record of Changes			
Change	**Remarks**	**Date Posted**	**Posted by**

EAFB 10-2 IEMP
PLAN SUMMARY

1. PURPOSE: This plan identifies procedures to be followed in the event of major accidents, natural disasters, attacks and terrorist use of Chemical, Biological, Radiological, Nuclear or High-Yield Explosive (CBRNE) weapons or materials. It outlines and describes specific actions to be accomplished during an event or contingency that would negatively impact Eglin AFB or the surrounding areas. It identifies specific functional area checklists required to implement response procedures and minimize operational capability impacts on the Air Force (AF) units.

2. CONDITIONS OF EXECUTION:

2.1. This plan is implemented when an event occurs that is beyond the control of first responders or is serious enough to warrant a full installation response.

2.2. The 96 TW/CC or designated representative may implement this plan independently or in conjunction with other plans.

2.3. The procedures within this plan apply to all installation units, host and associates, assigned or attached.

2.4. Eglin AFB will respond to major accidents involving Department of Defense (DoD) and Department of Energy (DoE) assets that occur within the installation's defined area of responsibility or as directed by higher authority.

2.5. Headquarters (HQ) AF, HQ AFMC, or the AF Operations Center may also direct responses based on unique circumstances.

2.6. AF response to civilian emergencies fall into four categories: immediate response, Mutual Aid Agreement (MAA), Presidentially-declared disaster/emergency, and 10-Day Rule. See Appendix 7 of Annex B for additional details regarding Defense Support of Civil Authorities (DSCA).

2.7. This plan is based on the information, factors and estimates available at the time of preparation and may be modified in a specific contingency.

3. ACTIONS:

3.1. **PREVENTION:** Includes broad categories of activities such as intelligence collection and analysis, active defense, proliferation prevention, fire prevention, disease prevention, and contamination prevention.

3.2. **PREPAREDNESS:** Includes actions such as planning, training, and exercising.

Developing installation response plans, conducting base populace training, and conducting major accident response exercises are all considered preparedness actions. Emergency Management coordinates with COOP/CARM Program Manager (PM) to ensure emergency response programs are integrated with mission assurance programs.

3.3. **RESPONSE:** Includes a combination of the following actions to respond to an incident: deploying the Disaster Response Force (DRF), implementing response plans and checklists and initiating the installation notification, and warning system.

3.4. **RECOVERY:** Includes operations such as implementing casualty treatments, rendering safe unexploded ordnance (UXO), personnel and resource decontamination, airfield damage repair, and facility restoration. Recovery planning and actions begin as soon as possible to ensure sustainment of crucial missions/Mission Essential Functions (MEF) and restoration of normal day-to-day operations.

3.5. **MITIGATION:** An ongoing process that is considered, to some degree, a part of every phase of incident management. In a global sense, mitigation includes all activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident.

4. OPERATION TO BE CONDUCTED:

4.1. **MAJOR ACCIDENTS:** Eglin AFB may be impacted by major accidents involving hazardous materials (HAZMAT), aircraft, munitions, and explosives, modes of transportation, facility emergencies or industrial accidents. Eglin AFB must prepare for and be able to quickly respond to major accidents to prevent the loss of life, preserve valuable resources, protect the environment, and continue the mission.

4.2. **NATURAL DISASTERS:** Eglin AFB could experience any of the following natural disasters: hurricanes, tornadoes, woodland fire, and floods. Eglin AFB must be prepared to effectively warn and notify personnel, and implement protective measures and recovery operations.

4.3. **ATTACK ACTIONS:** CBRNE and Conventional attacks are possible at Eglin AFB.

4.4. **TERRORIST USE OF CBRNE:**

4.4.1. Eglin AFB is required to prepare for a full range of CBRNE terrorist threats to include the use of CBRNE weapons or materials and/or a combination thereof. Terrorist use of CBRNE planning and operations are differentiated from that of an enemy attack by the general nature of the threat, the command and control structure and the in-place response organization in various disaster, contingency or emergency situations and environments.

4.4.2. Within the Continental United States (CONUS), peacetime rules of engagement and

standards set forth in the Occupational Safety and Health Administration (OSHA) and National Fire Protection Association (NFPA) must be followed. The Air Force Instruction 48-137, *Respiratory Protection Program*, must be followed for peacetime responses.

ABBREVIATIONS AND ACRONYMS

A&FRC	Airman and Family Readiness Center
AAFES	Army and Air Force Exchange Service
AAR	After-Actions Report
ABO	Air Base Operability
ACC	Air Combat Command
AFCA	Air Force Communications Agency
AFCESA	Air Force Civil Engineer Support Agency
AFH	Air Force Handbook
AFI	Air Force Instruction
AFIMS	Air Force Incident Management System
AFMAN	Air Force Manual
AFMC	Air Force Materiel Command
AFNSEP	Air Force Office of National Security Emergency Preparedness
AFOC	Air Force Operations Center
AFOSH	Air Force Occupational Safety and Health
AFPAM	Air Force Pamphlet
AFPD	Air Force Policy Directive
AFRAT	Air Force Radiation Assessment Team
AFRC	Air Force Reserve Command
AFRRI	Armed Forces Radiobiology Research Institute
AFSOAWC	Air Force Special Operations Air Warfare Center
AFSOC	Air Force Special Operations Command
AFVA	Air Force Visual Aid
AIB	Accident Investigation Board
AM	Airfield Management
AMS	Aerial Measuring System
ANG	Air National Guard
AOR	Area of Responsibility
ARAC	DoE Atmospheric Release Advisory Capability
ARC	American Red Cross
ARG	Accident Response Group
ASHG	Accident Site Health Group
ATC	Air Traffic Control
ATF	Advance Task Force
AT/FP	Antiterrorism/Force Protection
BCE	Base Civil Engineer
BDOC	Base Defense Operation Center
BEE	Bioenvironmental Engineer
BP	Base Populace

BSI	Base Support Installation
BSP	Base Support Plan
C2	Command and Control
C4I	Command, Control, Communications, Computers and Intelligence
CAP	Civil Air Patrol
CARM	Critical Asset Risk Management
CAT	Crisis Action Team
CATD	Crisis Action Team Directive
CB	Chemical/Biological
CBRNE	Chemical, Biological, Radiological, Nuclear or High Yield Explosive
CCA	Contamination Control Area
CCS	Contaminated Control Station
CCT	Contamination Control Teams
CDC	Center for Disease Control and Prevention
CE	Civil Engineer
CENTCOM	Central Command
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
CHEMTREC	Chemical Transportation Emergency Center
CMAT	Consequence Management Advisory Team
CMRT	Consequence Management Response Team
COMSEC	Communications Security
CONPLAN	U.S. Government Interagency Domestic Terrorism Concept of Operations Plan
CONUS	Continental United States
COOP	Continuity of Operations
CP	Command Post
CRP	Contingency Response Plan
DCC	Damage Control Center
DCO	Defense Coordinating Officer
DEM	Director Emergency Management
DHS	Department of Homeland Security
DIM	Dead Injured Missing
DoD	Department of Defense
DoE	Department of Energy
DoT	Department of Transportation
DRF	Disaster Response Force
DSCA	Defense Support of Civil Authorities
DTRA	Defense Threat Reduction Agency
DU	Depleted Uranium
DV	Distinguished Visitors
DWC	US NORTHCOM Domestic Warning Center

EAL	Entry Authorization Listing
ECC	Emergency Communication Center
ECP	Entry Control Point
EFAC	Emergency Family Assistance Center
EHS	Extremely Hazardous Substance
EM	Emergency Management; Emergency Manager
EMA	Emergency Management Agency
EO	Emergency Operation
EOC	Emergency Operations Center
EOCD	Emergency Operations Center Director
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
EPLO	Emergency Preparedness Liaison Officer
ESF	Emergency Support Function
ESP	Emergency/Special Project
ESO	Evacuee Support Officer
FAA	Federal Aviation Administration
FAR	Family Assistance Representative
FBI	Federal Bureau of Investigation
FCC	Fire Communications Center
FEMA	Federal Emergency Management Agency
FOUO	For Official Use Only
FPCON	Force Protection Condition
FRERP	Federal Radiological Emergency Response Plan
FRMAC	Federal Radiological Monitoring and Assessment Center
FRP	Federal Response Plan
FTX	Field Training Exercise
GPRMC	Global Patient Rapid Movement Center
GRREG	US Army Graves Registration
Hammer ACE	Hammer Adaptive Communications Element
HAZMAT	Hazardous Material
HC	Chaplain
HEPA	High Efficiency Particulate Air
HHA	Hand Held Assay
HOT SPOT	Mobile Accident Response Group Unit
HQ ACC	Headquarters Air Combat Command
HQ AFSPC	Headquarters Air Force Space Command
HRT	Hurricane Recovery Team
HURCON	Hurricane Condition
HUREVAC	Hurricane Evacuation
HVAC	Heating Ventilation Air Conditioning
IATA	International Air Transport Association

IAW	In Accordance With
IC	Incident Commander
ICBM	Intercontinental Ballistic Missile
ICD	Installation Commander Directive
ICP	Incident Command Post
ICPM	Installation COOP/CARM Program Manager
ICS	Incident Command System
IED	Improvised Explosive Device
IEMP	Installation Emergency Management Plan
IND	Improvised Nuclear Device
INWS	Installation Notification and Warning System
IPPD	In-Place Patient Decontamination
IRB	Initial Response Base
IRE	Initial Response Element
IRF	Initial Response Force
IRP	Individual Readiness Posture
ISP	Installation Security Plan
JA	Staff Judge Advocate
JACKPOT	Joint Airborne Communications Center/Command Post
JBEEM	Joint Bio-Environmental Emergency Management
JCCSA	Joint Communications Contingency Station Assets
JDAT	Joint Deployable Assessment Team
JFO	Joint Field Office
JIC	Joint Information Center
JNACC	Joint Nuclear Accident Coordinating Center
JTF	Joint Task Force
LEPC	Local Emergency Planning Committee
LFA	Lead Federal Agency
LIMFAC	Limiting Factors
LMR	Land Mobile Radio
MAA	Mutual Aid Agreement
MAJCOM	Major Command
MCP	Mobile Command Post
MCPT	Mobile Command Post Trailer
MCRP	Medical Contingency Response Plan
MEDRED-C	Medical Report for Emergencies, Disasters and Contingencies
MEOC	Mobile Emergency Operations Center
MOA	Memorandum of Agreement
MOPP	Mission Oriented Protective Posture
MOU	Memorandum of Understanding
MPS	Military Personnel Section
MRAT	Medical Radiological Advisory Team
MRP	Mishap Response Plan

MSCA	Military Support to Civil Authorities
MSDS	Material Safety Data Sheet
MTF	Medical Treatment Facility
NARP	Nuclear Weapons Accident Response Procedures
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NBC	Nuclear Biological Chemical
NBCC	Nuclear Biological Chemical Conventional
NDA	National Defense Area
NEST	Nuclear Emergency Search Team
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NM	Nautical Mile
NMCC	National Military Command Center
NMRI	Naval Medical Research Institute
NORAD	North American Air Defense Command
NOTAM	Notice to Airmen
NRC	National Response Center
NRF	National Response Framework
OCONUS	Outside the Continental United States
OEG	Occupational Exposure Group
OPR	Office of Primary Responsibility
OPREP	Operational Report
OPSEC	Operations Security
OSCP	On-Scene Control Point
OSI	Office of Special Investigations
OSHA	Occupational Safety and Health Administration
OSS	Operations Support Squadron
PA	Public Affairs
PETS	Personnel Evacuation Tracking System
PHEO	Public Health Emergency Officer
PPE	Personal Protective Equipment
RADCON	Radiological Control Team
RADIAC	Radiation Detection, Indication and Computation
RAMT	Radiological Advisory Medical Team
RC	Regional Coordinator
RDD	Radiological Dispersal Device
RIC	USAF Radioisotope Committee
RO	Radiation Officer
ROC	Recovery Operation Chief
ROE	Rules of Engagement
ROM	Restriction Of Movement
RST	Readiness Support Team

RTF	Response Task Force (HQ ACC)
RWG	Recovery Working Group
SAR	Search and Rescue
SFO	Senior Fire Official
SIB	Safety Investigation Board
SIP	Shelter In Place
SIPRNET	Secret Internet Protocol Router Network
SITREP	Situation Report
SMT	Shelter Management Team
SPACECOM	USAF Space Command
TCP	Traffic Control Point
TEU	Technical Escort Unit
TIM	Toxic Industrial Material
TTP	Tactics, Techniques and Procedures
TTSQ	Test Systems Squadron
TTX	Table Top Exercise
TWG	Threat Working Group
UCC	Unit Control Center
UXO	Unexploded Ordnance
WMD	Weapons of Mass Destruction
WRM	War Reserve Material

EAFB 10-2 IEMP
BASIC PLAN

1. SITUATION: This plan is implemented when an incident occurs that is beyond the control of first responders or is serious enough to warrant an installation response. The 96 TW/CC, 96 TW/CV or designated representative will decide whether or not to implement any/all checklists within this plan.

2. MISSION:

2.1. Minimize the loss of operational capability caused by wartime contingencies, peacetime disasters/accidents or terrorist-related events.

2.2. Provide maximum protection for installation personnel before, during and after a major incident.

2.3. Restore essential installation and unit functions as soon as possible.

2.4. Relieve suffering and provide care for survivors after an attack or disaster.

2.5. Provide DSCA to civilian communities IAW AFI 10-801, *Defense Support of Civil Authorities*.

2.6. Recover the Eglin AFB primary mission and return the installation to pre-incident status.

3. OPERATIONAL CONSTRAINTS:

3.1. Emergency medical treatment.

3.1.1. Eglin AFB has limited inpatient capability. Memorandums are in-place with three local hospitals.

3.1.2. The closest trauma center is located at Fort Walton Beach Medical Center.

3.2. Detection and sampling of suspected chemical, biological and radiological agents.

3.2.1**.** The closest biological agent "B" laboratory is on Eglin AFB.

3.2.2. Chemical and radiological samples will be sent for analysis under the guidance of the FBI.

3.3. All off-base responses require close coordination with local authorities. Eglin AFB has no specific authority when responding off base other than as the property owner for the resources involved in the accident/response. **NOTE:** Certain national security material may necessitate the establishment of a National Defense Area (NDA), which federalizes property. There must

be close coordination with the installation commander, incident commander, Staff Judge Advocate and local authorities.

4. ASSUMPTIONS:

4.1. Major accidents may occur at any time without warning, on or off Eglin AFB, involving aircraft, nuclear weapons or components, toxic fuels, toxic industrial materials (TIM), explosives and/or other hazardous materials. Eglin AFB must respond to all accidents involving military resources for which it is the closest military installation/activity or as directed by Air Force Materiel Command (AFMC). Eglin AFB reacts using the principles of notification, response, withdrawal and recovery to respond with the Disaster Response Force (DRF).

4.2. Numerous types of natural disasters or domestic emergencies can occur with little or no warning and may degrade the base's ability to execute its mission.

4.3. The installation may be called upon to provide immediate aid and assistance to other military installations and civilian agencies in accordance with applicable statutes and regulations.

4.4. Other military or Federal response agencies or civil authorities (with official/approved MAAs/NDAs in place) will respond to AF requests for assistance when disasters overwhelm installation capabilities.

4.5. Evacuation of key resources will be accomplished to minimize the damage/destruction caused by attacks, natural disasters or terrorist activities.

4.6. Assistance from allied forces may be limited in the event of a widespread disaster.

4.7. Disasters may result in the entire installation or portions being isolated for extended periods of time.

4.8. AF installations are primary targets in the event of nuclear attacks on the CONUS.

4.9. Nation State attacks will be preceded by increased international tensions and an orderly increase in military readiness. This will allow sufficient time to implement protective actions addressed in Annex D of this plan.

4.10. Facility protection against attacks may not be adequate to sustain wartime operations.

4.11. Terrorist groups may target Eglin AFB or nearby communities to create casualties, inflict damage or destruction, create chaos/panic (threatening calls/letters) or otherwise disrupt mission operations. CBRNE weapons/material could be used directly against the installation, civil, government, economic, population or social centers/icons that would impact Air Force operations.

4.12. Attacks (such as biological or use of radiological exposure devices) may go unrecognized for unspecified periods of time.

4.13. "On-base refers to all areas within the Eglin Testing and Training Complex (ETTC). This encompasses all US Air Force land, including Gulf of Mexico ranges, regardless of jurisdiction type. "Off-base refers to any areas beyond US Air Force jurisdiction. For further detail on specific areas, check with 96 Civil Engineer Group Real Property Office to examine maps and/or written boundary descriptions.

5. EXECUTION: See unit functional checklists for the applicable units.

6. LOGISTICS:

6.1. **LOGISTICS APPRAISAL:**

6.1.1. This plan is logistically feasible and within Eglin AFB capabilities to execute under most circumstances. Because of the many unknown logistics requirements involved in plan implementation, an accurate appraisal of logistics requirements for each potential event is not possible. Various factors will determine requirements (e.g., the emergency location, magnitude of the situation and size of available deployment force).

6.1.2. Eglin AFB will use all available equipment as required, to include those items postured within unit type codes (UTC) packages during response to major accident and/or terrorist attack situations. **NOTE:** War Reserve Materiel (WRM) may be used to support domestic incidents, but approval will be obtained from the WRM releasing authority IAW AFI 25-101, *Air Force War Reserve Materiel (WRM) Policies and Guidance*. When WRM is used to support domestic incidents, notify the approving authority as soon as possible.

6.2. Support for extended response/recovery operations may require augmentation (personnel, equipment, vehicles and supplies) from other installations, through contracting mechanisms from the local community or through approved/established support agreements. COOP Plan execution should be recommended if extended operation impacts Mission Essential Functions (MEF).

6.3. Adequate protective shelter space is not available on base for dependents and non-mission essential civilian employees.

6.4. Air Force Communications Agency provides emergency communication support through Hammer Adaptive Communications Element (Hammer ACE).

6.5. Eglin AFB may be tasked as an Initial Response Base (IRB) for a nuclear accident and assistance would be required for extensive response or recovery requirements.

6.6. Headquarters Air Force Global Strike Command (AFGSC) Response Task Force (RTF)

will provide radiological incident or accident assistance for other than Intercontinental Ballistic Missile (ICBM) assets within the CONUS, Puerto Rico or U.S. Virgin Islands.

6.7. Headquarters Air Force Space Command (HQ AFSPC) ICBM RTF will provide radiological assistance for events affecting Air Force-owned ICBM assets. **NOTE:** Further assistance for radiological events can be provided by the DoE Accident Response Group (ARG).

7. ADMINISTRATION:

7.1. **RELATIONSHIP TO OTHER PLANS:** EAFB 10-2 IEMP is complemented by the following plans. All Eglin AFB units will include specific EAFB 10-2 IEMP requirements in their respective plans:

7.1.1. **Medical Contingency Response Plan (MCRP):** The purpose is to establish procedures for wartime, humanitarian assistance, homeland security/defense and disaster response contingencies for medical personnel and includes:

7.1.1.1. Casualty management.

7.1.1.2. Reception and evacuation.

7.1.1.3. Emergency medical response.

7.1.1.4. HAZMAT/CBRNE surveillance, detection and sample evacuation procedures.

7.1.1.5. Plans for deploying, receiving and integrating medical augmentation forces.

7.1.2. **Contingency Response Plan (CRP):** IAW AFPAM 10-219, Volume 3, *Civil Engineer Contingency Response and Recovery Procedures*, the purpose of the Civil Engineer CRP is to minimize the loss of operation capabilities of units located on Eglin AFB, provide overall direction for base recovery, mobilize forces and mitigate human suffering.

7.1.3. **Integrated Defense Plan (IDP):** IAW AFI 31-101, *Integrated Defense (FOUO)*, the Air Force Defense Program is the basis for conducting security operations and resource protection operations at Eglin AFB. The plan defines the basic objectives sought by Security Forces operations and describes the design of these operations.

7.1.4. **Installation Antiterrorism (AT) Plan:** The AT Plan is written IAW DODIO-2000.16V1_AFI10-245-0, *Antiterrorism (AT).* For Eglin AFB, Standard 20 – *Terrorist Incident Response Measures* and Standard 21 – *Terrorism Consequence Management Measures* from DODIO-2000.16V1_AFI10-245-0 are contained within this IEMP 10-2. This plan, used in conjunction with the Eglin AFB AT Plan, supports emergency response planning, recovery and restoration of the mission and the installation after a terrorist attack.

7.1.5. **HAZMAT Emergency Planning and Response Plan:** EAFB Plan 32-6 integrates Federal, State and local emergency planning and response requirements with DoD emergency planning and response requirements. It provides guidance to Eglin AFB personnel to prepare for and respond to a HAZMAT incident.

7.1.6. **Mishap Response Plan (MRP):** EAFB Plan 91-202 complements EAFB 10-2 IEMP and provides guidance for rapid and positive response to all flight, weapons and ground mishaps that occur within the geographic area of responsibility for Eglin AFB. It should be implemented immediately upon notification of an aircraft incident/accident. This plan defines responsibilities and prescribes procedures for responding to, investigating and reporting major aircraft/weapons/ground mishaps. This plan ensures timely assembly of the Interim Safety Board (ISB) in order to preserve evidence, compile data and protect "privileged" and "For Official Use Only" information for the Air Force Safety Investigation and report.

7.1.7. **Base Support Plan:** EAFB 10-404 BSP integrates wartime actions for a high threat or deployed location. This plan identifies requirements needed to support Eglin AFB and what capabilities are brought to that location if deploying forces are known. Portions of this plan are classified.

7.1.8. **Eglin AFB Plan 9507 Aircraft Hurricane Evacuation Plan:** This plan provides guidance for planning, organizing and implementing the coordinated evacuation of military aircraft at Eglin AFB, Hurlburt Field and Duke Field.

7.1.9. **Okaloosa County Comprehensive Emergency Management Plan:** Identifies the hazards to which Okaloosa County is vulnerable, sets down responsibilities of all county and volunteer agencies and outlines a means for the County's resources to be used to assist the citizens and political subdivisions of the County. It describes a coordination mechanism for response to and recovery from disasters and incidences.

7.1.10. **Florida Emergency Operations Plan:** Facilitates delivery of State assistance to support local governments as they deal with the management of significant disasters. The plan outlines the policies, concepts of operations organizational structures and Federal-State-Local interfaces. It is designed to supplement and support local response and recovery efforts and is the basis for providing State resources. Local governments have capabilities and the primary responsibility for response to and recovery from disasters and emergencies but when those capabilities are exceeded State assistance is available.

7.1.11. **National Response Framework (NRF):** The NRF is the core operational framework for national incident management. It is an all-hazards plan that provides the structure and mechanisms for national level policy and operational coordination for domestic incident management. The NRF can be partially or fully implemented in the context of a threat, anticipation of a significant event or the response to a significant event. The Base Plan describes the structure and processes comprising a national approach to domestic incident management designed to integrate the efforts and resources of Federal, State, local, tribal,

private sector and nongovernmental organizations. The Base Plan includes planning assumptions, roles and responsibilities, concept of operations, preparedness guidelines and plan maintenance instructions.

7.1.11.1. The NRF incorporates relevant portions of and supersedes the:

7.1.11.1.1. Federal Response Plan (FRP)

7.1.11.1.2. U.S. Government Interagency Domestic Terrorism Concept of Operations Plan (CONPLAN).

7.1.11.1.3. Federal Radiological Emergency Response Plan (FRERP).

7.1.12. **Reporting Requirements:** Identified units will prepare and submit reports in support of IEMP events. See Table 1, Reporting Requirements for typical reports.

7.1.13. **Disaster Event Log/Activity Summary**

7.1.13.1. Chronological listing of events.

7.1.13.2. Unit resources committed.

7.1.13.3. Peak number of unit personnel utilized.

7.1.13.4. Quantity and types of equipment/items/supplies used and estimated reimbursement.

7.1.14. After-Actions Report (AAR)

7.1.14.1. Organization.

7.1.14.2. Operation nickname, (i.e., "2007 Earthquake: Eglin AFB").

7.1.14.3. Time and date event started/ended.

7.1.14.4. Special activities before the disaster occurred. Discuss method to activate response plans.

7.1.14.5. Problems encountered during the response. Discuss situations caused by the incident. Address AF casualties or damage to AF facilities resulting from the incident, response or recovery operations. Provide estimates of property damage.

7.1.14.6. Summary of post disaster activities. Provide a chronological summary of actions from notification to termination of response/recovery operations. List the types of forces, equipment and supplies used. Include estimate of expenses incurred. Provide pertinent photographs,

highlights of the operation, support rendered, unusual actions or occurrences or other events of interest.

7.1.14.7. Remarks and lessons learned. List specific issues key to the success of the operation. Address deficiencies that should have been but were not considered before or during the response. Include the need for specialized equipment or training.

7.2. Activities/units assisting civil agencies will account for all supplies, materials and services provided. Forward this information to 96 CPTS after terminating incident support.

8. COMMAND AND CONTROL:

8.1. The 96 TW/CC has the overall responsibility for the Emergency Management (EM) program.

8.2. The Flight Commander or ranking member of 96 CES/CEX is the EM program manager for Eglin AFB.

8.3. 96 CEG/CC appoints the HAZMAT/CBRNE Emergency Program Manager for Eglin AFB.

8.4. The Incident Commander (IC) is the designated representative of the 96 TW/CC and directs all military response activities at the incident scene until operations conclude or is relieved by a higher authority. At any incident where actual or suspected hazardous materials are present, the IC must be "HAZMAT Incident Commander" certified through DoD Fire & Emergency Services Certification Program.

8.5. Off-base responders must observe the jurisdictional rights of civilian authorities and private citizens. Off-base accidents may require the establishment of an MAA/NDA, approved by 96 TW/CC, to permit control of civilian property by military forces. Even after establishment of the NDA, close coordination with civil law enforcement agencies is essential to ensure an effective security program.

8.6. There are multiple unit Command Posts geographically located at Eglin AFB, all OPREPs will be coordinated and sent through the Eglin AFB, Command Post (EAFB CP).

9. FORCES EMPLOYED:

9.1. Disaster response may involve the entire DRF or portions thereof, depending upon the magnitude and severity of the disaster. Additional support may be called on from local, State and Federal agencies. The DRF is composed of CAT, EOC, ECC, Incident Commander, First Responders, Emergency Responders, UCC, SFS and specialized teams.

9.2. Specialized teams are activated and deployed based on the recommendation of the IC. Tasked organizations must ensure teams can provide 24-hour coverage.

10. COMMUNICATIONS:

10.1. The Installation Notification and Warning System (INWS) is a combination of methods using audible and visual signals, verbal messages or electronic communication. Eglin AFB uses the Be-Ready Program, *U.S. Air Force Emergency Notification Signals*.

10.2. **COMMUNICATIONS MODES** include but are not limited to:

10.2.1. Base Siren/Giant Voice System

10.2.2. Primary/Secondary Crash Net

10.2.3. Intrabase Radio Nets

10.2.4. Computer-based Notification System

10.2.5. Runners

10.2.6. Mobile Public Address Systems

10.2.7. Telephone Alerting System

10.2.8. Alert

10.3. **EGLIN AFB INCIDENT COMMAND STRUCTURE:** Organizations will utilize this structure during any incident and/or exercise regardless if the EOC is activated. To ensure National Incident Management System (NIMS)/Air Force Incident Management System (AFIMS) compliance IAW HSPD-5, information flow will follow the figures provided.

10.3.1. **Eglin AFB EOC Emergency Support Functions:** The following table indicates the AFIMS mandated ESFs for the EOC. All positions are dictated IAW AFMAN 10-2502.

EGLIN AFB EOC EMERGENCY SUPPORT FUNCTIONS AND OPRS	
ESF Number and Name	**Eglin AFB OPRs**
1. Transportation	96 LRS
2. Communications	96 CS
3. Public Works	96 CEG
4. Fire Fighting	96 CES/CEF

5. Emergency Management	96 CES/CEX
6. Mass Care, Housing	96 FSS
7. Resource Support	96 LRS
8. Public Health & Medical	96 MDG
9. Urban Search & Rescue	96 CES/CEF
10. Oil & HAZMAT Response	96 CES/CEF
11. Agriculture & Natural Resources	96 CEG/CEIEC
12. Energy	96 CEG
13. Public Safety & Security	96 SFS
14. Long term Recovery & Mitigation	96 CEG
15. External Affairs	96 TW/PA

10.3.1.1. 96 WS will fill a position within the EOC to provide the most current weather information during EOC activation.

10.3.1.2. 96 TW/SE will fill a position within the EOC to provide support.

10.3.1.3. UCC structure and UCC communications flow may be found in the UCC Operations Guide on the EOC SharePoint Site.

ATTACHMENT 1 TO BASIC PLAN TO EAFB 10-2 IEMP
DISASTER RESPONSE FORCE (DRF) NOTIFICATION

1. SITUATION: The Eglin AFB DRF will respond to accidents involving military resources both on and off base and must be available 24 hours a day.

2. MISSION: Major accidents may occur at any time without warning, on or off Eglin AFB, involving aircraft, nuclear weapons or components, toxic fuels, TIMs, explosives and/or other hazardous materials.

3. EXECUTION:

3.1. The 911 emergency calls are routed through Okaloosa County Dispatch, which are then automatically routed thru to CEF Fire Dispatch. CEF receives and transfers the calls to Base Defense Operations Center (BDOC) or 96 MDG depending upon the nature of the emergency.

3.1.1. BDOC/CEF will notify the CP Controller about the emergency.

3.1.2. Base Operations will pass pertinent information over the Secondary Crash Net.

3.1.3. The EAFB CP will initiate further DRF notification and recall at the direction of the 96 TW/CC or 96 CEG/CC. The current IC may request or recommend the activation of DRF entities. See Figure 2, DRF Notification.

3.2. PRIMARY CRASH NET: The air traffic control (ATC) tower activates the primary crash net and will dispatch First Responders in case of an emergency involving aircraft or the airfield.

3.3. **SECONDARY CRASH NET:**

3.3.1 If notification is not received via Secondary Crash Net, the CP controller will initially direct Airfield Management (AM) to activate the Secondary Crash Net and facilitate the rapid response of key base agencies. The IC may recommend EOC activation. 96 CES/CEX will initiate the EOC Recall via AtHoc and monitor system to confirm receipt.

3.3.2 For an EOC recall during degraded communications (phones/LMRs), the CP will, by best means available, contact BDOC to dispatch patrols with instructions to contact Eglin leadership. Once notified, commanders will contact their respective unit EOC members by any means available per applicable unit functional checklists.

3.4. Upon recall, the members will respond as directed.

3.4.1. The First Responders will respond immediately to the site via safe route obtained from Fire Comm.

3.4.2. During an emergency, entry into Eglin AFB may be blocked or delayed. The 96 SFS will allow emergency response personnel responding from off-base entry through the West Gate (Shalimar) and East Gate (Valparaiso) 24/7 and the Northwest Gate Monday-Friday between 0600-0800 hrs. and 1600-1800 hrs.

3.5. DEGRADED COMMUNICATIONS: During a failure of normal telephonic communication, CP controllers will initiate notifications using pre-established comm-out emergency response/recall procedures.

3.5.1. The CP will contact BDOC by the best means available (i.e., runner, radio, or hotline).

3.5.2. 96 SFS will dispatch a patrol vehicle to notify the appropriate individuals. They, in turn, will notify a pre-identified member of their organization to begin recall.

3.5.3. When contacted, individuals will initiate their portion of their unit's communications out recall program, then report to duty if required.

ATTACHMENT 2 TO BASIC PLAN TO EAFB 10-2 IEMP
PRIMARY FORCES/CONTACT LIST

EGLIN AFB PRIMARY FORCES/CONTACT LIST			
NAME		**CONTACT INFORMATION**	
Emergency Operations Center (EOC)		**Primary: Building 1** Commercial Phone: (850) 883-4829 (850) 882-3388	(850) 883-4783
Mobile Emergency Operations Center (MEOC)		Note: No permanent phone number. Contact Fire Communications Center (FCC) (850-882-5856) to obtain number during each contingency response.	
Emergency Operations Center (EOC)/Emergency Support Functions (ESF)	**ESF Number**	***These numbers only apply when EOC is activated.***	
Force Support Squadron (96 FSS)	6	Commercial Phone:	(850) 882-3471
Public Affairs (96 TW/PA)	15	Commercial Phone:	(850) 882-3246
Communications Squadron (96 CS)	2	Commercial Phone:	(850) 882-3543
Logistics Readiness Squadron (LRS)	1, 7	Commercial Phone:	(850) 882-3312
Medical Group (96 MDG)	8	Commercial Phone:	(850) 882-3259
Fire Protection (96 CEF)	4, 9, 10	Commercial Phone:	(850) 882-3386
Civil Engineer Group (96 CEG)	3, 12, 14	Commercial Phone:	(850) 882-3258
Emergency Management (96 CEX)	5	Commercial Phone:	(850) 882-3388
Security Forces Squadron (96 SFS)	13	Commercial Phone:	(850) 882-3093
Environmental (CEIEC)	10, 11	Commercial Phone:	(850) 882-3506
Safety (SE)	N/A	Commercial Phone:	(850) 882-7352
Weather Flight (WF)	N/A	Commercial Phone:	(850) 882-4800
EGLIN AFB Resources			
Fire/Medical/Police		Emergency:	911
96 MDG Emergency Room		Commercial Phone:	(850) 883-8227
Fire Communications Center		Commercial Phone:	(850) 882-5856
Base Defense Operations Center		Commercial Phone:	(850) 882-2000
Eglin AFB Command Post		**Primary: Building 1** Commercial Phone: Secure Phone: Secure Fax: Fax:	 (850) 883-4020 (850) 883-4025 (850) 883-4025 (850) 883-4026
Crisis Action Team (CAT Manager)		**Primary: Building 1** Commercial Phone: Secure Phone:	 (850) 882-8123 (850) 883-4025

Airfield Management (AM)	**Primary: Building 60**	
	Commercial Phone:	(850) 882-2614
	24-Hour Operations:	(850) 882-5313
	Fax:	(850) 882-2655
Air Traffic Control (ATC) Tower	**Primary: Building 2300**	
	Commercial Phone:	(850) 882-1876
	Commercial Phone:	(850) 882-4320
	Fax:	(850) 882-7799
CE Damage Control Center (DCC)	**Primary: Building 696**	
	Commercial Phone:	(850) 882-3201
	Fax:	(850) 882-8444
Det 104 (Field Investigations Sq, AFOSI)	Commercial Phone:	(850) 882-2153
	Secure Phone:	(850) 882-7372
	Fax:	(850) 882-4797
	After-Duty Hours:	(850) 882-2502
CE Service Call Desk	Commercial Phone:	(850) 882-2477
	Fax:	(850) 883-5223
	After-Duty Hours:	(850) 882-3177
96 CEG Environmental (CEIEC)	Commercial Phone:	(850) 882-7659
	Alternate Phone:	(850) 240-1628
96 CES Explosive Ordnance Disposal (EOD)	Commercial Phone:	(850) 882-3225
	Secure Phone:	(850) 882-3225
	Fax:	(850) 882-7723
96 FSS Emergency Family Assistance Center (EFAC)	Commercial Phones:	(850) 882-9060
		(850) 882-9061
	Fax:	(850) 882-9669
96 FSS Airman and Family Readiness Flight	Commercial Phone:	(850) 882-9060
	Fax:	(850) 882-9669
96 MXG Aircraft Maintenance Operations Center	Commercial Phone:	(850) 882-4691
	Fax:	(850) 882-9511
	After-Duty Hours:	(850) 882-4691
96 MXG Munitions Control	Commercial Phone:	(850) 882-8362
	Fax:	(850) 882-9511
	After-Duty Hours:	(850) 882-8362
33 FW Maintenance Operations Center	Commercial Phone	(850) 883-4030
	Fax:	(850) 883-5350
96 TW Public Affairs	Commercial Phone:	(850) 882-3915
	Fax:	(850) 882-4894
96 LRS Transportation	Commercial Phone:	(850) 882-3791
	Fax:	(850) 882-2709
96th Communications	Commercial Phone:	(850) 882-5920

96 TW Safety	Commercial Phone: Fax:	(850) 882-2540 (850) 882-8713
96 FSS Readiness	Commercial Phone: Fax:	(850) 882-8084 (850) 882-3465
96th Weather Squadron	Commercial Phone: Fax: After-Duty Hours:	(850) 882-4800 (850) 882-3341 (850) 882-4800
American Red Cross (ARC)	Commercial Phone: Fax:	(877) 272-7337 (850) 882-4290
COOP/CARM Program Manager	Commercial Phone: DSN:	(850) 882-4646 872-4646
Gates	North: East: West: ACC: Duke Field Gate:	(850) 882-1994 (850) 882-7500 (850) 882-8083 (850) 882-8093 (850) 883-7002
6th RTB Tactical Operations Center (TOC)	6 RTB Duty NCOIC: Commercial Phone: Secure Phone: Fax: After-Duty Hours:	(850) 882-1162 (850) 882-1115 (850) 883-2367 (850) 882-1371 (850) 882-1162
7th SFG(A) Staff Duty Officer	Commercial Phone: After-Duty Hours:	(850) 885-7321 (850) 885-7777
20 SPCS Mission Operations Center (MOC)	Commercial Phone: Defense Red Switch Network STE: Fax: After-Duty Hours:	(850) 883-7881 250-3177 (850) 883-7926 (850) 885-7988 (850) 883-7882
Duke Field Command Post (919 SOW/492 SOW/6 SOS/592 SOMXS)	Commercial Phone: Secure Phone: Fax: Secure Fax: After-Duty Hours:	(850) 883-6701 (850) 883-6598 (850) 883-6202 (850) 883-6504 (850) 883-6701
DOD RESOURCES		
HQ AFMC	DSN: Commercial Phone:	787-6314 (937) 257-6314

Air Force National Security Emergency Preparedness (AFNSEP) Emergency Preparedness Liaison Officer (EPLO) may be contacted through AFNSEP	1 AF/AFNSEP 501 Illinois Ave Ste 2 Stop 13 Tyndall AFB FL 32403 **Normal Duty Hours:** DSN: 523-6737 Commercial Phone: (850) 283-6737 Fax: (850) 283-4140 Email: AFNORTH.DSCA@us.af.mil **EMERGENCIES:** Location: AFNORTH/DOMOPS Tyndall AFB FL 32403 DSN: 523-5382 Commercial Phone: (850) 283-5382 Email: NIPR: afnorth.a7sa@us.af.mil
Air Force Operations Center (AFOC)	DSN: 227-6103 Commercial Phone: (703) 697-6103
National Military Command Center (NMCC)	DSN Primary: 227-6340 DSN Secondary: 725-3530 DSN Tertiary: 851-3840 Commercial Phone: (703) 697-6340 (703) 521-1014 Washington Switch: (703) 697-1201 Drop: DSN 312-1048/1049 312-1050/1051
US NORTHCOM Domestic Warning Center (DWC)	Watch Chief DSN: 692-2361 Commercial Phone: (719) 554-2361 DSN: 692-2359
NORAD CBRNE Reporting	DSN: 587-6643/6640 Commercial Phone: (315) 334-6643/6640 DSN Fax: 587-6772 Comm Fax: (315) 334-6772 Secure DSN/Comm Fax: 587-6771 Secure Comm Fax: (315) 334-6771

DoD Joint Nuclear Accident Coordination Center (JNACC)	DSN: 221-2102/2103/2104 Comm Phone: (703) 325-2102/2103/2104 Secure telephone: STU-II/KY-71, ID #01418
Air Combat Command (ACC) Response Task Force (RTF)	DSN: 574-1555 Commercial Phone: (757) 764-1555
USAF Space Command (SPACECOM) RTF	DSN: 227-6103 Commercial Phone: (703) 697-6103
Hammer Adaptive Communications Element (Hammer ACE)	0630-0000 (EST) DSN: 468-5888 Commercial Phone: (478) 926-5888 After Hours – 78 ABW CP DSN: 497-2612 Commercial: (478) 327-2612 Email: 78ABW.cp@us.af.mil DSN: 472-5785 Commercial: (478) 222-5785 Email: hammer.ace@us.af.mil
US Army Guardian Brigade [Contact for Technical Escort Unit (TEU) assets]	Army Ops Center DSN: 227-0218 Commercial Phone: (703) 697-0218
City Resources	
Airport	
Okaloosa County Airport Administration 1701 State Rd 85N Eglin AFB FL 32542	Main Desk: (850) 651-7160
Police Department	
Okaloosa County Sheriff's Office 1250 North Eglin Pkwy Shalimar FL 32579	Main Desk: (850) 651-7410 Dispatch: (850) 651-7400
Crestview Police Dept 201 Stillwell Blvd Crestview FL 32539-2221	Main Desk: (850) 682-3544 Dispatch: (850) 682-2055
Fort Walton Beach Police Dept 7 Hollywood Blvd Fort Walton Beach FL 32548	Commercial Phone: (850) 833-9546
Niceville Police Dept 212 North Partin Dr Niceville FL 32578	Commercial Phone: (850) 729-4030
Shalimar Police Dept Two Cherokee Rd Shalimar FL 32579	Commercial Phone: (850) 651-1115

Fire Departments	
Valparaiso Police Dept 465 Valparaiso Pkwy Valparaiso FL 32580	Commercial Phone: (850) 729-5400
Fort Walton Beach Fire Dept 5 Hollywood Blvd NE Fort Walton Beach FL 32548	Commercial Phone: (850) 833-9565
Jackson Guard 107 Hwy 85 N Niceville FL 32578	Commercial Phone: (850) 882-4164
Mary Esther Fire Dept 195 Christobal Rd Mary Esther FL 32569	Commercial Phone: (850) 243-5632
Niceville Fire Dept 102 Armstrong Ave Niceville FL 32578	Commercial Phone: (850) 729-4050 ext 1300
East Niceville Fire Dept 1709 27th St Niceville FL 32578	Commercial Phone: (850) 678-2311
North Okaloosa Fire Dept 3052 Hemphill Rd Crestview FL 32536	Commercial Phone: (850) 682-1808
Ocean City-Wright Fire Dept 2 Racetrack Rd NE Fort Walton Beach FL 32548	Commercial Phone: (850) 862-1185
Valparaiso Fire Dept 431 Highway 190 Valparaiso FL 32580	Commercial Phone: (850) 729-5410 (duty hrs only) (850) 729-5400
Hurlburt Field Fire Dept 1 SOCES Hurlburt Field FL 32544	Commercial Phone: (850) 884-6172 (850) 882-6360 (850) 882-3139
Hospitals	
Fort Walton Beach Medical Center 1000 Mar-Walt Dr Fort Walton Beach FL 32547	Commercial Phone: (850) 862-1111
North Okaloosa Medical Center 151 Redstone Ave Crestview FL 32539	Commercial Phone: (850) 689-8100
Sacred Heart Hospital 7800 Hwy 98 West Destin FL 32550	Commercial Phone: (850) 278-3000

Okaloosa County Resources		
Twin Cities Hospital 2190 Hwy 85 N Niceville FL 32578	Commercial Phone:	(850) 678-4131
Okaloosa Emergency Operations Center (EOC) 90 College Boulevard East Niceville FL 32578	Commercial Phone: Emergency:	(850) 651-7150 (850) 651-7150
Okaloosa County Health Department 221 NE Hospital Dr Fort Walton Beach FL 32548	Commercial Phone: Fax:	(850) 833-9240 (850) 833-9252
Florida Resources **Florida Emergency Management Agency**		
Florida Division of Emergency Management: 2555 Shumard Oak Blvd Tallahassee FL 32399-2100	Commercial Phone: Fax:	(850) 413-9969 (850) 488-1011
Florida Highway Patrol		
P.O. Box 1329 197 East James Lee Blvd Crestview FL 32536-1329	Crestview Comm: Crestview Comm Dispatch:	(850) 689-7904 (800) 459-6553
Environmental Agencies		
Florida Environmental Protection Agency	Toll Free:	(800) 320-0519
State Utilities		
Gulf Power (Power Lines)	Toll Free:	(800) 225-5797
Florida Power (Okaloosa Gas)	Commercial Phone:	(850) 729-4700
Florida Water	Commercial Phone:	(850) 651-7171
FEDERAL GOVERNMENT RESOURCES		
Department of Homeland Security (DHS) Homeland Security Operations Center (HSOC)	Commercial Phone:	(202) 282- 8101
Coast Guard	Liaison Officer: Senior: Destin:	(850) 623-7674 (850) 623-7779 (850) 244-7147 (850) 244-2682
FBI Operations Center	Commercial Phone:	(202) 324-6700
FBI Resident Agency – Mobile AL	Commercial Phone:	(251) 438-3674
FEMA Region 4	Commercial Phone:	(770) 220-5200
Center for Disease Control (CDC) and Prevention Emergency Response Hotline	Commercial Phone:	(770) 488-7100
US Coast Guard National Response Center	Toll Free:	(800) 424-8802

Department of Transportation (DoT) Hotline	Commercial Phone:	(202) 366-4488
DoT Office of Hazardous Materials Information Center	Toll Free:	(800) 467-4922
National Response Center	Toll Free:	(800) 424-8802
Nuclear Regulatory Commission (NRC) Operations Center	Commercial Phone:	(301) 816-5100
Department of Energy (DoE) Emergency Operations Center	Commercial Phone:	(202) 586-8100
DoE Joint Nuclear Accident Coordination Center (JNACC)	Commercial Phone:	(505) 845-4667
NON-AFFILIATED RESOURCES		
Alabama & Gulf Coast Railway	Commercial Phone:	(251) 575-5008
Chemical Transportation Emergency Center **NOTE**: Provides emergency information on Industrial Chemicals.	Toll Free:	(800) 424-9300

ANNEX A TO EAFB 10-2 IEMP
MAJOR ACCIDENTS

1. SITUATION: This annex defines procedures for major peacetime accidents involving DoD material or activities serious enough to warrant response by the DRF. Major accidents differ from the minor day-to-day emergencies and incidents base agencies typically handle.

1.1. HAZMAT RESPONSE: HAZMAT poses a threat to the installation and public if released.

1.1.1. Eglin AFB has identified the areas and facilities that may be involved in a HAZMAT accident/incident.

1.1.2. Responses are controlled through the HAZMAT Response Force.

1.1.3. The installation must provide immediate notification followed by written documentation to civil authorities addressed in the Eglin AFB Hazardous Material Emergency Planning and Response Plan 32-6 or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 upon the release of extremely hazardous substances (EHS) that exceed reportable quantities.

1.2. AIRCRAFT ACCIDENTS: Accidents may occur at any time; however, aircraft are most prone to accidents during take-off and landing. They may occur without any indication of a problem or there may be advance warning such as declaration of an in-flight emergency. Aircraft mishaps may generate harmful vapors, fumes, gases, potential electrical shorting hazards and airborne fibers due to composite materials.

1.3. NUCLEAR INCIDENTS: The DHS is responsible for the overall coordination of incident management activities for all nuclear or radiological Incidents of National Significance, including those involving terrorism. See Table A-1, Coordinating Agencies for Radiological Emergencies, for types of radiological emergencies and identified coordinating agencies.

1.4. NUCLEAR WEAPONS ACCIDENT

1.4.1. The Commander, USNORTHCOM, is responsible for DoD nuclear weapons or radioactive materials, response and recovery within the CONUS, Puerto Rico and the Virgin Islands. The NMCC will provide initial national-level command and control for DoD responses. Command and control will be transferred to the Air Force Operations Center (AFOC) in the case of AF nuclear weapon/material accidents.

1.4.2. Eglin AFB will establish procedures IAW the DoDI 3150.08, *Nuclear Weapons Accident Response Procedures (NARP),* which may be obtained from http://www.dtic.mil/whs/directives/.

1.4.3. CONUS: Eglin AFB will use Air Force Global Strike Command (AFGSC) Plan 10-1, *CONUS Radiological Accident/Incident Response and Recovery Plan*, for response pending arrival of the RTF.

1.4.4. The IC may request specialized teams and equipment through JNACC or the AFOC. See Table A-2, Specialized Teams and Equipment.

1.4.5. DoD see Figure A-3, Nuclear Weapon Accident On-Scene Setup, for a visual representation of the final site setup.

1.5. OTHER MAJOR ACCIDENTS: Incidents overwhelming First Responders and requiring the full resources of Eglin AFB but not falling under other appendices within Annex A of this plan.

1.6. DOE SECURE HOLDING: DoE and DoD have signed a secure holding agreement authorizing temporary storage and the protection of nuclear materials or non-nuclear classified materials. The installation will provide all support and assistance needed and will coordinate with the JNACC on temporary storage problems.

1.7. MAJOR ISSUES: Areas of potential concern during a major accident.

1.7.1. National Defense Areas (NDA): NDAs are established as a result of emergency situations. Critical material is essential to national defense and must be protected in an off-base accident response. This authority includes the removal from or the denial of access to an installation or site of individuals who threaten the orderly administration of the installation or site. Even after establishing the NDA, close coordination with civil law enforcement agencies is essential to effective security. The 96 TW/CC or designee, in coordination with the Staff Judge Advocate, will designate NDAs. When the Response Phase has passed, Major Accident Recovery Operations will begin. The EOC Director and portions of the DRF will prepare a recovery plan covering 96 TW/CC priorities.

1.7.2. Recovery Operations: Recovering from an accident/incident is a complex and time-consuming operation. Extended recovery operations may require the contract of equipment and other support items. Critical assets and MEFs could be impacted and require COOP execution. A recovery plan is developed by the IC and EOC assisted by technical experts, normally components of the EOC. Once complete, the 96 TW/CC will review and approve the recovery plan. See Tab B to Appendix 7 to Annex A, Major Accident Recovery Operations Checklist, for details.

1.7.3. Family Assistance: The establishment of an Emergency Family Assistance Center (EFAC) is critical after an incident where personnel are injured, deceased or displaced. The EFAC serves as a central location for distributing accurate information, forming and briefing family assistance teams and supporting families of those involved in the incident.

2. <u>MISSION</u>: The IC commits installation personnel and resources to support the accident response.

3. <u>EXECUTION</u>: Refer to individual checklists.

APPENDIX 1 TO ANNEX A TO EAFB 10-2 IEMP
HAZARDOUS MATERIAL (HAZMAT) RESPONSE CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneous and some may deviate from sequence. All should be considered.

	RESPONSE - (HAZMAT RESPONSE)	
ITEM	**TASK/ACTION**	**OPR**
1.	For initial notification of the Disaster Response Force (DRF), refer to Figure 2, DRF Notification, Annex Z.	
2.	Initiate notification of all response agencies via Secondary Crash Net. Notify 96 TW/CC, 96 TW/CV, and 96 CEG/CC. Instruct units to begin running most recent signed/approved version of the IEMP 10-2 unit functional checklists.	AM/CP
3.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
4.	Close the runway and issue Notice to Airmen (NOTAM) if directed by the 96 TW/CC.	AM
5.	Notify Okaloosa Emergency Management Agency for extremely hazardous materials or CERCLA hazardous substances that exceed reportable quantities. • Place immediate phone call. • Follow-up with written documentation. **NOTE: Hydrazine reportable quantities are one pint or more.**	CP CEIEC CEX
6.	Notify Okaloosa Emergency Management Agency of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	EOC
7.	Brief the IC on the spill classification for hydrazine spills. • Minor – One pint or less. • Major – More than one pint.	CEF CEIEC
8.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
9.	Immediately respond to the site from an upwind direction using a safe route.	First Responders
10.	Establish command.	IC

11.	For Hydrazine leaks: monitor, isolate and deny entry to incident area until Fire Emergency Services personnel arrive.	ATC AM 96 MXG
12.	Control access to the site and essential operations.	96 SFS
	• Cordon using Traffic Control Points (TCP). • ECP. • Installation Control Point. • Support functions outside the cordon. **NOTE**: See Figure 1, Typical Incident Site Setup, Annex Z.	96 CEF
13.	Check for secondary devices.	First Responders
14.	If the incident/accident involves a leaking Emergency Power Unit (EPU), accomplish the following: 1. Direct the pilot to face the aircraft into the wind. 2. Safe the EPU in accordance with (IAW) T.O. 00-105E-9. 3. Ensure the aircraft is shut down and safe to approach. 4. IC requests assistance from JBEEM if there's a visible leak. 5. Determine when it is safe to remove the pilot.	ATC/AM/ 96 MXG 96 CEF 96 MDG JBEEM
15.	Request air sampling assistance from the MXG for a hydrazine leak.	IC
16.	Perform initial lifesaving, rescue, suppression, containment and evacuation.	First Responders
17.	Establish a cordon including Hot, Warm and Cold Zones as needed. • Clearly mark the boundaries between the zones. • Clearly identify ingress and egress points after the zones are established. **NOTE**: See Figure 1, Typical Incident Site Setup.	IC
18.	Establish a decontamination capability.	96 CEF
19.	Authorize access to the cordon and ensure appropriate personal protective equipment (PPE) is worn.	IC/96 CEF/ BEE
20.	Establish tactical priorities. • Ensure rescue/life safety/responder safety. • Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC/BEE

21.	Develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions. • Evaluate the alternatives. • Choose best option. • Implement the plan and monitor and evaluate results.	IC 96 CEF JBEEM 96 CEIEC
22.	Recommend activation of the EOC and establish/maintain communication and coordinate with 96 TW/SE to initiate EAFB 91-202 if applicable.	IC/EOC Director
23.	Set up/establish a staging area.	IC
24.	Consider public actions to protect the general population from hazardous materials by either sheltering in-place (SIP) or evacuation.	IC
25.	Announce protective measures for the public using available resources.	CEF/CP/ AM 96 PA 96 SFS UCCs
26.	Establish and set up triage area.	96 CEF 96 MDG
27.	Segregate and prioritize casualties for decontamination. Based on: • Casualties closest to the point of release. • Casualties reporting or exhibiting signs of exposure to liquid, vapor or aerosol. • Casualties with serious medical symptoms. • Casualties with conventional injuries.	96 CEF
28.	Calculate an initial toxic corridor/downwind hazard area using Cameo/Marplot/ALOHA software.	96 CEF
29.	Prepare medical treatment facility for arrival of possibly contaminated personnel.	96 MDG
30.	Implement applicable plans to re-route traffic from the hazard area.	96 SFS

31.	Conduct decontamination of potentially contaminated personnel. • Secure exits and control entry into the Medical Treatment Facility (MTF). **NOTE:** Some casualties may be transported directly to the hospital by good Samaritans. • Activate the In-Place Patient Decontamination (IPPD) Team. • Ensure the triage team dons PPE and establish a triage staging area outside the MTF for receiving and triaging patients. They will provide immediate stabilizing care and prioritize casualties for decontamination and entry into the MTF. • Ensure the BEE monitors the patients upon their arrival at the MTF if assets and manpower are available. • Ensure the IPPD Team processes and decontaminates all patients as needed before being taken into the MTF. **NOTE:** The IPPD Team is able to process approximately 12 casualties per hour. • Clothing will be removed, bagged and individually marked. • Patients will be re-triaged and routed to appropriate areas for treatment.	96 MDG
32.	See Figure D-1, Overview for Initial HAZMAT/CBRNE Response.	ALL
33.	Brief the EOC on the situation and gather functional area requirements.	EOC Director
34.	Brief EOC Director on: • Available personnel and resources. • Problems/Concerns.	EOC Staff
35.	Evaluate the situation and determine additional personnel/resources needed at the site.	IC EOC Director
36.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
37.	Implement actions described in the Eglin AFB HAZMAT Emergency Planning and Response Plan.	IC/EOC
38.	Provide transportation to the accident site, as needed.	96 LRS

39.	Ensure communications during emergency situations. • Evaluate communications capabilities available to support the incident. • Determine operating frequencies and oversee frequency management during incident operations. • Provide on-site communications support, as necessary.	96 CS
40.	Establish/maintain contact with UCCs, as required.	CAT
41.	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff
42.	For hydrazine leaks use the maintenance hydrazine response team.	IC
43.	Ensure protective measures for personnel working at the incident scene. • Appropriate training. • Appropriate level of PPE according to Occupational Safety and Health Administration (OSHA) regulations. • Work-rest regimens. • Protective measures against climatic conditions. • Food and water. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams. • Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	IC/BEE/PH
44.	Gather information on the event and site. • Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. • Consider taking digital and still photographs and videos of the entire area. • Conduct interviews with people who observed the event.	JBEEM
45.	Sample spill for chemical nature, pollutant concentration and documentation.	96 CEF JBEEM
46.	Forward numbers of Dead, Injured or Missing (DIM) to the EOC as the information becomes available.	IC

47.	Relay casualty information to the EOC. • Forward names of deceased and injured to EOC by encrypted email/phone. o Do not use cell phones. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	IC 96 MDG
48.	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team for help in identifying remains, if required. • Coordinate handling contaminated remains. • Notify casualty reporting officer of names of identified fatalities.	96 FSS 96 MDG
49.	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a chaplain to the Medical Facility. • Activate the Chapel Control Center upon notification from CP. • Place the Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support, as needed.	96 HC
50.	Notify local hospitals of possible contamination hazards.	96 MDG
51.	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
52.	Construct detailed recovery plan for the situation.	EOC
53.	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident.	96 CEF
54.	Prepare initial news release within one hour of accident notification and coordinate with the 96 TW/CC or 96 CEG/CC on news releases, as needed. If mission partners' aircraft are involved, coordinate with their leadership and PA.	96 PA
55.	Establish a news media center, as needed.	96 PA

56.	Use Social Media, Website and office phones to handle all questions and queries related to the incident.	96 PA
57.	Advise 96 TW/CC and 96 CEG/CC on legal/jurisdictional issues with local, Eglin AFB, Federal agencies and private organizations.	96 JA
58.	Provide legal assistance to eligible DoD ID cardholders.	96 JA
59.	Provide weather data to CEX for hazard plotting.	96 WS
60.	Conduct hazard plotting.	96 CEX
61.	Set up weather monitoring device as close to the site as possible to assist in hazard plotting.	96 CEX 96 WS
62.	Redefine the initial toxic corridor/downwind hazard area established by the Fire and Emergency Services.	JBEEM
63.	Brief the IC on recommended adjustments to the toxic corridor/downwind hazard area.	JBEEM Team Chief
64.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
65.	Locate, sequester and interview witnesses.	96 SFS
PLANNED WITHDRAWAL		
66.	Declare after all firefighting, rescue and containment actions are completed. Scene is safe for recovery operations to begin.	IC
IMMEDIATE WITHDRAWAL		
67.	Declare emergency withdrawal over radio/public address systems. Sound vehicle mounted sirens.	IC
68.	Withdraw in an upwind/crosswind direction and take immediate cover inside the cordon area no closer than 300 feet from the ECP.	ALL
69.	Inform wing leadership of withdrawal and status of response forces.	IC
70.	Authorize re-entry when “all clear” is given.	IC
71.	Terminate the incident. • Conduct debriefings. • Critique incident actions (processes/procedures).	IC
72.	Formulate a containment and recovery plan. See Tab B to Appendix 7 to Annex A, Major Accident Recovery Operations Checklist.	EOC/IC
73.	Clean-up HAZMAT site and dispose of waste for Levels I and II incidents IAW Okaloosa County, State and Federal requirements.	Owner-User

74.	Clean-up HAZMAT site and dispose of waste for Level III incidents IAW Okaloosa County, State and Federal requirements.	HAZMAT Response Force 96 CEIEC
75.	Neutralize all areas that have been contaminated with hydrazine.	96 MXG 96 CEF
76.	Determine when neutralization is complete.	96 MXG JBEEM
77.	Assess remaining hazards.	IC

TAB A TO APPENDIX 1 TO ANNEX A TO EAFB 10-2 IEMP
SHELTER-IN-PLACE (SIP) CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

SHELTER IN-PLACE PROCEDURES **Actions for Personnel *Outside* of Buildings**	
ITEM	**TASK/ACTION**
1.	Take cover to protect from fire, explosive hazards, falling objects and inhalation hazards.
2.	Notify other personnel in the vicinity, don available protective equipment and evacuate the area by moving in an upwind or crosswind direction away from the point of release (if visible).
3.	Call 911 if emergency response forces are not at the scene, and report the incident.
4.	Move to a designated unit assembly point or location (if not located in the hazard area).
5.	Perform self-aid and buddy care, as needed.
6.	Do not drive vehicles unless directed by emergency response forces or unless required to evacuate injured people or those that cannot walk. If you are already in a vehicle, roll up windows, turn-off the ventilation system and attempt to safely exit the hazard area.
7.	If you cannot evacuate the area, go to the nearest building and take cover inside.
8.	After evacuating or sheltering, contact your UCC or appropriate C2 echelon to advise of your location and situation.
9.	Remain in shelter or at the assembly area and continue to wear protective equipment (if available) until directed otherwise by unit or emergency response personnel.
SHELTER IN-PLACE PROCEDURES **Actions for Personnel *Inside* of Buildings - *External Hazardous Material Release***	
ITEM	**TASK/ACTION**
1.	Take cover if needed to protect from fire, explosive hazards, falling objects and inhalation hazards.
2.	Don available protective equipment.
3.	Notify other personnel in the vicinity.
4.	Call 911 and report the incident to the ECC if emergency response forces are not at the scene.
5.	Close and lock windows, vents, and fireplace dampers.
6.	Turn off heating, ventilation and air conditioning (HVAC) systems and exhaust fans.
7.	Move to a designated safe room, if available.

8.	Seal door threshold with a wet towel.
9.	Seal room with plastic and duct tape.
10.	Stay away from outer walls and windows.
11.	Do not use any items with open flames.
12.	Perform self-aid and buddy care, as needed.
13.	Lock up or secure classified material and funds, if possible.
14.	Contact the CP, EOC or UCC and advise them of your location and situation.
15.	Remain in shelter until directed otherwise by the unit or emergency response personnel.
16.	Do not allow entry or exit during the plume passage.
17.	Evacuate the building if directed by the CP, EOC, UCC or emergency response forces.
18.	If directed, evacuate by moving in an upwind or crosswind direction away from the point of release (if visible). Move to the designated unit assembly point or location. Do not drive vehicles unless directed by emergency response forces or unless required to evacuate injured people or those that cannot walk.
19.	Purge the building when notified that the outside hazard has passed.
SHELTER IN-PLACE PROCEDURES **Actions for Personnel *Inside* of Buildings - *Internal Hazardous Material Release*.**	
ITEM	**TASK/ACTION**
1.	Take cover if needed to protect from fire, explosive hazards or falling objects.
2.	Don available protective equipment.
3.	Notify other personnel in the vicinity and evacuate as safely as possible.
4.	Call 911 and report the incident to the ECC if emergency response forces are not at the scene.
5.	Turn off the building HVAC systems and exhaust fans.
6.	Perform self-aid and buddy care, as needed.

APPENDIX 2 TO ANNEX A TO EAFB 10-2 IEMP
AIRCRAFT ACCIDENTS

1. SITUATION: Aircraft accidents involving military resources may occur on Eglin AFB or in the local area.

2. MISSION: Establish and maintain response capability to potential or actual accidents to minimize hazards and prevent unnecessary destruction of property.

3. EXECUTION: First Responders will respond immediately for accidents occurring on base or close enough where their presence may assist in saving lives or mitigating great property damage. The IC will determine who will be allowed at the scene. Also, EAFB Plan 91-202, *Mishap Response Plan*, will be utilized in conjunction with this plan. It defines responsibilities and prescribes procedures for responding to, and investigating major aircraft/weapons ground mishaps.

TAB A TO APPENDIX 2 TO ANNEX A TO EAFB 10-2 IEMP
ON-BASE AIRCRAFT ACCIDENT CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE - (ON-BASE CIVILIAN AIRCRAFT ACCIDENT)		
ITEM	**TASK/ACTION**	**OPR**
	NOTIFICATION	
1.	Activate the primary/secondary crash nets, as needed.	ATC/AM
2.	Notify 96 TW/CC, 96 TW/CV, 96 CEG/CC, and 96 MSG/CC.	CP
3.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
4.	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
5.	Notify Okaloosa County EOC of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	ECC
6.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206	CP
7.	Immediately respond to the site from an upwind direction (if possible) using a safe route.	First Responders
8.	Establish command.	IC
9.	Obtain situational awareness upon arrival before entering the site. If Incident Management System (IMS) is established report to the IC prior to zone entry.	First Responders
10.	Control access to the site and essential operations. • Cordon using Traffic Control Points (TCP). • ECP. • ICP. • Support functions outside the cordon. **NOTE**: See Figure 1, Typical Incident Site Setup.	96 SFS 96 CEF
11.	Perform initial lifesaving, rescue, suppression, containment and evacuation.	First Responders
12.	Establish a cordon including Hot, Warm and Cold Zones, as needed. • Clearly mark the boundaries between the zones. • Clearly identify ingress and egress points after the zones are established. **NOTE**: See Figure 1, Typical Incident Site Setup.	IC
13.	Notify 96 SFS of emergency personnel responding from local community.	ALL
14.	Establish a decontamination capability.	IC

15.	Establish tactical priorities. • Ensure rescue/life safety/responder safety. • Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC
16.	Develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions. • Evaluate the alternatives. • Choose best option. • Implement the plan. • Monitor and evaluate results.	IC
17.	Recommend activation of EOC and establish/maintain communication.	IC
18.	Set up/establish a staging area.	IC
19.	Consider public actions to protect the general population from hazardous material by either Sheltering in-place or evacuation.	IC
20.	Announce public protective actions using available resources.	96 PA
21.	Notify Okaloosa County EMS through the County 911 Center to dispatch Okaloosa EMS Commander to Scene.	IC ECC
22.	Place Search and Rescue Team on Standby; determine vehicle availability for transport.	96 FSS 96 LRS
23.	The First Responders set up a triage area.	First Responders
24.	Dispatch Emergency Medical Support units and personnel as requested by IC.	96 MDG
25.	Determine the need for using additional checklists. Likely checklists include: • Appendix 1 to Annex A, Hazardous Material (HAZMAT) Response Checklist. • Tab C to Appendix 2 to Annex A, Advanced Aerospace Materials (Composites) Checklist.	IC/EOC Director
26.	Authorize access to the cordon and ensure appropriate PPE is worn.	IC/96 CEF/ BEE
27.	Implement applicable plans to re-route traffic from the hazard area.	96 SFS
28.	Coordinate with 96 TW/SE to initiate Eglin AFB Mishap Response Plan if applicable.	96 TW/CC EOC Director/IC
29.	Activate UCCs and/or specialized teams, as needed.	96 TW/CC EOC Director

30.	Determine the composition of the EOC needed for the situation.	EOC Director
31.	Brief the EOC on the situation and gather functional area requirements.	EOC Director
32.	Brief EOC Director on: • Available personnel and resources. • Problems/Concerns.	EOC Manager
33.	Contact Airport EOC to determine support needs. Dispatch EM Liaison to the airport EOC.	ESF-5
34.	Evaluate the situation and determine additional personnel/resources needed at the site.	IC/EOC Director
35.	Execute emergency procurement procedures as directed by 96 TW/ CC if applicable.	AFTC/PZ
36.	Track all resources including manpower for possible reimbursement	ALL
37.	Provide transportation to and from the accident site, as needed. • Upon request from the EOC, Ground Transportation will provide passenger buses to transport uninjured personnel to collection area. • Upon request from the EOC, Ground Transportation will provide passenger buses to transport SRT members to/from accident location. • Upon request from EOC, Ground Transportation can provide Tractor/Trailer and MHE support once commercial support is exhausted.	96 LRS
38.	Contact Okaloosa County EOC for additional transportation assets if appropriate.	ESF-1
39.	Ensure communications during emergency situations. • Evaluate communications capabilities available to support incident. • Determine operating frequencies and oversee frequency management during incident operations. • Provide on-site communications support, as necessary. o Request Hammer ACE support, as required. • Conduct liaison with augmentation elements to coordinate procedures for communications. • Establish telephone "HOTLINES"/1-800 numbers as needed for disaster information. • Consider the need to "MINIMIZE" communications systems.	96 CS
40.	Establish/maintain contact with CP/EOC.	IC
41.	Establish/maintain contact with UCCs.	EOC
42.	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff

43.	Develop requirements for protective measures for personnel working at the incident scene which may include some or all of the following: • Appropriate training. • Appropriate level of PPE according to OSHA regulations. • Work-rest regimens. • Protective measures against climatic conditions. • Food and water for response personnel as appropriate. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams. • Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	IC/PH/BEE
44.	Determine hazards and appropriate actions.	CEF/EO/PH/ JBEEM
45.	Gather information on the event and site. • Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. • Consider taking digital, still photographs and videos of entire area. • Conduct interviews with people who observed the event.	JBEEM/ 96 CEF 96 SFS EOD
46.	Formulate an action plan to implement Render Safe procedures. • Aircraft ejection system. • Munitions. • Aircraft electro-explosive devices.	EOD
47.	Advise on operational wait times, as required.	EOD
48.	Evaluate established evacuation cordon distances and provide recommendations to reduce or expand, if necessary.	EOD
49.	Provide BTB names to 96 FSS to run names through DEERS in order to properly notify NoK in the case of an AD military death.	EOC
50.	Forward numbers of DIM to the EOC as the information becomes available.	IC
51.	Relay casualty information to the EOC. • Forward names of believed-to-be (BTB) deceased and injured to EOC by runner or encrypted email/phone. Do not use cell phones. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%. • Facilitate communications with Airline and Airport liaisons for casualty information. • Contact Armed Forces Medical Examiner System (AFMES) and the District One ME if death occurs on exclusive federal,	96 MDG

	concurrent, or proprietary property of EAFB IAW MOU #2823-16263-0959.	
52.	Coordinate with IC to advise 96 TW/CC, 96 CEG/CC, and 96 MSG/CC on legal/jurisdictional S&R efforts with local, State, Federal agencies and private organizations IAW current MOA with District 1 Medical Examiner (D1ME) Agreement #FB2823-16263-959.	96 TW/JA
53.	Establish S&R jurisdiction IAW current MOA with District 1 Medical Examiner (D1ME) Agreement #FB2823-16263-959 prior to activating mortuary operations.	96 TW/JA/ D1ME/ AFMES
54.	Request D1ME respond to scene as appropriate based on jurisdiction.	96 FSS
55.	Coordinate and conduct search and recovery operations; include local jurisdictions as appropriate.	96 FSS IC
56.	Contact Hurlburt Field, SOFSS mortuary officer for potential manpower to place Hurlburt Field S&R members on standby IAW Search & Recovery Duties MOU #FB2323-17034-0540.	96 FSS
57.	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact appropriate authority for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team for help in identifying remains, if required. • MDG will assist in handling contaminated remains. • Notify casualty reporting officer of names of identified fatalities.	96 FSS
58.	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a Chaplain to the Medical Facility. • Activate the Chapel Control Center upon notification from CP. • Place the Chaplain Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support as needed.	HC
59.	Participate in Disaster Mental Health Interventions for affected Active Duty population, military first responders, and any eligible beneficiaries.	96 MDG 96 HC
60.	Construct base recovery plan for the situation.	EOC
61.	Implement support agreements, as needed. Notify CP when implemented.	96 CEF 96 MDG
62.	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident. If aircraft is an F-35, photographer must be military.	96 CEF

63.	Prepare initial news release within one hour of accident notification and coordinate with the 96 TW/CC or 96 CEG/CC on news releases, as needed. If aircraft is an F-35, 33 FW/PA will do initial release.	96 PA
64.	Establish a news media center with local jurisdiction PIOs as needed.	96 PA
65.	Advise 96 TW/CC, 96 CEG/CC, and 96 MSG/CC on legal/jurisdictional issues with local, State, Federal agencies and private organizations.	96 JA
66.	Coordinate and conduct search and recovery operations; include local jurisdictions as appropriate.	96 FSS IC
67.	As appropriate, provide legal assistance for families, claims, victims and witnesses.	96 JA
68.	Protect classified material.	ALL
69.	Provide weather data for CEX for hazard plotting.	96 WS
70.	Conduct hazard plotting.	96 CEX
71.	Calculate a toxic corridor/downwind hazard area.	96 CEX
72.	Provide transportation of S&R team to the accident site.	96 LRS
73.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206	CP
74.	Locate and sequester witnesses and make them available to 96 TW/ SEF.	96 SFS
75.	Submit reports in Table 1, Reporting Requirements, as required.	ALL
PLANNED WITHDRAWAL		
76.	Declare after all firefighting, rescue and containment actions are completed. Scene is safe for recovery operations to begin.	IC
IMMEDIATE WITHDRAWAL		
77.	Declare emergency withdrawal over radio/public address system. Sound vehicle mounted sirens.	IC/SFO
78.	Withdraw in an upwind/crosswind direction and take immediate cover inside the cordon area no closer than 300 feet from the ECP.	ALL
79.	Inform wing leadership of withdrawal and status of response forces.	IC
80.	Authorize re-entry when “all clear” is given.	IC
81.	Terminate the incident. • Conduct debriefings. • Critique incident actions (process/procedures).	IC
82.	Ensure explosive hazards are safely transported to storage locations or disposed of.	EOD
83.	Formulate a containment and recovery plan. See Tab B to Appendix 6 to Annex A, Major Accident Recovery Operations Checklist.	EOC/IC

TAB B TO APPENDIX 2 TO ANNEX A TO EAFB 10-2 IEMP
OFF-BASE AIRCRAFT ACCIDENT CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE - (OFF-BASE AIRCRAFT ACCIDENT)		
ITEM	**TASK/ACTION**	**OPR**
	NOTIFICATION	
1.	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2.	Notify 96 TW/CC, 96 TW/CV, 96 CEG/CC, and 96 MSG/CC.	CP
3.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
4.	Notify Okaloosa County EOC of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	EOC
5.	Notify 96 SFS of emergency personnel responding from local community.	ALL
6.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
7.	Immediately respond to the site from an upwind direction (if possible) using a safe route.	First Responders
8.	Offer to take responsibility as Incident Commander (IC) if local responders are on scene first.	CEF
9.	If IC is assumed, establish command.	IC
10.	Obtain situational awareness upon arrival before entering the site. If IMS is established report to the IC prior to zone entry.	First Responders
11.	Perform lifesaving, rescue, suppression, containment and evacuation.	First Responders
12.	Coordinate with local authorities on security issues for the site and essential operations. Establish a cordon including Hot, Warm and Cold Zones, as needed: • Clearly mark the boundaries between the zones. • Clearly identify ingress and egress points after the zones are established. **NOTE**: See Figure 1, Typical Incident Site Setup.	IC 96 SFS
13.	Establish decontamination capability.	96 CEF 96 CEX
14.	Establish tactical priorities. • Ensure rescue/life safety/responder safety. • Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC

15.	Working with local officials, develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions. • Evaluate the alternatives. • Choose best option. • Implement the plan. • Monitor and evaluate results.	IC 96 CEF 96 MDG JBEEM
16.	Recommend activation of EOC and establish/maintain communications.	IC
17.	Set-up and establish a staging area. **NOTE:** If local first responders are on-scene consider integrating into their established command structure.	IC
18.	Coordinate public protective actions with local authorities to protect the general population from hazardous material by using: • Shelter-In-Place. • Evacuation.	IC
19.	Coordinate with local authorities announcing public protective actions using available resources.	IC 96 CEF 96 SFS
20.	Coordinate access to the cordon with local authorities and ensure appropriate PPE is worn.	IC 96 CEF 96 BEE
21.	Establish and set up triage.	96 CEF 96 MDG
22.	Determine the need for using additional checklists. Likely checklists include: • Appendix 1 to Annex A, Hazardous Material (HAZMAT) Response Checklist. • Tab C to Appendix 2 to Annex A, Advanced Aerospace Materials (Composites) Checklist. • Tab A to Appendix 6 to Annex A, National Defense Area (NDA) Checklist.	ALL
23.	Coordinate with local/State authorities to re-route traffic from the hazard area.	96 SFS
24.	Activate control centers and specialized teams, as needed.	96 TW/CC EOC Director
25.	Coordinate with SE to initiate EAFB Mishap Response Plan 91-202.	96 TW/CC EOC/IC
26.	Determine the composition of the EOC needed for the situation.	EOC Director
27.	Brief the EOC on the situation and gather functional area requirements.	EOC Director

28.	Brief EOC Director on: • Available personnel and resources. • Problems/Concerns.	EOC Staff
29.	Evaluate the situation and determine additional personnel/resources needed at the site.	IC EOC Director
30.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
31.	Coordinate route of travel with appropriate law enforcement agencies.	IC 96 SFS
32.	Provide transportation to the accident site, as needed.	96 LRS
33.	Ensure communications during emergency situations. • Evaluate communications capabilities available to support the incident. • Determine operating frequencies and oversee frequency management during incident operations. o Provide on-site communications support, as necessary. • Request Hammer ACE support, as required. • Conduct liaison with augmentation elements to coordinate procedures for communications. • Establish telephone "HOTLINES"/1-800 numbers as needed for disaster information. • Consider the need to "MINIMIZE" communications systems.	96 CS
34.	Establish/maintain contact with CP/EOC.	IC
35.	Establish/maintain contact with UCCs.	CAT/EOC
36.	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff
37.	Establish liaison with local, State and Federal authorities.	IC/EOC
38.	Evaluate established evacuation cordon distances and provide recommendations to reduce or expand, if necessary.	EOD
39.	Provide weather data to CEX for hazard plotting.	96 WS
40.	Conduct hazard plotting.	96 CEX
41.	Set up weather monitoring device as close to the site as possible to assist in hazard plotting.	96 WS 96 CEX
42.	Calculate a toxic corridor/downwind hazard area.	CEX
43.	Establish an NDA when the scene is on non-Federal land. See Tab A to Appendix 6 to Annex A, National Defense Area (NDA) Checklist. • Coordinate with JA on NDA legal issues. • An NDA should encompass all classified material. • Ensure the NDA is not expanded to cover areas of radioactive contamination.	96 TW/CC EOC Director

44.	Ensure protective measures are taken for personnel working at the incident scene. • Appropriate training. • Appropriate level of PPE according to OSHA regulations. • Work-rest regimens. • Protective measures against climatic conditions. • Food and water. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams. • Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	IC EOD PH BEE
45.	Determine hazards and appropriate actions.	CEF JBEEM EOD 96 SFS
46.	Gather information on the event and site. • Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. • Consider taking digital/still photographs and videos of entire area. • Conduct interviews with people who observed the event. **NOTE**: Don't transmit classified or sensitive information on non-secure communication devices (i.e., radios and cellular phones).	96 CEF JBEEM 96 SFS EOD
47.	Formulate an action plan to implement Render Safe procedures. • Aircraft ejection system. • Munitions. • Aircraft electro-explosive devices.	EOD
48.	Advise on operational wait times, as required.	EOD
49.	Evaluate established evacuation cordon distances and provide recommendations to reduce or expand, as necessary.	EOD
50.	Forward numbers of DIM as the information becomes known.	IC
51.	Relay casualty information to the EOC. • Forward names of deceased and injured to EOC by runner or encrypted email/phone. o IAW AFI 10-701, avoid discussing critical information on non-secure landlines, cell phones or satellite phones. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	IC 96 MDG

52.	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team, if required, for help in identifying remains. • MDG will coordinate handling contaminated remains. • Notify casualty reporting officer of names of identified fatalities.	96 FSS 96 MDG
53.	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a Chaplain to the Medical Facility. • Activate the Chapel Control Center upon notification from CP. • Place the Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support, as needed.	96 HC
54.	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
55.	Protect classified material.	ALL
56.	Implement support agreements, as needed.	EOC CEF 96 MDG
57.	Provide alert photographer and ensure access to the scene when safe to provide official documentation of accident. Coordinate with SE/SEF.	96 CEF
58.	Prepare initial news release within one hour of accident notification and coordinate with 96 TW/CC or 96 CEG/CC and 96 TW/SEF on news releases. If F-35, 33 FW/PA will do the initial release.	96 PA
59.	Establish a news media center, if needed.	96 PA
60.	Advise 96 TW/CC and 96 CEG/CC on legal/jurisdictional issues with local, State, Federal agencies and private organizations.	96 JA
61.	Provide legal assistance to eligible DoD ID cardholders.	96 JA
62.	Coordinate and conduct SAR operations.	96 FSS IC
63.	Provide transportation of SAR team to the accident site.	96 LRS
64.	Closest command post with knowledge of incident provide follow-up reports by telephone, e-mail or OPREP-3.	CP
65.	Locate and sequester witnesses and make witnesses available to 96 TW/SEF.	96 SFS
66.	Submit reports in Table 1, Reporting Requirements, as required.	ALL

PLANNED WITHDRAWAL		
67.	Declare after firefighting, rescue and containment actions have been completed. Scene is safe for recovery operations to begin.	IC
IMMEDIATE WITHDRAWAL		
68.	Declare emergency withdrawal over radio/public address system. Sound vehicle mounted sirens.	IC 96 SFO
69.	Withdraw in an upwind/crosswind direction and take immediate cover inside the cordon area no closer than 300 feet from the ECP.	ALL
70.	Inform installation leadership of withdrawal and status of response forces.	IC
71.	Authorize re-entry when "all clear" is given.	IC
72.	Terminate the incident. • Conduct debriefings. • Critique incident actions (process/procedures).	IC
73.	Ensure hazards are safely transported to storage locations or disposed of.	EOD
74.	Formulate a containment and recovery plan. See Tab B to Appendix 6 to Annex A, Major Accident Recovery Operations Checklist.	EOC IC

EXHIBIT 1 TO TAB B TO APPENDIX 2 TO ANNEX A TO EAFB 10-2 IEMP
AIRCRAFT WATER ACCIDENT CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE - (AIRCRAFT WATER ACCIDENT)		
ITEM	**TASK/ACTION**	**OPR**
	NOTIFICATION	
1.	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2.	Notify 96 TW/CC, 96 TW/CV, 96 CEG/CC, and 96 MSG/CC.	CP
3.	Obtain a copy of the flight manifest.	AM
4.	Notify United States Coast Guard (USCG) for SAR.	CP
5.	Determine tail number of the aircraft.	AM
6.	Determine if the aircraft is located in state or international waters.	EOC
7.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
8.	Determine which Coast Guard Station has operational authority for the accident.	IC EOC
9.	Coordinate with USCG on securing the perimeter around the site.	IC
10.	Coordinate manning and manning support for the personnel securing the area for the duration of the event.	96 SFS
11.	Coordinate response between Supervisor of Flying and USCG to retrieve pilot, aircrew, and/or passengers.	EOC IC AM
12.	Coordinate incident response with owning unit.	EOC
13.	Implement procedures from EAFB 91-204, *Mishap Response Plan*	96 SE
14.	Determine if USCG vessels, contracted vessels or Navy vessels are required.	EOC
15.	Contact Hurlburt Command Post to place AFSOC Divers on standby.	CP

TAB C TO APPENDIX 2 TO ANNEX A TO EAFB 10-2 IEMP
ADVANCED AEROSPACE MATERIALS (COMPOSITES) CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE (ADVANCED AEROSPACE MATERIALS/COMPOSITES)		
ITEM	**TASK/ACTION**	**OPR**
	NOTE: This checklist supplements: Tab A to Appendix 2 to Annex A, On-Base Aircraft Accident Checklist; Tab B to Appendix 2 to Annex A, Off-Base Aircraft Accident Checklist	
1.	Notification covered under On-Base or Off-Base Aircraft Accidents Checklist.	ALL
2.	Perform an initial survey to determine: • Fire damaged composites. • Presence of loose/airborne fibers and particulates. • Exposed personnel. • Prevailing weather conditions/wind direction. • Degree of site exposed to fire/impact/explosion. • Nearby equipment/asset damage and hazard. • Assess the status of weapons. • Perform emergency render safe procedures if EOD is available.	96 CEF
3.	Establish command.	IC
4.	Evacuate immediate vicinity of the mishap site and move mobile equipment.	96 CEF 96 SFS 96 MDG 96 MXG
5.	Restrict flying or taxiing operations within 500' AGL feet above ground level and 1,000' radius from the site.	ATC/CEF/ AM
6.	Extinguish fire and cool composites to below 300 degrees F.	96 CEF
7.	Avoid dispersing composite materials. Do not use high-pressure water to break-up and disperse composite materials.	96 CEF
8.	Perform gross decontamination of patients at the site, as needed.	96 CEF
9.	Perform in-place patient decontamination.	96 MDG
10.	Determine the extent of the contaminated area.	96 CEF
11.	Identify contaminated/damaged aircraft and equipment.	96 CEF
12.	Determine protective measures for surrounding area. To reduce exposure, personnel should consider sheltering in place.	IC/BEE
13.	Minimize walking, working or moving materials to reduce airborne particulates, fibers and dust.	ALL

14.	Personnel entering/exiting from the entry control point will follow the below guidelines: • Set up tent/trailer for donning/removing PPE. • Use High Efficiency Particulate Air (HEPA) filtered vacuums to remove advanced composite contaminates from their outer clothing, work glove boots, headgear and equipment. • Wipe or brush off as much contamination as possible, if HEPA vacuum is not available. • Wash hands, forearms and face prior to eating, drinking or smoking. • Wrap and seal contaminated clothing and dispose of properly. • Shower (in cool water) when leaving the site to preclude injury from loose fibers.	First Responders
15.	Evaluate and track personnel exposed to material and smoke hazards.	96 MDG
16.	Advise the medical staff of any ill effects believed to be related to exposure to the advanced composite materials.	ALL
17.	Secure burned or loose fragments and residue with plastic, fire-fighting agent or fixing material to prevent re-suspension. **NOTE**: Carefully wrap coated parts and/or materials with plastic sheeting or place in a plastic bag that is minimum thickness of 6mm. **NOTE**: Consult the maintenance organization the aircraft belongs to before applying fixing material unless safety concerns override delayed application.	ALL
18.	Visually inspect and, if available, use a detector to determine if items are safe to handle. Items subjected to smoke and fire damage should be vacuumed thoroughly with electrically protected HEPA vacuum.	96 CEF
19.	Provide disposal instructions for waste.	96 CEIEC

APPENDIX 3 TO ANNEX A TO EAFB 10-2 IEMP
NUCLEAR WEAPONS ACCIDENT CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE - (NUCLEAR WEAPONS ACCIDENT)		
ITEM	**TASK/ACTION**	**OPR**
	NOTE: This checklist provides only an outline of actions. Use procedures directed in: • DoD 3150.8-M, *Nuclear Weapon Accident Response Procedures* (*NARP*). • AFGSC Plan 10-1, *CONUS Radiological Accident/Incident Response and Recovery Plan*.	ALL
	NOTE: Eglin AFB will respond immediately to the accident, if it is the nearest military installation. The following actions should be completed in the initial response to a nuclear weapon accident. DoD 3150.8-M, *Nuclear Weapon Accident Response Procedures* (*NARP*). • Establish command and control. • Establish contact with Higher Headquarters. • Extinguish fires. • Rescue, stabilize and evacuate casualties. • Establish an NDA where needed. • Secure airspace over the accident site. • Assess the status of weapons. • Perform initial render safe procedures if EOD is available. • Provide a transition brief when needed.	ALL
NOTIFICATION		
1.	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2.	Notify 96 TW/CC, 96 TW/CV, 96 CEG/CC, and 96 MSG/CC.	CP
3.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
4.	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
5.	Notify the Federal Aviation Administration (FAA) to restrict airspace, as needed. (IAW DoD 3150.8-M).	AM
6.	Notify Okaloosa County EOC of the situation and recommend closure or evacuation of civilian areas/functions as needed.	EOC
7.	Notify 96 SFS of emergency personnel responding from local community.	ALL
8.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP

9.	Neither confirm nor deny the presence of nuclear weapons unless cleared by the 96 TW/CC. • Inform authorities of DoD response to an accident.	ALL
10.	Immediately respond to the site from an upwind direction.	First Responders
11.	Establish command.	IC
12.	Control access to the site and essential operations. • Cordon using traffic control points (TCP). • ECP. • ICP. • Support functions outside the cordon. **NOTE**: Refer to Figure A-3, Nuclear Weapons Accident On-Scene Setup.	96 SFS
13.	Perform initial lifesaving, rescue, suppression, containment and evacuation.	First Responders
14.	Obtain situational awareness upon arrival before entering the site. If IMS is established report to the IC prior to zone entry.	First Responders
15.	First Responders must upon arrival determine the presence or lack thereof, radiological hazards, making note of background readings.	First Responders
16.	Establish a cordon including Hot, Warm and Cold Zones, as needed. • Clearly mark the boundaries between zones. • Clearly identify ingress and egress points after the zones are established. **NOTE**: Refer to Figure A-3, Nuclear Weapons Accident On-Scene Setup.	IC
17.	Establish a decontamination capability.	IC
18.	Authorize access to the cordon and ensure appropriate PPE is worn.	IC/CEF/ BEE
19.	Make preliminary assessment. **NOTE**: Responders will wear appropriate protective gear to protect the eyes, respiratory tract and skin until the area is declared safe. Gear will be issued in staging area if not previously issued.	IC
20.	Establish tactical priorities. • Ensure rescue/life safety/responder safety. • Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC
21.	Activate control centers and specialized teams, as needed. • JBEEM (Joint Bio-Environmental Emergency Management) • Emergency Management Support Team	96 TW/CC EOC Director

22.	Develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions.	IC/CEF/ 96 MDG/ JBEEM/ CEIEC
	• Evaluate the alternatives. • Choose the best option. • Implement the plan. • Monitor and evaluate results.	
23.	Recommend activation of the EOC and establish/maintain communications.	IC
24.	Set up/establish a staging area.	IC
25.	Consider public actions to protect the general population from hazardous material by either sheltering in-place or evacuation.	IC
26.	Announce public protective actions using available resources.	96 PA
27.	Implement applicable plans to re-route traffic from the hazard area.	96 SFS
28.	Establish and set up triage area.	96 CEF 96 MDG
29.	Identify people who may have been exposed to contamination.	96 MDG 96 CEF
30.	Perform gross decontamination of patients, as needed.	96 CEF
31.	Perform In-Place Patient Decontamination (IPPD).	96 MDG
32.	Transport only persons needing the full capability of a hospital (treat and stabilize all others at the triage area).	96 MDG
33.	Notify local and State officials of Extremely Hazardous Substance (EHS) release. **NOTE**: Do not confirm or deny the presence of nuclear weapons until cleared by the IC.	96 CEF 96 CEIEC EOC 96 CEX
34.	Notify local hospitals of possible contamination hazards.	96 MDG
35.	Identify a single route to the medical center. • Do not delay transporting casualties with life threatening injuries. Saving lives takes precedence over a secure route. • Cordon the route to avoid spread of contamination.	IC
36.	Establish a safe route for follow-on forces.	IC
37.	Confirm presence of Nuclear Weapons IAW the NARP. It is policy to neither confirm nor deny the presence of nuclear weapons at any particular installation or location. The two exceptions are: • Public safety is or may be in danger. • Reduce or prevent widespread public alarm.	96 TW/CC

38.	Determine which senior military representative will respond to the accident site. • **DoD ASSET**: Assume duties as IC and remain in command until relieved by the RTF Commander. • **DoE ASSET**: Assume duties as IC and remain in command until relieved by the DoE ARG.	96 TW/CC
39.	Establish an NDA when the scene is on non-Federal land. See Tab A to Appendix 6 to Annex A, National Defense Area (NDA) Checklist.	IC
	• Coordinate with JA on NDA legal issues. • Ensure the NDA encompasses all classified material. • Ensure the NDA is not expanded to cover areas of radioactive contamination. **NOTE:** Refer to Figure A-3, Nuclear Weapons Accident On-Scene Setup.	
40.	Determine the composition of the EOC needed for the situation.	EOC Director
41.	Brief the EOC on the situation and gather functional area requirements.	EOC Director
42.	Brief EOC director on: • Available personnel and resources. • Problems/Concerns.	EOC Staff
43.	Keep lines of communication open with HQ AFMC and responding agencies.	CAT/CP
44.	Provide information to HQ AFMC as it comes available.	CAT/CP
45.	Implement contamination control/isolation and ensure protective clothing at medical treatment facilities (appropriate for the medical risk to the patient and radiological risk to the provider) are worn.	96 MDG
46.	Segregate vehicles and equipment until they can be checked for contamination and decontaminated, if necessary.	ALL
47.	Forward numbers of DIM as the information becomes known.	IC
48.	Relay casualty information to the EOC. • Forward names of deceased and injured to EOC by runner or encrypted email/phone. o Do not use cell phones. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	96 MDG
49.	Coordinate additional requirements such as specialized teams and equipment.	IC/CEF

50.	Request specialized teams and equipment through JNACC or Air Force Operations Center. **Joint Nuclear Accident Coordination Center** DSN: 221-2102/2103/2104 Commercial: (703) 325-2102/2103/2104 Secure telephone numbers: STU-II/KY-71, ID Number 01418 **Air Force Operations Center** Commercial: (703) 695-6103 DSN: 227-6103	CAT
51.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
52.	Prepare for the RTF arrival. See Tab A to Appendix 3 to Annex A, Response Task Force (RTF) Reception Checklist.	CAT
53.	Provide transportation to the accident site, as needed.	96 LRS
54.	Ensure communications during emergency situations. • Evaluate communications capabilities available to support the incident. • Determine operating frequencies and oversee frequency management during incident operations. • Provide on-site communications support, as necessary. o Request Hammer ACE support, as required. • Conduct liaison with augmentation elements to coordinate procedures for communications. • Establish telephone "HOTLINES"/1-800 numbers as needed for disaster information. • Consider the need to "MINIMIZE" communications system.	96 CS
55.	Establish communications between the IC and the EOC. **NOTE**: Secure communications is desired.	EOC 96 CS
56.	Establish/maintain contact with EOC.	IC
57.	Establish/maintain contact with UCCs.	CAT
58.	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff
59.	Contact the Weapons Recovery Director, HQ ACC/EOD. • Establish the weapons identification and condition from the EOD team. • Establish a safe withdrawal area or control zone. • Prepare a weapon recovery plan using Weapons Recovery Center staff. • Coordinate render safe procedures with ARG.	EOD
60.	Evaluate established evacuation cordon distances and provide the IC with recommendations to reduce or expand, if necessary.	EOD
61.	Advise the IC on operational wait times, as required.	EOD

62.	Formulate an action plan to implement Render Safe procedures on non-nuclear explosive hazards. • Aircraft ejection system. • Munitions. • Aircraft electro-explosive devices.	EOD
63.	Ensure protective measures for personnel working at the incident scene. • Appropriate training. • Appropriate level of PPE according to OSHA regulations.	IC/PH/BEE
	• Work-rest regimens. • Protective measures against climatic conditions. • Food and water. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams. • Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	
64.	Provide guidance on exposure limits and personnel monitoring.	PH/BEE
65.	Provide weather data to CEX for hazard plotting.	96 WS
66.	Conduct hazard plotting.	96 CEX
67.	Set up weather monitoring device as close to the site as possible to assist in hazard plotting.	96 WS 96 CEX
68.	Calculate a toxic corridor/downwind hazard area.	96 CEX
69.	Update DoE Atmospheric Release Advisory Capability (ARAC) center [Commercial (925) 422-9100] with the information at the accident site. • Wind speed/direction at the time of impact. • Wind speed/direction after the First Responders arrived at the site. • Description of accident particulars (details of fire and plume height).	EOC/CEX
70.	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team, if required, for help in identifying remains. • Coordinate handling contaminated remains. • Notify casualty reporting officer of names of identified fatalities.	96 FSS 96 MDG
71.	Provide advice to civil authorities, if requested, by establishing a radiological health program for any civilian personnel who may have internal contamination.	96 MDG 96 BEE

72.	Establish liaison with local, State and Federal authorities.	IC/EOC
73.	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident.	96 CEF
74.	Prepare initial news release within 1 hour of accident notification (see NARP for information related to news releases).	96 PA
75.	Establish a news media center.	96 PA
76.	Coordinate with the 96 TW/CC and EOC Director on news releases, as needed.	96 JA
77.	Protect classified material.	ALL
78.	Prepare for and select proper site for Contaminated Control Station (CCS) operations.	JBEEM
79.	Set up the CCS.	JBEEM
80.	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a Chaplain to the Medical Facility. • Activate the Chapel Control Center upon notification from CP. • Place the Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support, as needed.	96 HC
81.	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
INITIAL SITE ENTRY		
82.	Gather information on the event and site. • Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. • Consider taking digital and still photographs and videos of the entire area. • Conduct interviews with people who observed the event. **NOTE**: Do not transmit classified or sensitive information on non-secure communication devices (i.e., radios and cellular phones).	96 CEF JBEEM 96 SFS EOD
83.	Ensure EOD team chief maintains positive control of the Recon team. • Obtain the best available information from Joint Hazard Evaluation Center (JHEC)/Forward JHEC team. • Establish an EOD team chain of command. • Ensure all weapons personnel are technically qualified. • Report results of reconnaissance.	EOD

84.	Initiate surveys.
	• Determine whether radioactive contamination has been released.
	• EOD.
	  o Locate weapons.
	  o Confirm weapons identification and condition.
	  o Determine status of aircraft ejection systems
	  o Determine status of aircraft electro-explosive devices.
	  o Mark hazards and safe route.
	• JBEEM
	  o Determine whether radioactive contamination extends outside the base perimeter.
	  o Determine boundaries of contamination for perimeter definition.
		IC

	o Take soil, vegetation and air samples. o Determine if First Responder members have been exposed to radioactive contamination. **NOTE**: Confirming presence/absence of contamination is of highest priority. Ensure any remaining casualties are removed from the area.	
85.	Process personnel using the CCS and expand, as necessary.	JBEEM
86.	Perform emergency render safe procedures on weapons, as required.	EOD
87.	Reassess priorities and actions based on initial entry findings and ensure all classified components are accounted for and controlled.	IC EOD
88.	Closest command post with knowledge of incident provide follow-up reports by telephone, e-mail or OPREP-3.	CP
89.	Submit reports in Table 1, Reporting Requirements, as required.	ALL
90.	Document actions taken and ensure evidence is retained for an Interim Safety Board (ISB), Safety Investigation Board (SIB), or an Accident Investigation Board (AIB).	IC Safety
IMMEDIATE WITHDRAWAL		
91.	Declare emergency withdrawal over radio/Public Address. Sound vehicle mounted sirens.	IC
92.	Withdraw in an upwind/crosswind direction and take immediate cover inside the cordon area no closer than 300 feet from the ECP.	ALL
93.	Inform installation leadership of withdrawal and status of response forces.	IC
ROUTINE WITHDRAWAL		
94.	Declare after all firefighting, rescue and containment actions have been completed.	IC
95.	Authorize re-entry after "all clear" is given.	IC
96.	Terminate the incident. • Conduct debriefings. • Critique incident actions (processes/procedures).	IC

97.	Recommend fixing material to highly contaminated areas to reduce re-suspension.	BEE
98.	Assist the RTF to develop and implement a weapons recovery plan to include the proper packaging requirements consistent with final disposition and disposal requirements of weapons.	IC EOC
99.	Continue air monitoring, upwind and downwind.	JBEEM
100.	Ensure medical actions continue. • Set up personnel control station at ECP. • Brief reconnaissance and recovery team members of health related hazards and protective measures. • Establish and operate the personnel radiation monitoring program.	96 MDG
101.	Advise 96 TW/CC, 96 CEG/CC and EOC Director on legal and jurisdictional issues with local, State, Federal agencies and private organizations.	96 JA
102.	Provide legal assistance to eligible DoD ID cardholders.	96 JA
103.	Inform the Senior FEMA official on-scene of all on-site activities which could impact outside the cordoned area.	Senior Military Official
104.	Assist the RTF in formulating a containment and recovery plan. See Tab B to Appendix 6 to Annex A, Major Accident Recovery Operations Checklist.	IC/EOC

TAB A TO APPENDIX 3 TO ANNEX A TO EAFB 10-2 IEMP
RESPONSE TASK FORCE (RTF) RECEPTION CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE TASK FORCE (RTF) RECEPTION		
ITEM	**TASK/ACTION**	**OPR**
1.	Prepare for RTF arrival between 6 and 24 hours from notification, depending on available airlift and location of the accident.	CAT
2.	Appoint a Liaison to coordinate with the RTF on their pending arrival and special needs.	CAT
3.	Initially plan on 10 senior officers as part of approximately 60 RTF personnel; 20% female members. Lodge RTF personnel together if possible in these priorities: 1. On base in contingency configurations if the installation is near the accident site. 2. Off-base contract quarters. 3. Other commercial lodging facilities. 4. Empty dormitories or facilities that are bed-down compatible. 5. Tent city.	96 FSS 96 CES
4.	Coordinate on additional lodging for the DoE ARG, other specialized teams and Distinguished Visitors (DV). If installation lodging is utilized, room charges will apply. **NOTE**: The requirements could reach 2,500 personnel.	96 FSS 96 CES AFTC/PZ
5.	Prepare for RTF feeding. Use the below priorities: 1. Installation dining facilities if near the accident site. Personnel utilizing dining facilities will be required to pay for meals. 2. Clubs or other base establishment if near the accident site. Personnel utilizing dining facilities will be required to pay for meals. 3. Contracts with local restaurants or full food service operation in a leased building. 4. Dining facility run by contingency dining personnel.	96 FSS AFTC/PZ
6.	Ensure expenditures are approved by the 96 TW/CC or 96 CEG/CC.	AFTC/PZ
7.	Set up transportation for the RTF. 96 LRS will provide transportation, as needed. • Coordinate with the RTF liaison on additional vehicle requirements.	96 LRS
8.	Provide workspace for the RTF and responding teams. Facilities must be in close proximity to the accident site. • Plan for 1500 - 2000 square feet each for at least 10 centers.	96 CEG AFTC/PZ

9.	Provide a transition briefing to the RTF commander and staff within 30 minutes of arrival.
	• Introduction.
	  o General situation discussion.
	  o Time of accident.
	  o Location of accident.
	  o Fire involved.
	• Weather.
	  o Effect on recovery operations.
	  o Downwind contamination impact.
	  o Forecast including wind, precipitation and lightning.
	  o Has the initial ARAC plot been received?
	• Intelligence.
	  o Hostile collection or exploitation efforts.
	• Operations.
	  o Provide a diagram of the accident scene layout.
	  o Weapons.
	  • Number of weapons involved.
	  • Have the weapons been located?
	  • Location of weapons.
	  • Are the weapons intact or have they sustained any damage?
	  • Has fire engulfed the weapons and if so for how long?
	  • Has information been forwarded for an updated ARAC plot?
	  • Render safe procedures planned/completed.
	  o Is there a radiation leak?
	  o Status and results of radiological surveys.
	  • Known or estimated areas of contamination.
	  • What times were the initial and subsequent surveys accomplished?
	  • Have the boundaries of contamination been identified?
	  • Has the radiation reached the installation perimeter? (For on-base accidents.)
	  o Public safety.
	  • Contamination status and impact to local community.
	  • Protection action recommendations issued.
	  o Cordon/Evacuation area.
	  • Size.
	  • Is it secure?
		EOC/IC

	○ Contamination control procedures in place. ○ Specialized teams and capabilities present. ○ Security. ○ Status of NDA (Non-Federal property). ▪ Is the NDA clearly identified? ▪ Any problems with property owners? ○ Interactions with local and State law enforcement. ○ Security/entry procedures such as badges. ○ Access issues. ○ Use of Force rules. • Medical. ○ Status of casualties. ▪ Radiation contamination. ▪ Dead, missing or injured. ▪ Location of injured or deceased. ▪ Family notifications. ○ Status and impact on medical facilities. • Legal. ○ Significant or unusual legal activity. ○ Relationship with State and Federal authorities. ○ Use of Force. ○ Legal basis for the NDA. • Logistics. ○ Personnel on-site and timelines of those expected to arrive such as DoE ARG, RAMT, and Air Force Radiation Assessment Team (AFRAT). ○ On-scene personnel. ▪ USAF and DoD. ▪ Local, State and Federal. ○ Status of messing and billeting. ○ Status of support infrastructure. ○ Equipment accountability. ○ Available military manpower. ○ Status of equipment and services needed to sustain RTF operations. ○ Emergency services/response capabilities. ○ Status of the airfield.	

	• Public Affairs.
	  o Media on-site.
	  o Public awareness and concerns.
	  o Has there been a disclosure that nuclear weapons are/are not present?
	  o Has PA set up a media center?
	  o Summary of news releases up to the present.
	• Communications.
	  o Assets available.
	  o Status of establishing secure communications.
	  o Extent of reports that have been made to headquarters elements.
	  o Communications/Radio frequencies cleared for RTF use.
	  ▪ Very High Frequency (VHF).
	  ▪ Ultra High Frequency (UHF).
	  ▪ High Frequency (HF).
	• Problems/concerns.
	• Relevant presentations by other Federal elements.
	• Provide maps showing:
	  o Accident location.
	  o NDA.
	  o ECP.
	  o Joint Field Office (JFO).
	  o Accident Site Health Group (ASHG).
	  o Joint Information Center (JIC).
	• Provide the RTF:
	  o A topographical map of the accident site and surrounding area with reference points and major population centers plotted or identified.
	  o Copies of all news releases.
	  o Copies of all inquiries from local, State and/or Federal officials.
	  o Names, rank and position of all commanders on base.
	  o Names and locations of eyewitnesses, contaminated or potentially contaminated personnel and others having information.
	  o Current local and State road atlas.	

10.	Provide information to the RTF as it becomes available.	EOC
11.	Provide this information within 3 hours of the RTF arrival: • Summary of lodging and transportation arrangements. • Names and titles of local officials involved. • Written summary of mishap response up to transition briefing. • Thirty sets of base grid maps/local topographical maps. • Updated ARAC plot.	EOC
12.	Coordinate transfer of responsibility to RTF.	EOC

13.	Coordinate with the RTF on which installation responders will be integrated into the RTF and become the basis of technical expertise, manpower and logistical support for the entire operation.	EOC
14.	Assume duties as the RTF Director of Logistics and Support once transfer of responsibility is complete.	EOC

APPENDIX 4 TO ANNEX A TO EAFB 10-2 IEMP
OTHER MAJOR ACCIDENTS CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

RESPONSE - (OTHER MAJOR ACCIDENTS)		
ITEM	**TASK/ACTION**	**OPR**
	NOTIFICATION	
1.	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2.	Notify the 96 TW/CC, 96 TW/CV, 96 CEG/CC, and 96 MSG/CC.	CP
3.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
4.	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
5.	Notify Okaloosa County EOC of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	EOC
6.	Notify 96 SFS of emergency personnel responding from local community.	ALL
7.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
8.	Immediately respond to the site from an upwind direction using a safe route.	First Responders
9.	Establish command.	IC
10.	Control access to the site and essential operations. • Cordon using Traffic Control Points (TCP). • ECP. • ICP. • Support functions outside the cordon. **NOTE**: See Figure 1, Typical Incident Site Setup.	96 SFS 96 CEF
11.	Check for secondary explosive devices (IED).	First Responders
12.	Perform initial lifesaving, rescue, suppression, containment and evacuation.	First Responders
13.	Establish a cordon including Hot, Warm and Cold Zones, as needed. • Clearly mark the boundaries between the zones. • Clearly identify ingress and egress points after the zones are established. **NOTE**: See Figure 1, Typical Incident Site Setup.	IC
14.	Establish a decontamination capability.	96 CEF 96 CEX
15.	Authorize access to the cordon and ensure appropriate PPE is worn.	IC/96 CEF 96 BEE

16.	Establish tactical priorities. • Ensure rescue/life safety/responder safety. Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC
17.	Develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions. • Evaluate the alternatives. • Choose best option. • Implement the plan. • Monitor and evaluate results.	IC 96 CEF 96 MDG JBEEM 96 CEIEC
18.	Recommend activation of EOC and establish/maintain communication.	IC
19.	Set up/establish a staging area.	IC
20.	Consider public actions to protect the general population from hazardous material by either SIP or evacuation.	IC
21.	Announce public protective actions using available resources.	CP 96 CEF AM 96 PA 96 SFS
22.	Establish a triage area.	96 CEF
23.	Implement applicable plans to re-route traffic from the hazard area.	96 SFS
24.	Determine the composition of the EOC needed for the situation.	EOC Director
25.	Brief the EOC on the situation and gather functional area requirements.	EOC Director
26.	Brief EOC Director on: • Available personnel and resources. • Problems/Concerns.	EOC Staff
27.	Evaluate the situation and determine additional personnel/resources needed at the site.	IC/EOC Director
28.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
29.	Provide transportation to the accident site, as needed.	96 LRS
30.	Ensure communications during emergency situations. • Evaluate communications capabilities available to support the incident. • Determine operating frequencies and oversee frequency management during incident operations.	96 CS

	• Provide on-site communications support, as necessary. o Request Hammer ACE support, as required. • Conduct liaison with augmentation elements to coordinate procedures for communications. • Establish telephone "HOTLINES"/1-800 numbers as needed for Incident information. • Consider the need to "MINIMIZE" communications.	
31.	Establish/maintain contact with EOC.	IC
32.	Establish/maintain contact with UCCs.	EOC/CAT
33.	Coordinate SE to initiate EAFB 91-202, *Mishap Response Plan*.	96 TW/CC EOC Director
34.	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff
35.	Evaluate established evacuation cordon distances and provide recommendations to reduce or expand, if necessary.	EOD
36.	Ensure protective measures for personnel working at the incident scene. • Appropriate training. • Appropriate level of PPE according to OSHA regulations. • Work-rest regimens. • Protective measures against climatic conditions. • Food and water. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams. • Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	IC/PH/BEE
37.	Gather information on the event and site. • Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. • Consider taking digital and still photographs and videos of the entire area. • Conduct interviews with people who observed the event. **NOTE**: Don't transmit classified or sensitive information on non-secure communication devices (i.e., radios and cellular phones).	96 CEF JBEEM 96 SFS
38.	Forward numbers of DIM as the information becomes known.	IC
39.	Relay casualty information to the EOC. • Forward names of deceased and injured to EOC by runner or by encrypted email/phone.	96 MDG

	○ Do not use cell phones. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	
40.	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team, if required, for help in identifying remains. • MDG will coordinate handling of contaminated remains. • Notify casualty reporting officer of names of identified fatalities.	96 FSS 96 MDG
41.	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a Chaplain to the Medical Facility. • Activate the Chapel Control Center upon notification from CAT. • Place the Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support, as needed.	HC
42.	Provide traumatic stress response briefings for affected populace.	96 MDG 96 HC
43.	Construct detailed recovery plan for the situation.	EOC
44.	Protect classified material.	ALL
45.	Implement support agreements, as needed for assistance.	EOC/CEF/ 96 MDG
46.	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident.	96 CEF
47.	Prepare initial news release within one hour of accident notification and coordinate with the 96 TW/CC or 96 CEG/CC on news releases, as needed.	96 PA
48.	Establish a news media center, as needed.	96 PA
49.	Use Social Media, Website and office phones to handle all questions and queries related to the incident.	96 PA
50.	Coordinate with the 96 TW/CC on news releases, as needed.	96 JA
51.	Advise 96 TW/CC and EOC Director on legal/jurisdictional issues with local, State and Federal agencies and private organizations.	96 JA
52.	Provide legal assistance for families, claims, victims and witnesses.	96 JA
53.	Provide weather data to CEX for hazard plotting.	96 WS
54.	Conduct hazard plotting.	96 CEX
55.	Set up weather monitoring device as close as possible to assist in hazard plotting.	96 WS 96 CEX
56.	Calculate a toxic corridor/downwind hazard area.	96 CEX

57.	Redefine the initial toxic corridor/downwind hazard area, established by the Fire Department.	JBEEM
58.	Brief the IC on recommended adjustments to the toxic corridor/downwind hazard area.	JBEEM
59.	Closest command post with knowledge of incident provide follow-up reports by telephone, e-mail or OPREP-3.	CP
60.	Locate, sequester and interview witnesses.	96 SFS
61.	Submit reports in Table 1, Reporting Requirements, as required.	ALL
62.	Declare when all firefighting, rescue and containment actions have been completed. Scene is safe for recovery operations to begin.	IC
	IMMEDIATE WITHDRAWAL	
63.	Declare emergency withdrawal over radio/public address system. Sound vehicle mounted sirens.	IC 96 SFO
64.	Withdraw in an upwind/crosswind direction and take immediate cover inside the cordon area no closer than 300 feet from the ECP.	ALL
65.	Inform installation leadership of withdrawal & status of response forces.	IC
66.	Authorize re-entry when "all clear" is given.	IC
67.	Terminate the incident. • Incident debriefing. • Post incident analysis. • Critique.	IC
	RECOVERY - (OTHER MAJOR ACCIDENTS)	
68.	Transfer command from emergency phase to responsible agency/individual for recovery and clean up.	IC
69.	Formulate a containment and recovery plan. See Tab B to Appendix 6 to Annex A, Major Accident Recovery Operations Checklist.	EOC/IC

APPENDIX 5 TO ANNEX A TO EAFB 10-2 IEMP
DEPARTMENT OF ENERGY (DoE) SECURE HOLDING CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

DoE SECURE HOLDING		
ITEM	**TASK/ACTION**	**OPR**
1.	Receive information on Secure Holding: • Classified message. • Unannounced shipment arriving at the installation. **NOTE:** Notify the CP if another agency receives a classified message.	CP
2.	Notify the 96 TW/CC. • Reason for unannounced arrival. • Estimated time of arrival for scheduled shipments. • Expected departure time. • Special precautions and firefighting procedures.	CP
3.	Notify 96 SFS and CEF of the pending arrival and identification means. • Unclassified cargo information. • Number of safe secure trailers and escort vehicles. • Courier identification. o Number of couriers. o DoE identification card numbers. o Dates of birth. o Social Security Numbers. o Estimated time of arrival.	CP
4.	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
5.	Refer to the Eglin AFB Installation Defense Plan for hostile action response.	ALL
6.	Upon verification of the DoE courier's identification, direct the DoE courier to park at the designated hold point and await 96 SFS escort and approval of the SAFE HAVEN request. The 96 SFS will then coordinate information between the EAFB CP and the DoE courier until identification has been verified with DTRA, and the 96 TW/CC or his designated representative has granted permission for the SAFE HAVEN.	96 SFS
7.	Assign a designated parking area for the shipment.	AM
8.	Meet the munitions shipment at the gate parking location and verify identity of the driver and cargo.	96 SFS
9.	Coordinate security arrangements with the courier.	96 SFS
10.	Escort the shipment to the temporary storage area.	96 SFS

11.	Provide the temporary storage area location to CEF, CP and MXS.	AM 96 LRS
12.	Provide fire, medical, PA and transportation support.	96 CEF 96 MDG 96 PA 96 LRS
13.	Provide food and lodging for DoE personnel during storage period. Personnel utilizing dining and lodging facilities will be required to pay for lodging and meals.	96 FSS
14.	Notify JNACC of any incident affecting shipments, vehicles or personnel that could adversely affect the shipment's safety or security.	CP
15.	Process reimbursement costs ensuring that installation personnel are aware of and using established Emergency/Special Project (ESP) codes.	96 CPTS
16.	Account for all obligations and costs incurred supporting the shipment.	ALL
17.	Submit reimbursement request for support provided by Eglin AFB IAW AFI 65-601, Volume 2, *Budget Management for Operations*.	96 CPTS
18.	Submit reports in Table 1, Reporting Requirements, as required.	ALL

APPENDIX 6 TO ANNEX A TO EAFB 10-2 IEMP
MAJOR ISSUES

1. SITUATION:

1.1. Critical material essential to national defense must be protected in an off-base accident response.

1.2. When the Response phase has passed there must be a standard method of returning to normal operations. Major Accident Recovery Operations will begin.

2. MISSION:

2.1. Establish procedures for protecting national defense material through the use of an NDA. The 96 TW/CC or designee, in coordination with the Staff Judge Advocate, will designate NDAs.

2.2. Standardize Major Accident Recovery Operations. The EOC Director and portions of the DRF will prepare a recovery plan covering 96 TW/CC priorities.

3. EXECUTION: See individual checklists.

TAB A TO APPENDIX 6 TO ANNEX A TO EAFB 10-2 IEMP
NATIONAL DEFENSE AREA (NDA) CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

NATIONAL DEFENSE AREA (NDA)		
ITEM	**TASK/ACTION**	**OPR**
1.	Establish NDAs only during emergencies. **NOTE**: IAW AFI 31-101, only those commanders delegated the authority to establish restricted areas have the authority to establish an NDA. 96 TW/CC has the authority to establish NDAs. Seek legal advice on any decisions regarding establishing, dissolving or modifying the NDA.	IC/JA
2.	Advise civil authorities/officials of the authority and the need for the NDA and the security controls in effect.	IC
3.	Secure the landowners' consent and cooperation. **NOTE**: Consent is not a prerequisite for establishing the NDA.	IC
4.	Clearly define the NDA boundary to minimize interference with other lawful activities on different uses of the property.	IC 96 SFS 96 JA
5.	Request a list of personnel responding from local, State and Federal authorities/agencies.	EOC
6.	Provide an entry authority list (EAL) to the IC/96 SFS.	EOC
7.	Determine which personnel from local, State and Federal authorities/agencies are granted escorted/unescorted entry.	IC
8.	Arrange escort for the various local, State and Federal authorities/ agencies, as needed.	IC
9.	Post AFVA 31-102, *Restricted Area Sign-National Defense*: • At the entry control point. • Along the boundary visible from any avenue of approach.	96 SFS
10.	Brief personnel that during response operations lifesaving, fire suppression and emergency activities may temporarily take priority over security procedures.	IC 96 SFS
11.	Ensure that on-scene military personnel do not violate the Posse Comitatus Act. **NOTE**: Military personnel are generally precluded from assisting civilian law enforcement officials in pursuing or apprehending individuals outside the NDA. Contact SF and JA.	IC 96 SFS 96 JA
12.	Brief use of force to all personnel.	96 SFS 96 JA
13.	Establish and enforce an entry control point and standard security measures as soon as possible.	96 SFS

14.	Establish entry control logs and a record of all personnel entering the NDA.	96 SFS
15.	Implement identification and badging system.	IC
16.	Request support from local civil authorities/officials in preventing unauthorized entry and in removing unauthorized personnel who enter the NDA.	96 SFS
17.	Ask civilian authorities to apprehend or arrest civilians who violate any security requirements at the NDA. **NOTE**: If local civil authorities are unavailable or refuse to give assistance, on-scene military personnel should apprehend and detain violators or trespassers. Disposition should be completed quickly following coordination with the legal officer.	96 SFS 96 JA
18.	Create procedures for a base camp. • Traffic control. • Law enforcement. • Base camp entry control point. • Restriction of curiosity seekers. • Maintaining order and discipline within the camp.	IC 96 SFS
19.	Protect specified classified components from sight and overhead photographic surveillance.	ALL
20.	Inform landowners of their rights and claims procedures.	96 JA
21.	Coordinate on all statements to the media.	96 JA 96 PA
22.	Request news media cooperation in protecting classified materials or information.	96 PA
23.	Consider reducing the size of the NDA when resources have been located and secured.	96 JA
24.	Consider dissolving the NDA when all classified government resources have been removed.	96 JA

TAB B TO APPENDIX 6 TO ANNEX A TO EAFB 10-2 IEMP
MAJOR ACCIDENT RECOVERY OPERATIONS CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

MAJOR ACCIDENT RECOVERY OPERATIONS		
ITEM	**TASK/ACTION**	**OPR**
1.	Report all damage to the EOC.	UCCs
2.	Report damage, fire, casualties and other incidents as found to the CP. Annotate the following: • Damage location or facility number. • Damage description. • Time damage occurred. • Estimated cost of repairs. • Repair priority. • Repair status.	EOC/ROC
3.	Analyze initial and detailed damage assessments and create a recovery plan based on priorities established by the 96 TW/CC. • Medical, firefighting, security and logistics support. • Support/Recovery Team identification procedures. • Procedures to document and report resource expenditures. • Contamination control. • Environmental considerations to prevent pollution and restore area. • Safing and removing explosives and hazardous materials information. • Personnel protective equipment, post-traumatic stress, blood-borne pathogen exposure, medical screening and bioassay requirements and procedures for all victims and responders. • Property damage and personal injury estimates and contact information for those people who suffered injury or property damage. • Public affairs activities. • Liaison with military, local, State and Federal investigation officials. • Wreckage removal information. • Site restoration considerations. • Mishap investigation requirements.	EOC/ROC/ IC
4.	Approve and direct implementation of the recovery plan.	96 TW/CC
5.	Ensure personnel entering the site are informed of the hazards present and equipped with proper personnel protection equipment.	IC
6.	Assign or identify Interim Safety Board (ISB) members.	96 TW/CC

7.	Provide a list of personnel required at the site to EOC. • Coordinate with Federal, State and local officials for a list of their personnel.	UCCs
8.	EOC creates an EAL to the site for the IC and provides to 96 SFS.	EOC 96 SFS
9.	Authorize personnel access. Delineate personnel with access to: • Wreckage. • Entry Control Point.	IC
10.	Ensure security at the incident scene is maintained. • Obtain an entry authority list from the IC once the emergency situation has stabilized. • Track personnel entering the site by name and organization.	IC 96 SFS
11.	Coordinate access and assets needed through the IC.	SIB/AIB
12.	Grant access to SIB, AMB and AIB personnel when safe.	IC
13.	Transfer custody of wreckage and other physical evidence to the SIB or AIB president when appropriate.	IC
14.	Provide input to IC on HAZMAT and exposure precautions for workers and the general public.	BEE
15.	Locate, sequester and interview witnesses.	96 SFS
16.	Provide a contact list of witnesses to the IC for the SIB, AMB or AIB.	96 SFS
17.	Obtain missing information by all appropriate means including witness interviews, inventories and various forms of reconnaissance.	SIB/AIB
18.	Provide water supply for decontamination operations, if necessary.	96 CEG
19.	Provide firefighting support during recovery operations.	96 CEF
20.	Assist the IC in HAZMAT environmental issues. • Provide input on hazardous materials involved. • Participate in Chemical Spill Response Plan recovery activities, if required.	96 CEIEC 96 CEF
21.	Recall vehicles required in clean-up operations.	96 LRS
22.	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
23.	Provide legal assistance to eligible DoD ID cardholders.	96 JA
24.	Establish and clearly identify designated areas for debris storage/removal.	96 CEG
25.	Provide disposal instructions for contaminated waste. • Establish work center, facility and base-wide storage/disposal points. • Clearly identify the storage/removal area. • Ensure personnel are trained to collect and dispose of their	96 CEIEC

	contaminated items. • Ensure contaminated waste from unit disposal points are collected and stored at one or more waste disposal areas. • Determine methods of handling large amounts of waste: open storage, burying or burning.	
26.	Provide lodging for personnel responding from another installation, as required. Standard room charges will apply.	96 FSS
27.	Collect and compile expenses in support of a major accident.	UCCs
28.	Consolidate expense lists and forward them for reimbursement and ensure personnel are aware of and using established ESP codes.	96 CPTS
29.	Consider the following actions before ending major accident recovery operations involving Air Force resources: • Obtain proof of existence or nonexistence of contamination. • Identify, account for or recover all classified and hazardous materials. • Ensure military and local, State and Federal agencies are able to complete their duties. • Remove wreckage and restore the site in coordination with accident investigation officials and, if necessary, civil authorities. • Request aerial photos if the situation dictates.	IC/ROC 96 TW/CC
30.	Submit reports in Table 1, Reporting Requirements, as required.	ALL
31.	Review/refine plans resulting from lessons learned/after action reports.	ALL

TAB C TO APPENDIX 6 TO ANNEX A TO EAFB 10-2 IEMP
FAMILY ASSISTANCE CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

FAMILY ASSISTANCE		
ITEM	**TASK/ACTION**	**OPR**
1.	Consider/coordinate child care services for personnel affected by the crisis.	96 FSS
2.	Check on and assist family members directing them to appropriate agencies for assistance.	Unit CCs/ First Sgt's
3.	Assign an OPR for receiving, acknowledging receipt of, accounting for and disbursing all donations of material and goods (food/flowers).	96 FSS
4.	Activate the EFAC IAW AFI 34-1101, *Assistance to Survivors of Persons Killed in Air Force Aviation Mishaps and Other Incidents*. Ensure the following: • The EFAC serves as a central location for collecting and distributing accurate information, forming and briefing family assistance teams and supporting families of people involved in the incident. • The EFAC's primary mission is to handle the needs of families of potential casualties and people affected by the disaster. • The center is set-up to ensure the privacy and dignity of individuals is maintained. • Center members only respond to requests for information	96 TW/CC EOC Director 96 FSS
5.	Ensure EFAC staff is recalled and arrangements are made for 24-hour operation. Task agencies to staff the EFAC: • Chaplain (HC). • Staff Judge Advocate (JA). • Air Force Aid Society (AFAS). • American Red Cross (ARC). • Mental Health Clinic (Should medical support be required, the mental health representative will contact the MTF and use their on- call medical staff). • Military Personnel Section (MPS).	96 TW/CC EOC Director 96 FSS
6.	Establish telephone service at the EFAC and additional communications support, if required.	96 CS

7.	Advise the EOC of the following: • Regarding needs of the families and community utilizing EFAC services. • When specialized service provider augmentees from other installations are needed.	EFAC
8.	Provide EFAC with updated information. • Clear all information released through the EFAC pertaining to the crisis. • Ensure widespread dissemination of information regarding activation of the EFAC.	96 PA
9.	Conduct operations, as needed. • Provide emotional and spiritual support to family members and affected community members at the EFAC. • Provide assistance with casualty notifications. • Advise leadership on memorial/funeral services.	96 HC
10.	Coordinate with the ARC on notification of family members, other than next of kin, once information is releasable.	96 FSS
11.	Provide emergency assistance and support to family members.	96 FSS
12.	Provide next of kin/families a focal point to help with issues that are not within the purview of other programs such as casualty assistance and mortuary affairs, including assistance with funeral arrangements.	96 FSS
13.	Provide legal assistance to eligible DoD ID cardholders.	96 JA
14.	Coordinate support for the EFAC. • Ensure adequate refreshments and supplies are available. • Coordinate details to ensure the safety and comfort of family members. • Ensure adequate communication assets are available for EFAC operation.	EFAC
15.	Serve as a centralized location for required services following confirmation of casualties. • Grief counseling. • Entitlement briefings. • Financial assistance. • Legal assistance.	EFAC
16.	Provide supportive services and serve as a consultant in situations where family members may require medical intervention. • Organize critical incident stress briefings. • Request assistance from other helping agencies, as needed.	96 MDG
17.	Establish a volunteer control center to match volunteers with identified needs (e.g., manning phones, childcare, logistical support).	EFAC
18.	Designate a fund's manager, when required, who will exercise a fiduciary responsibility over all monetary donations made to the installation as a result of the incident.	96 FSS

19.	Coordinate any additional manpower requirements and offers of volunteer support. Establish an assembly location for volunteers.	96 FSS
20.	Shift the focus of the EFAC to long-term assistance, if needed, after initial arrangements are made for the affected families. • Continued counseling support for grieving family members. • Services to non-casualty families, survivors, "first responders", staff and volunteers. • Continued coordination of support services. • Completion of an after-action report.	EFAC

ANNEX B TO EAFB 10-2 IEMP
NATURAL DISASTERS

1. SITUATION: The 96 TW/CC may have to implement the IEMP 10-2 due to impending or post natural disasters. Aircraft, facilities, equipment, and personnel must be protected in order to maintain maximum operational capabilities. Off-base disasters could cause danger to and/or evacuation of large segments of surrounding communities and may require emergency military support. The 96 WS is the authoritative source for environmental information on the Eglin Test and Training Complex.

1.1. HURRICANES:

1.1.1. Florida is the most hurricane prone state and hurricanes are the greatest natural disaster threat to the Florida panhandle region. The four hazards produced by a hurricane are storm surge, high winds, heavy rainfall and tornadoes. Hurricanes producing tornadoes add to the storm's destructive power, and people living in low-lying areas and mobile homes face additional flooding and surge hazards.

1.1.2. Hurricane Season: The official hurricane season for the Atlantic Basin (Atlantic Ocean, Caribbean Sea and Gulf of Mexico) is from 1 June to 30 November. While activity may occur at any time, historical data shows the majority of hurricanes occur from 1 August to 31 October.

1.1.3. Annual hurricane preparedness briefings will be provided as a joint effort by 96 CES/CEX and 96 WS to all Team Eglin personnel to prepare for hurricane season.

1.2. TORNADOES: Eglin AFB is susceptible to tornadoes anytime during the year and may form independently or in association with tropical storms/hurricanes. Tornadoes are rated using the Enhanced Fujita Scale (also known as the Enhanced Fujita-Pearson Scale). It assigns a numerical rating from EF0 to EF5 to rate the intensity of tornadoes.

1.3. FLOODS: Eglin AFB is susceptible to floods/flashfloods anytime during the year, especially from June to September.

1.4. EXTREME HEAT/COLD: Eglin AFB is susceptible to extreme heat or cold conditions. The average high temperature is 89° F in July, with a record maximum of 106° F. The average low temperature is 43° F in January with a record minimum of 6° F.

1.5. WILDLAND FIRE/FOREST FIRE: Eglin AFB has more than 463,000 acres of woodland susceptible to wildfire. The Jackson Guard implements a rigorous fuels management strategy and preventive fire controls plan; however, in the event of an uncontrolled wildfire fire additional actions may be required.

1.6. DEFENSE SUPPORT TO CIVIL AUTHORITIES: Natural disaster events may also affect the local communities. The installation can be tasked to provide support after a disaster under a Presidential Declaration and in accordance with AFI 10-801, *Defense Support of*

Civilian Authorities.

1.7. BASE SUPPORT INSTALLATION: Eglin AFB may be tasked as a base support installation (BSI) for disaster relief efforts. The BSI serves as the main logistical hub for military support operations.

1.8. DISASTER SHELTERING: Disaster sheltering normally takes place in the home, workplace or dormitory. When directed, personnel will remain in these locations unless directed to evacuate by the 96 TW/CC. If quarters are severely damaged by the natural disaster, alternate quarters will be found during the recovery effort for these personnel.

1.9. DISEASE CONTAINMENT: If the installation or assigned personnel are afflicted with a pandemic disease, there are actions the installation will have to take to prevent the spread of that disease on the installation and to the outside community. The Public Health Emergency Officer (PHEO) would provide guidance on preventing the spread of the disease. Refer to EAFB 10-2604, *Disease Containment Plan,* for further guidance.

2. MISSION: Ensure effective notification of all personnel when natural disasters threaten Eglin AFB and surrounding areas, maintain the safety and security of personnel and property, enable a strong and stable command and control structure, enhance effective responses and return to full operational capability as soon as possible.

3. EXECUTION: Refer to Appendices for:

Natural Disasters
Hurricanes
Tornadoes
Floods
Extreme Cold/Heat
Wildland Fire/Forest Fire
Defense Support of Civil Authorities (DSCA)
Base Support Installation (BSI)
Personnel Sheltering
Disease Containment
Civil Authority Request for Evacuee Beddown
Mission Critical Personnel

NATURAL DISASTER DEFINITIONS

Heavy Recovery Team (HRT): Hurricane recovery team comprised of the bulk of hurricane recovery team forces. Team is sheltered/staged within structures located in the 7th Special Forces Group [7th SFG(A)] compound.

Hurricane Categories: The potential extent of damage to Eglin AFB is dependent upon the strength of the hurricane or wind speed. Eglin AFB follows the Saffir-Simpson Scale to classify hurricanes. Hurricanes are categorized by sustained wind speed from I

(Weak/Minimal) to V (Devastating/Catastrophic). See Appendix 3 to Annex B for visual chart.

Hurricane Conditions (HURCON): HURCONs serve as a countdown to the possible arrival of destructive surface winds of 58 mph (50 kts) sustained and/or gusts of 69 mph (60 kts), beginning 96 hours out (HURCON 5) and ending at recovery after the storm (HURCON 1R). See Appendix 3 to Annex B for visual chart.

Hurricane Preparedness: Incorporates the actions and planning efforts taken before a hurricane is expected to make landfall at or near Eglin AFB. This is done to mitigate any potential damage or injury that could be caused by a hurricane.

Hurricane Response Force (HRF): Pre-identified teams dispatched to sheltered locations on Eglin AFB. Teams will be sheltered at Eglin AFB main, 20 SPCS, and the 7th SFG(A) compound located in the north central Eglin AFB reservation. The role of these teams is to evaluate damage sustained following a hurricane or other natural disaster as soon as conditions are safe. Teams will be assembled and briefed at the earliest possible time (HURCON 3 or 4) to allow members to prepare. Other personnel required for base recovery operations may be recalled through the EOC or CP as conditions warrant. A general recall of personnel, to include non-mission critical, will not be accomplished until Eglin AFB and surrounding civilian communities have been authorized for re-entry.

Hurricane Response: Established procedures IAW this plan and other contingency plans/checklists to prevent or minimize danger to Eglin AFB resources if a hurricane is expected to make landfall at or near Eglin AFB.

Hurricane Warning: Hurricane conditions are expected within the specified area. Warnings are issued 36 hours in advance of the anticipated onset of tropical storm winds.

Hurricane Watch: A hurricane watch means that hurricane conditions of sustained winds of 74 mph or higher are possible within the specified area. A hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds in an area.

Installation Notification Warning System (INWS): Provides notifications to the installation populace through the use of AtHoc, giant voice, cable TV override, popups, etc.

Liaison Operations (LNO): Provides 96 TW direct liaison capability to coordinate with AFMC Headquarters and external agencies, and perform other actions as required outside of storm zone. LNO Team is led by the 96 TW/CV and will depart for Wright-Patterson AFB NLT HURCON 3 (48 hours prior to projected landfall). Refer to Exhibit 2 to Tab G to Appendix 3 para 2.5. for a list of team members.

Light Recovery Team (LRT): Small, 150 personnel or less recovery team, comprised of 96 CES, 96 MDG, and 96 SFS personnel. Team shelters at the 96 MDG, building 2825.

Mandatory Evacuation: When 96 TW/CC has directed the evacuation of Eglin AFB.

Mandatory evacuation means no person shall remain on Eglin AFB. Only those personnel pre-identified as mission critical recovery team members and EOC/CAT members will remain on duty during the evacuation period. Mission critical personnel's dependents will be authorized to the same evacuation status/entitlements of their non-mission critical counterparts. Non-mission critical military personnel are required to evacuate the local area and seek refuge at a distance determined by the 96 TW/CC. Non-mission critical civilian personnel will be placed on Administrative leave as prescribed by 96 TW/CC.

Mission Critical (essential) Personnel: Civilian, contractor or military personnel, identified by supervision/management that are needed to provide services or support functions during contingencies having the potential to disrupt normal base-level operations.

Saffir-Simpson Scale: The Saffir-Simpson Hurricane Scale is a 1-5 rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor in the scale, as storm surge values are highly dependent on the slope of the continental shelf and the shape of the coastline in the landfall region.

Tornado Strike: A tornado has struck/damaged the base or surrounding area.

Tornado Warning: Announced when a tornado has been sighted or is imminent.

Tornado Watch: Announced when conditions are favorable for tornadoes to form.

Tropical Cyclone: Systems of cyclonic rotating winds characterized by a rapid decrease in pressure and increase in winds toward the center of the storm. Size can vary from 60 nautical miles to over 1000 nautical miles.

Tropical Depression: An area of low pressure, counter-clockwise rotation of clouds with maximum sustained winds of 33 kts/38 mph or less.

Tropical Disturbance: A moving area of thunderstorms in the tropics.

Tropical Storm: A low pressure area with maximum sustained surface winds ranging from 34 kts/39 mph to 63 kts/73 mph. A storm is given a name at this point.

Tropical Storm Warning: Tropical-storm conditions are expected in the specified area within 36 hours.

Tropical Storm Watch: Topical-storm conditions are possible within the specified area.

Voluntary Evacuation: The 96 TW/CC approves release from duty of non-mission critical, non-emergency essential and/or non-key civilian personnel and their dependents electing to evacuate the local area. This will be authorized when organizational requirements have been met and there is no further need to retain them on station. For non-mission critical, non-emergency essential and/or non-key civilian personnel wishing to evacuate, a liberal leave

policy may be established. No entitlements authorized.

APPENDIX 1 TO ANNEX B TO EAFB 10-2 IEMP
NATURAL DISASTER CHECKLIST

1. MISSION: The purpose of this checklist is to supplement, and be used in conjunction with, specific natural disaster checklists such as hurricanes, tropical storms, tornadoes, floods, extreme heat/cold, and wildfires found in Appendices 2-7. If a detailed checklist does not exist for an occurring natural disaster, this checklist shall serve as a starting point to begin the response to the event. These procedures are developed to protect assigned personnel, aircraft and equipment from the effects of severe weather and to restore facilities and operations to normal status after the passage of severe weather. Each unit is expected to notify their internal sections IAW EAFB 15-1 Weather Support Plan.

2. EXECUTION: Natural disaster response consists of three phases: notification, response and recovery. This section addresses notification, response, and recovery actions that should be considered during all natural disasters.

NOTIFICATION - (NATURAL DISASTER)		
ITEM	**TASK/ACTION**	**OPR**
1	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2	Notify base populace using Installation Notification Warning Systems (INWS) (i.e., AtHoc and Giant Voice).	96 TW/CP
3	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position as required.	ATC/AM
4	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
5	Notify Okaloosa Emergency Management of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	CAT EOC
6	Notify Utilities Privatization (UP) Partners (ASUS and CHELCO).	796 CES
7	Notify 96 SFS of emergency personnel responding from local community.	EOC IC
8	The 96 TW/CP having knowledge of an event/incident will report/facilitate OPREP-3 reporting as required by AFMAN 10-206.	96 TW/CP
9	Activate control centers and specialized teams, as needed. • CP. • EOC. • UCCs. • Specialized Teams.	CAT
10	Request assistance through HQ AFMC, if required.	96 TW/CC

11	Determine the composition of the EOC needed for the situation.	EOC Director
12	Activate the 96 CEG UCC to coordinate with 96 CEG/CC and EOC on emergency activities.	96 CEG
13	Identify auxiliary generators and ensure they are positioned and operational. • Identify all critical activities requiring backup power and list them in priority order. • Determine type of generator and capacity (in KW) for each identified critical function. • Determine connection details (plug, split-bolt, etc.) and load transfer method at the facility where the unit is likely to be used. • Develop an operating agreement with users covering generator startup, load transfer, servicing and equipment maintenance responsibilities. • Ensure generators are topped off with fuel. • Maintain log of generator status to include periodic checks of operational generators at a minimum of every two hours.	
14	Identify utilities to be turned off in threatened areas and communicate those to Utilities Privatization Partners (ASUS and CHELCO) if/where applicable.	796 CES 96 CEF
15	Ensure utility systems are checked by ASUS and CHELCO prior to turning them back on.	796 CES
16	Ensure protection of C4I resources.	ALL
17	Conduct and report initial damage assessment of facilities, utilities, water/waste systems, food supplies, fuels distribution systems, HAZMAT/toxic material storage sites, and C4I systems. • Forward information to the EOC.	UCCs
18	Annotate and update the EOC on actions/events. • Damage location, utility or facility number. • Damage description. • Time damage occurred. • Estimated cost of repairs. • Repair priority. • Estimated/actual repair start time. • Estimated/actual completion time. • Repair status.	96 CEG

	• Maintain log of identified damage and repair status.	
19	Clear main roads of debris to ensure response capabilities of emergency personnel.	96 CEG
20	EOC Staff reports activation status of UCCs to EOC Manager.	EOC Staff
21	Identify needs for Specialized Teams and emergency manpower requirements to the CAT.	EOC Director
22	Maintain an activities log using ICS Form 214.	EOC UCCs
23	Identify non-mission critical personnel for Specialized Teams and emergency duties to the EOC Director.	EOC Staff
24	Assign non-essential personnel to Specialized Teams.	EOC Director All Units
25	Consider releasing non-mission critical personnel.	96 TW/CC
26	Establish an installation waste disposal area for debris and coordinate a separate disposal site for HAZMAT.	96 CEG
27	Implement sanitation control procedures. • Ensure proper disposal of waste materials and garbage. • Coordinate with Public Health for local guidance and procedures.	
28	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 TW/HC
29	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
30	Assign a senior military liaison between Okaloosa County, State and Federal authorities.	96 TW/CC
31	Advise the 96 TW/CC and 96 CEG/CC on legal/jurisdictional issues with local, State and Federal agencies and private organizations.	96 TW/JA
32	Recall vehicles needed for support/recovery operations. • Units report dorm residents without vehicles to EOC.	96 LRS
33	Assess status of food supplies and requirements.	96 FSS
34	Assess status of potable water supplies and requirements and distribute water as required. • Identify backup sources of water and treatment systems readily available to the base.	96 CEG BEE 96 LRS
	• Establish procedures to immediately notify fire protection on status of water.	

35	Coordinate with dining facilities, MWR and AAFES on extended hours for meal requirements.	96 FSS
36	Assess status of medical supplies and requirements.	96 MDG
37	Control access to the site and essential operations. • Cordon using Traffic Control Points (TCP). • ECP. • ICP. • Support functions outside the cordon. • **NOTE:** See Figure 1, Typical Incident Site Setup	96 SFS 96 CEF
38	Perform initial lifesaving, rescue, suppression, containment and evacuation.	First Responders
39	Authorize access to the cordon and ensure appropriate PPE is worn.	IC 96 CEF BEE
40	Establish tactical priorities. • Ensure rescue/life safety/responder safety. • Determine presence/absence of contamination. • Identify boundaries of contamination. • Stabilize the incident. • Conserve property and the environment.	IC
41	Develop an incident action plan. • Identify problems. • Examine conditions surrounding the problems. • Develop possible solutions. • Evaluate the alternatives. • Choose best option. • Implement the plan. • Monitor and evaluate results.	IC 96 CEF 96 MDG JBEEM 96 CEG/CEI
42	Set up/establish a staging area.	IC
43	Consider public actions to protect the general population from HAZMAT by either SIP or evacuation.	IC
44	Announce public protective actions using available resources.	96 TW/PA
45	Establish a triage area.	96 CEF
46	Implement applicable plans to route evacuation traffic or re-route traffic from the hazard area.	96 SFS
47	Brief the EOC Staff on the following: • Incident Description	EOC Director

	• Forces on Scene • Casualty Estimate • Cordon Size and Location • Protective Measures being taken • Tactical Priorities • EOC Priorities • Weather	EOC Manager
48	Evaluate the situation and determine additional personnel/resources needed at the site.	IC EOC Director
49	Provide ESF personnel with procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
50	Provide transportation to the site, as needed.	96 LRS
51	Ensure communications during emergency situations. • Evaluate communications capabilities available to support the mission. • Determine operating frequencies and oversee frequency management. • Provide communications support, if necessary. • Coordinate with augmentation elements to establish procedures for communications. • Establish telephone "HOTLINES"/1-800 numbers as needed for disaster information. • Consider the need to "MINIMIZE" communications systems.	96 CS
52	Establish/maintain contact with UCCs.	EOC
53	Support the EOC Director by committing unit personnel and resources to mitigate the situation.	EOC Staff UCCs
54	Ensure protective measures for personnel working at the incident scene. • Appropriate training. • Appropriate level of PPE according to OSHA regulations. • Work-rest regimens. • Protective measures against climatic conditions. • Food and water. • Sanitary facilities. • Procedures to monitor "stay times" for entry teams.	IC PH BIO

	• Occupational and environmental surveillance and health risk assessment. • Personnel exposure levels.	
57	Forward DIM count to the EOC Director as the information becomes available.	IC
58	Relay casualty information to the EOC. • Forward names of deceased and injured to EOC by encrypted email/telephone or by runner. • **** Do not use cell phones**. • Ensure only medical authorities certify death. • Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	96 MDG
59	Coordinate handling of deceased personnel. • Perform mortuary services. • Set up a temporary morgue, as needed. • Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. • Contact Armed Forces Medical Examiner System (AFMES). • Coordinate with medical personnel or AF identification team, if required, for help in identifying remains. • Notify casualty reporting officer of names of identified fatalities. • 96 MDG coordinates handling of contaminated remains.	96 FSS
60	Dispatch personnel and conduct operations, as needed. • Provide ministry and advise senior leadership at the CAT. • Provide ministry to the on-scene personnel when safe. • Dispatch a Chaplain to the medical facility. • Activate the Chapel Control Center upon notification from the CAT. • Place the Death/Notification Team on stand-by. • Prepare chapel facilities for spiritual support, as needed.	96 TW/HC
61	Construct detailed recovery plan for the situation.	EOC
62	Implement support agreements, as needed for assistance.	96 TW/CP 96 CEF 96 MDG
63	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident.	96 CEF
64	Prepare initial news release within one hour of accident notification and coordinate with the 96 TW/CC or 96 CEG/CC on news releases, as needed.	96 TW/PA/JA

65	Establish a news media center, as needed.	96 TW/PA
66	Provide legal assistance to eligible DoD ID cardholders.	96 TW/JA
67	Provide follow-up reports by INWS, telephone, e-mail or OPREP-3.	96 TW/CP
68	Publicize disaster information. • Florida evacuation routes. • Emergency contact information. • Family assistance. • Peacetime disaster sheltering information.	96 TW/PA
69	Ensure the following actions have been taken or considered. • Direct protection of high-level assets and installation resources. • Shelter or disperse aircraft. • Identify facilities to be protected. • Initiate surveillance of protected facilities. • Secure all loose objects. • Check condition of emergency equipment. • Shut down nonessential functions. • Disperse vehicles, equipment and supplies (food, water, medical, etc.).	EOC
70	Consider sectoring the installation for large-scale disasters and assigning Sector Representatives.	EOC Director
71	Appoint a Recovery Operations Chief in writing prior to 1 May.	96 TW/CC
72	Conduct damage assessment and report damage, fire, casualties and other incidents as found to the 96 CEG UCC. Annotate the following: • Damage location or facility number. • Damage description. • Time damage occurred. • Estimated cost of repairs. • Repair priority. • Estimated/actual repair start time. • Estimated/actual completion time. • Repair status.	96 CEG
73	Analyze initial and detailed damage assessments and create a recovery plan based on priorities established by the 96 TW/CC. Coordinate with COOP PM to ensure impacts to MEFs and damage to key and critical assets is reported appropriately. • Medical, firefighting, security and logistics support. • Support/Recovery Team identification.	EOC 96 CEG

	• Debris removal and pick-up points for debris removal. • Procedures to document and report resource expenditures. • Environmental considerations. • Hazardous material operations. • Personnel protective equipment, post-traumatic stress, blood-borne pathogen exposure, medical screening and bioassay requirements and procedures for all victims and responders. • Preparing property damage and personal injury estimates and contacting those people who suffered injury or property damage. • Public affairs activities.	
74	Consider EAFB 10-208 COOP plan implementation if required. Refer COOP Plan execution checklist.	CAT
75	Transfer command to ROC once individual is appointed by the 96 TW/CC.	IC
76	• Inspect damaged facilities prior to restoring utilities to prevent fires. • Verify condition with electrical/utility supervisors. • Identify distribution lines to restore, valves or switches to open or close, preferred sequences and responsible individuals/functions. • Notify key personnel (e.g., UCC, EOC, Fire Protection) when systems are restored. • Identify facilities affected by restoration.	96 CEG
77	Ensure utility systems are checked by ASUS and CHELCO prior to turning them back on.	796 CES
78	Provide technical expertise, personnel and equipment to recover base utilities, repair damages to facilities and remove trees and large debris that require specialized equipment. • **NOTE:** Use the Eglin AFB Facility Priority Listing.	96 CEG
79	Approve and direct implementation of the recovery plan.	96 TW/CC
80	Establish designated areas for debris storage/removal.	96 CEG/UCC
81	Accomplish preliminary debris removal.	96 CEG
82	Control Specialized Teams assigned to assist in operations.	UCC
83	Upon request, provide transportation for Specialized Teams.	96 LRS
84	Ensure personnel entering the site are informed of the hazards present and equipped with proper personnel protection equipment.	IC

85	Request aerial photos if the situation dictates.	96 TW/CC EOC Director
86	Coordinate and conduct search and recovery operations.	96 FSS/IC
87	Provide transportation of search and recovery team to the accident site.	96 LRS
88	Inspect housing, dormitories, mobile homes and schools before allowing personnel to return.	96 CEG
89	Perform communicable disease surveillance and monitor vectors.	PH 96 CEG
90	Ensure refuse contractor in military family housing picks up small debris placed along curb by occupants.	96 CEG
91	Consolidate expense lists and forward them for reimbursement and ensure personnel are aware of and using established ESP codes.	96 CPTS
92	Submit reports IAW IEMP 10-2, Table 1, Reporting Requirements, as required.	ALL
93	Review/refine plans resulting from lessons learned/after action reports.	ALL
94	Utilize Air Force Personnel Accountability and Assessment System (AFPAAS) to assist recovery accountability. If AFPAAS is not activated follow ICD directions.	ALL
95	If required, conduct recovery operations. Includes return to normal/safe operations, utility recovery, generator location/fueling to support MEFs, and contracting support as required. Utilize existing recovery, emergency response and contingency plans.	EOC

APPENDIX 2 TO ANNEX B TO EAFB 10-2 IEMP
TROPICAL STORM CHECKLIST

1. OVERVIEW: This appendix will be used in the event of a tropical storm warning at EAFB.

2. MISSION: Mitigate loss of life and resources and restore operational capability.

3. EXECUTION: This checklist will be run independently of HURCON checklists, but storm conditions could intensify rapidly, dictating a switch to procedures in Appendix 3.

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

TROPICAL STORMS		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	EOC and 96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Contact Hurlburt Field and Okaloosa County Emergency Management officials to coordinate mutual storm preparations.	96 CEX
5	Recall and activate EOC personnel to develop a course of action.	EOC Director
6	Activate UCCs as directed.	EOC
7	Disseminate tropical storm information to base populace using INWS.	96 TW/CP
8	Review HURCON checklists within this Annex.	UCCs
9	Ensure assigned personnel have an identified shelter location. Personnel on base will shelter in their residence. Dorm residents will shelter in the dorms while off-base personnel will find a safe sheltering location in their area. TDY and transient personnel will be given priority in lodging.	ALL Units

10	Establish closure time of all base facilities.	EOC
11	Determine availability/status of emergency equipment/ supplies.	UCCs
12	Consider phasing down non-essential operations and releasing non-storm essential personnel.	EOC Director
13	Ensure vehicles are refueled and stored in safe locations.	96 LRS
14	Consider evacuating aircraft to refuge locations.	CAT
15	Move remaining aircraft into available hangar space or tie down securely.	96 OG 96 MXG
16	Close installation marina and remove all recreational vehicles from water.	96 FSS
17	Consider evacuating FAMCAMP, Maxwell Recreation Center, and Postl Point residents.	EOC Director
18	Identify staging locations for sandbag operations, if required.	96 CEG
19	Direct contractors to secure construction material.	96 CEG
20	Decide and announce release and reporting procedures for military, non- mission critical civilian/contractor personnel.	CAT EOC
21	Notify EOC upon completion of this checklist.	UCCs

APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURRICANES

Tabs:

A HURCON 5 Checklist

B HURCON 4 Checklist

C HURCONs 3, 2, 1 Checklists (EVAC)

D HURCON 1R (Recovery) Checklist (EVAC)

E HURCONs 3, 2, 1 Checklists (NON-EVAC)

F HURCON 1R (Recovery) Checklist (NON-EVAC)

G Personnel Evacuation Checklist

---Exhibit 1 Commander Evacuation Matrix
---Exhibit 2 Hurricane Response Teams

1. Hurricane Conditions (HURCON). HURCONs serve as a countdown to the possible arrival of destructive surface winds of 58 mph (50 kts) sustained and/or gusts of 69 mph (60 kts), beginning 96 hours out (HURCON 5) and ending at recovery after the storm (HURCON 1R).

HURCON	Criteria
5	Destructive winds are possible within 96 hours
4	Destructive winds are possible within 72 hours
3	Destructive winds are possible within 48 hours
2	Destructive winds are possible within 24 hours
1	Destructive winds are possible within 12 hours
1C	Caution: Winds of 40-57 mph/35-49 kts sustained are occurring.
1E	Emergency: Winds of 58 mph/50 kts sustained and/or gusts of 69 mph/60 kts or greater are occurring. All outside activity is strictly prohibited.
1R	Recovery: Destructive winds have subsided and are no longer forecast to occur; survey and work crews are permitted to determine the extent of the damage and to establish safe zones around hazards (e.g., downed power lines, unstable structures). Non-essential personnel are asked to remain indoors.

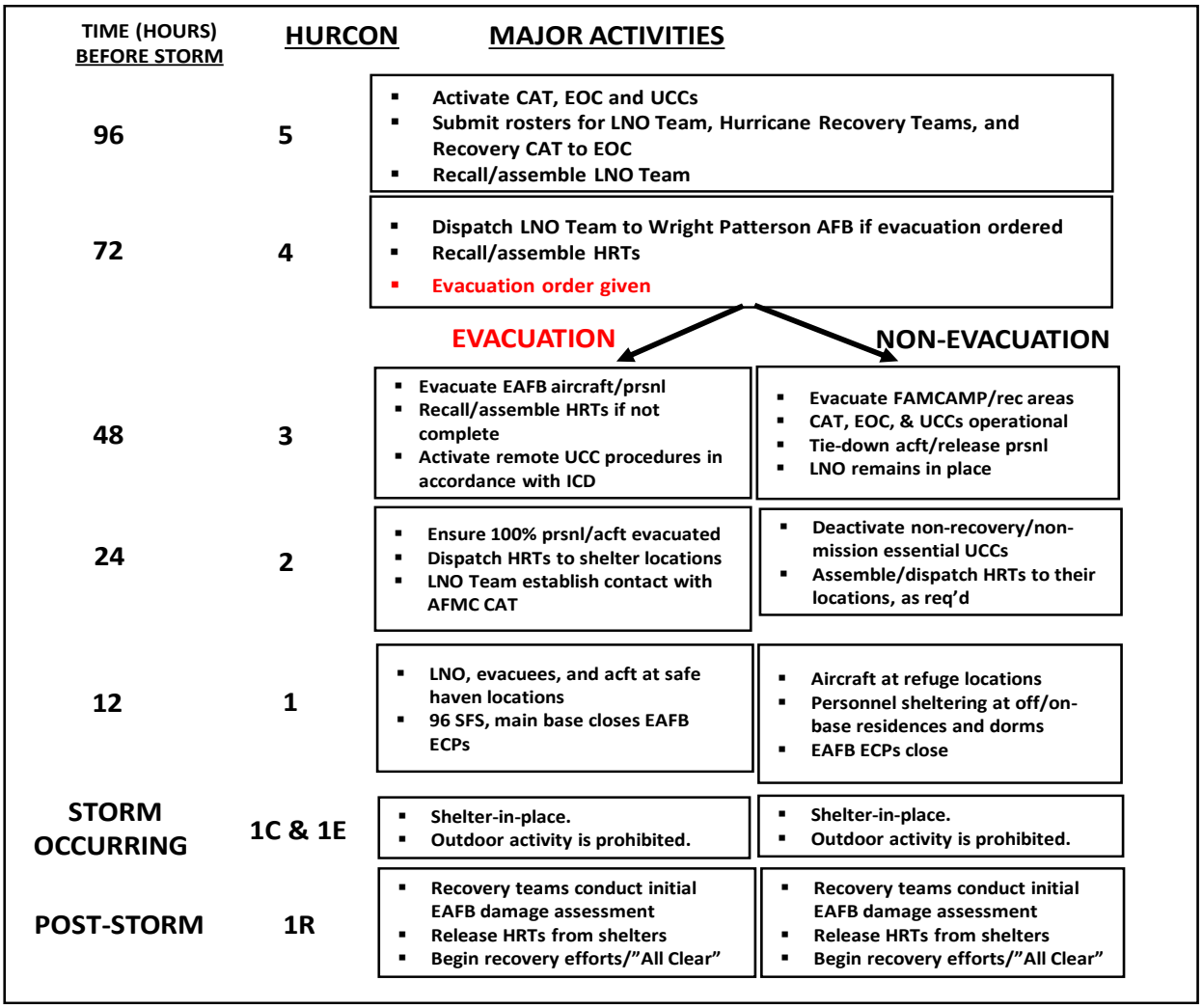
2. Hurricane Categories. Hurricanes are categorized by their sustained wind speed from category I (Weak/Minimal) to V (Devastating/Catastrophic).

Storm Category	Damage	Wind Speed (sustained)	
		Knots	MPH
I	Minimal	64 - 82	74 - 95
II	Extensive	83 - 95	96 -110

III	Devastating	96 - 112	111 - 129
IV	Catastrophic	113 - 136	130 - 156
V	Catastrophic	Above 137	Above 157

3. Eglin AFB Hurricane Response Summary. Eglin AFB's response to hurricanes is based off the Hurricane Conditions (HURCON) and each HURCON's respective activities. Hurricane Response Force (HRF) will perform initial damage assessment and recovery efforts. HURCON 3 is when the installation's response activities diverge based on the 96 TW/CC's decision to evacuate or not evacuate the installation. **Evacuation orders will be given NLT 48 hours out (HURCON 3) prior to the arrival of winds greater than 58 mph (50 knots) sustained or gusts of 69 mph (60 knots).**

Disclaimer: this graphic is not all inclusive. It depicts only the major activities ongoing through the HURCON level changes. More detailed measures are listed in the specific HURCON checklists.



3.1. LNO Team will relocate to and operate from Wright-Patterson AFB in anticipation of an evacuation order. The O-6 position identified on the LNO team roster is chosen by the 96 TW/CV just prior to actual deployment. The selected O-6 will assist the 96 TW/CV with operation of the LNO team and provide the means to conduct 24 hour operations if required. The only personnel remaining on base and in the vicinity of the local area during a mandatory evacuation will be the Hurricane Response Force (HRF), Recovery CAT, and Recovery EOC outlined in Exhibit 2 to Tab G of this Appendix.

4. Hurricane Evacuation. Category III, IV, and V storms require complete evacuation of EAFB personnel and facilities. Evacuation decisions are made by the 96 TW/CC or designated representative. Exhibit 1 to Tab G shows the Commander's Evacuation Matrix. Eglin AFB utilizes an evacuation radius to evacuate the installation populace. Evacuated military, dependents, and civilians if included in the evacuation order, may evacuate to a location of their choosing. The selected evacuation location must fall within the announced evacuation radius for full reimbursement. Military, dependents and civilians may choose a location outside the radius, but they will not be reimbursed for travel exceeding the maximum evacuation order distance.

4.1 Voluntary Evacuation. The 96 TW/CC approves the release from duty those non- mission critical military personnel and their dependents electing to evacuate the local area. Personnel in low lying areas may wish to move inland or to shelters. A liberal leave policy may be established for non-mission critical personnel wishing to evacuate, but travel related expenses will not be reimbursed. Voluntary evacuation of non-mission critical personnel is authorized when organizational requirements have been met and there is no further need to retain those personnel on station. No entitlements authorized.

4.2 Mandatory Evacuation. When 96 TW/CC has directed the evacuation of Eglin AFB. Mandatory evacuation means no person shall remain on Eglin AFB. Only those personnel pre-identified as mission critical Recovery members will remain on duty during the evacuation period. Mission critical personnel's dependents will be authorized to the same evacuation status/entitlements of their non-mission critical counterparts. Non-mission critical military personnel are required to evacuate the local area and seek refuge approximately 100 miles or more from the forecasted path and will be placed in a Temporary Duty status. Non-mission critical civilian personnel will be placed on Administrative Leave as prescribed by 96 TW/CC.

TAB A TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURCON 5 CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

HURCON 5 - (Destructive winds possible within 96 hours)		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Declare HURCON 5, based on recommendation from 96 WS.	
5	Direct HURCON 5 ICD transmission with decisions included.	
6	Submit required applicable OPREP-3 as required IAW AFMAN 10-206	CP
7	Initiate EAFB 9507, Aircraft Evacuation Plan and set time for the Contingency Operations Team (COT) meeting.	96 OG
8	Activate EOC and UCCs.	CAT
9	Establish communication with UCCs.	EOC
10	Determine number of students that will require transportation if evacuation is ordered. • Recall needed vehicles or coordinate off base transport through MOAs or contracting.	33 FW/ 96 MDG/ 96 LRS/ CAT/EOC
11	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	CP
12	Perform 100% accountability per 96 TW/CC approved ICD.	96 FSS
13	Post HURCON 5 sign at gates.	96 SFS
14	Direct the Comptroller (96 CPTS) to establish a Cost Account Code for natural disaster operations.	CAT
15	Set target time for extended hours of service/facilities based on arrival of 50 kt winds.	EOC
16	Submit LNO, Hurricane Response Force, and Recovery CAT rosters to EOC if not previously completed. • The EOC will develop a Recovery EOC roster.	ALL
17	Review unit response checklists.	ALL
18	Review EAFB 9507, *Aircraft Evacuation Plan*.	CAT

19	Place HRF team members on telephone stand-by and identify POC for activation to EOC – report completion to EOC.	UCCs
	Ensure personnel confirm status of their Government Travel Card, update or renew as needed.	ALL
	Ensure personnel have PPE, uniforms, and restricted area badges as needed.	ALL
	Consider placing identified recovery team members and other identified support personnel in Critical Mission Status.	ALL
	Consider increasing Government Purchase Card limits from 4K to 10K to support recovery actions. • Depending upon impact and duration, AFL3 (4)/ECARS may need to approve 20K.	ALL
20	Disseminate pertinent information to host and associate commanders on facility preparations.	CAT
21	Review procedures for securing facilities inside and out. • Procure and fill sandbags as required (Contact EOC for sand supply)	ALL
22	Review HURCON 4 measures.	ALL
23	Recall or place on stand-by the LNO team.	96 TW/CC
24	Determine ground transportation capabilities and provide info to EOC. • Inventory Air Force vehicles for personnel evacuation. • Determine availability of additional transportation in the form of buses, vans, etc.	96 LRS
25	Identify mission essential vehicles and equipment to be used for recovery.	96 CEG 96 MSG
26	Determine capability to relocate personnel and mission essential equipment and brief the CAT.	EOC
27	Unit Environmental Coordinators (UEC) provide 96 CEG with an estimated type, quantity and weight of hazardous waste and material requiring storage.	ALL
28	Contact family members of personnel in TDY status to ensure dissemination of current hurricane condition.	ALL
29	Identify mission critical/non-mission critical personnel and develop procedures to take care of deployed members' families.	ALL
30	Provide non-mission critical personnel (manpower pool) to assist in preparation/post hurricane operations, as necessary.	ALL
31	Establish a hurricane information program to continuously disseminate information and news releases, as needed. • Estimated time of landfall.	96 TW/PA 96 CEX 96 WS

	• Hurricane category and definition. • Expected storm surge. • Probable areas of flooding. • Family preparation actions. • Pet care during an evacuation. • Emergency contact information. • Local TV/Radio stations with current information. • Utilize TV override/AM Radio Station 530, as required. • Hurricane evacuation procedures: • Instructions prior to evacuating. • Use of private vehicles. • Designated locations for transportation assistance. • Evacuation processing and pre-departure instructions. • Reporting instructions at the refuge location. • Family Assistance.	
32	Conduct an inventory of emergency supplies needed for hurricane preparation and recovery. Procure items as required: • Lumber. • Plywood. • Chainsaws.	96 CEG
33	Coordinate with other nearby installations and local authorities/ communities how the "All Clear" will be disseminated.	96 CEX
34	Review Base Civil Engineer (BCE) Contingency Response Plan (CRP) 10-211.	96 CEG
35	Prioritize facilities for protection using BCE CRP 10-211. Consider these areas when prioritizing facilities: • Location in probable flood areas. • Mission criticality. • Supplies available. • Manpower available. • Time required and available for protective measures.	96 CEG
36	Provide information on self-help protective measures to base housing residents. • Protective measures allowed. • Identify supplies available. • Where to obtain supplies.	96 CEG 96 TW/PA
37	If LNO deployment is anticipated, assemble and brief on duties and responsibilities.	CAT

38	Coordinate lodging arrangements at Wright-Patterson AFB for LNO Team members if evacuation order is anticipated.	96 FSS
39	Safeguard resources/protect from high winds and water damage.	ALL
40	Notify AFPC Personnel Readiness of potential base evacuation at DSN 665-2020; Toll Free 1-800-435-9941.	96 FSS
41	Consider cancelling scheduled test missions to facilitate orderly range shutdown and personnel evacuation.	96 TW/CC
42	Brief the 96 TW/CC and CAT on all power phase downs. **NOTE:** Power phase down in this document refers to placing affected power grid areas in "One Shot" mode which means with a single short or arc, power will go down and emergency generator power kicks on until fuel runs out.	EOC
43	Ensure Civil Engineer technicians are placed on standby for possible recovery operations, as necessary.	96 CEG
44	Consider evacuation of TLF and areas considered vulnerable to high winds.	96 TW/CC
45	Assess requirement for 24-hour operations of UCCs and EOC – make recommendation to CAT to place appropriate CAT support staff, UCCs and EOC on stand-by as a minimum.	EOC
46	Direct the 96 CPTS/UCC to contact the Chief, Air Armament Museum to initiate museum display tie down – report completion to 96 CPTS/UCC.	EOC
47	Advise all AFTC/PZ monitored contractors under control of 96 CEG to secure their facilities/property.	96 CEG
48	Advise the Corps of Engineers to notify civilian contractors under their control to secure all property.	96 CEG
49	96 FSS will ensure the following is accomplished: • Hangar the Eglin Aero Club aircraft and secure remaining resources. • Ensure small boats are secured – report completion to EOC Director. Coordinate with commissary, BX, and base service stations to determine the need to ration critical supplies (i.e., gas, batteries, and baby supplies)--report to the EOC	96 FSS
50	Disseminate information as widely as possible.	CAT
51	Phase down non-mission critical facilities and operations.	ALL

52	Identify number of personnel requiring transportation if mandatory evacuation is directed. Report numbers to the EOC.	ALL
53	Establish 24-hour operations of CAT, EOC and UCCs.	96 TW/CC
54	Take appropriate action to protect and secure base facilities and high-value equipment.	96 CEG
55	Ensure all supporting unit actions are accomplished, as directed.	EOC
56	Contact Okaloosa County Emergency Management for up-to-date information.	96 CEX
57	Ensure actions are taken to secure protection of high-level resources.	96 SFS
58	Establish procedures for securing facilities beyond other organizations' capability to secure.	96 CEG
59	Notify civilian contractors and military personnel under your control to secure all property and take protective actions when directed by CAT.	ALL
60	Ensure contractors take action to implement security plans for protection of resources and secure loose construction materials and possible flying debris.	AFTC/PZ
61	Disseminate hurricane warnings/HURCONs to host and associate commanders.	96 TW/CP
62	Identify backup generators and serviceability.	96 CEG
63	Verify base housing residents are informed of current HURCON.	
64	Verify sufficient communication is available to support HRT and LRT operations (satellite phones, cell phones, and LMRs).	96 CS
65	Post hurricane condition signs at gate.	96 SFS
66	Coordinate meal requirements and a flexible food service through the dining facility and AAFES when needed.	96 FSS
67	Direct the EOC to activate or place recovery teams on standby.	CAT
68	Notify EOC upon completion of this checklist.	All UCCs

TAB B TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURCON 4 CHECKLIST

HURCON 4 - (Destructive winds possible within 72 hours)		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist, and Personnel Evacuation Checklist (Tab G).	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	EOC and 96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Declare HURCON 4, based on recommendation from WS and EOC Director.	CAT
5	Direct HURCON 4 ICD transmission with decisions included.	CAT
6	Submit required applicable OPREP-3 as required IAW AFMAN 10-206	96 TW/CP
7	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override if available, popups, etc.).	96 TW/CP
8	Perform 100% accountability per ICD instructions if not already completed.	96 FSS UCCs
9	Post HURCON 4 sign at gates.	96 SFS
10	Review/implement associated EAFB Contingency Plans as directed by the CAT. BCE CRP.	CAT 96 CEG
11	Evaluate shelter or evacuation decision (voluntary, recommended, mandatory, or none).	CAT
12	Assign a liaison to the Okaloosa County EOC to coordinate actions and information.	EOC
13	Commanders brief authorized evacuation procedures and accountability process to unit personnel.	ALL Units
14	Stage mission essential recovery vehicles and equipment at pre-designated locations.	96 MSG 96 CEG
15	Ensure families with TDY members are advised and supported for evacuation.	ALL
16	Provide two laptop computers and two cell or satellite phones for LNO team.	96 CS

17	Make preparations for securing the Eglin AFB complex. • Control all utility operations. • Notify on-base construction contractors of situation and required actions. • Check serviceability of and service backup generators.	96 CEG
18	Establish closure time of all base facilities.	EOC
19	Identify classified information storage locations and POC for each location. • Ensure SFS checks each location after storm passage to ensure classified material is secure.	CAT 96 SFS
20	LNO support: • Ensure vehicle(s) and drivers are available, if needed. • Provide a 15-passenger van(s) for the LNO team to deploy to Wright-Patterson AFB; ensure the van(s) are fully serviced. Ensure a federal credit card is available for each driver.	96 LRS
21	Dispatch LNO to Wright-Patterson AFB once support requirements are completed (items 16 and 20).	CAT
22	Survey equipment that will be needed for post-hurricane operations, remove to safe location, and be prepared to evacuate to designated locations.	ALL
23	Ensure all non-mission critical communications/computer equipment is secured.	ALL
24	Ensure all munitions, classified and/or sensitive materials are properly secured.	ALL
25	If evacuation is anticipated, air evacuate critical patients (or use ground transportation, if required), and discharge non-critical prior to HURCON 3 – report completion to CAT Director.	96 MDG
26	Conduct a deployment/situation briefing to all members of the Hurricane Response Force (HRT, LRT), if deemed appropriate or as directed.	EOC
27	Place HRT and LRT on telephone standby and direct personnel to begin deployment, personal, and home preparations.	EOC
28	Coordinate with JA on the legal/financial impact of evacuation order(s) issued to base personnel.	96 CPTS
29	Establish and maintain contact with local authorities, Utilities Privatization Partners, and other nearby installations.	EOC 796 CES

30	Maintain communication with AFMC CAT and alert when deployment of LNO to Wright-Patterson AFB is anticipated.	CAT
31	Notify local civil authorities of completed and anticipated actions.	96 CEX
32	Coordinate with EOC for personnel that require transportation for evacuation.	UCCs
33	Address MEFs that could be impacted by pending storm. Refer to EAFB 10-208, *COOP Plan* execution checklist.	CAT
34	Send Liaison representative(s) to the Okaloosa County EOC early to establish coordination as soon as it stands up.	96 CEX
35	If weather forecast calls for Category II hurricane or lower, then proceed to HURCON 3 (NO EVAC) checklist. If forecast calls for Category III hurricane or higher, then proceed to HURCON 3 (EVAC) checklist.	CAT EOC
36	Declare Eglin AFB evacuation order, if necessary (voluntary, recommended, mandatory, or none).	CAT
37	Notify EOC upon completion of this checklist.	All UCCs

TAB C TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURCONS 3, 2, 1 CHECKLISTS (EVAC)

HURCON 3 - (Destructive winds possible within 48 hours)		
EVAC		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist, and Personnel Evacuation Checklist (Tab G).	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	Declare HURCON 3, based on recommendation from 96 WS and EOC Director.	CAT
4	Direct HURCON 3 ICD transmission with decisions included.	CAT
5	Submit required applicable OPREP-3 as required IAW AFMAN 10-206	96 TW/CP
6	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
7	Perform 100% accountability per ICD instructions if not already completed.	96 FSS UCC
8	Post HURCON 3 sign at gates.	96 SFS
9	Evacuate EAFB aircraft IAW EAFB 9507, *Aircraft Evacuation Plan*, if not already completed.	96 OG
10	Once evacuation of all aircraft is complete consider closing airfield, send NOTAM of closure.	CAT 96 OG
11	Release all non-mission essential personnel for evacuation.	CAT
12	Direct phase down of electric power, as necessary.	CAT 96 CEG
13	Advise EOC if additional manpower is needed to secure the base.	96 CEG
14	Set time for Recovery teams to report to their designated Recovery shelter locations: Eglin, 7th SFG(A), 20 SPCS and 96 MDG building 2825.	EOC
15	Assemble Recovery teams and conduct a situation briefing to all members of the Recovery teams. Place them on standby.	ALL
16	Review HURCON 2 measures.	ALL
17	Direct units to cease outside activities upon arrival of 50 kt winds, emergency operations exempted.	EOC Director
18	Ensure all UCCs deactivated and in route to remote	

	operation location.	
19	Direct closure of all non-mission critical base facilities.	96 TW/CC
20	Direct Chief, Public Affairs, to: Continue dissemination of hurricane information to base personnel and residents as long as feasible through on-base mass communication channels and local news media. • Submit PA release to 96 TW/CC or designee for approval, then release.	96 TW/CC
21	Reassemble HRT and LRT, verify they have water, food, equipment/vehicles, clothing/hygiene, and communications, dispatch to sheltering locations. • Team members will not bring pets to shelter location.	Unit CCs EOC Director
22	Establish and maintain contact with local authorities, Recovery Teams, Utilities Privatization Partners, and nearby installations.	EOC Director 796 CES
23	Establish time for transition to Eglin Recovery CAT and Recovery EOC operations, disseminate information through ICD.	96 TW/CC
24	Maintain communication with HRT and LRT teams.	EOC Director
HURCON 2 - (Destructive winds possible within 24 hours)		**EVAC**
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist, and Personnel Evacuation Checklist (Tab G).	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	Declare HURCON 2, based on recommendation from 96 WS and EOC Director.	96 TW/CC
4	Direct HURCON 2 ICD transmission.	
5	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
6	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
7	Post HURCON 2 sign at gates.	96 SFS
8	Ensure base populace has evacuated based on published evacuation time.	EOC
9	Accomplish final inspection of all facilities to ensure they are secure.	96 CEG
10	Establish security force patrol to secure base and housing area.	96 SFS
11	Review HURCON 1 and 1R checklists.	CAT/EOC

12	Dispatch Recovery teams to designated shelter locations if not completed.	EOC
13	Recovery CAT/Recovery EOC initiate operations per ICD instructions.	CAT/EOC
HURCON 1 - (Destructive winds possible within 12 hours)		**EVAC**
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist, and Personnel Evacuation Checklist (Tab G).	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	Declare HURCON 1, based on recommendation from 96 WS and EOC Director.	CAT
4	Direct HURCON 1 ICD transmission.	CAT
5	Submit required applicable OPREP-3 as required IAW AFMAN 10-206	96 TW/CP
6	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
7	Post HURCON 1 sign at gates.	96 SFS
8	Review HURCON 1R checklists.	CAT/EOC
9	Establish and maintain communication with LNO Team at Wright-Patterson AFB; HRT, LRT, 20 SPCS teams dispersed in local area (7th SFG(A), 20 SPCS, and Eglin AFB Main).	EOC
10	Close and secure all Eglin ECPs, post HURCON 1E sign at gates, and return to Eglin AFB shelter location.	96 SFS

HURCON 1C & 1E (SURFACE WINDS 40 MPH+)		
ITEM	**TASK/ACTION**	**OPR**
1	All outdoor activity is prohibited. Remain indoors except for life or death emergencies.	ALL
2	Up channel OPREP-3.	96 TW/CP

TAB D TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURCON 1R (RECOVERY) CHECKLIST (EVAC)

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

HURCON 1R (RECOVERY) EVAC		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Review situation and when safe, dispatch HRT and LRT team members (96 CES, 796 CES, SFS) to perform initial damage assessment when wind speeds drop below 50.	EOC
3	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
4	Direct release of HRT and LRT teams from their sheltered locations based on recommendation of Eglin Incident Commander.	EOC
5	Begin clearing roads for safe access route around the base, and secure Eglin AFB gates.	Eglin Recovery Teams
6	Collect post-hurricane real property facility damage information and provide the 96 TW/CC with pertinent damage assessments.	
7	Post HURCON 1R sign at gates.	
8	Dispatch a team of SFS and CEG personnel from LRT to Duke Field to begin security and damage assessment of critical areas and facilities.	EOC
9	Direct capabilities to open food facilities and source potable water.	EOC
10	Establish evacuee return time and date based on damage assessment. • Coordinate with Okaloosa County for road closures and re-entry procedures.	
11	Maintain 24-hour operations of EOC through recovery.	
12	Ensure recovery teams have adequate food, water and supplies.	
13	Appoint the 96 CEG/CC as the base Recovery Operations Chief (ROC).	

14	Update/monitor the decision of state and local EM officials and report to CAT Manager. Maintain a liaison at the county EOC.	
15	Coordinate all requests for off-base support with the 96 TW/CC.	
16	Direct base recovery operations.	
17	Provide support to off-base communities within Eglin AFB's capability and legal authority if requested or directed.	
18	Be prepared to support requests from higher authorities if the area has been declared a major disaster area.	
19	Submit PA release to 96 TW/CC or designated representative for approval, then release.	
20	Keep Eglin AFB populace informed of decisions and conditions via all available means.	
21	When directed by 96 TW/CC, conduct operations necessary to reopen airfield including manning ATC tower, publishing NOTAMs, and coordinating for backup lighting and navigation aids (NAVAIDs), if required.	96 OG 96 OSS
22	Conduct Facility Damage Assessment: • Check for structural damage (inside and outside of facility). • Maintain close surveillance for wind, water damage and potential fire hazards in assigned facilities. • Check the gas, electrical, water and sewage lines for damage. • Wear heavy shoes or boots for protection. • Do not untilize candles and other open flames indoors. Use a flashlight to inspect for damage. • Check for injured or trapped persons and provide first aid, if trained. • Check electrical appliances, computers and other electronic equipment. • Open storage areas carefully. • Report facility damage to 96 CEG UCC.	ALL Recovery Teams
23	Establish contracts to facilitate recovery, as required.	AFTC/PZ
24	Request recovery support above unit capability through EOC.	ALL
25	Obtain Eglin Main damage assessment prior to releasing non-mission critical personnel from shelters and provide status to Recovery EOC team members.	EOC

26	Recall designated mission critical personnel for base recovery (post-hurricane). Recall remaining personnel/dependents once Eglin AFB has recovered to the point that it is considered safe for their return.	
27	Reactivate local UCCs once buildings are safe. Direct each Commander to perform a damage assessment of their resources (further discussion required).	
28	Report damage assessment through UCCs to the EOC.	ALL
29	Enable emergency communications capability to DoD, other federal agencies or civil authorities during the recovery phase.	96 CS
30	Perform damage assessment to critical communications facilities and equipment – report to Okaloosa EOC.	
31	If required set up alternate communications to ensure that several means of communications exists in and out of Eglin AFB for C2 purposes and communication with higher headquarters (i.e., satellite phones, commercial telephone service).	
32	Supervise restoration of airfield facilities/debris clearance activities on runways, taxiways and ramps during recovery operations.	96 CEG
33	Test and monitor food supplies for human consumption.	96 MDG
34	Inspect base water supplies for contamination and continue periodic sampling throughout the post disaster operations – report water potability to EOC.	
35	Implement preventative medical procedures and care for casualties – report data to EOC.	
36	Provide assistance to Environmental Management during post-disaster operations.	
37	Determine status of classified information and materials, secure as needed. • Reference unit listing collected in HURCON 5 for locations and POCs.	96 SFS
38	Provide for the lodging/feeding of disaster victims within capability.	96 FSS
39	Direct 96 FSS to assemble 96 MSG manpower pool to assist in recovery operations and to facilitate reuniting families.	EOC Director
40	Direct 96 SFS to sweep the Eglin Main and housing areas to ensure outside objects are secure. Report all unsecured items to 96 SFS Base Defense Operation Center (BDOC). BDOC will refer all unsecured items to the proper agency.	96 MSG

41	Establish a reception facility to assist dislocated families with a variety of needs – report details (i.e., location, contact numbers) to EOC.	96 FSS
42	Ensure casualty reporting IAW AFI 36-3002, *Casualty Services*.	
43	Be prepared to provide assistance in reuniting Air Force families.	
44	Recover, identify and dispose of human remains and direct mortuary services, as required; report to CAT.	
45	Provide security for the base and assist in directing local traffic.	96 SFS
46	Direct roving patrols to prevent looting; report incidents to EOC.	
47	Establish transportation to meet recovery needs; report to EOC Director.	96 LRS
48	Verify status of fuel system; report to EOC Director.	
49	Notify aircraft refuge bases of target return date and alert crews.	CAT
50	Open (NOTAM) the airfield as determined by the CAT.	96 TW/CC/ 96 OSS
51	Recover and inspect secured aircraft and equipment when safety permits, report damage to EOC.	96 MXG
52	Monitor recovery of returning HUREVAC aircraft; report completion to CAT.	96 OG
53	Collect all information and account for emergency supplies and equipment utilized or expended and report them to 96 CPTS using the Emergency and Special Program (ESP) code provided.	EOC
54	Repair communications equipment IAW restoration priorities contained in Plan 45, Part II.	96 CS
55	Ensure all munitions, classified and/or sensitive materials are properly secured and collected. Brief base personnel and nearby communities to report any storm-strewn classified materials to Eglin AFB Security Managers.	ALL
56	EOC team members maintain an events log for recovery actions and provide to 96 CES/CEX for a consolidated final report.	ALL
57	Coordinate with base agencies on inputs for the final AAR.	96 CEX
58	Consider reducing the minimum evacuation distance based on impact area.	96 TW/CC

59	Determine recall process of evacuated installation personnel.	96 TW/CC
60	Ensure checklist is complete and report any significant/ required changes to CAT Manager.	EOC Director

TAB E TO APPENDIX 3 TO ANNEX B TO EAFB IEMP 10-2
HURCONS 3, 2, 1 CHECKLISTS (NON-EVAC)

HURCON 3 - (Destructive winds possible within 48 hours)		
NON-EVAC		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	EOC and 96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Declare HURCON 3, based on recommendation from 96 WS and EOC Director.	CAT
5	Direct HURCON 3 ICD transmission with decisions included.	CAT
6	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
7	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
8	Perform 100% accountability per ICD instructions if not already completed.	96 FSS UCCs
9	Post HURCON 3 sign at gates.	96 SFS
10	Review HURCON 2 measures.	UCCs
11	Consider evacuating family camps/recreation areas, and Postl Point, and direct occupants to transient quarters or hotels off base.	96 TW/CC
12	Direct phase down of electric power, as necessary.	CAT 96 CEG
13	Consider phasing down non-essential operations, and releasing non-storm essential personnel.	EOC
14	Ensure vehicles are refueled and stored in safe locations.	96 LRS
15	Consider evacuating aircraft to safe haven refuge locations.	CAT
16	Hangar aircraft remaining on Eglin AFB IAW EAFB 9507, *Aircraft Evacuation Plan*.	96 OG 96 MXG
17	Close installation marina and remove all recreational vehicles from water.	96 FSS

18	Once evacuation of all aircraft is complete consider closing airfield, send NOTAM of closure.	CAT 96 OG
19	Identify staging locations for sandbag operations, if required.	96 CEG
20	Advise EOC if additional manpower is needed to secure the base.	96 SFS
21	Direct units to cease outside activities upon arrival of 50 kt winds, emergency operations exempted.	EOC Director
22	Direct closure of all non-mission critical base facilities.	96 TW/CC
23	Direct Chief, Public Affairs, to: • Continue dissemination of hurricane information to base personnel and residents as long as feasible through on-base mass communication channels and local news media. • Submit PA release to 96 TW/CC or designee for approval, then release. Disseminate message that personnel on base will shelter in their residence. Dorm residents will shelter in the dorms while off-base personnel will find a safe sheltering location in their area. TDY and transient personnel will be given priority in lodging.	96 TW/PA
24	Based on weather conditions and Hurricane Category, consider assembling and briefing LNO and HRF recovery teams.	EOC
25	Establish and maintain contact with local authorities, and nearby installations.	EOC
26	Maintain communication with all deployed teams. Teams will remain in place at their locations until the storm has passed.	EOC Director
27	Notify EOC upon completion of this checklist.	UCCs

HURCON 2 - (Destructive winds possible within 24 hours)

NON-EVAC

ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, *Natural Disaster Checklist.*	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS

3	EOC and 96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Declare HURCON 2, based on recommendation from 96 WS and EOC Director.	CAT
5	Direct HURCON 2 ICD transmission.	CAT
6	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
7	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
8	If not already accomplished, release non-mission critical personnel at HURCON 2 if base has completed hurricane preparation actions.	CAT
9	Turn off utilities in threatened areas, as needed, and: • Identify areas to be isolated. • Identify utility lines to isolate, valves or switches to open or close, preferred sequences and responsible individuals/functions. • Identify facilities affected by isolation. • Annotate time of isolation, time utilities restored and duration of isolation. • Notify key personnel (i.e., UCC, EOC, Fire Protection) when systems are isolated. • Maintain log of all utility isolations and status. • Identify facilities affected by outage. • Annotate isolation/restoration times. Provide potable water during service disruptions.	796 CES
10	Accomplish final inspection of all facilities to ensure they are secure.	96 CEG
11	Establish security force patrol to secure base and housing area.	96 SFS
12	Post HURCON 2 sign at gate.	96 SFS
13	Deactivate all non-mission essential and non-recovery UCCs, and release these personnel to their sheltering locations.	EOC
14	Based on weather conditions and Hurricane Category, consider assembling and dispatching recovery teams to designated recovery shelter locations: 20 SPCS, 7th SFG(A), and Eglin.	EOC

15	Have the CP activate the base warning siren (3-5 minute steady tone) and disseminate over TV override system when sustained winds of 50 knots reach Eglin AFB.	CAT
16	Review HURCON 1 and 1R checklists.	CAT/EOC
HURCON 1 - (Destructive winds possible within 12 hours)		
NON-EVAC		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Brief forecasted weather conditions to 96 TW/CC and EOC Director.	96 WS
3	EOC and 96 WS recommend to CAT asymmetric response courses of action taken across portions of ETTC (i.e., Cape San Blas Site D2 vs. inland portions of West Range).	CAT
4	Declare HURCON 1, based on recommendation from WS and EOC Director.	CAT
5	Direct HURCON 1 ICD transmission.	CAT
6	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
7	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
8	Post HURCON 1 sign at gates.	96 SFS
9	Maintain contact with local authorities, mission critical recovery UCCs, recovery teams, and LNO if deployed.	EOC
10	Close and secure EAFB ECPs upon arrival of 50 knot winds. Post HURCON 1E sign at gates.	96 SFS
HURCON 1C & 1E (SURFACE WINDS 40 MPH+)		
ITEM	**TASK/ACTION**	**OPR**
1	All outdoor activity is prohibited. Remain indoors except for life or death emergencies.	ALL
2	Up channel OPREP-3.	96 TW/CP

TAB F TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURCON 1R (RECOVERY) CHECKLIST (NON-EVAC)

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

HURCON 1R (RECOVERY) NON-EVAC		
ITEM	**TASK/ACTION**	**OPR**
1	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2	Declare HURCON 1R, based on recommendation from 96 WS and EOC Director.	CAT
3	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
4	Disseminate HURCON using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
5	Appoint the 96 CEG/CC as the base Recovery Operations Chief (ROC).	96 TW/CC
6	Establish CEG UCC.	96 CEG
7	Conduct Facility Damage Assessment: • Check for structural damage (inside and outside of facility). • Maintain close surveillance for wind, water damage and potential fire hazards in assigned facilities. • Check the gas, electrical, water and sewage lines for damage. • Wear heavy shoes or boots for protection. • Avoid using candles and other open flames indoors. • Use a flashlight to inspect for damage. • Check for injured or trapped persons and provide first aid, if trained. • Check electrical appliances, computers and other electronic equipment. • Open storage areas carefully. • Report facility damage to 96 CEG UCC.	96 CEG

	• Recall designated mission critical personnel for base recovery (post-hurricane). Recall remaining personnel and dependents once Eglin AFB has recovered to the point that it is considered safe for their return.	
8	Collect post-hurricane real property facility damage information and provide the 96 TW/CC, CAT, and EOC with pertinent damage assessments.	96 CEG
9	Direct release of recovery teams, if activated, based on recommendation of EOC Director.	96 TW/CC
10	Direct each Commander to perform a damage assessment of their resources (further discussion required).	EOC
11	Based on damage assessment, set target for reopening mission critical base facilities and make recommendation to CAT.	EOC
12	Reactivate UCCs once buildings are safe.	EOC Director
13	Request recovery support above unit capability through the EOC.	ALL
14	Update Okaloosa County EOC.	96 CEX
15	Provide support to off-base communities within Eglin AFB's capability and legal authority if requested or directed.	96 TW/CC
16	Keep Eglin AFB populace informed of CAT decisions and recovery conditions via all available means.	96 TW/PA
17	Issue releases to local and regional news media announcing "All Clear" for return to quarters or duty.	96 TW/PA
18	Establish contracts to facilitate recovery, as required.	AFTC/PZ
19	Submit required applicable OPREP-3 as required IAW AFMAN 10-206.	96 TW/CP
20	When directed by 96 TW/CC, conduct operations necessary to reopen airfield including manning OSS facilities, publishing NOTAMs, and coordinating for backup lighting and NAVAIDs, if required.	96 OSS
21	Supervise restoration of airfield facilities/debris clearance activities on runways, taxiways and ramps during recovery operations.	96 CEG 96 OSS

22	Update/monitor the decision of state and local EM officials – report to CAT Director.	96 CEX
23	Perform damage assessment to critical communications facilities and equipment – report to CAT.	96 CS
24	Test and monitor food supplies for human consumption.	96 MDG
25	Inspect base water supplies for contamination and continue periodic sampling throughout the post disaster operations – report water potability to CAT.	96 MDG
26	Provide for the lodging/feeding of disaster victims within capability.	96 FSS
27	Direct the 96 SFS/CC to sweep the Eglin Main and housing areas to ensure outside objects are secure. Report all unsecured (debris/damaged) items to 96 SFS Base Defense Operation Center (BDOC) BDOC will report unsecured objects to the appropriate authority.	96 MSG
28	Establish a reception facility to assist dislocated families with a variety of needs – report details (i.e., location, contact numbers) to CAT.	96 FSS
29	Provide security for the base and assist in directing local traffic.	96 SFS
30	Ensure all munitions, classified and/or sensitive materials are properly secured and collected. Brief base personnel and nearby communities to report any storm-strewn classified materials to Eglin AFB Security Managers.	ALL
31	Verify status of fuel system; report to EOC Director.	96 LRS
32	Recover and inspect secured aircraft and equipment when safety permits; report damage to EOC.	96 MXG
33	Account for emergency supplies and equipment utilized or expended and report them to 96 CPTS using the Emergency and Special Program (ESP) code provided.	EOC Manager/Staff
34	Maintain an events log of recovery actions and provide to 96 CES/CEX for a consolidated final report.	CAT EOC Staff UCCs

35	Collect Lessons Learned and AAR inputs from Unit Commanders and UCCs. Forward final consolidated inputs to EOC Manager.	EOC Staff
36	Ensure checklist is complete and report any required changes to CAT Director.	EOC Director

TAB G TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
PERSONNEL EVACUATION CHECKLIST

1. Evacuation decisions are made by the 96 TW/CC or designated representative. **NOTE**: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

EVACUATION PROCEDURES - (Hurricanes)		
ITEM	**TASK/ACTION**	**OPR**
	Notify base personnel of decision for evacuation.	CAT/CP PA/UCCs
1	When evacuation order is issued the following units/Recovery teams will evacuate/shelter to designated locations based on MAAs: • 6th RTB will evacuate to Fort Benning, GA. • NAVSCOLEOD will evacuate per local instruction. • 359 TRS will evacuate to Albany, GA. • LNO Team will evacuate to Wright-Patterson AFB, OH. • HRT will shelter at the 7th SFG(A) compound. • LRT will shelter at 96 MDG, building 2825. • 20 SPCS Recovery Team will shelter within building 8652 at 20 SPCS. • Recovery CAT will shelter in building 1. • Recovery EOC will shelter in building 1.	CAT EOC 96 TW/PA UCCs
2	Obtain assistance from Field Director, American Red Cross (ARC), in areas of humanitarian needs and ensure ARC is notified when evacuation is determined or as required.	96 TW/CC
3	Direct host and associate commanders to carry out evacuation orders.	96 TW/CC

4	Ensure the Chief of Public Affairs publicizes evacuation instructions to include: • Departure from the local area in private vehicles. • Reporting to the Fitness Center or Eglin Youth Center for those personnel desiring transportation assistance. • Evacuation processing and pre-departure instructions. • Advise personnel to stay tuned to the base TV Override System, local radio or TV stations for any final instructions prior to evacuating. • Ensure all aircraft, high-value weapons systems and support equipment are evacuated to designated safe locations. • Direct recovery teams to shelter as directed by CAT/EOC, if required.	96 TW/CC
5	Brief personnel (including dependents) being evacuated on essential information: • Advise to remain in contact with UCCs to provide accountability and obtain follow-on instructions. • Advise to carry potable drinking water in their vehicle. • Advise to have full tank of fuel prior to departure. • Advise to carry sufficient money/credit cards to defray cost of meals, gas and other expenses. • **Note:** ATM/credit cards may be of limited use due to power and communication outages. • Advise to take infant supplies, bedding requirements, adequate clothing and necessary medicines/medical supplies for the trip to and subsequent stay at the refuge base. • Advise to carry personal items such as: plastic tumblers, towels, washcloths, books, games, canned foods and snacks for use enroute and in the event dining services are delayed at the refuge base. • Provide arrangements for safe location of pets. • Notify family of intentions. • Ensure residence is secure prior to departing. • Ensure personnel are aware of their responsibility to evacuate the base when instructed by 96 TW/CC.	96 TW/PA

	• Ensure personnel are aware of their responsibility to listen to the radio or TV and to contact their work center, control center orderly room or duty station (once the hurricane threat has passed the base or the hurricane has made landfall) regarding when they should return to work when the "ALL CLEAR" has been declared. • Stay tuned to radio stations while enroute to evacuation location for additional hurricane information.	
8	Request personnel using private vehicles to carpool/share a ride with other organizational personnel.	EOC UCCs
9	Coordinate with local authorities on official military traffic departing the base.	96 SFS
10	Ensure convoy traffic, if utilized, is expedited.	96 SFS
12	Advise CAT on traffic flow and any route changes at HURCON 2 and prior to departure of HRT convoys.	96 SFS
13	Coordinate with Okaloosa County EOC on mass evacuation of personnel from Eglin AFB.	96 CEX
14	Be prepared to provide assistance at the HRT staging area(s) at activation.	96 MSG
15	Provide transportation for deployment/dispersal of high-value equipment, as identified by owning agencies.	96 LRS
16	Ensure LRS develops evacuation procedures/plans and prepares for the movement of high-value/support equipment assigned to the 96 TW.	96 LRS
18	LNO assemble at Bldg. 1 and convoy to Wright-Patterson AFB (WPAFB), report to 96 TW/CP or EOC for instructions and provide current estimated number of personnel intending to deploy to WPAFB prior to the team's departure.	LNO
19	Ensure personnel are aware of their responsibility to evacuate the base when instructed by the 96 TW/CC.	ALL
20	Prior to HURCON 1, ensure high-value equipment/weapons systems are deployed to designated dispersal sites. Contact the CAT for redeployment instructions after storm passage.	ALL

21	Advise personnel to stay tuned to the Base TV Override System, local radio or TV stations for any final instructions prior to evacuating.	ALL
22	Ensure evacuation instructions are disseminated to all assigned personnel, to include dependents of TDY and recovery crew personnel and determine their requirements for assistance. Military members and dependents desiring transportation will report to Bldg. 810, Eglin Fitness Center or Bldg. 2582, Eglin Youth Center.	ALL
23	Ensure evacuees are instructed to update service specific accountability system (AFPAAS, Marines Online).	ALL

EXHIBIT 1 TO TAB G TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
COMMANDER EVACUATION MATRIX

Base of Assignment	Living or Work Location	Who Orders Evacuation	Who Pays
Assigned to Eglin	Residing on Eglin AFB	Eglin AFB Installation/CC	Eglin Unit of Assignment
Assigned to Eglin	Residing on Hurlburt Field	Hurlburt Field Installation/CC	Eglin Unit of Assignment
Assigned to Eglin	Residing off Base	Eglin AFB Installation/CC. As directed, to receive entitlements	Eglin Unit of Assignment
Assigned to Eglin	Working on Hurlburt Field	Hurlburt Field Installation/CC	Eglin Unit of Assignment
Assigned to Hurlburt	Residing on Hurlburt Field	Hurlburt Field Installation/CC	Hurlburt Unit of Assignment
Assigned to Hurlburt	Residing on Eglin AFB	Eglin AFB Installation/CC	Hurlburt Unit of Assignment
Assigned to Hurlburt	Residing off Base	Hurlburt Field Installation/CC. As directed, to receive entitlements	Hurlburt Unit of Assignment
Assigned to Hurlburt	Working on Eglin AFB	Eglin AFB Installation/CC	Hurlburt Unit of Assignment
TDY to Eglin/ Hurlburt	Working on/near Eglin or Hurlburt	Installation/CC or Local Officials	Home Unit of Assignment

NOTE: For Joint-Spouse personnel, Installation/CCs may order evacuations that cause families to relocate at the expense of the other units of assignment.

NOTE: Central Fund Cite will be established for evacuations.

EXHIBIT 2 TO TAB G TO APPENDIX 3 TO ANNEX B TO EAFB 10-2 IEMP
HURRICANE RESPONSE TEAMS

1. Hurricane Response Force: Pre-identified recovery teams consisting of 387 personnel. Teams will perform initial damage assessment and recovery operations. Teams will activate in the event of a hurricane or major tropical storm that is forecast to impact Eglin AFB. Eglin AFB recovery teams evaluate the damage sustained following a hurricane or other natural disaster as soon as conditions are safe. Teams will begin initial recovery actions as soon as conditions are safe. Teams will be assembled and briefed at the earliest possible time (HURCON 3 or 4) to allow members to prepare. Other personnel required for base recovery operations may be recalled through the EOC or CP as conditions warrant. A general recall of personnel, to include non-mission critical, will not be accomplished until Eglin AFB and surrounding civilian communities have been authorized for re-entry.

1.1. Recovery Team Member Identification. Hurricane teams are comprised of personnel from units across Eglin AFB. They are considered specialized teams and as such fall under the requirements within AFI 10-2501, table 1.2, item 4b.

1.1.1. Annual update of all team positions will be sent as a 96 TW tasking in February. Tasked groups will forward the tasking to the appropriate squadrons for update of team positions and names assigned to each group/squadron position.

1.1.2. Squadron Commanders are responsible for identifying mission essential squadron functions. Mission essential functions will be utilized by the squadron to determine required squadron ride out team composition.

1.1.3. Squadron Commanders are responsible for ensuring personnel are assigned to each team with a mission essential squadron position.

1.1.4. Squadron Commanders will identify a squadron leadership lead for each assigned ride out team with assigned Squadron members.

1.1.5. Squadron team leads will serve as the direct contact for the Team Lead/Commander of the assigned ride out team. Unit team leads will provide manning assistance to the Team Lead/Commander to staff C2 positions prior to and during operations.

1.1.6. During hurricane season team rosters will be updated monthly; team assignments will be reported on the unit quarterly EM Reports. Squadron/unit personnel can be assigned to only one team and must be informed of the assignment. All team assignments will be reported to Emergency Management through the use of quarterly Emergency Management Report. Monthly changes will be reported utilizing the team Excel spreadsheet provided by 96 CES/CEX.

1.2. Recovery Team, Command and Control Structure. The senior ranking member assigned to each team, regardless of unit, will serve as the Team Lead/Commander. Team Leads/Commanders are responsible for organizing the team command and control structure

based on the team's mission. Minimum organization must include a primary team Lead/Commander, Alternate Lead/Commander, Safety, Logistics, and Communication representative. Other positions can be appointed at the discretion of the team Lead/Commander. Recovery team C2 members will utilize Incident Command Forms or other 96 TW approved forms to the extent possible. Forms will be utilized to track activity, communication point of contact and means of contact, equipment and resources utilized, man hours expended, and cost incurred.

1.1.7. Team Lead/Commander will provide overall leadership for the assigned team. Responsible for the development of all checklists that will be required to effectively operate the assigned team. Responsible for annual updates of checklist based on operational changes or change to this document.

1.1.8. Safety will ensure operations/conditions within the ride out location are maintained in a safe manner.

1.1.9. Logistics will ensure bunk areas are identified that allow safe operations. Ensure supplies and equipment are stored in a safe, and as much as possible, secure location.

1.1.10. Communications will ensure adequate communication modes are maintained to provide direct connection to the Okaloosa Floor Team and/or the COOP C2 Team.

1.2. Recovery Team Activation. The 96 TW/CC and CAT will direct activation of ride-out teams; activation will be passed from the CAT to the UCCs utilizing the ICD. UCCs will confirm the activation of team members with the EOC who will provide the information to the CAT.

1.4. Recovery Team Deployment Bag. Should an evacuation be warranted, these are the items recommended for each hurricane recovery team member to bring:

Cash	Water/Food (5 Gallons/5 Days)	CAC
Bedding/Sleeping Bag/cot optional	Phone/Charger	Clothing (5 Days min)
Flashlight/Batteries	Hygiene Items	Towels
PPE (Work gloves, eye pro, etc)	Prescriptions/Medication	Tools

RECOVERY CONOPS/Timeline

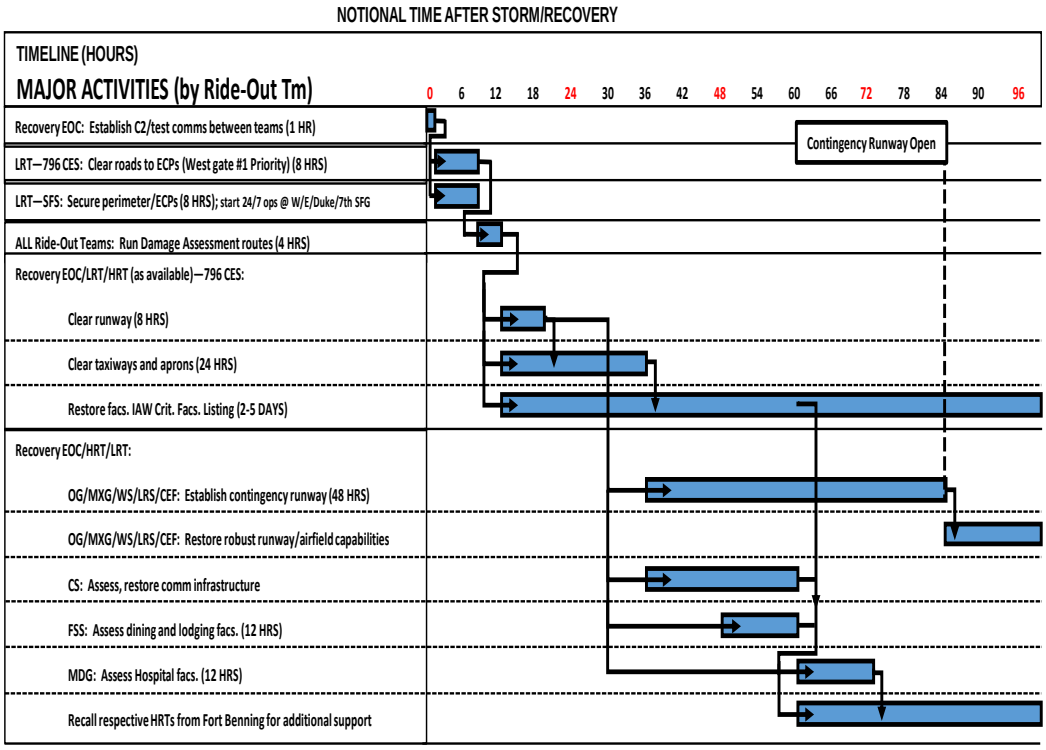


Figure 3.1.1 Hurricane Recovery Timeline

1.5. Eglin Light Recovery Team. Should an evacuation be warranted, a light recovery team will remain at Eglin AFB, Bldg. 2825 or other suitable location. The mission of this team is final base closure and initial damage assessment, recovery, and security. There will be an IC assigned and he/she will maintain contact with the Eglin AFB EOC for support. Eglin Recovery team members will be appointed in writing using the format directed by the EOC. Eglin Recovery team composition is as follows:

	Organization	Duty	Rank	Role/Description	Total
1	96 SFS/CC		0-5	On-site command and control during follow-on forces receipt	1
2	96 SFS	Security	N/A	Installation Security	70
3	96 CES/CEF	Battalion Chief		Command and control of AFIMS Incident	1
4	96 CES/CEF	Engine/Fire Fighters		Building Isolation, fire/emergency containment/medical stabilization	4
5	96 CES/CEF	Dispatchers		Emergency Dispatch Operations	2
6	96 CEG/CEI	HAZMAT		Environmental	0
7	796 CES/CL	Lead		Lead On-Base Engineer/recovery	1
8	796 CES	Work Management		Work Management	1
10	796/CES	Power Production		Damage Assessment	3
11	796/CES	Structures/Heavy Equipment		Damage Assessment/Debris Removal	8
12	796/CES	Facilities/ Infrastructure		Damage Assessment	8
13	796/CES	Utilities		Damage Assessment	4
18	96 LRS	Logistics Readiness Officer		LRS Command and Control	1
19	96 LRS	Ground Transportation		Ground Operations	1
20	96 LRS	Air Transport		Air Operations	1
21	96 LRS	Vehicle Maintenance		Vehicle Operations	1
22	96 LRS	Fuels		Fuel Systems Support	1
23	96 CS/SCOW	Cable		Cable	1
24	96 CS/SCOSV	LMR		LMR	1
25	96 CS/SCOIA	Circuit Actions		Circuit Actions	1
26	96 CS/SCOII	Network		Network	1
27	96 CS/SCOIV	Voice		Voice	1
28	96 CS/SCOO	Services		Services	1
29	96 RN	Prepare Range Recovery and Access		Prepare Range Recovery and Access	1

30	96 RN	Eglin Main Support		Eglin Main Support	1
31	96 MXG	Aircraft Maintenance		Aircraft Maintenance	4
32	96 MXS	Safeguard Munitions Storage Area		Safeguard Munitions Storage Area	4
33	96 OSS	Eglin Tower		Eglin Tower	2
34	96 OSS	Eglin Airfield Management		Airfield Management	1
35	96 OSS	Automations		Automations	1
36	96 OSS	ATCALS		ATCALS	2
37	96 MDG	MDG/CD		On-site MDG Commander	1
38	96 MDG	MCC Systems		Support MDG Commander	2
39	96 MDG	ER Doctor		Recovery Team Med Support	1
40	96 MDG	Nurse/IDMT/ Paramedic		Recovery Team Med Support	1
41	96 MDG	Bio Officer/ Technician		Provide Sampling as Required for Recovery Team	1
42	96 MDG	PH Officer/ Technician		Provide Sampling as Required for Recovery Team	1
43	96 MDG	CE/Hospital Maintenance		Facility Maintenance/HVAC/Generator	1
44	96 MDG	Facilities		Facility Maintenance/MRI watch for safety	1
45	96 MDG	BMET		Facility Maintenance/MRI watch for safety	1
46	96 FSS	FSS/CC		Command and Control	1
47	6 RTB			Damage Assessment	4
				TOTAL	**141**

1.6. Eglin Heavy Recovery Team. A Pre-identified team sheltered at the 7th SFG(A) Compound. This team performs initial damage assessments at both the 7th SFG(A) and Duke Field Compounds, and will assist with recovery efforts on Eglin main once the EOC declares it is clear to return.

	Organization	Duty	Rank	Role/Description	Total
1	SFS	Installation Security		Provide post-storm recovery security	20
2	96 CS	Network & Comm Infrastructure		Provide post storm Communication repairs	25

3	796 CES	Estimator/Lead		Damage Assessment	1
4	796 CES	Facility/Infrastructure		Damage Assessment	3
5	796 CES	Heavy Equipment		Debris Removal	2
6	96 CES/CEF	Battalion Chief		Command and control of AFIMS Incident	1
7	96 CES/CEF	Engine/Fire Fighters		Building Isolation, fire/ emergency containment/ medical stabilization	8
8	96 FSS	Operations Officer		Mortuary Affairs	1
9	96 FSS	Services		Food Operations	6
10	96 FSS	Personnel		Accountability/Casualty	2
11	96 FSS	Airman & Family Readiness		Emergency Family Assistance Center	2
12	96 LRS	Logistics Readiness Officer		LRS Command and Control	1
13	96 LRS	Ground Transportation		Ground Operations	1
14	96 LRS	Air Transport		Air Operations	2
15	96 LRS	Vehicle Maintenance		Vehicle Operations	4
16	96 LRS	Fuels		Fuel System Support	7
17	96 LRS	Supply		Resource Suppot	3
18	96 MDG	HRT Team Leader (3 Letter)		Provide Command & Control to Medical Element	1
19	96 MDG	Medical Emergency Manager		Provide Medical Emergency Management	1
20	96 MDG	Flight Doctor		Provide Recovery Team Medical Support/Air Ops	1
21	96 MDG	Flight Medicine Technician/IDMT		Provide Recovery Team Medical Support/Air Ops	1
22	96 MDG	Provider/ER Doc		Provide Recovery Team Medical Support	1
23	96 MDG	Nurse/IDMT		Provide Recovery Team Medical Support	1
24	96 MDG	Disaster Mental Health Provider		Provide Recovery Team Mental Health Support	1
25	96 MDG	Disaster Mental Health Tech		Provide Recovery Team Mental Health Support	1
26	96 MDG	General Dentist		Provide Recovery Team with emergent dental care	1

27	96 MDG	Dental Technician		Provide Recovery Team with emergent dental care	1
28	96 MDG	Pharmacist/Pharm D		Provide pharmacy capability to the Recovery Team	1
29	96 MDG	Pharm Tech		Provide pharmacy capability to the Recovery Team	2
30	96 MDG	Radiologist		Provide X-Ray support to Recover Team	1
31	96 MDG	Radiologist Technician		Provide X-Ray support to Recover Team	1
32	96 MDG	BMET		Medical Equipment Repair/Support for Recovery Team	2
33	96 MDG	Medical Logistics		Medical Supply Support to Medics supporting Recovery Team	2
34	96 MDG	Bioenvironmental Technician		Provide Sampling as Required for Recovery Team Safety	1
35	96 MDG	Public Health Technician		Provide Sampling as Required for Recovery Team Safety	1
36	96 OSS	Reopen Airfield		Augment existing airfield ops caps	19
37	96 WS	Weather Forecast		Weather Forecasting	2
				Total	**131**

1.7. SPCS Recovery Team. The 20 SPCS Category 5 recovery shelter is Bldg. 8652 at Site C-6. Recovery team members will be appointed in writing using the format directed by the EOC. The 20 SPCS recovery team composition is as follows:

	Organization	**Duty**	**Rank**	**Role/Description**	**Total**
1	96 SFS	Installation Security		Provide post-storm recovery security	6
2	96 CES/CEF	Battalion Chief		Command and control of AFIMS Incident	1
3	96 CES/CEF	Engine/Fire Fighters		Emergency Response/Hazard Isolation	4
4	20 SPCS	Operations		Operations	12
				TOTAL	**23**

1.8. 7th SFG(A) Recovery Team. The 7th SFG(A) recovery shelters are Bldgs. 4435, 4470, 4485, 4490, 4515, 4525, & 4545. Recovery team members will be appointed in writing using the format directed by the EOC. The 7th SFG(A) recovery team composition is as follows:

	Organization	Duty	Rank	Role/Description	Total
1	7th SFG(A)	Commander			1
2	7th SFG(A)	Operations			1
3	7th SFG(A)	NCOIC			1
4	7th SFG(A) (3 prsnl)	ENG			3
5	7th SFG(A) (2 prnsl)	HHC			2
6	7th SFG(A) (14 prsnl)	Soldier			14
				TOTAL	**22**

1.9. Eglin AFB, C2 Recovery Teams. Upon final evacuation, the CAT and EOC will reduce to minimal manning. The EOC will maintain contact with recovery teams (HRT, LRT, and 20 SPCS). The CAT will control base recovery, and coordinate required resources with local agencies and the LNO Team. Forty-one positions are allocated for 24/7 shift support working in the CAT and EOC, building 1. Team members will be appointed in writing using the format directed by the EOC. The Eglin C2 recovery teams' composition is as follows:

Recovery CAT Team					
	Organization	**Duty**	**Rank**	**Role/Description**	**Total**
1	96 TW/CC	Commander		CAT Director	1
2	96 CEG/CC	Recovery Operations Chief		Military Disaster Recovery Officer	1
3	96 MSG/CC	Recovery Operations Support		Recovery Operations Support	1
4	96 TW/CP	Command Post Controller		Command and Control Manager	3
5	AFTC/PZ	Contracting Officer		Recovery Contract Support	2
6	96 CPTS	Comptroller		Recovery Financial Support	2
7	96 TW/JA	Judge Advocate		Legal Advice	2
8	919 SOW/ 492 SOW			Duke Field Recovery	1
9	96 OG			Airfield Operations Recovery	1
10	96 WS	Weather		Weather Coordinator	1

11	96 TW/PA	External Affairs		Public Information Dissemination	1
				TOTAL	**16**
Recovery EOC Team					
	Organization	**Duty**	**Rank**	**Role/Description**	**Total**
1	EOC Director	Director		EOC Direction & Operations	1
2	EOC Manager	Manager		EOC Management	2
3	EOC Administration	Administration		EOC Administrative Support	1
4	ESF-1	Transportation		Transportation Support	2
5	ESF-2	Communications		Communications Support	2
6	ESF-3	Public Works		Initial Damage Assessment/ Recovery Support	2
7	ESF-4	Fire Fighting		Fire Fighting Support	2
8	ESF-5	Emergency Management		Emergency Management	2
9	ESF-6	Mass Care, Housing		Mass Care Support	2
10	ESF-7	Resource Support		Resource Support	2
11	ESF-8	Public Health & Medical		Public Health & Medical	2
12	ESF-9	Urban Search & Rescue		Urban Search & Rescue	0
13	ESF-10	Oil & HAZMAT Response		Oil & HAZMAT Response	0
14	ESF-11	Agriculture & Natural Resources		Agriculture & Natural Resources	0
15	ESF-12	Energy		Energy	0
16	ESF-13	Public Safety & Security		Security Support	4

17	ESF-14	Long Term Recovery & Mitigation		Long Term Recovery & Mitigation	2
18	ESF-15	Public Affairs		Public Information Dissemination	0
19	96 SFS	Security		Installation Security	6
20	96 CES/CEF	Fire Operations		Fire Operations	9
21	96 CES/CEF	SFO		Fire Operations Support	1
22	96 OG	OG Representative		Airfield Operations	1
				TOTAL	**43**

Additions or deletions to these teams will be approved by the 96 TW/CC, as needed.

1.10. LNO Team. The LNO team will remain in contact with the Eglin CAT and serve in a Liaison capacity to represent the needs of Eglin AFB to the AFMC CAT leadership. Refer to hurricane definitions, page 3 of this annex for in-depth definition.

LNO Team					
	Organization	**Duty**	**Rank**	**Role/Description**	**Total**
1	96 TW/CV	Vice Commander		Liaison Director	1
2	96 MSG/CV				1
3	O-6 Rep				1
4	96 OG				1
5	96 TW/CCC				1
6	96 CEG/DD				1
7	96 TW/JA				1
8	96 TW/PA				1
9	96 TW/XP				1
10	96 MDG	MDG SGA		Defense Health Agency/MDG Liaison	1
11	96 TW/CP				1
				TOTAL	**11**

APPENDIX 4 TO ANNEX B TO EAFB 10-2 IEMP
TORNADO WATCH/WARNING/ALL CLEAR CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

TORNADO WATCH/WARNING/ALL CLEAR		
ITEM	**TASK/ACTION**	**OPR**
Tornado Watch		
1.	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2.	Ensure tornado watch is issued as required with notification to 96 TW/CP.	96 WS
3.	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
4.	Disseminate Tornado Watch information using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
5.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
6.	Monitor local radio/television stations for current information.	ALL
7.	Notify personnel of weather conditions.	ALL
8.	Direct securing/sheltering of equipment/materials if time permits.	ALL
9.	Advise FAMCAMP by mobile PA announcements of tornado watch/warning or 50 knots or greater winds watch/warning.	96 SFS
10.	Immediately contact the CP and dial 911 upon spotting tornadoes.	ALL
Tornado Warning		
11.	Receive Tornado Warning. Disseminate Tornado Warning information using INWS (AtHoc, giant voice 3-5 minute steady tone, cable TV override, popups, etc.).	96 TW/CP
12.	Notify the primary/secondary crash nets.	ATC/AM
13.	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
14.	Notify personnel to take immediate cover.	ALL
All Clear		
15.	Receive "All Clear" from 96 WS. Use INWS (AtHoc, giant voice, cable TV override, popups, etc.) to notify Eglin Main personnel and range personnel. **NOTE**: Do not use sirens to notify personnel of "All Clear".	96 TW/CP
16.	Activate the primary/secondary crash nets and announce "All Clear".	ATC/AM

APPENDIX 5 TO ANNEX B TO EAFB 10-2 IEMP
FLOOD CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

FLOODS		
ITEM	**TASK/ACTION**	**OPR**
1.	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2.	Relay information on flood watches and warnings to Airfield Management.	96 WS
3.	Notify the primary/secondary crash nets, as needed.	ATC/AM
4.	Notify 96 TW/CC, 96 CEG/CC, and MSG/CC.	96 TW/CP
5.	If directed by 96 TW/CC, disseminate Flood information using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
6.	Monitor local radio/television stations for current information.	ALL
7.	Notify personnel of weather conditions.	ALL
8.	Determine areas likely to flood and pass information on to PA.	96 CEG
9.	Publicize low lying areas likely to flood.	96 TW/PA
10.	Coordinate with Okaloosa County EOC to identify flood prone areas in surrounding community.	96 CEX
11.	Provide a map of the installation and surrounding area showing flood prone areas. At a minimum identify: • Streams. • Culverts. • Foot Bridges. • Dams. • Levees. • Typical yearly flood zones. • Non-typical flood zones such as 20- or 50-year floods.	96 CEG
12.	Coordinate relocation to higher ground items, as needed. Mission-essential operations. Equipment.	ALL
13.	Prioritize facilities for protection.	96 CEG
14.	Consider these areas when prioritizing facilities: • Location in probable flood areas. • Mission criticality. • Supplies available. • Manpower available. • Time required and available for protective measures.	96 CEG

15.	Determine what self-help protective measures will be allowed in base housing. • Sandbags. • Turning off utilities. • **NOTE**: Base housing is maintained by CORVIAS.	96 CEG
16.	Provide information to installation personnel on dangers of floods. Assemble a disaster supplies kit. Move to higher ground away from rivers, streams, creeks and storm drains. Do not drive around barricades. If vehicle stalls in rapidly rising waters, abandon immediately and climb to higher ground.	96 CEX 96 TW/PA
17.	Provide information on self-help protective measures to base housing residents. Protective measures allowed. Identify supplies available. Where to obtain supplies.	96 TW/PA
18.	Implement applicable traffic control plans, as required. Close roads where water is too high for safe movement.	96 SFS

19.	Turn off utilities in threatened areas, as needed, and:
	• Identify areas to be isolated.
	• Identify utility lines to isolate, valves or switches to open or close, preferred sequences and responsible individuals/functions.
	• Identify facilities affected by isolation.
	• Annotate time of isolation, time utilities restored and duration of isolation.
	• Notify key personnel (i.e., UCC, EOC, Fire Protection) when systems are isolated.
	• Maintain log of all utility isolations and status.
	  o Identify facilities affected by outage.
	  o Annotate isolation/restoration times.
		796 CES

20.	Continue to reevaluate the threat and recommend actions.	CAT Staff EOC Staff

APPENDIX 6 TO ANNEX B TO EAFB 10-2 IEMP
EXTREME COLD/HEAT CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

EXTREME COLD/HEAT		
ITEM	**TASK/ACTION**	**OPR**
1.	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2.	Issue 32°F Advisory and/or 25°F Watch as required via JET & IWDS, with notification to 96 TW/CP.	96 WS
3.	Notify the primary/secondary crash nets, as needed.	ATC/AM
4.	Notify 96 TW/CC, 96 CEG/CC, and MSG/CC.	96 TW/CP
5.	If directed by 96 TW/CC, disseminate Extreme Cold/Heat information using INWS (AtHoc, giant voice, cable TV override, popups, etc.).	96 TW/CP
6.	Monitor Wet Bulb Globe Temperature (WBGT) Heat Stress Flag Conditions for Eglin Main, Duke Field, and Range locations at: https://eglinweather.eglin.af.mil/Iwds/WetBulb.aspx.	96 WS
7.	Monitor local radio/television stations for current information.	ALL
8.	Notify personnel of weather conditions.	ALL
9.	Recommend protective measures to housing contract owner for base housing.	96 CEG
10.	• Provide information on self-help protective measures to base housing residents. • Protective measures allowed. • Identify supplies available. • Where to obtain supplies. Provide information to installation personnel on actions during extreme temperatures. **EXTREME COLD** **Personal preparation:** • Help infants, elderly people and people with disabilities. • Dress warmly and in layers. • Stretch before shoveling snow or other physical activity. • Cover the mouth to protect the lungs. • Avoid overexertion. • Watch for signs of frostbite and hypothermia. • Keep dry.	96 CEG 96 TW/PA

11.	**Household preparation:** • Clean/replace filters in HVAC. • Assemble a disaster supplies kit. • Insulate walls and attic. • Caulk and weather-strip doors and windows. • Install storm windows or cover windows with plastic from the inside. • Have safe emergency heating equipment available. • Install/check smoke detectors. • Wrap pipes to keep them from freezing. • Lower the thermostat and close off unused rooms. • Know how to shut off water valves. • Allow inside faucets to drip (especially those with lines prone to freezing). • Disconnect hoses from outside water faucets. • Insulate outside water faucets. **EXTREME HEAT** • **Personal preparation:** • Dress in light clothing. • Stay out of the sun as much as possible. • Rest frequently allowing your body to cool. • Help infants, elderly people and people with disabilities. • Stay on the lowest floor if in a building without air conditioning. • Eat well-balanced, light meals. • Avoid high caffeine products. • **Household preparation:** • Clean/replace filters in HVAC. • Assemble a disaster supplies kit. • Protect windows by hanging shades, draperies, awnings or louvers in windows that get afternoon sun. **NOTE:** Base housing is maintained by CORVIAS.	96 CEX 96 TW/PA UCCs
12.	Continue to reevaluate the threat and recommend actions.	EOC

APPENDIX 7 TO ANNEX B TO EAFB 10-2 IEMP
WILDLAND FIRE/FOREST FIRE CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

WILDLAND FIRES/FOREST FIRES		
ITEM	**TASK/ACTION**	**OPR**
1.	This checklist is used in conjunction with Appendix 1 to Annex B, Natural Disaster Checklist.	ALL
2.	Report to the scene, conduct size up, report on conditions and establish incident command system.	IC
3.	Maintain a history of fires to be used in predicting potential for future fires and planning suppression strategies. (This function should be that of Natural Resources and Fire	96 CEG
4.	Develop an Incident Action Plan (IAP).	IC
5.	Establish Standard Operating Procedures.	IC
6.	Brief ten standard firefighting orders.	IC
7.	Brief 18 situations that shout "watch out!" to responders.	IC
8.	Establish an incident communications plan.	IC
9.	Develop rehabilitation plan to include feeding, hydration, sleeping procedures/facilities and personal hygiene.	IC
10.	Provide heavy equipment and operators.	96 CEG
11.	Request US Forest Service Type I Incident Management Team, if required.	IC
12.	Assign a name to the fire prior to requesting mutual aid.	IC/EOC
13.	Increase patrols to support/enhance preventive measures.	96 SFS
14.	Provide escort for responding off-base firefighting forces to established staging area.	96 SFS
15.	Establish emergency medical services, treatment and transport near the ECP.	96 MDG
16.	Place aircraft and crews on stand-by status for air fire reconnaissance/rescue.	96 OG
17.	Ensure observations are taken of temperature, relative humidity, wind, etc.	96 WS
18.	Provide weather forecast at 2-hour intervals to the IC/EOC/CP.	96 WS
19.	Provide advice on vegetation types/growth, habitat, archaeological sites, range configurations, water sources and general terrain features.	96 CEG

APPENDIX 8 TO ANNEX B TO EAFB 10-2 IEMP
DEFENSE SUPPORT OF CIVILIAN AUTHORITIES (DSCA) CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

DEFENSE SUPPORT OF CIVILIAN AUTHORITIES (DSCA)		
ITEM	**TASK/ACTION**	**OPR**
1.	Notify the CP and 96 TW/CC of requests for assistance: Ensure the CP is the single POC to receive, confirm and relay an AF recommendation to evacuate civilians from hazardous areas caused by a mishap or incident. State and local authorities are responsible for coordinating the evacuation of hazardous areas under their jurisdiction. Advise the civil authority to send the request through the Okaloosa County EOC if the installation receives a request for support directly from a local civil authority. **NOTE**: Unless the request meets the criteria for response under imminently serious conditions, in which case the Eglin EOC will notify the Okaloosa EOC of its actions as soon as possible.	ALL
2.	Evaluate the disaster situation/request to determine what extent the Installation can provide support IAW AFI 10-801. **NOTE**: See Figure B-1, Decision Tree for Defense Support to Civil Authorities.	96 TW/CC EOC Director 96 TW/JA
3.	**Evaluation Criteria for DSCA:** • Legality – Compliance with laws. • Lethality – Potential use of lethal force by or against DoD Forces. • Risk – Safety of DoD Forces. • Cost – Who pays for the response and the impact on the budget? • Appropriateness – Whether the requested mission is in the interest of the AF to conduct. • Readiness – Impact on the installation's ability to perform primary mission. **Responsibilities and authority:** • Civil authorities have primary responsibility for response and recovery operations within the areas under civil jurisdiction. • The rights and responsibilities of civil authorities, in their areas of jurisdiction, will be recognized and respected. • The AF has no specific rights or jurisdiction solely because military resources are involved in the accident unless an NDA is established.	96 TW/CC EOC Director 96 TW/JA
4.	Transmit DSCA report via OPREP-3 channels as required by AFMAN 10- 206.	96TW/CP
5.	Determine the composition of the EOC for the situation and activate control centers and specialized teams, as needed.	96 TW/CC EOC

6.	• Obtain 96 TW/CC or 96 TW/CV permission to respond. • Assign an incident risk category. • Ensure non-DoD toxic or hazardous materials are not brought/ introduced onto military installations for storage or disposal unless requirements of AFI 32-3001 are met.	Emergency Responders
7.	Dispatch/deploy required elements/resources.	96 TW/CC EOC
8.	Coordinate and direct all Air Force resources on-scene.	IC
9.	Ensure information is gathered and photographed and then approved by the IC prior to release.	96 TW/PA
10.	Submit reports IAW IEMP 10-2, Table 1, Reporting Requirements, as required.	ALL
11.	Consolidate expense lists and forward them for reimbursement and ensure personnel are aware of and using established ESP codes.	EOC

APPENDIX 9 TO ANNEX B TO EAFB 10-2 IEMP
BASE SUPPORT INSTALLATION (BSI) CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

BASE SUPPORT INSTALLATION (BSI)		
ITEM	**TASK/ACTION**	**OPR**
1.	Notify the 96 TW/CC of designation as BSI from HQ AFMC. **NOTE:** AFMC will notify Eglin AFB of possible or actual designation as BSI.	CAT 96 TW/CP
2.	Determine the composition of the EOC for the situation and activate control centers and specialized teams, as needed.	96 TW/CC EOC Director
3.	Designate a senior officer to support BSI activities and to coordinate support activities with the Defense Coordinating Officer (DCO). The designee will: Contact the Florida Air Force Emergency Preparedness Liaison Officer (EPLO) to determine current situation and support requirements. Tailor a working group to support operations.	96 TW/CC EOC Director
4.	Assess the availability of resources based on requirements supplied by the EPLO (i.e., lodging, manpower).	EOC Staff
5.	Determine capability to fuel aircraft (heavy, light and rotor), ground vehicles and equipment.	96 LRS
6.	Establish a news media center and provide news releases, as required.	96 TW/PA
7.	Advise 96 TW/CC and 96 CEG/CC on legal/jurisdictional issues with local, State and Federal agencies and private organizations.	96 TW/JA
8.	Establish and operate a manpower pool, if required.	96 FSS
9.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ
10.	Submit reports IAW EAFB 10-2 IEMP, Table 1, Reporting Requirements, as required.	ALL
11.	Consolidate expense lists and forward them for reimbursement and ensure personnel are aware of and using established ESP codes.	96 CPTS

TAB A TO APPENDIX 9 TO ANNEX B TO EAFB 10-2 IEMP
FEDERAL OPERATIONAL STAGING AREA

This document assumes response for a Category 3 hurricane. National Disaster Medical System (NDMS) will deploy one Management Support Team (MST) and eight Disaster Medical Assistance Teams (DMAT) and US&R will deploy with one Incident Support Team (IST) and six Task Forces of both type I and type III.

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

FEDERAL OPERATIONAL STAGING AREA		
ITEM	**TASK/ACTION**	**OPR**
1.	Notify the 96 TW/CC of designation as Federal Operational Staging Area (FOSA) from HQ AFMC/HQ AFNORTH. **NOTE:** AFMC will notify Eglin AFB of possible or actual designation as FOSA.	CP
2.	Determine need for EOC, control centers, and specialized teams activation.	96 TW/CC
3.	Designate a senior officer to support activities and to coordinate support activities with the DCO. The designee will: Contact the Florida Air Force Emergency Preparedness Liaison Officer (EPLO) to determine current situation and support requirements. Tailor a working group to support operations.	EOC Director
4.	Assess the availability of resources based on requirements supplied by the EPLO (i.e., lodging, manpower). Parking for: • 16 tractor trailers. • 34 large vehicles (CACHE truck and FEDEX). • 30 rental cars (SUVs). • Provide showers and bathroom facilities for 100 drivers who will remain with their vehicles. • Portable lighting. • Housing for 360 personnel (hotel will be the preference).	EOC
5.	Determine capability to setup a Mobilization Center for ground vehicles and equipment: • 5000 sq ft of open warehouse with a climate controlled area for pharmaceuticals. • 1 loading dock located in or near the warehouse. • Active network drops. • Phone lines. • 5 telephone handsets.	EOC
6.	Establish procedures to obtain urgently needed equipment and supplies.	AFTC/PZ

7.	Consolidate expense lists and forward them for reimbursement and ensure personnel are aware of and using established ESP codes.	96 CPTS

EXHIBIT 1 TO TAB A TO APPENDIX 9 TO ANNEX B TO EAFB 10-2 IEMP
EGLIN AFB INSTALLATION ASSESSMENT CHECKLIST

EGLIN AFB INSTALLATION ASSESSMENT CHECKLIST					
Full Capacity	**Limited Capacity**	**No Capacity**	**CLASSIFICATION: FOUO**		**1 of 3 Pages**
			NOTE:	Situation: Eglin AFB installation assessment required to support FEMA.	Date Prepared
			No.	**ITEM**	**OPR**
				Dining Facility Throughput on a Daily Basis (measured in meals served):	96 CEG 96 FSS
				Number of Maintenance Bays:	
				Bulk Water Storage (Gal):	
				Number of Bulk Water Points:	
				Billet Space (how many personnel can be accommodated using available billets, gyms, etc.):	
				Installation POC Name and Phone Number:	
				Covered Warehouse Space (sq ft):	96 CEG
				Outdoor Hard Stand (sq ft):	
				Covered Outdoor Hard Stand (sq ft):	
				Climate Controlled Storage for Cold Storage (sq ft):	
				Open Areas for Staging/Storage/Billeting (measured in acres):	
				Installation POC Name and Phone Number:	
				Number of Access Gates Into and Out of the Installation:	96 LRS 96 SFS
				Fuel Requirement, Aviation and Ground:	
				Adequate Road Network In/Around the Installation:	
				Water Port on Site/Distance to Nearest Water Port:	
				Can Access Gates Manage an Increase in Military and Commercial Movements (yes/no):	
				Installation Transportation Office on Site to Manage Military and Commercial Movements (yes/no):	
				Number of Loading Docks/Ramps:	

Full Capacity	Limited Capacity	No Capacity	No.	MHE On-Site:	Warehouse Forklifts	6 K	10 K	25 K	40K	Container Handling Equipment	2 of 3 Pages
				Distance to Nearest Military Airfield:							96 TW
				Aircraft Accommodated (list largest type of Aircraft):							
				Helicopter Landing Area (yes/no):							
				All Weather Capable (yes/no):							
				Maximum Aircraft on the Ground (measured by C-130 aircraft):							
				Installation Proximity to Closest Commercial Airport:							
				Installation POC Name and Phone Number:							
				Tactical Satellite Capability (yes/no):							96 CS
				Phone Line Expansion Capability (yes/no):							
				Internet Access (yes/no):							
				Excess IP Addresses (yes/no):							
				Assessments Based on Ability to Accommodate 200 Person General Officers HQs:							
				Installation POC Name and Phone Number:							
				Ground Equipment Maintenance Installation Support Personnel (yes/no):							96 CEG 96 FSS 96 LRS 96 CEIE
				Aviation Maintenance Installation Support Personnel for Fixed Wing and Rotary Wing:							
				Food Service Installation Support Personnel:							
				Installation Transportation Support (i.e., buses, cars) (yes/no):							
				AAFES on Site (yes/no):							
				Contracting Support Capability (number of warranted contracting officers assigned):							
				Office Space to Accommodate JTF Headquarters (200 persons HQs planning factor):							
				Can the Installation Receive and Process HAZMAT (used oil/battery acid, etc):							
				On-Hand Emergency Power Generation Capability/Availability:							
				Installation POC Name and Phone Number:							

Full Capacity	Limited Capacity	No Capacity	No.	ITEM	3 of 3 Pages
				Installation Security on Site (yes/no):	96 MDG
				Installation Security Military or Civilian Contracted:	
				Installation Perimeter has 360 Degree Security (yes/no):	
				Fire Fighting/Emergency Response Support on Site (yes/no):	
				HAZMAT/DECON capability (yes/no):	
				Installation MWR POC Name and Phone Number:	
				Installation Military Hospital POC Name and Phone Number:	
				Class VII Warehouse Storage Space (sq ft):	
				Class VII Cold Storage (sq ft):	
				Emergency Room Service on Site (yes/no):	
				Primary Care Facility (yes/no):	
				Medical Air Evacuation capable (yes/no):	
				Number of Ground Ambulances Basic and/or Advance Life Support:	
				Pharmacy (yes/no):	
				Distance to Nearest Civilian Hospital:	
				Installation POC Name and Phone Number:	

NOTE: To be used for example purposes only. Numbers involved are not accurate or to be used for real-world application.
The installation assessment should be based on the following initial force:
Headquarters: 2-Star Command and 200-person headquarters.
Responding Forces: 3,000 – 5,000 personnel.
Equipment: 500 wheeled vehicles Rotary Aircraft: 30 each.

Parking Space Capacity Calculation Reference			
Size Sq Ft (42,000 sq ft = 1 acre)	Acres	Trucks & Trailer	889
64,000	15	533	1,125
810,000	18	675	1,389
1,000,000	21	833	1,681
121,000	24	1,008	2,000
-	-	-	-

APPENDIX 10 TO ANNEX B TO EAFB 10-2 IEMP
RECOVERY SHELTERING CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

PERSONNEL SHELTERING		
ITEM	**TASK/ACTION**	**OPR**
1.	Determine shelter requirements.	96 FSS
2.	Establish Recovery Shelter Supervisor responsibilities.	96 FSS
3.	Determine amount of personnel requiring shelter. **NOTE**: Okaloosa County EOC will activate shelters for personnel residing off base.	EOC UCC
4.	Determine and report shelter capacities for displaced families/personnel to the EOC.	96 FSS
5.	Manage shelter operations.	96 FSS
6.	Direct shelter stocking plan, as required.	96 FSS
7.	Provide medical personnel to support shelter operations if aid stations are directed.	96 MDG
8.	Direct shelters to be shut down when practical.	EOC

APPENDIX 11 TO ANNEX B TO EAFB 10-2 IEMP
DISEASE CONTAINMENT CHECKLIST

NOTE: Refer to EAFB 10-2608, *Disease Containment Plan (DCP)*.

APPENDIX 12 TO ANNEX B TO EAFB 10-2 IEMP
EVACUEE BEDDOWN

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

NOTIFICATION (PRE-EVENT) Evacuee Beddown		
ITEM	**TASK/ACTION**	**OPR**
1.	Implement base recall as directed by the installation commander.	96 TW/CP
2.	Notify HHQ/AFNSEP of any requests for assistance from local civil authorities.	CAT
3.	Submit reports IAW AFMAN 10-206, as required.	96 TW/CP
4.	Coordinate with local civil authorities on emergency relocation of nonessential personnel and dependents.	EOC
5.	Establish connectivity with NORTHCOM/J-2 and NORTHAF/A-2.	CAT
6.	Identify command and control relationship with DoD agencies and non-DoD Federal agencies.	CAT
7.	Consult NGO relief agencies to support the camp.	CAT
8.	Establish contact with State and City Emergency OP Centers C2 Cells.	CAT
9.	Activate local long-range planning cell within 48 hours of major disaster to begin to address camp requirements.	96 TW/CC
10.	Activate the EOC to manage beddown operations.	96 TW/CC
11.	Determine if FEMA will establish a Mobilization Center on or near the installation. If so, provide AF liaison to the Center.	CAT
12.	Request aerial photos of beddown area if the situation dictates.	CAT 96 TW/CC
13.	Activate unit control centers, as required.	CAT
14.	Establish procedures to obtain urgently needed equipment and supplies.	EOC
15.	Identify resources from nearby military, to include reserve/national guard, bases.	EOC
16.	Channel requests for assistance from civil authorities to the Command Post who will ensure the 96 TW/CC, 96 CEG/CC and 96 CEX are notified.	EOC
17.	Immediately identify all personnel and equipment shortfalls or LIMFACs.	EOC
18.	Coordinate all facility needs with the 96 CEG.	EOC
19.	Maintain a log of all actions to support evacuee operations.	EOC

20.	Implement the following plans at the direction of the CAT/EOC: BCE Contingency Response, Medical Contingency Response/ Installation Security and Information Systems Restoration, as applicable.	UCC
21.	Identify/resolve mission shortfalls.	ALL
22.	Prepare for 24-hour operations.	ALL
23.	Ensure considerations are taken for family members with special needs.	ALL
24.	Convene Threat Working Group (TWG) to review FPCON criteria and determine need, if any, for recommending FPCON.	TWG
25.	Ensure weapons brought onto the installation are turned over to 96 SFS.	96 FSS
26.	Provide service for outgoing mail and temporary location to receive emergency mail.	96 FSS
27.	Coordinate w/ARC liaison to track non-DoD evacuee personnel data.	96 FSS
28.	Initiate AF Contract Augmentation Program.	96 FSS
29.	Prepare to stand up a military evacuee reception center for all upon arrival that issues temporary IDs to non-DoD evacuees and to provide visual record for accountability.	96 FSS
30.	Place bilingual translators in the processing line.	96 FSS
31.	Conduct a search of self-contained campers, trailers or motor homes for drugs/weapons before assigning a parking space at: FAMCAMP areas. Mobile Home parks. Athletic fields. Other.	96 SFS 96 FSS
32.	Develop Use of Force/ROE procedures with local law enforcement.	96 SFS 96 TW/JA
33.	Coordinate plan for handling any evacuee protests or other disruptive behavior.	96 SFS 96 TW/PA 96 TW/JA
34.	Establish a transportation plan/traffic patterns in the staging, reception and other areas (with signage).	96 SFS
35.	Designate a gate for evacuee traffic to use.	96 SFS
36.	Direct evacuees to the reception area.	96 SFS
37.	Establish a vehicle parking area for evacuees.	96 SFS
38.	Establish secure storage for weapons surrendered by evacuees.	96 SFS
39.	Coordinate with 96 CEG to layout perimeter, ECPs and locations of facilities.	96 SFS
40.	Implement applicable traffic control plans as required.	96 SFS
41.	Initiate physical security.	96 SFS
42.	Use vehicle-mounted public address systems to inform personnel to evacuate to shelters.	96 SFS

43.	Establish procedures to control access to camp, including issuing passes and registering vehicles.	96 SFS
44.	Plan for perimeter fencing and adequate lighting to channel all traffic throughout points where control can be exercised.	96 SFS
45.	Establish individual and vehicle search procedures.	96 SFS
46.	Establish joint Law Enforcement patrol and clarify jurisdictional responsibilities.	96 SFS
47.	Establish a joint incident response force (USAF, local/state officials).	96 SFS
48.	Develop joint law enforcement cell/control center with local/state officials.	96 SFS
49.	Establish procedures for management of centrally located DLA and GSA supplies/equipment.	96 LRS
50.	Determine warehouse space, vehicles and MHE required to support base mission and evacuee camp.	96 LRS
51.	Determine single point of contact for Base Supply Operations.	96 LRS
52.	Establish the procedures for all fuel authorizations (DLA only).	96 LRS
53.	Provide an available and approved re-supply method.	96 LRS
54.	Establish procedures to report all grades for fuel, equipment, personnel, and facilities, etc. (REPOL Reporting).	96 LRS
55.	Determine if support equipment tanks are required for the contingency.	96 LRS
56.	Determine requirement of jet fuel, personnel, equipment for additional aircraft support.	96 LRS
57.	Determine refueling plans.	96 LRS
58.	Provide transportation for evacuees to their shelters.	96 LRS
59.	Arrange transportation of supplies to shelters.	96 LRS/96 FSS
60.	Plan for vehicle support of evacuee camp set up. (i.e., tractor trailers, all terrain forklifts with operators).	96 LRS
61.	Assess all vehicle requirements to include those of other camp activities such as services, supply, medical, etc.	96 LRS
62.	Establish vehicle accountability.	96 LRS
63.	Determine method to track reimbursable expenses for logistical support provided (i.e., fuel cost, vehicle maintenance, vehicle damage, supplies, cargo movement).	96 LRS
64.	Set up tents for the reception center, if required.	96 TW/PA
65.	Brief all personnel in the reception area regarding base-specific rules, regulations, safety, weather warnings, etc.	96 TW/PA
66.	Establish a media center to handle media queries and news releases.	96 TW/PA
67.	Determine requirements for basic human needs: water, food, portable toilets, etc.	96 FSS
68.	Determine beddown requirements, stocking procedures and supplies needed.	96 FSS

69.	Determine organic beddown capabilities based on available facilities, land space and maximum base population capacities.	96 FSS
70.	Establish an assembly location for volunteers.	96 FSS
71.	Coordinate meal requirements with dining facilities, MWR and AAFES.	96 FSS
72.	Determine what to do with pets based on the disaster. Consider directing the use of local kennels.	96 MDG
73.	Set up temporary medical treatment centers, as needed.	96 MDG
74.	Develop Occupational Health surveillance plans.	96 MDG
75.	Assess status of potable water supplies and requirements and distribute water, as required.	96 CEG
76.	If employment of WRM is required, needs must be approved IAW limits set by AFI 25-101.	96 CEG
77.	Develop local briefings on Base Emergency Preparedness Orientation (BEPO), CC policies, medical treatment, etc.	96 TW/PA 96 CEX
78.	Build template and consolidate all functional information into welcome package for evacuees.	96 TW/PA
79.	Information Volunteer Center collaborates with local community.	96 TW/PA
80.	Establish a media/public information center.	96 TW/PA
81.	Monitor base relief activities and develop news releases for local dissemination.	96 TW/PA
82.	Determine PA support requirements and provide sufficient resources to distribute resident information, as needed.	96 TW/PA
83.	Access the AFPD 84-1, AFI 84-101 and AFI 84-102 for preparation to gather history during this event.	96 TW/HO
84.	Determine sufficient ramp space available for incoming aircraft.	96 OSS 96 MXS 96 LRS
85.	Determine if the receiving base has aviation POL storage and into- plane delivery capability.	96 OSS 96 MXS 96 LRS
86.	Develop a reception plan for incoming aircraft being evacuated.	96 OSS 96 MXS 96 LRS
87.	Set-up a dot-com capability for Internet access to support non-military supporting organizations.	96 CS
88.	Build centralized home page listing local activities available to broad audience of support agencies.	96 TW/PA
89.	Establish communications with evacuee/contingency site (LMR-Land Lines).	96 CS
90.	Provide direct “HOTLINES”/1-800 numbers for linking senior leadership of all key players and for evacuee information.	96 CS
91.	Consider establishing an Adopt a Family program for dislocated personnel.	96 FSS

92.	Consider implementing Family Assistance Checklist for military members and families.	96 FSS
93.	At the direction of the 96 TW/CC, stand up the Emergency Family Assistance Center (EFAC).	96 FSS
94.	Assess status of medical supplies and requirements.	96 MDG
95.	Consider mental/emotional health consequences including "worried well" and "personal paralysis."	96 MDG
96.	Identify health concerns for personnel while dealing with evacuees (96 SFS, 96 FSS, Volunteers, etc.).	96 MDG
97.	Pre-establish procedures for military evacuees who do not have financial means to pay for their accountability.	96 CPTS
98.	Request an ESP code from HQ AFMC if one has not been established.	96 CPTS
99.	Determine requirements/available resources using AFI 10-404.	96 LRS
100.	Establish central POC for gathering and collecting incremental costs associated with the support to the civilian authorities.	96 CPTS
101.	Review installation jurisdiction boundaries (exclusive, concurrent and proprietary).	96 TW/JA
102.	Devise plan for handling crimes committed by non-DoD	96 TW/JA
103.	Ensure site plans account for Chapel and facility for counseling.	96 TW/HC BCE
104.	Establish clear chain of command for the Religious Support Team (RST).	96 TW/HC
105.	Identify logistical needs of the RST.	96 TW/HC
106.	Coordinate with local civilian clergy and religious support	96 TW/HC
107.	Ensure OSHA and AF requirements are taken into account for all operations.	96 TW/SE
108.	Perform a site survey of planned beddown area and identify concerns.	96 TW/SE
109.	Liaison with affected Federal, State and local law enforcement agencies.	AFOSI
110.	Determine and coordinate investigative and prosecutorial jurisdictional issues.	96 TW/JA AFOSI 96 SFS
111.	Resolve Posse Comitatus issues with base legal and HQ AFOSI/JA (TW); i.e., civilian agent arrest authority.	AFOSI 96 TW/JA 96 SFS
112.	Coordinate Federal, State and local law enforcement base access issues.	AFOSI 96 SFS
113.	Provide a climate summary for the base.	96 WS
114.	Identify available weather services and equipment.	96 WS
115.	Develop Contingency Contracting Activities for base camp.	AFTC/PZ

116.	Identify local sources of equipment, supplies and services for sale or lease.	AFTC/PZ

SUSTAINED BEDDOWN (Evacuee Camp)		
ITEM	**TASK/ACTION**	OPR
1.	Maintain a log of all actions to support evacuee operations.	ALL
2.	Initiate sustained beddown checklists; review Recovery checklists.	ALL
3.	Identify/resolve mission shortfalls and up-channel to CAT.	ALL
4.	Appoint Installation's Services Commander or Director as the Evacuee Support Officer (ESO).	96 TW/CC
5.	Appoint a Camp Commander.	96 TW/CC
6.	Establish a Disaster Assistance Center.	EOC
7.	Assess status of food supplies and requirements and distribute food, as required.	EOC
8.	Contact the responsible command's transportation control node(s) [Tanker Airlift Control Center (TACC), U.S. Army Surface Deployment and Distribution Command (SDDC), Military Sealift Command (MSC)] to obtain an Estimated Time of Arrival for the first	CAT
9.	ESO will compose and transmit to HQ AFMC a Daily Situation Report IAW AFI 10-206 until the camp is disestablished.	ESO
10.	Maintain a log of all reimbursable job and work orders executed to support evacuee operations.	96 CEG 96 FSS
11.	Assess status of potable water supplies and requirements and distribute water, as required.	96 CEG 96 FSS
12.	Establish pet holding areas/shelters in locations such as tennis courts and sports fields.	96 CEG 96 FSS
13.	Execute lodging, meals, child care, mortuary and support program procedures.	96 FSS
14.	Determine requirement for DoD evacuee pet care and coordinate with the Army Veterinary Services, public health office and local veterinaries and kennels to provide off-base assistance or shelter.	96 MDG
15.	Determine supplies and equipment available in-stock to support mission and evacuee camp.	96 FSS
16.	Establish an assembly location for volunteers.	96 FSS
17.	Coordinate meal requirements with dining facilities, MWR and	96 FSS
18.	Maintain the installation's physical infrastructure to support the evacuee operation.	96 CEG
19.	Support command and control facility requirements to ensure 24/7 capability (i.e., generator support, HVAC).	96 CEG
20.	Continue assessment and inspections of housing, facilities, utilities, water/waste systems, food supplies, fuels distribution systems, HAZMAT/toxic material storage sites and C4 systems.	96 CEG
21.	Monitor environmental hazards.	96 CEG
22.	Enforce good order and discipline through LE patrols and response forces.	96 SFS

23.	Maintain a joint law enforcement cell/control center with local/state officials.	96 SFS
24.	Support 96 SFS physical security requirements, such as temporary hold- cell facilities for law enforcement actions, concertina-wire erection, traffic barrier placement, area lighting and temporary encampment fencing, as required.	96 CEG
25.	Enforce camp/site parking plan.	96 SFS
26.	Consider telephone "HOTLINES"/1-800 numbers for disaster information.	96 CS
27.	Monitor essential communications.	96 CS
28.	Consider mental/emotional health consequences including "worried well" and "personal paralysis".	96 MDG
29.	Assess status of medical supplies and requirements.	96 MDG
30.	Consider sanitation, environmental and health (short- and long-term) issues.	96 MDG
31.	Ensure contingency agencies have either a valid Department of Defense Activity Address code for DoD customers or a Federal Activity Address code for Federal Agencies assigned by the Defense Automatic Addressing System Center.	POL
32.	Establish an on-site LRS dispatch office and parking area.	96 LRS
33.	Establish aircrew support transportation to take crews to billeting/hotels and pickup/drop off crews to the aircraft 24 hours a day, as needed.	96 LRS
34.	Plan for cargo movement and off-load capability of supplies from airfield/other base facilities to the evacuee camp.	96 LRS
35.	Establish a media/public information center.	96 TW/PA
36.	Provide periodic updates to base agencies/populace via fixed and portable Public Address systems, electronic marquees, primary and secondary crash nets, telephones, Cable Television, CCTV, commercial radio/television and electronic media (i.e., e-mail, SIPRNET).	96 TW/PA
37.	Ensure media have qualified AF PA escort while on the installation and aboard inbound aircraft.	96 TW/PA
38.	Collect key documentation and interview key officials and participants relative to the evacuee preparations and operations.	96 TW/PA
39.	Produce and disseminate news release updates as appropriate; arrange media availability/news conferences with base officials.	96 TW/PA
40.	Brief media on current status of (BASE X) relief activities.	96 TW/PA
41.	Coordinate/facilitate arrangements with appropriate agencies/authorities for media on DoD or other inbound aircraft.	96 TW/PA
42.	Ensure appropriate authority exists for beddown.	96 TW/JA
43.	Provide guidance for utilization of military resources IAW DoD guidance.	96 TW/JA
44.	Provide prompt and accurate advice on legal issues pertaining to evacuees and beddown procedures.	96 TW/JA
45.	Provide necessary instructions and paperwork to evacuees injured on the installation who wish to file claims against the AF.	96 TW/JA

46.	Report to areas of greatest spiritual need.	96 TW/HC
47.	Coordinate site commander support for worship observances, pastoral care and advice to leadership.	96 TW/HC
48.	Oversee civilian clergy participation (Ref: AFI 52-101).	96 TW/HC
49.	Secure logistical support (i.e., worship and counseling locations, phone, computer, vehicle, religious literature).	96 TW/HC
50.	Provide 24-hour response capability to criminal and counterintelligence activities.	AFOSI
51.	Submit daily SITREPs to CAT until otherwise directed.	AFOSI
52.	Provide capability to run name/background checks on foreign individuals identified by SF or in-processing teams.	AFOSI
53.	Arrange for daily weather briefs and short-term weather forecast.	96 WS
54.	Schedule meetings and address safety considerations with affected military and civilian agencies.	96 TW/SE
55.	Record costs in a spreadsheet/database.	96 CPTS
56.	Review documentation for the use of the Emergency and Special (ESP) code and use all means to broadcast the need for the use of the ESP code.	96 CPTS
57.	Ensure adequate funds are loaded on Government Purchase Cards for emergency purchases (especially on weekends).	96 CPTS
58.	Provide financial assistance to displaced persons.	96 CPTS
59.	Establish funding and reimbursement procedures.	96 CPTS
60.	Implement requisitioning controls acceptable to the assigned commander.	AFTC/PZ
61.	Implement procedures with the finance staff to ensure funds are available to pay for purchases (AF Form 616).	AFTC/PZ
62.	Determine purchasing methods for expedited ordering (i.e., SF 44,	AFTC/PZ
63.	Determine NAF contracting requirements.	AFTC/PZ

APPENDIX 13 TO ANNEX B TO EAFB 10-2 IEMP
MISSION CRITICAL PERSONNEL

1. Mission Critical Selection: Assignments to mission critical status for employees within the bargaining unit will be made on the basis of volunteers who possess the requisite skills, training, and required job performance as determined by the Employer. In the event there are too many volunteers, assignments will be made on the basis of the longest service computation date (SCD).

1.1. Employers will follow Article 10 of the Master Labor Agreement Local Supplement regarding the selection of mission critical employees (Bargaining Unit Employees Only).

2. Mission Critical personnel will be issued proper designation (prior, during, or after) and identification as soon as practicable after selection.

3. Recovery Crews: Assignments to "Recovery crews" will be rotated among designated mission critical employees who possess the requisite skills, training, and required job performance as determined by the employer. Exceptions to these procedures may be made when needed to meet mission requirements.

4. Employees designated to serve on "Recovery crews" should be granted annual leave prior to the extreme weather conditions, natural disaster, or other contingency causing the employees to serve on the "Recovery crew" in order to make personal appropriate arrangements and preparations, if mission requirements allow for such release.

5. The employer/unit will comply with applicable laws, rules, and regulations regarding pay and benefits in administration of the Mission Critical program.

6. The employer/unit will provide the Labor Relations Office/Unions a listing of mission critical designated bargaining unit employees on a semi-annual basis.

ANNEX D TO EAFB 10-2 IEMP
TERRORIST USE OF CBRNE

1. SITUATION: Terrorist groups may target Eglin AFB or nearby communities. This could include the preplanned, indiscriminate use of chemical, biological, radiological, nuclear or high-yield explosive (CBRNE) weapons to create casualties, inflict damage or destruction, create chaos/panic (threatening calls/letters) or otherwise disrupt mission operations.

2. ASSUMPTIONS:

2.1. Eglin AFB may not have the authority or expertise to act unilaterally on the many issues that arise in response to CBRNE incidents.

2.2. CBRNE incidents, particularly those aimed at large population centers, may produce consequences that will almost immediately overwhelm response capabilities.

2.3. Biological attacks or, to a lesser degree, incidents involving radiological exposure devices (RED) may not be recognized until there are multiple casualties. Responders may become exposed before recognizing an agent was involved.

2.4. CBRNE incidents may result in contamination of facilities, large geographic areas and people. Victims may carry contamination unknowingly to their transportation, facilities, residences and hospitals. First responders may carry contamination to subsequent emergency calls.

2.5. CBRNE incidents involving airborne agents may expand in scope and affect multiple jurisdictions. Sheltering in place may be required until evacuation procedures can be implemented. In the case of attacks involving radiological materials, in order to keep personnel exposures as low as reasonably achievable (ALARA), sheltering-in-place should generally only be used while the hazard cloud is transiting the area and evacuation should begin as soon as possible thereafter.

3. MISSION: Respond with all necessary resources to mitigate the threat or destruction caused by terrorists and to plan, organize, train and equip to respond to the full spectrum of emerging terrorist threats. These actions may include contamination control, implementing strict incident scene control and evidence protection, logistical and administrative support. Assistance may be required to support Okaloosa County, Florida and Federal forces that may respond to the incident.

4. EXECUTION: Refer to individual checklists.

APPENDIX 1 TO ANNEX D TO EAFB 10-2 IEMP
TERRORIST USE OF CBRNE RESPONSE CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

PREPAREDNESS - TERRORIST CBRNE RESPONSE		
ITEM	**TASK/ACTION**	**OPR**
1	Pre-plan for known and existing hazards.	ALL
2	Identify the critical mission operations that are anticipated to be continued despite the presence of CBRNE contamination. Clearly describe the circumstances in which the critical missions will be maintained.	CAT
3	Develop and distribute operational exposure guidelines (OEG) for critical mission operations in the aftermath of a Counter-Radiological Warfare event. See the Counter-Radiological Warfare Commanders Guide for suggested OEGs.	EOC
4	Prepare a decontamination plan for aircrew, ambulatory and non-ambulatory personnel. See examples below: · For purposes of response to radiological incidents, establish what the background radiation readings in the local area should be so that accurate post-attack assessments can be made. · Determine decontamination system for gross and technical decontamination. · Estimate expected numbers. · Establish number required to operate decontamination lines. · Identify and conduct training for decontamination lines. · Establish a policy on personal protection equipment. · Identify equipment and material needed for decontamination lines. · Plan for decontamination of people wearing protective equipment, duty uniform(s) and civilian clothing. · Plan for modesty requirements for male and female personnel. · Plan for handling fatalities. · Identify required detection equipment. · Identify detection equipment shortfalls/LIMFACs.	96 MDG/ JBEEM
5	Ensure programs are established and integrated. · Response capabilities: o Identify baseline capabilities. o Identify LIMFACs/shortfalls in all functional areas. o Identify MAJCOM/DoD response capabilities (specialized teams) and activation/notification procedures.	JBEEM

	o Environmental monitoring. · Ensure individual readiness posture (IRP) through viable health protection programs: o Disease monitoring. o Vaccine and diagnostics. o Isolation and quarantine of casualties. o Short- and long-term medical surveillance systems. · Active and passive defensive measures: o FPCONs. o CBRNE Defense. o Intel Analysis. · Recovery capabilities: o Decontamination procedures. · Equipment and training: o Provide adequate resources to ensure the installation is properly trained and equipped to respond to a terrorist CBRNE incident/attack. o Staff, equip, train and exercise the DRF to respond to terrorist CBRNE incident/attack. o Request funds for un-programmed requirements through higher headquarters. o Identify response equipment necessary for all functional areas.	
6	Review allocation and projected utilization of CBRNE detectors. · Identify time-phased shortfalls, develop cross organizational detector utilization plans as required and report any shortfalls that can't be mitigated to the parent MAJCOM organizations.	JBEEM 96 CEF EOD AFTC/PZ
7	Identify urgently needed equipment and supplies and establish procedures to obtain them. *Ensure expenditures are approved by the 96 CEG/CC or 96 TW/CC prior to commitment.	AFTC/ PZ
8	Establish a primary and an alternate location for the CAT/CP/EOC. **NOTE**: Primary and alternate CP/CAT/EOC should mirror each other in capabilities.	CAT CP EOC
9	Coordinate with and maintain a working relationship with local FBI WMD Coordinator.	AFOSI EOC
10	Establish emergency notification rosters of all appropriate agencies (FEMA, local law enforcement, FBI) and maintain liaison.	
11	Establish CBRNE warning and reporting systems or networks (integrated with the Global Command and Control System, if available).	96 CEX
12	Establish preformatted or preaddressed messages for OPREP-3 and CBRNE Warning and Reporting System.	

13	Ensure that all DRF members are properly equipped, trained and exercised to respond to a terrorist CBRNE incident/attack.	IC
14	Ensure a means to identify each position within the incident command system at the incident site (using, for example, colored vests, armbands)	
15	Develop terrorist CBRNE threat response procedures and brief the Installation Commander and staff on their status.	96 SFS 96 CEX EOD
16	Establish liaison with local medical facilities; identify local response capabilities and facility bed capacity.	96 MDG
17	Establish agreements with local medical community regarding patient handling.	
18	Designate antibiotic distribution/vaccine centers.	
19	Develop plans for acquiring vaccines.	
20	Develop plans for local stockpiles of antibiotics as well as local civilian resupply and receipt of the national pharmaceutical stockpile.	
21	Provide decisions tools to assist commanders in determining when and how to respond to Biological Attack incidents based on "trigger events." · **Intelligence Warning** occurs when an "all-source" intelligence report indicates the enemy possesses an offensive biological capability and intends to employ it or that an enemy has deployed a biological agent. · **Weapons Event** refers to an overt attack employing weapon systems such as theater ballistic missiles, sub-munitions, artillery, sprayers or crop dusters that might be armed with biological agents. · **Detector Alarm** refers to an indication of a possible biological attack via a signal from a detection device (could be human) that a biological agent is present. · **Sentinel Casualties** refers to the medical community's detection of a biological event by assessing trends in medical symptoms, unexplained illness or death among base or off-base personnel or in domestic pets, livestock or wildlife.	
22	Identify baseline detection points and frequency based on the threat.	JBEEM
23	Provide the 96 TW/CC with a detailed checklist of critical actions that should be considered if a biological warfare trigger event occurs.	PHEO
24	Determine the criteria to give or deny help to the local area in response to a biological event.	EOC
25	Determine actions to control the spread of disease if suspected agents are contagious. · Seek expert advice on quarantine issues from higher headquarters medical staff. · Establish a viable quarantine plan.	
	· Identify timelines for initiation of base quarantine plan. · Identify quarantine LIMFACs.	

26	Identify available labs/analysis capabilities on base, in theater/area of operations, etc. and associated turnaround timelines.	96 MDG
27	Develop a unit personnel biological tracking system to track the status of the base populace. · Status of duty personnel. · Status of contractor personnel. · Status of dependents for personnel assigned to the unit. · Number and names of personnel believed to be exposed to biological warfare agents or contagious persons, as available. · How often status updates should be provided.	
28	Develop a medical surveillance plan and medical surveillance system that will alert when a higher than expected disease incidence rate occurs or an index case is diagnosed. Consider the below following items: · Non-endemic disease incidence. · Patients diagnosed with multiple BW agent diseases. · Increase in antibiotic and other medication prescriptions associated with BW syndromes. · Laboratory results. · Increase in ambulance runs. · Worried well inquiries. · Animal deaths and illness.	PH
29	Protect health of personnel. · Conduct preventive medicine and detection operations. · Plan for the medical response to accommodate unexpected surges of casualties, some of which may be contaminated by CBRNE agents. · Ensure sufficient medical treatment materials (ciproflaxin or other antibiotics for anthrax for example) to effectively handle large population exposures. · Vaccinate personnel, as necessary.	96 MDG
30	Ensure water is safe to drink. · Develop and execute plans to protect all water system components from potential damage and deliberate contamination. · Restrict access to water system components. · Conduct an installation water vulnerability assessment.	BEE 96 CES
31	Increase surveillance activities as required and consider beginning vector surveillance. Coordinate with Local Public Health for information and guidance on vector surveillance.	96 CES
32	Establish a contamination control capability; includes being able to identify contamination, develop decontamination capability using functional resources available to support essential operations within their	IC 96 CEX

	capabilities and mark contaminated areas as appropriate.	
33	Advise the IC concerning response and recovery policies and procedures.	96 CEX
34	Maintain the Mobile Emergency Operations Center (MEOC).	CEF JBEEM 96 CEX
35	Establish the installation's CBRNE detection, survey, marking, plotting, prediction and reporting capabilities and associated equipment requirements.	JBEEM
36	Develop contact procedures for EPA Region National Response Center.	96 CEIEC
37	Obtain appropriate equipment and PPE for HAZMAT and CBRNE response.	CEF JBEEM
38	Become familiar with all applicable portions of the Robert Stafford Disaster Relief and Emergency Assistance Act.	ALL
39	Develop a working knowledge of airborne plume modeling, atmospheric stability conditions, Gaussian dispersion and environmental receptor vulnerabilities. · Review Counter-Radiological Warfare Plume Handbook for information on likely radiological exposure device (RED), radiological dispersal device (RDD) and improvised nuclear device (IND) hazard zones.	CEX
40	Keep the 96 TW/CC informed of public affairs directives and policy guidance from higher headquarters.	PA
41	Publicize possible attack indicators. **Possible indicators of a biological incident are:** · Occurrences of diseases unusual for the area/time of year. · Unusual numbers of sick or dying people or animals. · Unscheduled/unusual dissemination of liquid or spray (especially outdoors or at night). · Abandoned dispersal devices, containers or lab type equipment. · Diagnosis of a non-endemic disease. · Positive results of Presumptive Detection/Sampling (***not*** indigenous to the incident area). · Multiple diseases in one patient. · Significant numbers of patients with similar symptoms. · Evidence of mass "point source" outbreaks. · Illness in small or localized areas. · Low sickness rates in protected (masked/indoors) personnel. · Increased absences from duty/work. · Apparent aerosol routes of infection. · Local communities with similar problems/medical conditions. · Claims by aggressors, groups or perpetrators (potential hoax). · Absence of normal insect life. · Unusual product dissemination. · Suspicious packages, letters or parcels. **Possible indicators for a nuclear (radiological) incident are:**	96 PA/ 96 MDG/ JBEEM

	· An explosion. · Abandoned or suspicious devices. · Readings (higher than background) on detection instruments (RADIACs). · Incidences of people self-presenting at medical facility with symptoms of acute radiation syndrome. · Appearance of people at attack site with signs of cutaneous radiation injury. **Possible indicators of an incendiary incident are:** · Multiple fires. · Remains of incendiary device components. · Odors of accelerants such as gasoline or fuel oil. · Unusually heavy burning or fire volume. **Possible indicators of a chemical incident are:** · Low order explosions dispersing liquid, spray, mist or gas. · Explosions appearing only to destroy a package or device. · Rapid onset of similar symptoms in a large group of people. · Unscheduled/unusual dissemination of liquid or spray (especially outdoors or at night). · Individuals reporting unusual odors or tastes. · Abandoned dispersal devices such as a mist generator. · Numerous dead animals, fish or birds. **Possible indicators for an explosive device are:** · Explosive noises (other than from ranges/scheduled events).Large-scale facility damage. · Blown out windows and widely scattered debris. · Victims exhibiting blast effects such as shrapnel-induced trauma and the appearance of shock-like symptoms (e.g., eardrum damage).	
42	Prepare a generic initial news release, applicable to terrorist CBRNE incidents, in coordination with the 96 TW/CC. · If the threat warrants, review the Counter-Radiological Warfare Public Affairs News Release Templates.	96 PA
43	Assess and make arrangements for acquiring additional transportation resources to meet local IEMP Plan and Installation Security Plan taskings.	96 LRS
44	Participate in CBRNE threat response planning, evaluation and exercises.	96 WS
45	Assist the IC/EOC in establishing procedures for obtaining additional weather information in the event of an incident.	
46	Work with CP to establish, maintain and test the installation warning system.	96 CS
47	Assist the Fire and Emergency Services Flight in establishing and maintaining a mobile communications package to support the Mobile Emergency Operations Center (MEOC).	
48	Identify primary and alternate means of communications; plan for communications and equipment redundancy.	

49	Assess overall needs and develop the incident communications plan; establish frequencies and nets for use during an incident.	
50	Develop a communications security plan.	
51	Ensure frequency compatibility with installation units and with mutual support agreements.	
52	Establish information sharing capability with local law enforcement agencies and provide shared information to the FBI.	AFOSI
53	Obtain appropriate installation maps reflecting nature of Federal jurisdiction for each area (i.e., exclusive, concurrent, proprietary).	96 JA
54	Establish and maintain current points of contact with appropriate local and state attorneys and law enforcement officials.	
55	Brief the IC, EOC and appropriate installation staff members on the role of claims team.	
56	Coordinate with local food distributors to obtain subsistence items to support shelter stocking as necessary to meet incident requirements. Develop plans/procedures to move food and water warehoused off base to on-base storage.	EOC
57	Coordinate with US Army Graves Registration OPR located at Fort Lee Virginia on the processing of contaminated remains IAW AFI 34-501, *Mortuary Affairs Program*.	96 FSS
58	Develop a plan with local schools and child care centers for safeguarding children during or following an incident. · Holding children. · Organization contact information for parents to check on children. · Parent contact information for organization. · Evacuation plans including location where children will be supervised and accounted for. · Shelter In-Place plans including safe rooms. ***Consider plan to safeguard children:*** **<u>Preparation</u>** · Identify a secure means of notifying school/child care center. · Identify an alternate facility able to hold children and staff if evacuation is necessary. **Response** · Call the superintendent/supervisor who will: o Alert the staff of the situation. o Secure exterior doors. o Ensure positive identification of everyone inside the facility. o Move children away from exterior windows. · Coordinate with the superintendent/supervisor on the best way to notify parents (i.e., television, radio, public address system).	96 FSS

	· Dispatch police to secure the area of the school/child care center. · Evacuation. · Ensure 96 SFS escorts children and staff to alternate facility. · Avoid dismissing students to unknown personnel.	
59	Establish a morgue: · Procure available refrigerated trucks. · Procure lease/rental of refrigerated trucks/Sea-Land containers. **Identification (ID) Team:** · Medical officer will assume command of the ID team and direct all activities performed at the morgue by the ID team. · Dental officer. · Preventive Medicine Officer. · Medical assistants, if requested by the commanding medical officer. · CEX will provide technical assistance and equipment to Mortuary Affairs personnel as necessary. · Request other specialists, as needed. **Morgue log will include:** · Morgue tag number. · Identity of remains, when known, including name, rank and SSAN. · Reference to applicable dental records. · Reference to applicable fingerprint/footprint cards. · AF Form 697, *Identification Findings and Conclusions.* · Location of burial plots (if mass burial is required) or location on rack in cold storage. · Fingerprint Cards (in duplicate) and Dental Records: mark with appropriate log number and maintain with log.	96 MDG 96 FSS
	Establish a mortuary file for each deceased to collect all forms prepared during processing: · Identify files using log number and (when identified) name, rank and SSAN of deceased. · Each file will need the following forms: o AF Form 697, *Identification Findings and Conclusions.* o AF Form 137, *Footprint Record.* o AF Form 1122, *Personal Property and Personal Effects Inventory.* o AF Form 1122A, *Personal Property Inventory (Continuation Sheet).* o DD Form 1075, *Convoy List of Remains of Deceased Personnel.* o DD Form 565, *Statement of Recognition of Deceased.* o DD Form 894, *Identification Processing, Record of Fingerprint Chart.*	

	o DD From 551, *Record of Interment.* o DD Form 568, *Grave Plot Chart.*	
60	Conduct food and water vulnerability assessments and establish plans to ensure only protected food and water is used. · Test water for radiological contamination (in addition to routine chemical-biological tests) as required by threat.	96 FSS PH
61	Provide a representative to participate in CBRNE threat response planning.	96 SE
62	Establish procedures to operate on a sustained, 24-hour basis as required to support response to terrorist CBRNE incident/attack. Includes duties and responsibilities, staffing, communications, reports and timelines; equipping with communications gear, information systems and visual aids (i.e., status boards, grid maps, overlays, bulletin boards).	UCCs
63	Establish procedures for recall of UCC personnel. Establish primary and alternate assembly areas for each building that are separated a minimum of 2000 feet.	
64	Develop checklists for operating the UCC in a terrorist CBRNE incident/attack.	
RESPONSE - TERRORIST CBRNE RESPONSE		
ITEM	**TASK/ACTION**	**OPR**
Notification		
1	Direct everyone in the immediate area to: · Move as far away from the incident as possible without placing themselves in danger. · Stay out of "line of sight" of the incident. · Stay away from windows or objects that can cause injury should an explosion occur. · Remain alert for secondary releases or explosions. · Do not re-enter the hazard area.	ALL
2	Activate the primary/secondary crash nets, as needed.	ATC/AM
3	Notify the 96 TW/CC.	CP
4	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
5	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
6	Notify Okaloosa County EOC of the situation and recommended closure or evacuation of civilian areas/functions, as needed.	EOC
7	Closest command post with knowledge of the incident submit OPREPs as required by AFMAN 10-206.	CP
8	Notify 96 SFS of emergency personnel responding from local community.	ALL
9	Submit reports in Table 1, Reporting Requirements, as required.	
10	Immediately respond to the site from an upwind direction using a safe	First

	route. · Have dosimeters turned on so they will provide the earliest indications possible of the presence of radiation (RED) and/or contamination (RDD).	Responders
11	Establish command.	IC
12	Obtain situational awareness upon arrival before entering the site. If ICS is established report to the IC prior to zone entry.	First Responders
13	Control access to the site and essential operations. · Verify the ICP, staging areas, etc., are free of chemical-biological contamination and that any radiation readings are ≤ 0.1cGy/hr. · Cordon using Traffic Control Points (TCP). · ECP. · ICP. · Support functions outside the cordon. **NOTE:** See Figure 1, Typical Incident Site Setup	96 SFS/ 96 CEF
14	Search for secondary devices.	First Responders
15	Perform initial lifesaving, rescue, suppression, containment and evacuation.	
16	Establish a cordon including Hot, Warm and Cold Zones as needed. For radiological incidents, use initial cordon sizes of 100 meters for RDDs and 25 meters for REDs until instrumentation can verify the scope of radiological contamination. · See Figure 1, Typical Incident Site Setup, for all CBRNE incidents, with or without radiological considerations. · Clearly mark the boundaries. · Clearly identify ingress and egress points after the zones are established.	IC
17	Establish tactical priorities. · Ensure rescue/life safety/responder safety. · Determine presence/absence of contamination. · Identify boundaries of contamination. · Identify dangerous hotspots, if any, within the contaminated area (as will occur with radioisotopes such as Co-60 and Ir-92 that break into fragments instead of completely aerosolizing). · Stabilize the incident. · Conserve property and the environment.	IC
18	Implement a personnel accountability system.	IC/ 96 CEF/ 96 MDG/ 96 CEIEC
19	Develop an incident action plan. · Identify problems. · Examine conditions surrounding the problems. · Develop possible solutions.	

	· Evaluate the alternatives. · Choose best option. · Implement the plan. · Monitor and evaluate results.	
20	Recommend activation of the EOC and establish/maintain communication.	IC
21	Activate EOC.	96 TW/CC
22	Set up/establish a staging area.	IC
23	Consider public actions to protect the general population from hazardous material by either sheltering in-place or evacuation.	IC
24	Announce protective measures for the public using available resources.	96 CEF/CP/ AM/PA/ 96 SFS/ UCCs
25	Implement applicable plans to re-route traffic from the hazard area.	96 SFS
26	Establish and set up a triage area.	96 CEF
27	Segregate and prioritize casualties for decontamination. Variables: · Casualties closest to the point of release. · Casualties reporting or exhibiting signs of exposure to liquid, vapor or aerosol. · Casualties with serious medical symptoms. · Casualties with conventional injuries.	
28	Calculate an initial toxic corridor/downwind hazard area using Aerial Locations of Hazardous Atmospheres (ALOHA) software.	
29	Use a gross decontamination station to process personnel out of the hot zone.	
	· Use water for gross decontamination. · Separate symptomatic and asymptomatic personnel. · Expand decontamination capabilities as additional resources arrive. · Treat run-off as contaminated waste. · Direct questions on decontamination of severely injured personnel to flight surgeon before decontamination.	
30	Forward numbers of DIM to the EOC Director as the information becomes known.	IC
31	Provide casualty estimates to base and local hospitals to assist in determining requirements for additional medical resources.	96 MDG IC
32	Activate control centers and specialized teams, as needed. o CAT o EOC. o UCCs. · Specialized Teams:	96 TW/CC 96 CEG

	o HAZMAT Team. o Spill Response Team.	
33	Determine the composition of the EOC needed for the situation.	EOC Director
34	Determine target of the attack.	96 TW/CC
35	Implement patient tracking and movement plan for patients and their status.	96 MDG
36	Relay casualty information to the EOC. · Forward names of deceased and injured to EOC by runner or by encrypted email/secure phone. o Avoid the use of cell phones. · Ensure only medical authorities certify death. · Caveat reports of injured and deceased with "believed to be" when identification cannot be confirmed 100%.	
37	Conduct decontamination of potentially contaminated personnel. · Determine the need to secure exits and control entry into the MTF. **NOTE**: Some casualties may be transported directly to the hospital by good Samaritans. · Activate the In-Place Patient Decontamination (IPPD) Team. · Ensure the triage team dons PPE and establishes a triage staging area outside the MTF for receiving and triaging patients. They will provide immediate stabilizing care and prioritize casualties for decontamination and entry into the MTF. · Ensure the Bioenvironmental Engineer (BEE) monitors the patients upon their arrival at the MTF if assets and manpower are available. · Ensure the IPPD Team processes and decontaminates all patients as needed before being taken into the MTF. **NOTE**: The IPPD Team is able to process approximately 12 casualties per hour. · Clothing will be removed, bagged and individually marked. · Patients will be re-triaged and routed to appropriate areas for treatment.	96 MDG
38	Provide alert photographer and ensure access to the scene when safe to provide official documentation of the accident.	96 CEF
39	Prepare initial news release within one hour of incident notification. · Use Counter-Radiological Warfare Public Affairs News Release Templates for situations involving RED, RDD, IND or nuclear spent fuel storage facility incidents.	96 PA
40	Coordinate approval of a news release within one hour after the incident.	96 TW/CC
41	Issue FPCON changes as directed by the 96 TW/CC.	CAT
42	Implement mutual aid agreements for assistance, as needed. Notify CP when implemented.	96 CEF/ 96 MDG
43	Protect or treat the incident site as a crime scene. Coordinate with AFOSI on investigative issues.	96 SFS/IC
44	Conduct crime scene notification and coordination with the FBI.	AFOSI

45	Ensure that classified material is controlled and protected, as directed by the IC.	ALL
46	Submit reports in Table 1, Reporting Requirements, as required.	ALL
47	Request additional resources and personnel, as required. · Contact HQ AFMC for additional assistance. · Request specialized teams and resources, as needed. See Table D-1, CBRNE Resources. · Coordinate with local civilian law enforcement agencies for follow-on and supplemental support. · Specialized teams/equipment.	CAT
48	Notify FBI Resident Agency.	AFOSI
49	Brief the EOC on the situation and gather functional area requirements.	EOC Director
50	Brief EOC Director on: · Available personnel and resources. · Problems/concerns.	EOC Staff
51	Evaluate the situation and determine additional personnel/resources needed at the site.	IC/EOC Director
52	Construct Incident Action Plan.	IC/CEF/ JBEEM/ EOD
53	Develop strategies and tactics, techniques and procedures (TTP) for BW sampling, detection and identification based on available resources.	JBEEM
54	Specify what BW agents' local hospitals or other units (joint service, coalition, host nation) can detect and/or identify should they respond to a request for assistance.	
55	Provide transportation to the accident site, as needed.	96 LRS
56	Ensure communications during emergency situations. · Evaluate communications capabilities available to support the incident. · Determine operating frequencies and oversee frequency management during incident operations. · Provide on-site communications support, as necessary. o Request Hammer ACE support, as required. · Conduct liaison with augmentation elements to coordinate procedures for communications. · Establish telephone "HOTLINES"/1-800 numbers as needed for disaster information. · Consider the need to "MINIMIZE" communications systems.	96 CS
57	Ensure procedures in place to obtain urgently needed equipment and supplies as needed.	AFTC/PZ
58	Advise the IC on the status of affected utilities (isolate as necessary) and	96 CEG

	facilities.	
59	Dispatch personnel and conduct operations, as needed: · Provide ministry and advise senior leadership at the CAT. · Provide ministry to the on-scene personnel when safe. · Dispatch a Chaplain to the Medical Facility. · Activate the Chapel Control Center upon notification from CAT. · Place the Death/Notification Team on stand-by. · Prepare chapel facilities for spiritual support, as needed.	96 HC
60	Provide family/individual grief counseling, as needed.	96 HC
61	Ensure protective measures for personnel working at the incident scene.	IC/BEE
62	Determine the status of the incident and assess the threat of terrorists or protesters.	IC/96 SFS
63	Conduct EOD Operations. · Evaluate established evacuation cordon distances and provide recommendations to reduce or expand, if necessary. · Recommend an action plan to the IC. · Conduct the initial Improvised Explosive Device (IED) incident assessment remotely (via robotics) or in appropriate PPE. · Formulate a detailed plan to identify contents, neutralize device and/or stabilize the site. · Perform RSP on IED or triggering devices. · Ensure that the site is clear of secondary or additional devices. · Conduct detection activities as capability allows.	EOD
64	Review BW attack/incident decision tools; ensure explosive safety issues are addressed.	
65	Gather information on the event and site. · Conduct a reconnaissance of the site. o Use vehicles and radios in reconnaissance if they do not present an electro-explosive hazard. · Consider taking digital and still photographs and videos of the entire area. · Conduct interviews with people who observed the event. **NOTE**: Don't transmit classified or sensitive information on non-secure communication devices (i.e., radios and cellular phones).	96 CEF/ JBEEM/ 96 SFS/ EOD
66	Use detection assets to make preliminary identification of suspect agents. **NOTE**: False positive indications are decreased by using multiple and/or different detection assets.	CEF/ JBEEM EOD
67	Survey, locate and define the general boundaries of the contaminated area ensuring hazards are identified and do not extend outside the cordon. **Airborne hazard:**	

	· Consider placing automatic detection assets at key locations around the site: o Downwind side of the cordon taking into account normal wind direction shifts. o Entry Control Point. o ICP. **NOTE**: The radiation plume boundary is defined as 5 times the background level (*Federal Radiological Monitoring and Assessment Center*). · Advise the IC on needed cordon adjustments. **Surface contamination:** · Identify hotspots of contamination (such as what happens when certain radioisotopes break into high-intensity fragments instead of aerosolize). · Identify outside edges of contamination using detection assets. · Place markers around this area warning personnel of contamination. · **NOTE**: Survey operations may have to be tailored due to the type and amount of detection assets available.	JBEEM
68	Brief the 96 TW/CC of the preliminary findings.	EOC
69	Provide weather data to CEX for hazard plotting.	96 WS
70	Conduct hazard plotting.	96 CEX
71	Set up weather monitoring device as close to the site as possible to assist in hazard plotting.	96 WS 96 CEX
72	Redefine the initial toxic corridor/downwind hazard area, established by the Fire Department.	JBEEM
73	Continually reassess the cordon size and locations of the ECP based on weather conditions and recovery operations.	IC
74	Order a sample collection for the support of intelligence and operational requirements. When suspicious events occur, the use of CBRNE agents must be verified. Evidence must be scientifically valid and any samples must have a legal chain of custody from the point of collection to presentation to a laboratory for analysis. · Sample Evacuation processing includes collection, handling, transferring, chain-of-custody and administrative procedures. · After laboratory analysis of the sample, medical, CBRNE and intelligence personnel analyze the data to support multiple requirements. · Decisions to detect-to-protect and/or detect-to-treat can be directly impacted by analysis results from the sampling process.	IC

	Sampling provides the following: · Verification that an attack has occurred. · Identification of agents used. · Delivery systems and their nation of origin. · Determination of the level of technology involved. · Determine therapy for exposed personnel. · Estimate number and type of casualties to expect. · Determine time period before casualties should be expected. · Identification of areas and surfaces that require decontamination. · Determination of the handling and disposal procedures for expendable items.	
75	Administer or issue medicine along with instructions, as needed. · Pretreatment drugs. · Prophylaxis medication. · Antidotes. · Provide appropriate medical follow-up for personnel using these substances.	96 MDG
76	Activate prophylaxis distribution/vaccine centers as allowed by ROM declaration.	96 MDG
77	Provide external security for prophylaxis distribution/vaccine centers.	96 SFS
78	Implement procedures for a suspected chemical, biological or radiological event, as needed. · Gather patient information and recommend actions to control the spread of infection to others. · Initiate personnel tracking and hazard assessment based on presumptive indications. · Begin epidemiology investigation IAW the MCRP.	96 MDG PH BEE
79	Identify or estimate the population at risk.	PHEO
80	Collect samples as needed to confirm diagnosis (Clinical & environmental).	96 MDG
81	Inform the MTF Commander, providers, the PHEO and RSRH of the incidence, prevalence, modes of transmission and recommended control measures for the disease.	PH
82	Advise the 96 TW/CC on the medical aspects of declaring a Public Health Emergency and appropriate disease containment.	PHEO
83	Provide legal advice to the 96 TW/CC concerning the declaring of a public health emergency.	96 JA
84	Provide legal advice to the 96 TW/CC concerning establishing Restriction Of Movement (ROM) measures.	
85	Provide legal advice to the 96 TW/CC concerning the vaccination and prophylaxis of military and non-military members.	
86	Provide legal advice to the 96 TW/CC concerning the Rules of Engagement (ROE) for enforcing ROM.	

87	Declare a public health emergency for the installation IAW AFI 10-2519, *Public Health Emergencies and Incidents of Public Health Concern.*	96 TW/CC
88	Activate and execute support agreements as stated in the agreements to respond to events indicating a disease outbreak. Installation leadership will integrate with local, state, federal authorities.	EOC
89	Develop a ROM plan appropriate for the disease IAW principles detailed in AFI 10-2519.	PHEO/EOC
90	Assess operational impacts due to loss of personnel affected by ROM.	EOC
91	Assess impact of international quarantine protocols affecting ROM.	
92	Present ROM plan to CC for approval.	PHEO/EOC
93	Recommend ROE for enforcing ROM.	EOC
94	Issue ROE to Security Forces.	96 TW/CC
95	Establish ROM.	
96	Activate pre-designated ROM buildings.	EOC
97	Notify personnel affected by ROM IAW standards set forth in AFI 10-2519.	PHEO 96 JA
98	Arrange for transport of non-ambulatory personnel to ROM facilities, as needed.	EOC
99	Identify disease appropriate infection control procedures and IPP/PPE requirements for ROM facilities.	PHEO BEE
100	Determine need to direct return of out-bound aircraft as appropriate following disease outbreak.	CAT EOC
101	Establish a quarantine or ROM upon HQ AFMC direction and/or during outbreaks of infectious disease if identification and isolation of infectious cases is difficult. · Refer to EAFB 10-2608, DCP. · Refer to DODD 6200.3, *Emergency Health Powers on Military Installations.*	96 TW/CC PHEO
102	Adjust generic feeding plan to fit specific situation and provide food and water supplies for personnel affected by ROM actions. Users will be required to pay for meals and water. FSS will provide bottled water as part of purchased meals.	96 FSS
103	Provide medical supplies required by personnel affected by ROM actions.	96 MDG
104	Locate and acquire additional medical supplies, as needed.	
105	Provide laundry service for personnel affected by ROM actions if available.	96 FSS
106	Provide contaminated trash removal for ROM facilities.	96 CEG
107	Enforce ROM for entire installation, focusing on quarantine/isolation facilities.	96 SFS
108	Increase pest control efforts to control potential vectors following a biological trigger event.	796 CES
109	Provide information on vector surveillance.	96 CES

110	Triage, treat and manage disease casualties.	96 MDG
111	Coordinate handling of deceased personnel. · Perform mortuary services. · Set up a temporary morgue, as needed. · Contact Okaloosa County Coroner for release and approval to remove remains of AF personnel. · Contact Armed Forces Medical Examiner System (AFMES). · Coordinate with medical personnel or AF identification team, if required, for help in identifying remains. · MDG coordinate handling of contaminated remains. · Notify casualty reporting officer of names of identified fatalities.	96 FSS
112	Implement Public Affairs procedures. · Establish a news media center, as needed. · Coordinate still photos and video for release to news media. · Coordinate with other Federal public affairs representatives (i.e., FBI, FEMA). · Report the facts to the public concerning the CBRNE incident/attack, the government investigation, apprehension of terrorists, recovery operations and other public interest stories, as appropriate. · Provide accurate and timely information to the media to safeguard public safety and avoid misinformation. This may preclude "invented" stories, rumors and supposed "experts" testimony. · Establish regularly scheduled briefings. Explain any variation to the schedule. · Interviews with media will be accomplished by Public Affairs or select subject matter experts.	96 PA
113	Using Public Affairs and Medical Subject Matter Experts, establish a communication platform via website and social media to provide current information to installation personnel. Topics covered should be personal hygiene, healthy practices, protective actions, recognition of disease symptoms and expected installation impacts.	EOC
114	Publicize information on identified agents/materials.	96 PA 96 MDG PHEO
115	Coordinate with PA on all news releases.	ALL
116	Coordinate and provide intelligence information and data gathering support to the 96 TW/CC.	AFLCMC IN
117	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
118	Assist with coordination among the IC, EOC and other civil or military authorities involved in the response.	JBEEM
119	Provide medical support for responders and accident investigation teams.	96 MDG

120	Control safe routes. Provide escorts for delivery of supplies and for ambulance traffic to and from the affected area and to designated airfields for air evacuation.	96 SFS
121	Process fatalities IAW local agreements and AFI 34-501, *Mortuary Affairs Program.* · EM personnel will provide technical assistance and equipment to Mortuary Affairs personnel, as necessary.	96 FSS
122	Notify next-of-kin.	
123	Arrange/coordinate feeding and lodging of all incoming response forces. If installation lodging is to be utilized, room charges apply. Users will pay for meals and room charges.	
124	Submit reports in Table 1, Reporting Requirements, as required.	ALL
125	Conduct decontamination operations. · Reduce or prevent exposure, cross-contamination or recontamination of personnel by removing contamination from personnel, facilities and equipment. · Brief personnel on health hazards and protective measures and monitor exposures. · Monitor the effectiveness of personnel decontamination. · Control contaminated runoff and properly dispose of contaminated waste. · Advise mortuary affairs on occupational and environmental concerns regarding contaminated human remains.	CEF/ 96 CEG/ 96 LRS/ 96 MXG JBEEM
126	Inform IC of environmental vulnerabilities such as surface and groundwater, flora and fauna and infrastructure.	96 CEIEC
127	Advise 96 TW/CC and 96 CEG/CC on legal/jurisdictional issues with local, Florida and Federal agencies and private organizations.	96 JA
128	Provide legal assistance for families, claims, victims and witnesses, as appropriate.	
129	Coordinate on pronouncement of death procedures and managing remains of deceased patients at the medical treatment facility or facilities.	96 MDG 96 FSS 96 HC
130	Provide a focal point within the organization to monitor unit resources and mission capability and coordinate activities during the incident.	UCCs
131	Evaluate and report damage, casualties and mission capability.	
132	Locate and arrange to interview witnesses.	96 SFS AFOSI
133	Serve as the senior representative until recovery operations are complete or until relieved by a higher authority or responsible agency.	IC

134	Control the site. · Continue to ensure all nonessential personnel have been evacuated from the incident site. · Do not allow any person or groups to reenter the area until the investigating authority releases the site.	96 SFS
135	Report all damage to the EOC.	UCCs/ 96 CEG
136	Analyze initial and detailed damage assessments.	CAT/EOC/ IC/ 96 CEG
137	Create a recovery plan based on priorities established by the 96 TW/CC. The recovery plan should include: · Medical, firefighting, security and logistics support. · Support/Recovery Team identification. · Procedures to document and report resource expenditures. · Contamination control. · Environmental actions to prevent pollution and restore the area. · Safing and removing explosives and hazardous materials. · Personnel protective equipment, post-traumatic stress, blood-borne pathogen exposure, medical screening and bioassay requirements and procedures for all victims and responders. · Preparing property damage and personal injury estimates and contacting those people who suffered injury or property damage. · Public affairs activities. · Liaison with military, local, State and Federal investigators.	JTTOC
138	Determine when disease cycle has been broken.	PHEO
139	Recommend termination of ROM.	PHEO
140	Terminate ROM.	96 TW/CC
141	Assess manpower and report shortfalls to EOC/CAT.	UCCs
142	Discuss mission impact of manpower shortfalls with HQ AFMC.	CP/CAT
143	Approve and direct implementation of the recovery plan.	96 TW/CC
144	Coordinate safety actions and support the IC/EOC during recovery operations.	96 SE
145	Ensure personnel entering the site are informed of the hazards present and equipped with proper personnel protection equipment, to include dosimeters for radiological incidents. Ensure personnel are aware of radiological OEGs and have established "turn back" times/conditions (pre-set dose and dose rate alarms preferred).	IC
146	Assess short-term and long-term health impacts to responders and other exposed personnel resulting from CBRNE use. · Provide input to IC on exposure precautions for workers and the general public. · Document agent exposure in medical records.	96 MDG BEE

147	Consider/implement decontamination options. · Prioritize decontamination efforts. Decontaminate items based upon mission, time and extent of contamination, equipment status, decontamination assets available and personnel expertise. · Implement stringent contamination avoidance procedures to limit the spread of contamination. · Consider options such as aging, isolation, and chemical breakdown of material.	96 CEF 96 CEIEC 96 LRS 96 OG 96 MXG JBEEM
148	Initiate procedures for decontamination, environmental monitoring and long-term site cleanup.	96 CEIEC
149	Coordinate or assist efforts with regulators on contamination control/ restoration. (e.g., EPA, OSHA and NRC)	BEE 96 CEIEC
150	Assist the IC in environmental issues.	96 CEIEC
151	Recall vehicles, equipment & personnel required in clean-up operations.	96 LRS
152	Participate in Disaster Mental Health Interventions for affected populace.	96 MDG 96 HC
153	Collect and compile expenses.	UCCs
154	Process reimbursement costs ensuring that installation personnel are aware of and use established Emergency/Special Project (ESP) code.	96 CPTS
155	Submit reimbursement request for support provided by Eglin AFB IAW AFI 65-601, Volume 2, *Budget Management for Operations.*	96 CPTS
156	Accomplish actions before ending major accident recovery operations involving Air Force resources. · Obtain proof of existence or nonexistence of contamination. · Identify, account for or recover all classified and hazardous materials. · Ensure military and local, Florida and Federal agencies are able to complete their duties. · Remove wreckage and restore the site in coordination with accident investigation officials and if necessary, civil authorities.	IC
157	Supervise the evacuation of equipment from the incident area.	96 LRS
158	Establish a contamination control capability for transportation assets. This includes being able to identify contamination, mark contaminated areas as appropriate and conduct decontamination to support critical operations within their capabilities.	96 LRS
159	Coordinate logistical requirements for specialized teams, NRF Emergency Support Functions and additional forces.	96 LRS
160	Submit reports in Table 1, Reporting Requirements, as required.	ALL
161	Review/refine plans resulting from lessons learned/after action reports.	ALL

APPENDIX 2 TO ANNEX D TO EAFB 10-2 IEMP
SUSPICIOUS ITEMS WITH SUSPECTED CBRNE CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

SUSPICIOUS ITEMS WITH SUSPECTED CBRNE		
ITEM	**TASK/ACTION**	**OPR**
1.	Contact 911 if there is a suspicious object or substance that could possibly be terrorist related.	ALL
2.	Dispatch an SF patrol and Fire vehicle to the scene to determine whether to continue with the response. • The senior fire officer is the designated Incident Commander (IC) and has operational control of the overall emergency response. • EOD will render safe all packages of explosives, booby traps and/or initiators. • Once rendered safe of explosives (booby traps or initiators), the package will be treated as a HAZMAT Response. Use radiation detectors/dosimeters to rule out the presence of gamma emitters as soon as possible. • Isolate and interview personnel who found the package/substance. • Check with anybody who may own the package/substance. • Find out when the package/substance was first noticed. • Gather all details of the package/substance. o Size/Shape. o Liquid/powder. o Markings. o Location. • Take digital photographs when safe to do so.	96 SFS 96 CEF EOD
3.	Determine the appropriate response and recommend actions to the IC.	96 SFS 96 CEF
4.	Decide what actions to take. **SUSPICIOUS PACKAGE:** • Requires an EOD and JBEEM response. • Suspicious packages (Improvised Explosive Device) may include: o Unclaimed or unattended luggage, packages, boxes or bags without tags or other identification. A package, letter or parcel that have one or more of the following: excessive postage, handwritten or poorly typed addresses, incorrect titles, titles but no names, improper spelling of common words, oily stains, discolorations or odor, no return address, excessive weight, lopsided or uneven envelope, protruding wires, visual distractions, ticking sound, marked with restrictions such as "personal" or	

	"confidential" or shows a city or state in the postmark that does not match the return address. • Advise the caller as follows: Do not touch, disturb or move the item or substance. **SUSPICIOUS SUBSTANCE:** • Requires a JBEEM response. • Suspicious substances may include: o A package, letter or parcel that when opened contains an unknown powder, liquid or other substance and the use of explosives, booby traps and/or initiators has been ruled out. o Spilled powders or liquids or powders and liquids found in a container that cannot contain explosives, booby traps and/or initiators. o Unknown substances that do not contain explosives, booby traps and/or initiators. • Direct the caller to perform the following actions: o Cover the object, wash their hands with soap and water immediately and secure the area. If others have also touched the object they should also wash their hands immediately. o Secure doors and do not allow anyone to enter. o Shut down ventilation systems, if possible. o Have all personnel evacuate the immediate area. Have them specify where they will reassemble. o List of all personnel in the area at the time of the event and those who might have been in close proximity to the object. o See flowchart in Figure D-2, Overview for a Suspicious Package/Substance Response, Annex Z. o Be calm -- don't panic or call others to see package or letter. o Notify people in the area and within the affected building to evacuate. • See flowchart in Figure D-3, Overview for a Bomb Threat Response, Annex Z. • Decide what actions to take	IC
5.	Activate the primary/secondary crash nets, as needed.	ATC/AM
6.	Notify the 96 TW/CC and 96 CEG/CC.	CP
7.	Closest command post with knowledge of the incident submit OPREPs as required by AFMAN 10-206.	CP
8.	Ensure no radio transmissions are made within 25 feet of a suspected explosive device for handheld radios and/or cellular phones and 100 feet for vehicle radios (unless a greater distance is needed per AFI 91-201).	ALL
9.	Direct the evacuation of buildings within the immediate area.	IC

10.	**SITUATION:** Bomb Threat Improvised Explosive Device (IED): IED < 2 cubic feet IED > 2 cubic feet or vehicle	**SIZE OF CORDON:** 500 feet 500 feet 1000 feet	IC
Suspicious Packages			
11.	Follow suspect package procedures until the item is declared safe.		EOD
12.	Turn the response over to the HAZMAT Response Team if the item is determined to be free of explosives, booby traps and/or initiators but exhibits characteristics of an unknown substance.		EOD
13.	If the package is rendered safe, contains explosives and no evidence of CBRNE materials are present, protect the object as evidence and contact AFOSI.		96 SFS
14.	Conduct notification and coordination with the FBI if required.		AFOSI
Suspicious Substances			
15.	If no injuries or reactions are reported, consider dispatching an initial assessment team as a non-emergency response (without lights or sirens). Based on the assessment the team may: • Recommend terminating the incident. • Initiate further response operations.		96 SFS 96 CEF IC
16.	If injuries occurred or physical reactions (e.g., difficulty breathing, coughing, nausea, and burning eyes) to the substance are reported, follow local procedures for emergency response to a hazardous material release. The IC manages the incident until the area is declared safe.		96 SFS 96 CEF
17.	Dispatch a security patrol to establish an ECP, cordon off the area and conduct interviews at the reassembly point.		96 SFS
18.	Determine if a credible threat exists based on investigative questioning by 96 SFS, CEF and/or OSI. If there is evidence of terrorist involvement, notify the CP or 96 TW/CC. • Notify Airfield Management to activate the secondary crash net to inform all agencies of events.		IC 96 CEG
19.	Perform field tests checking for radiological material, biological or chemical agents.		96 CEF JBEEM
20.	Brief 96 TW/CC on the incident, evidence found and submit recommendations on findings whether there is or is not a CBRNE incident.		IC
21.	Determine whether to initiate Appendix 1 to Annex D, Terrorist Use of CBRNE Response Checklist.		96 TW/CC
22.	Obtain samples for further analysis ensuring they are controlled as evidence.		96 CEF JBEEM 96 MDG
23.	Establish a decontamination capability.		96 CEF
24.	If no hazardous materials appear to be present, fire fighters may withdraw and the response will continue as a law enforcement investigation.		96 CEF 96 SFS

APPENDIX 3 TO ANNEX D TO EAFB 10-2 IEMP
CBRNE FORCE PROTECTION CONDITIONS AND MEASURES

These additional measures are to be used in force protection conditions (FPCON) to help prepare for and counter Chemical, Biological, Radiological, Nuclear and High-Yield Explosives (CBRNE) threats. They are only to be considered if a CBRNE threat exists.

CBRNE FPCON ALPHA

Measure **CBRNE ALPHA 1**. Establish/review utilization plan for all hand-held CBRNE detectors (deployment and home station), if available, that will be used at home station during periods of increased threat for terrorist use of CBRNE materials.

Measure **CBRNE ALPHA 2**. Review shelter-in-place and evacuation plans for all facilities on base or controlled by USAF personnel/units.

Measure **CBRNE ALPHA 3**. If updates from local medical care providers are not automatically received through the medical surveillance system, contact local hospitals and establish lines of communication for notification of the installation in the event of significant increase in antibiotic use or people exhibiting symptoms of exposure to CBRNE materials.

Measure **CBRNE ALPHA 4**. Brief installation leadership if manning or capabilities do not allow for specialized teams as outlined in AFI 10-2501.

Measure **CBRNE ALPHA 5**. AFOSI will coordinate CBRNE threat intelligence with local law enforcement agencies, to include the local FBI field office.

Measure **CBRNE ALPHA 6.** Develop and exercise (TTX or FTX) a Detection Plan using available detectors and dosimeters.

CBRNE FPCON BRAVO

Measure **CBRNE BRAVO 1**. Review JSIVA, Service and local vulnerability assessment reports. Identify specific CBRNE-related operational shortfalls in planning documents and brief to installation leadership.

Measure **CBRNE BRAVO 2**. Have intelligence and OSI personnel provide a CBRNE threat briefing to the Threat Working Group (TWG) or equivalent. Include specific information such as:

- Probability of CBRNE material use against installation or local community.
- Type(s) and amounts of CBRNE materials that may be used.
- CBRNE materials release mechanism(s) (i.e., explosive release of toxic industrial material from tanker truck, use of biological materials through pesticide sprayer).
- Probable targets and intent of CBRNE release.

Measure **CBRNE BRAVO 3**. Verify the interoperability of CBRNE response procedures with local community resources. In addition, coordinate CBRNE response capabilities with local responders.

Measure **CBRNE BRAVO 4**. Establish/review process for getting key installation personnel (leadership, First Responders, Emergency Responders and specialized team members) and mutual aid resources onto the installation (in order to assist in the response/recovery effort for a CBRNE incident) when the base is locked down as part of the FPCON Delta measures.

Measure **CBRNE BRAVO 5**. Establish/review procedures for reporting CBRNE incidents to higher headquarters and the local community. Include:

- Listing of the reports that are required to be sent to higher headquarters and the timeline associated with each report.
- Release authority for the reports that are being sent to higher headquarters.
- Who will submit each report, to include supporting organizations that will provide supplemental information to the designated installation point of contact?
- Release authority/criteria for contacting the local community in the event of a CBRNE incident on the installation. Include who has the authority to inform civil POCs of a CBRNE incident.

Measure **CBRNE BRAVO 6**. Establish/review process for setting up a Joint Information Center (JIC) in the aftermath of a terrorist incident involving CBRNE materials. This includes the process for determining where the JIC will be located (on base, off base) and the accompanying operational procedures considering the base will probably be locked down as part of the FPCON Delta measures.

Measure **CBRNE BRAVO 7**. Review mass prophylaxis plan for exposure to biological agents. Review includes verifying/updating personnel presently vaccinated for known biological agent threats, the availability of vaccine and prophylaxis and the plan for distribution if directed.

Measure **CBRNE BRAVO 8**. Ensure the information in the CRP and MCRP has been coordinated with off-base medical treatment facilities to ensure procedures have been developed for these facilities to handle contaminated casualties.

Measure **CBRNE BRAVO 9**. Review procedures for re-supply of critical CBRNE response supplies/equipment and establish who can provide the re-supply and the time frame.

Measure **CBRNE BRAVO 10**. Secure and inspect base water supply and food storage facilities.

Measure **CBRNE BRAVO 11**. Expand biological Public Health Awareness Plan to emphasize preventive (good hygiene) and biological attack recognition activities.
Measure **CBRNE BRAVO 12**. As applicable assess CBRNE detection and identification capabilities. Verify stockpiles and review detection arrays and collection schedules for

maximum effect.

Measure **CBRNE BRAVO 13**. Review CRP and MCRP to ensure consideration is given to mass issuance of CBRNE pre-treatment medications, nerve agent antidotes, biological prophylaxis and/or antibiotics.

Measure **CBRNE BRAVO 14**. Inventory CBRNE detection and protection equipment as directed or threat increases.

Measure **CBRNE BRAVO 15**. As appropriate to the threat or when directed, develop a plan to issue CBRNE IPE to First and Emergency Responders.

Measure **CBRNE BRAVO 16**. Review MCRP to ensure consideration is given to mass issuance of CBRNE pre-treatment medications, nerve agent antidotes, biological prophylaxis and/or antibiotics.

Measure **CBRNE BRAVO 17**. Ensure the medical surveillance system and MCRP includes triggers/criteria for personnel exposure to CBRNE materials.

Measure **CBRNE BRAVO 18**. As appropriate to the threat or when directed develop a plan to issue CBRNE IPE to First and Emergency Responders.

CBRNE FPCON CHARLIE

Measure **CBRNE CHARLIE 1**. If a CBRNE threat exists ensure all shortages of CBRNE equipment and the potential impact is briefed to installation commander.

Measure **CBRNE CHARLIE 2**. If a CBRNE threat exists, verify operation and deploy and begin using all available CBRNE detectors and dosimeters (deployment and home station resources) as outlined in Detection Plan.

Measure **CBRNE CHARLIE 3**. If a CBRNE threat exists, consider routing all traffic through installation access gates that have radiation portal monitors or other CBRNE detectors and dosimeters installed/available.

Measure **CBRNE CHARLIE 4.** If a CBRNE threat exists, consider the use of hand-held detectors and dosimeters to check for the presence of radioactive materials and chemical hazards at the installation access gates.

Measure **CBRNE CHARLIE 5**. If a potential biological threat exists, consider the usefulness and feasibility of increasing the sampling rate of available biological detection systems.

Measure **CBRNE CHARLIE 6**. Consider placing mobile biological detection systems (if available) such as Dry Filter Units (DFU) at key installation facilities (command and control, critical mission).

Measure **CBRNE CHARLIE 7**. Ensure all personnel with IPE are briefed to have it available at all times (work, living quarters and during transit).

Measure **CBRNE CHARLIE 8**. Consider implementing MCRP for mass issuance of CBRNE pre-treatment medications, nerve agent antidotes, biological prophylaxis and/or antibiotics.

Measure **CBRNE CHARLIE 9**. Ensure that all buildings with a collective protection capability are operating properly and that periodic maintenance and inspections are increased based on threat.

Measure **CBRNE CHARLIE 10**. Ensure flow of information between on- and off-base medical treatment facilities participating in the medical surveillance program. Consider initiation of manual collection of data if the automated system has a 24-hour or more delay in providing results.

Measure **CBRNE CHARLIE 11**. If a CBRNE threat exists, consider placing the installation Disaster Response Force into 24-hour operations. If not feasible, consider placing key DRF personnel on standby.

Measure **CBRNE CHARLIE 12**. If a CBRNE threat exists, consider activation of specialized team members and place them on standby.

Measure **CBRNE CHARLIE 13**. Ensure that DRF and, if permissible, local authorities are briefed on potential CBRNE threat.

Measure **CBRNE CHARLIE 14**. If the Homeland Security Advisory System is Orange (High) or Red (Severe) determine (through MAJCOM and HQ USAF) if a Principal Federal Official (PFO) has been designated and an Emergency Response Team (ERT) is in the process of establishing a Joint Field Office (JFO). As appropriate, make contact and begin coordination for influx of forces and equipment as necessary.

Measure **CBRNE CHARLIE 15**. Accomplish CBRNE contamination avoidance measures to the maximum extent possible IAW IEMP 10-2 and CE CRP.

Measure **CBRNE CHARLIE 16**. Distribute instructions for individual response to CBRNE incidents to the base populace through existing channels. Have facility managers ensure facility staff understand emergency actions to take in the event of a CBRNE attack.

Measure **CBRNE CHARLIE 17**. Validate that all CBRNE warning, notification and reporting channels are operational and that all parties know what announcements will be made and what reporting protocol (for terrorist use of CBRNE materials) will be followed.

Measure **CBRNE CHARLIE 18**. Increase medical surveillance activities and consider beginning vector surveillance.

Measure **CBRNE CHARLIE 19**. Increase monitoring of food and water sources, both on and off base.

Measure **CBRNE CHARLIE 20**. If a CBRNE threat exists, consider suspending/ closing all non-mission essential group gatherings.

Measure **CBRNE CHARLIE 21**. If a CBRNE threat exists, consider closing dining facilities and issue MREs and/or bottled water.

Measure **CBRNE CHARLIE 22**. If a biological threat exists, consider implementing enhanced disease prevention per the CRP – issuance/use of surgical masks, increased emphasis on hygiene and sectoring medical treatment facility for medical provider protection.

Measure **CBRNE CHARLIE 23**. Ensure that if the installation has Collective Protection facilities, they are operational.

Measure **CBRNE CHARLIE 24**. If there is a credible radiological threat, consider increased AT/FP measures such as conducting random monitoring with radiological detection devices of vehicles at installation access gates that do not possess radiological portal monitors.

Measure **CBRNE CHARLIE 25**. Consider issuance of CBRNE pre-treatment supplies, biological prophylaxis and nerve agent antidotes to the installation population, if credible threat.

CBRNE FPCON DELTA

Measure **CBRNE DELTA 1**. Take appropriate action to finalize/complete all previous CBRNE measures not already accomplished.

Measure **CBRNE DELTA 2**. Initiate enhanced medical surveillance procedures; include triage outside the medical treatment facility.

Measure **CBRNE DELTA 3**. If not already accomplished and a credible threat exists, initiate collective protection.

APPENDIX 4 TO ANNEX D TO EAFB 10-2 IEMP
FACILITY LOCKDOWN ACTIONS/ACTIVE ASSAILANT

1. SITUATION: Hostile personnel may target Eglin AFB or nearby communities. This could include the preplanned, indiscriminate use of conventional methods or lethal tools to create casualties, inflict damage or destruction, create chaos/panic (threatening calls/letters), or otherwise disrupt mission operations. Lockdown is most often referred to with active assailant scenarios, but it may also be applied to other scenarios to include but not limited to bomb threat, CBRNE threat, and armed robbery. The checklist below focuses on active assailant lockdown actions, but emergency mass notification and facility lockdown procedures will apply for all lockdown scenarios.

1.1. LOCKDOWN NOTIFICATION/PROCEDURES: The term lockdown means personnel move quickly to a secured room or location away from the threat. Personnel in the threat area may be alerted to the threat from hearing gunshots, loud voices or mass notification system. Giant Voice will announce "LOCKDOWN, LOCKDOWN, LOCKDOWN, the last known threat area is (Affected Area)." The message will be repeated followed by a 3-5 minute attack siren. Other mass communication to alert personnel of an active assailant incident will be done through AtHoc or email. Personnel must not confuse Lockdown procedures with Shelter-in-Place procedures. Shelter-in-Place procedures are reserved strictly for Hazardous Materials releases. Refer to Tab A to Appendix 1 to Annex A of this plan for Shelter-in-Place actions.

2. ASSUMPTIONS:

2.1. Active assailant replaces active shooter terminology.

2.2. Active assailant attacks could inflict mass casualties with little or no warning and are likely to create a mass casualty environment.

2.3. Active assailant scenarios are incredibly dangerous and difficult because there is no criminal objective involved, such as robbery or hostage taking, other than pure violence.

2.4. Responding Security Forces personnel may not be able to distinguish between friendly and enemy forces when responding on-scene.

2.5. Base populace may not be aware of the situation or cease movement during active assailant attacks, thus making the environment more dynamic for first responders.

3. MISSION: Respond with all necessary resources to mitigate the threat or destruction caused by enemy attacks and to plan, organize, train, and equip to respond to the full spectrum of emerging threats.

4. EXECUTION: Refer to associated checklist in Tab A to Appendix 4 to Annex D of this plan.

TAB A TO APPENDIX 4 TO ANNEX D TO EAFB 10-2 IEMP
ACTIVE ASSAILANT LOCKDOWN CHECKLIST

NOTE: The actions listed below are in approximate order; however, many actions occur simultaneously and some may deviate from sequence. All should be considered.

ACTIVE ASSAILANT LOCKDOWN		
ITEM	**TASK/ACTION**	**OPR**
PREPAREDNESS		
NOTE: This checklist provides only an outline of actions and procedures as required by: EAFB Plan 31-101, *Integrated Defense Plan* (IDP); EAFB Plan 41-106, *Medical Contingency Response Plan* (MCRP); AFI 35-107, *Public Web and Social Communication.*		ADMIN
NOTIFICATION		
1	Notify all response agencies via Primary/Secondary Crash Nets.	ATC/AM
2	96 TW/CC declares FPCON DELTA. *Due to the dynamic nature of the situation, 96 TW/CC has delegated the authority to declare FPCON DELTA during a declared active assailant incident to the 96 SFS/CC.	96 TW/CC
3	Notify 96 TW/CC, 96 CEG/CC, and 96 MSG/CC. Consider activation of Virtual CAT – OPR: CAT Director. Consider activation of Virtual EOC – OPR: EOC Director.	CP CAT Manager
4	Notify base populace by all means available: Giant Voice, Alert, AtHoc, LMR, etc. Giant Voice will repeat LOCKDOWN, LOCKDOWN, LOCKDOWN, the last known threat (Affected Area).	CP
5	Notify base populace of "LOCKDOWN" by social media.	PA
6	Advise taxiing and airborne aircraft of appropriate information and instruct to divert or hold position, as required.	ATC/AM
7	Close the runway and issue NOTAM if directed by the 96 TW/CC.	AM
8	Notify the Federal Aviation Administration (FAA) to restrict airspace, as needed. (IAW DoD 3150.8-M).	AM
9	Notify Crestview SWAT for support.	BDOC
10	Notify Okaloosa County EOC of the situation and recommend closure or evacuation of civilian areas/functions as needed.	EOC Manager
11	Notify local fire departments of situation.	ECC
12	Closest command post with knowledge of incident submit OPREPs as required by AFMAN 10-206.	CP
13	All Air Force personnel (Military and Civilian) **WILL NOT** post any information on social media that: **1**. Would reveal sensitive movements of first and emergency responders **2**. Would put personnel in harm's way. **3**. Live stream or record sensitive information relating to the response and medical condition of casualties. Ref: AFI 35-107, para 4.4.10.1.1.2.	ALL

Response "LOCKDOWN, LOCKDOWN, LOCKDOWN"		
14	Hear or see the notification via Giant Voice, Alert/AtHoc, Radio, and social media. The proper notification call is: LOCKDOWN, LOCKDOWN, LOCKDOWN	ALL
15	**Lockdown for facilities not within immediate area of the threat:** Close and lock all exterior doors. (**NOTE**: Every building will be responsible to come up with their own procedures to secure their facility). Find an office that has the ability to lock the door that limits observation from outside. Turn off lights/maintain noise discipline. If assailant ends up in your building, follow the escape, barricade, and fight (as a last resort) procedures.	ALL
16	Stay in place until you hear the ALL CLEAR signal issued by recognized authority.	ALL
ESCAPE - BARRICADE - FIGHT		
If assailant ends up in your building, follow the Escape, Barricade and Fight procedures listed below as a last resort.		
17	**Escape from active assailant**: Consider points of egress as escape areas. Use when not directly confronted with assailant. Maintain situational awareness of possible threats. Notify others to escape, but don't wait for approval from others.	ALL
18	**Once in a safe location, inform responding SF of the following**: Location of assailant(s). Number of assailant(s). Physical description of assailant(s). Number and type of weapons. Number of potential victims at the location.	ALL
19	**Barricade yourself from the active assailant:** Close and lock door, while being prepared to fight. Move heavy objects (furniture, desks, and/or appliances) to barricade door. (**NOTE**: if door can't be barricaded, use objects in the room to turn away or delay assailant). Turn off lights/maintain noise discipline. Hide in a place that limits observation from outside the room. If barricade is breached, be prepared to fight the assailant. Communicate with first responders calmly when they make contact with you.	ALL
20	**As a last resort, Fight the assailant:** Secure an improvised weapon (something to strike or throw with). Throw objects at attacker's head (surprise), then close in for an immediate (speed) counterattack (violence of action). Attempt to disarm or direct weapons away from you and others. Seize the initiative (disarm/incapacitate assailant). Discard the weapon. Ensure weapon is removed from the vicinity of the assailant. Communicate with first responders calmly when they make contact with you. Alert them to the location of the assailant.	ALL
21	Stay in place until you hear the ALL CLEAR signal issued by recognized authority.	ALL

22	**Conclusion/Contact with Response Forces:** Remain calm and follow instructions. Empty and raise your hands/spread fingers. Keep hands visible and follow instructions. Avoid making quick movements towards and holding onto first responders. Don't stop to ask first responders for help or questions. Exit in the path the first responders entered.	ALL
RECOVERY		
23	**Execute the following checklist for Recovery operations:** Tab B to Appendix 6 to Annex A, Major Accident Recovery Operations Checklist. Tab C to Appendix 6 to Annex A, Family Assistance Checklist.	ALL
24	Submit reports in Table 1, Annex Z, Reporting Requirements, as required.	ALL

ANNEX Z TO EGLIN AFB IEMP 10-2
OFF-BASE DISTRIBUTION

DISTRIBUTION		
Organization	**Address**	**#**
Florida Emergency Management Agency	2555 Shumard Oak Blvd Tallahassee FL 32311	1
Florida Emergency Management Agency Regional Coordinator, Region 1	4081 E. Olive Rd, Suite A Pensacola FL 32514	
HQ AFMC/CEOO	Wright-Patterson AFB OH 45433	
HQ AFMC/CEX	Wright-Patterson AFB OH 45433	1
Mayor, Crestview	198 North Wilson Crestview FL 32536	
Mayor, Destin	4200 Two Trees Rd Destin FL 32541	
Mayor, Ft. Walton Beach	P.O. Box 4009 Ft. Walton Beach FL 32549	
Mayor, Freeport	P.O. Box 339 Freeport FL 32439	
Mayor, Mary Esther	Christobal Rd, North Mary Esther FL 32569	
Mayor, Niceville	208 North Partin Dr Niceville FL 32578	
Okaloosa County Emergency Management Agency	11th Avenue Shalimar FL 32579	1
Safety Officer Florida Highway Patrol	P.O. Box 17626 Pensacola FL 32522	

Figure 1. Typical Incident Site Setup

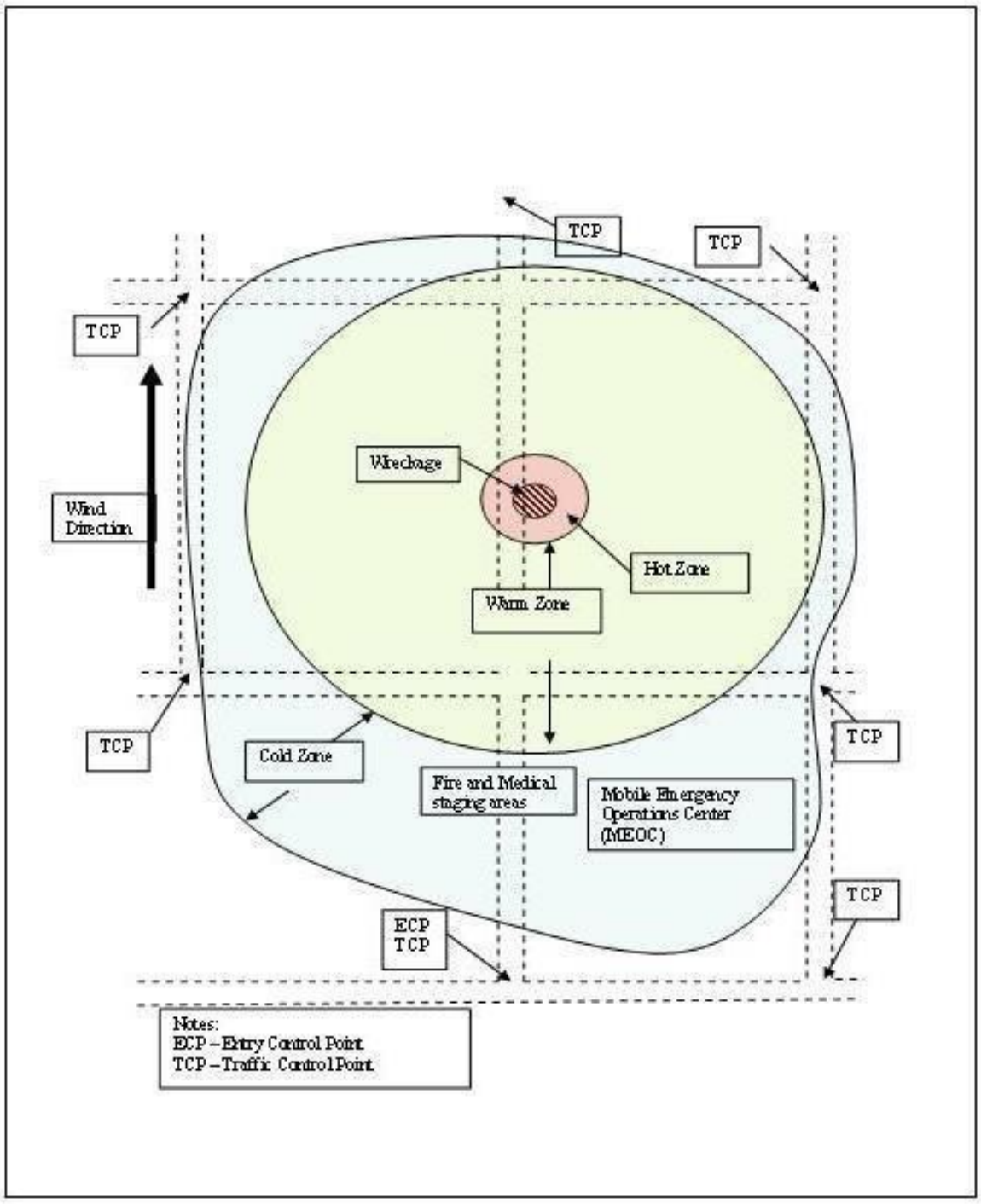


Figure 2. DRF Notification

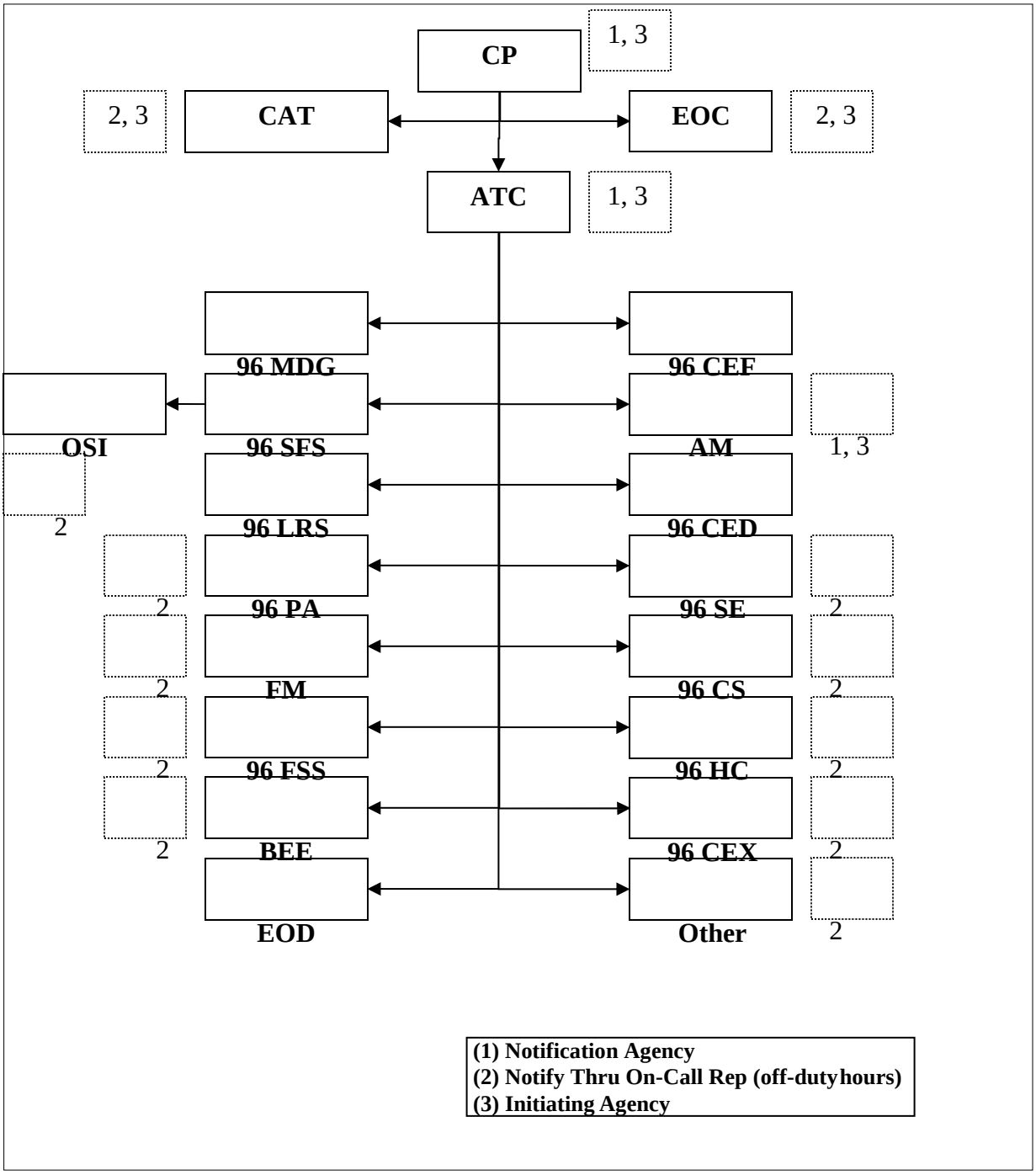


Figure A-1. Nuclear Weapons Accident Response Flowchart

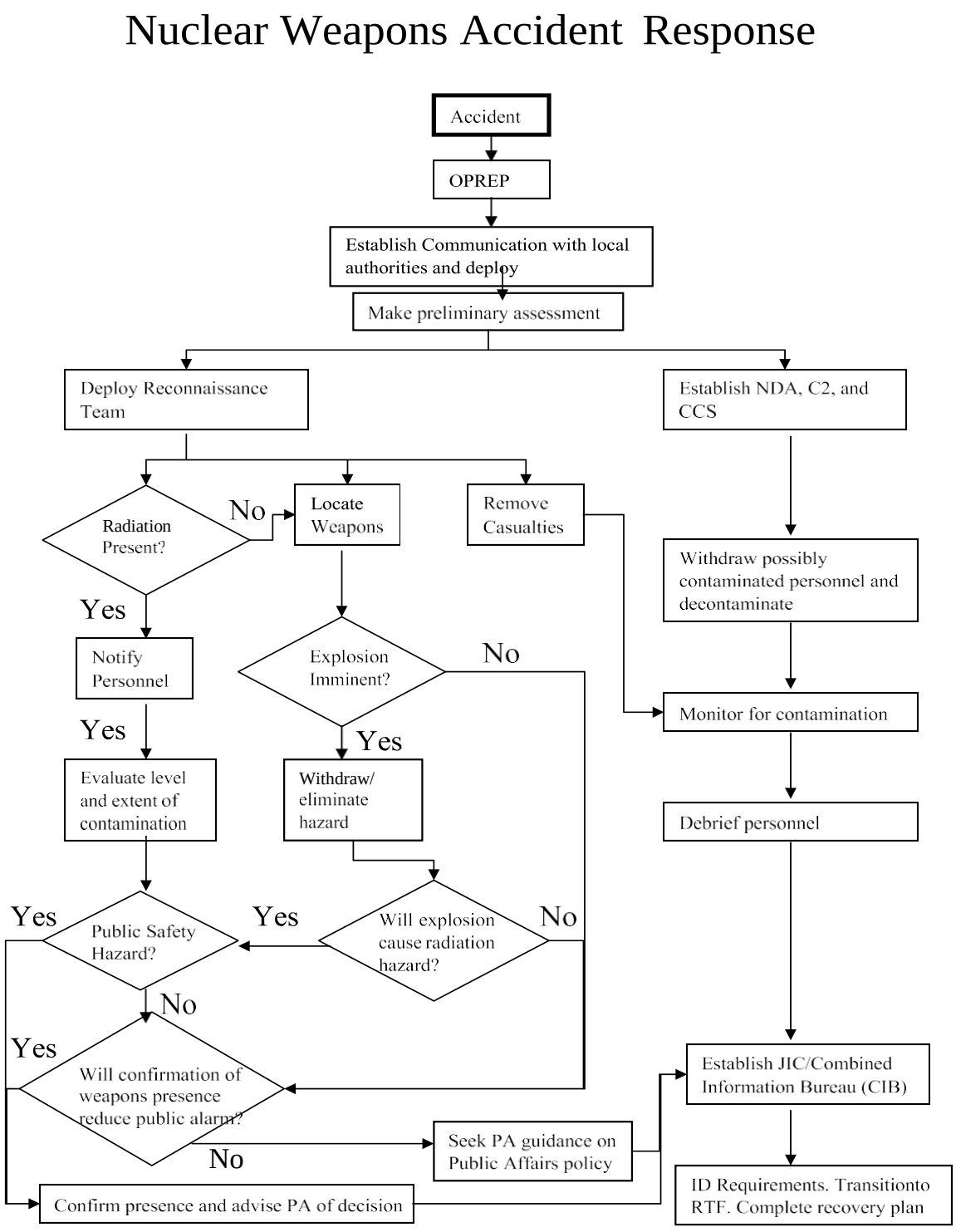


Figure A-2. Response Task Force Command Structure

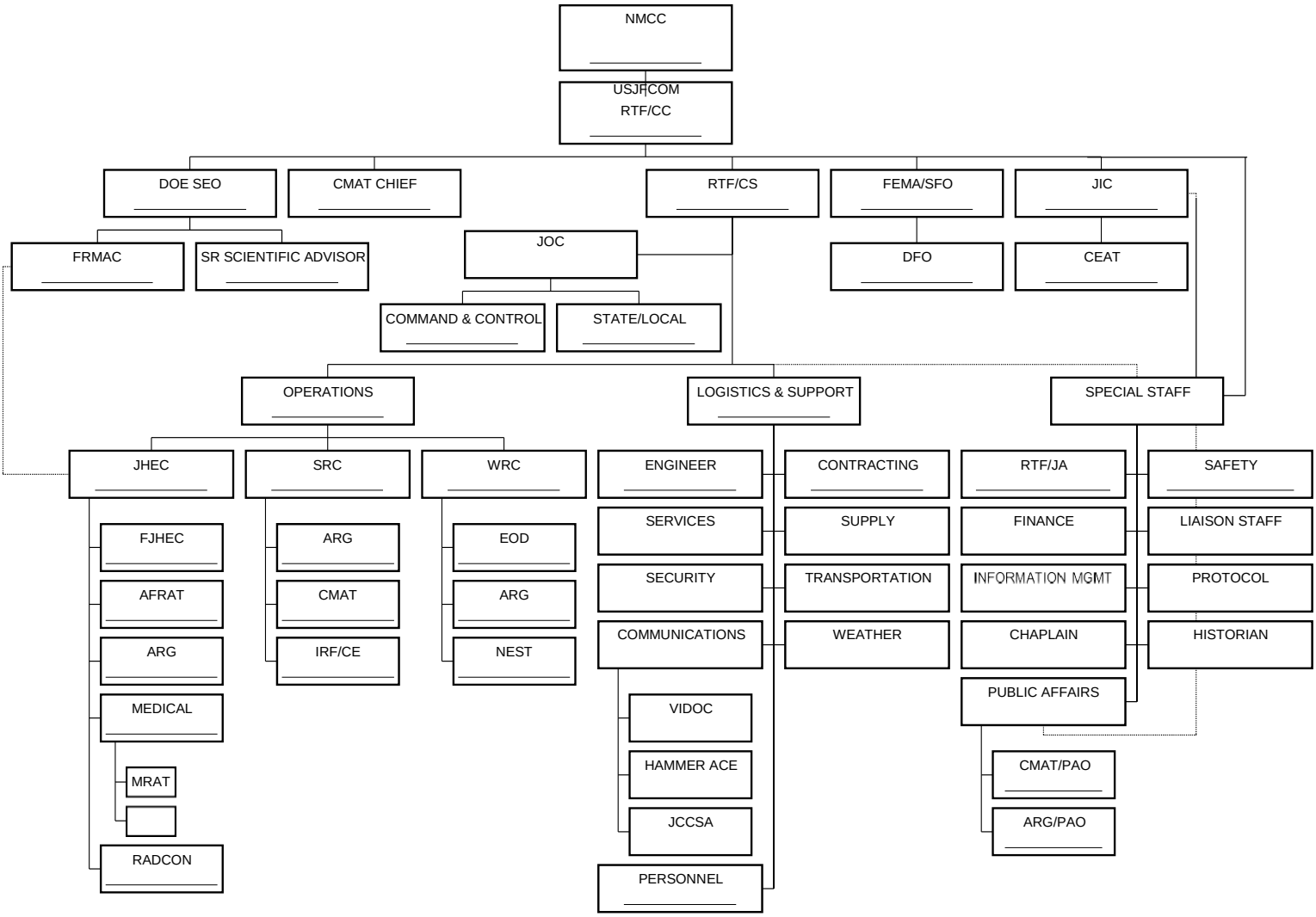


Figure A-3. Nuclear Weapons Accident On-Scene Setup

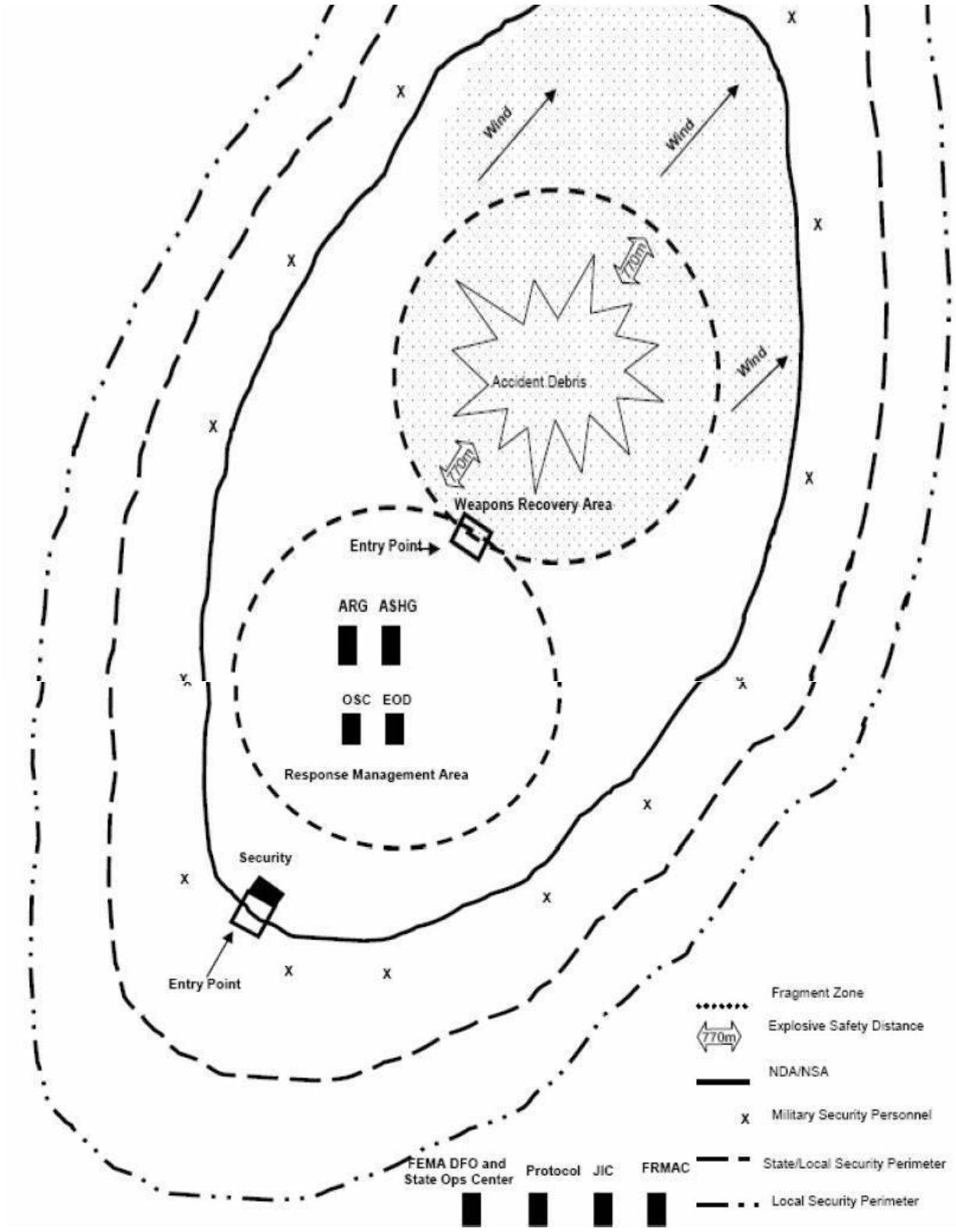


Figure B-1. Decision Tree for Defense Support to Civil Authorities

NOTE: This decision tree is not all inclusive. Specific situations will determine whether support is rendered. Contact AFNSEP for questions on providing DSCA.

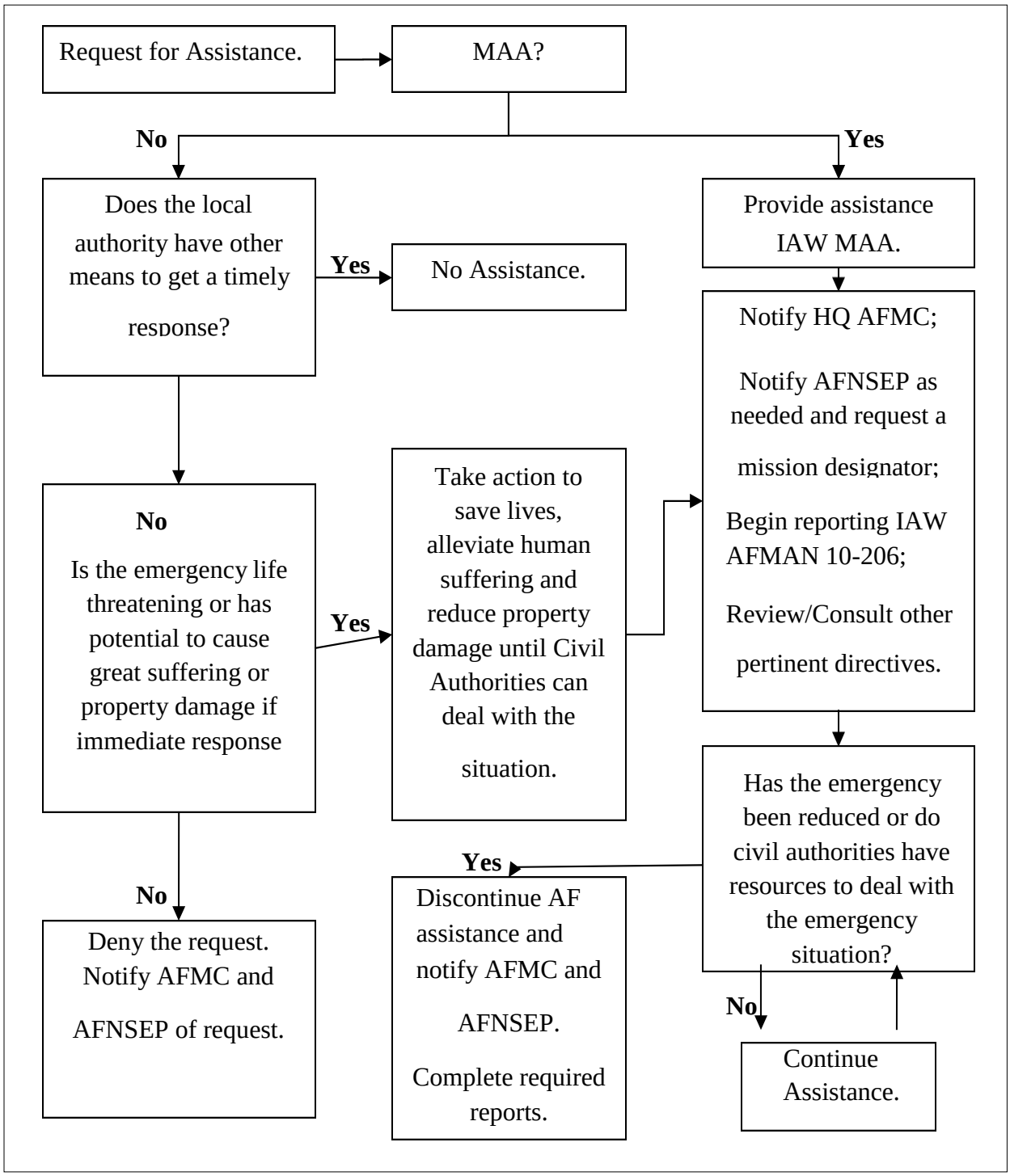


Figure D-1. Overview for Initial HAZMAT/CBRNE Response

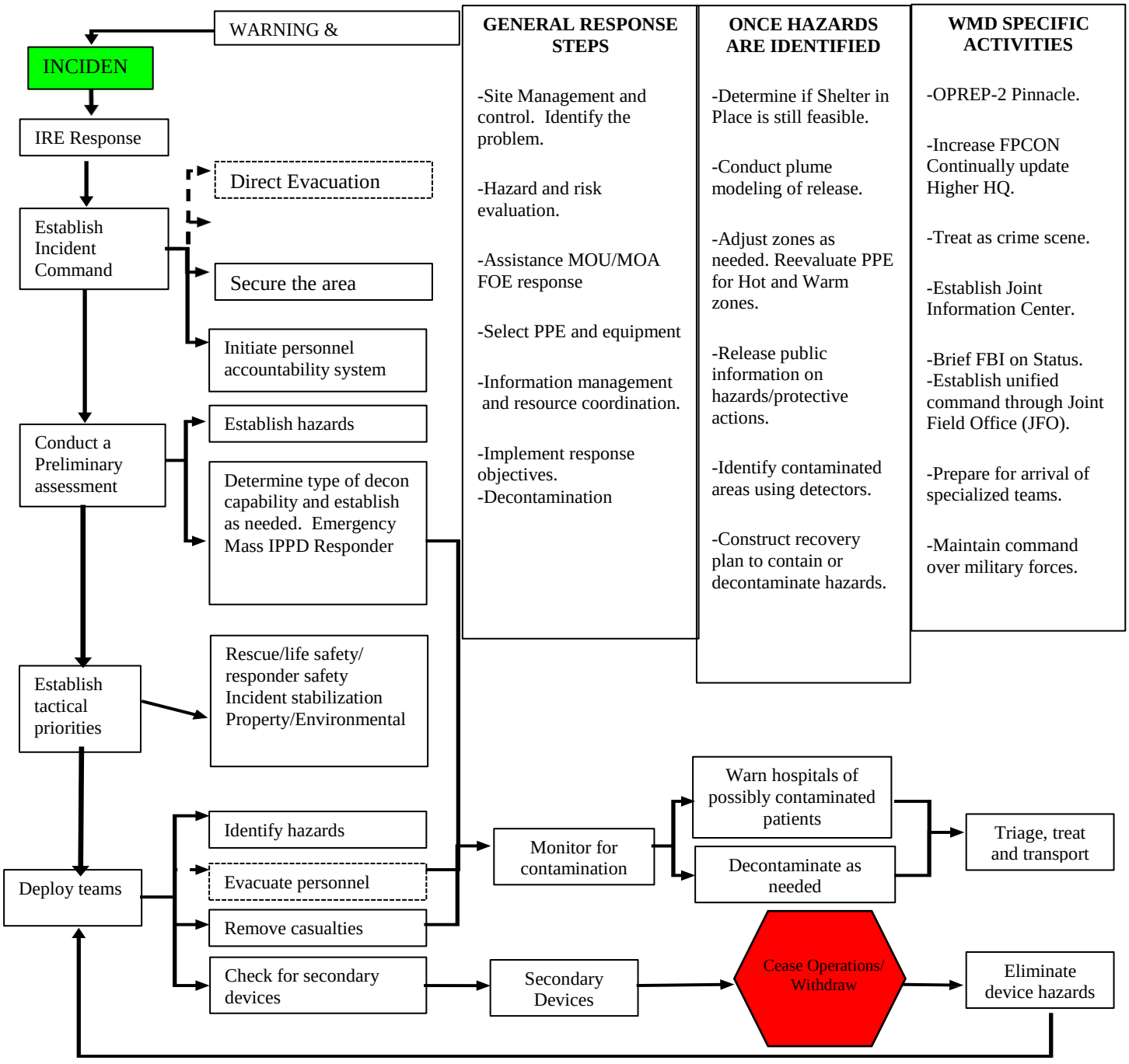


Figure D-2. Overview for a Suspicious Package/Substance Response

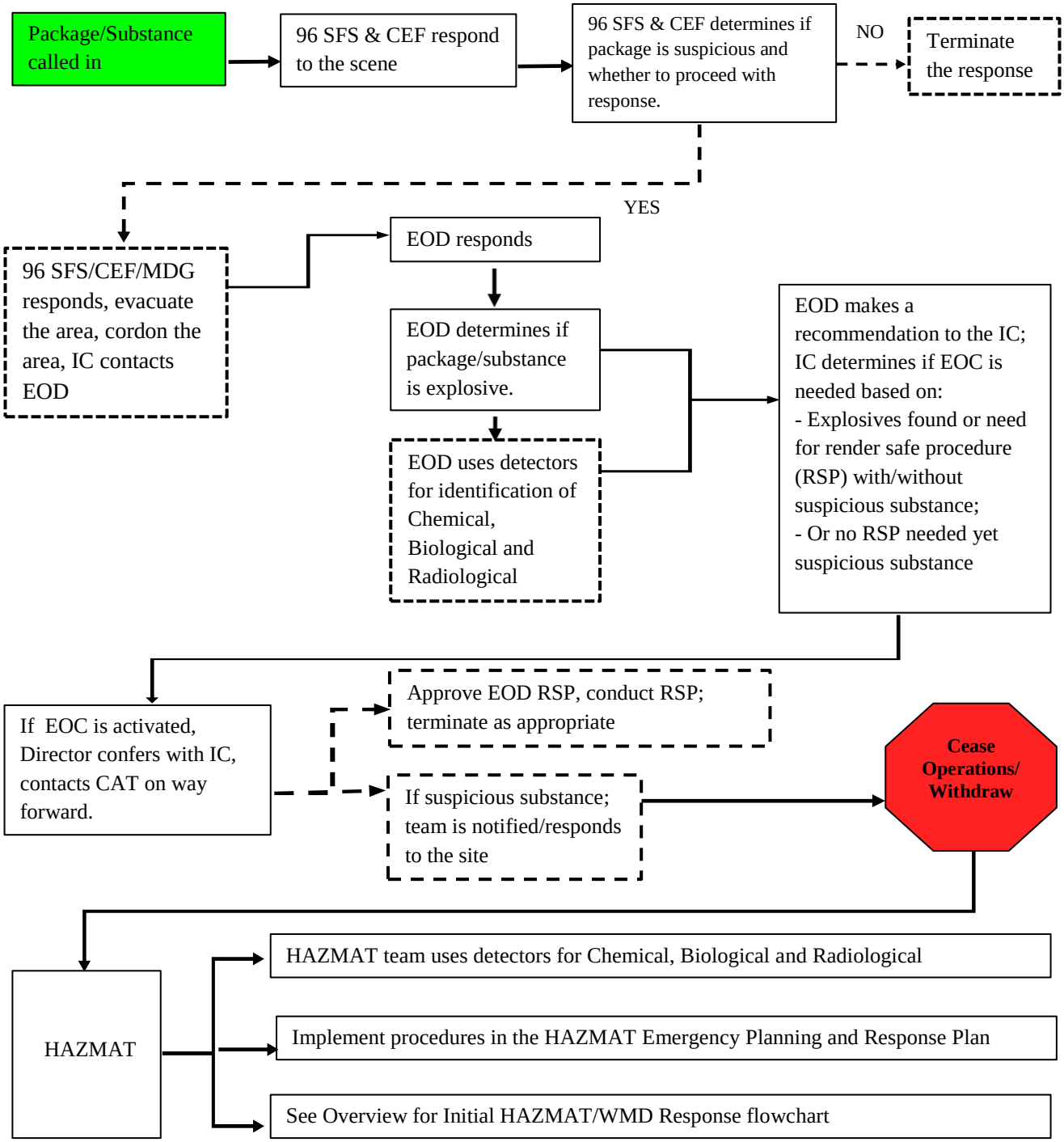


Figure D-3. Overview for a Bomb Threat Response

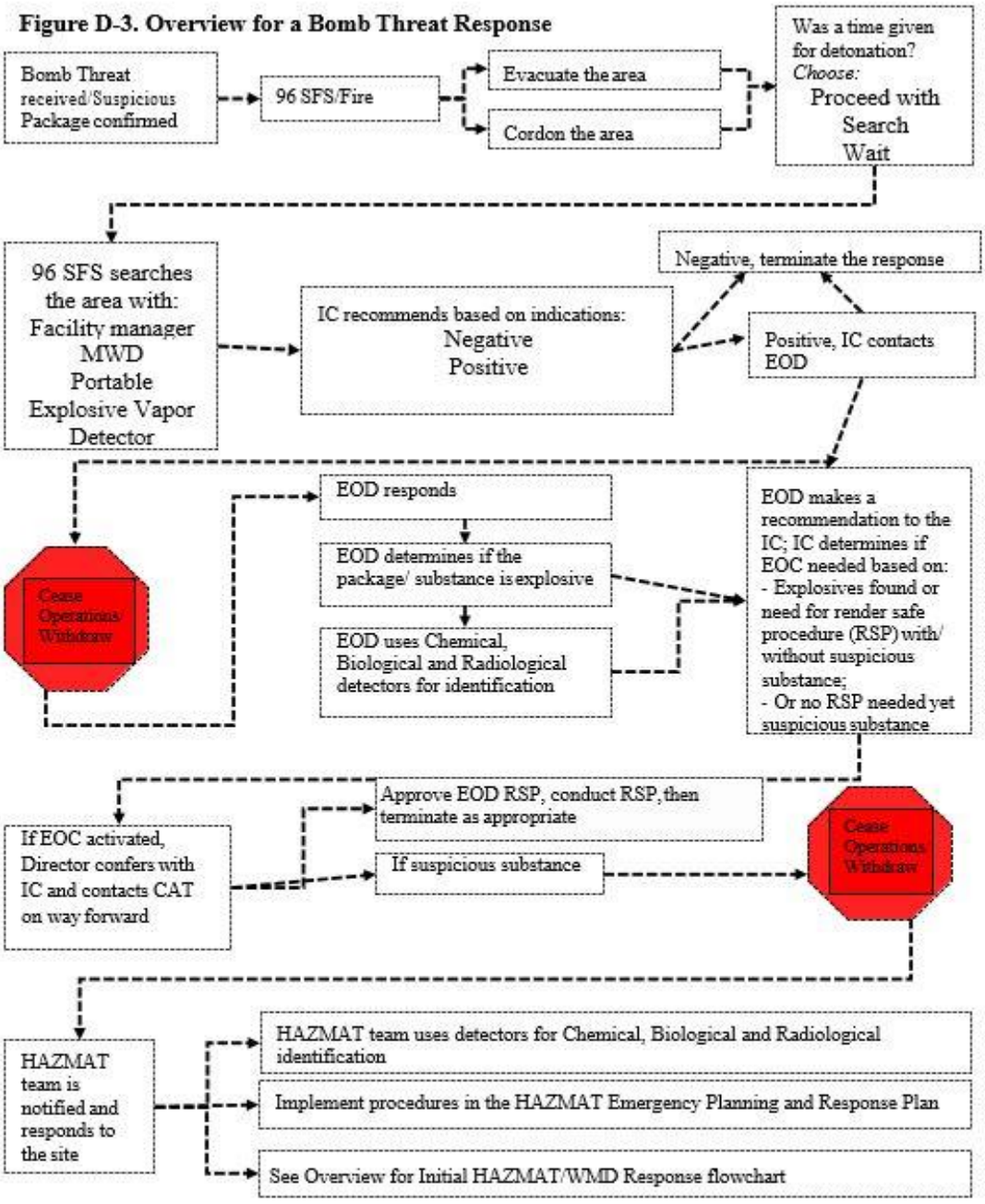


Table 1. Reporting Requirements				
Title/Type	**OPR**	**Sent To**	**Cc**	**Frequency**
** After-Actions Report (AAR)	96 CES/CEX	SAF/IEE USAF/A7CXR USAF/AFOC HQ AFSC/SEW HQ AFMC/A7C HQ AFCESA/CEX	96 TW/CC; 96 CEG/CC	Within 14 days of termination
Activity Summary	96 CES/CEX	CP/EOC	96 CES/CC	TIME daily; Within 48 hrs of termination
Covered Wagon	96 SFS	MAJCOM Operations Center	96 TW/CC; 96 MSG/CC	As required
Disaster Events Log	UCCs IC	96 CES/CEX	Unit Commander	TIME daily; Within 24 hrs of termination
HAZMAT	Varies	AFMC; USAF/A7CV USAF/A7CX Florida Emergency Management Agency; Okaloosa Emergency Management Agency	96 TW/CC; 96 CEG/CC; 96 CEG/CEIEC	As requested by OPR
Items of Special Interest Report	CP	HQ AFMC	96 TW/CC 96 CEG/CC	As required
Operational Report (OPREP-3)	CP	HQ AFMC	96 TW/CC 96 CEG/CC 96 MSG/CC	As required
OTHERS IAW AFI 10-206	CP	As Applicable	96 TW/CC 96 CEG/CC 96 MSG/CC	As required
Situation Report (SITREP)	CP	HQ AFMC	96 TW/CC 96 CEG/CC 96 MSG/CC	As required
Mishap/Accident Reports	96 TW/SE	HQ AFMC, AF Safety Center	As required	As required
COOP/CARM Report	96 TW/XPX ICPM	HQ AFTC/XPT & HQ AFMC/A3X	96 TW/CC	As Required

Table 2. Primary Crash Net Members	
AM	Airfield Management
CEF	Fire and Emergency Services
96 MDG	96 MDG Ambulance Services *After Duty Hours Emergency Room answers both primary and secondary crash net phones and responds accordingly.*
BDOC	Base Defense Operations Center
Table 3. Secondary Crash Net Members	
33 MOC	Maintenance Operations Center
96 MOC	Maintenance Operations Center
96 MXG	Aircraft Recovery
96 OG/CC	Operations Group
96 WF	Weather Flight
919 SOW/CP	Command Post
96 TW/CP	Command Post
96 TW/PA	Public Affairs
96 CES/CEX	Emergency Management
96 LRS	Transportation
96 MDG	96 MDG Ambulance Services - During duty hours 0800-1600. *After Duty Hours Emergency Room answers both primary and secondary crash net phones and responds accordingly.*
96 TW/SE	96 TW Safety
33 FW/SE	33 FW Safety
EOD	Explosive Ordnance Disposal
FD	Crash/Fire Station
MOCC	Maintenance Operations Control Center
JTTOCC	Joint Test and Training Operations Control Center
BDOC	Base Defense Operations Center
TA	Transient Alert

Table A-1. Coordinating Agencies for Radiological Emergencies	
Type of	**Coordinating**
A. Radiological terrorism incidents [e.g., Radiological Dispersal Device (RDD)/Improvised Nuclear Device (IND) or radiological exposure device]: (1) Material or facilities owned or operated by DoD or DoE. (2) Material or facilities licensed by the Nuclear Regulatory Commission (NRC) or Agreement State. (3) All others.	 (1) DoD or DoE (2) NRC (3) DoE
B. Nuclear facilities: (1) Owned or operated by DoD or DoE. (2) Licensed by NRC or Agreement State. (3) Not licensed, owned or operated by a Federal agency or an Agreement State or currently or formerly licensed facilities for which the owner/operator is not financially viable or is otherwise unable to respond.	 (1) DoD or DoE (2) NRC (3) EPA
C. Transportation of radioactive materials: (1) Materials shipped by or for DoD or DoE. (2) Shipment of NRC or Agreement State-licensed materials. (3) Shipment of materials in certain areas of the coastal zones that are not licensed or owned by a Federal agency or Agreement State. (4) All others.	 (1) DoD or DoE (2) NRC (3) DHS/USCG (4) EPA
D. Space vehicles containing radioactive materials: (1) Managed by National Aeronautics and Space Administration (NASA) or DoD. (2) Not managed by DoD or NASA impacting certain areas of the coastal zone. (3) All others.	 (1) NASA or DoD (2) DHS/USCG (3) EPA
E. Foreign, unknown or unlicensed material: (1) Incidents involving foreign or unknown sources of radioactive material in certain areas of the coastal zone. (2) All others.	 (1) DHS/USCG (2) EPA
F. Nuclear weapon accident/incident (based on custody at time of event).	DoD or DoE
Other types of incidents not otherwise addressed above.	DHS designates
Source: *National Response Framework* (*NRF*). **NOTE**: The USAF Radioisotope Committee (RIC) oversees and issues permits for radioactive material and is the single point of contact for the Air Force Master Material License issued by the NRC.	

Table A-2. Specialized Teams and Equipment	
Air Force Radiation Assessment Team **(AFRAT)**	Responds with transportable equipment for detecting, identifying and quantifying any type of radiation hazard.
Armed Forces Radiobiology Research Institute **(AFRRI)**	A tri-service facility in Bethesda MD that conducts research in the field of radiobiology and related matters essential to the operational and medical support of the U.S. Department of Defense and the Military Services. The AFRRI provides the Medical Radiobiology Advisory Team (MRAT).
Aerial Measuring System **(AMS)**	Aerial Radiological Survey and Photography.
Atmospheric Release Advisory Capability **(ARAC)**	A DoE/National Nuclear Security Administration (NNSA) asset for providing real-time computer modeling to assess events involving the release of hazardous radiological materials into the atmosphere.
Accident Response Group **(ARG)**	A DoE/NNSA asset comprised of technical and scientific experts, with specialized equipment. The ARG includes a cadre of senior scientific advisors, weapons engineers and technicians, experts in nuclear safety and high-explosive safety, health physicists, radiation control technicians, industrial hygienists, physical scientists, packaging and transportation specialists and other specialists.
Accident Site Health Group **(ASHG)**	A group of health and safety experts, staffed by representatives from the DoD and the DoE/NNSA, shall ensure the health and safety of all on-site personnel during recovery from a nuclear weapon accident and all associated hazards, not just radiological hazards. The ASHG was formerly known as the Joint Hazard Evaluation Center (JHEC).
Consequence Management Advisory Team **(CMAT)**	Assists the IC with the management of recovery operations. It is composed of personnel knowledgeable in accident management, health physics, the use of RADIACs and contamination control procedures.

FRMAC Consequence Management Response Team **(CMRT)**	The Federal Radiological Monitoring and Assessment Center (FRMAC) CMRT I is a 16-member initial response team. The team incorporates all disciplines to include radiation monitoring, sampling, analysis, assessment, health and safety and support and logistics functions. FRMAC Phase I can be expected on-scene in approximately 8 hours. The FRMAC CMRT II is designed to dispatch as an augmentation team to CMRT I. CMRT II will provide additional monitoring and assessment capability; allow for 24-hour emergency response activities; and establish the data, voice and fax links. FRMAC Phase II can be expected on-scene in about 11 hours. CMRT I and II are comprised of assets from U.S. and Nevada DoE, National Nuclear Security and Administration Nevada Site
Table A-2. Specialized Teams and Equipment	
	Office. Both provide the DoE with the consequence management capability to rapidly respond to any radiological emergency anywhere in the world.
Federal Radiological Monitoring and Assessment Center **(FRMAC)**	A coalition of all Federal resources that coordinates and manages the Federal off-site radiological monitoring and assessment activities during major radiological emergencies within the United States. The FRMAC works in support of State, Local and Tribal governments.
Harvest Eagle/Falcon Kits	War readiness materials designed for supporting units operating in remote locations.
Mobile Accident Response Group Unit (**HOT SPOT)**	Provides a mobile capability to the DoE/ARG component to analyze, identify and document on-scene radioactive contamination.
Joint Airborne Communications Center/Command Post (**JACKPOT)**	Airborne command center.
Joint Communications Contingency Station Assets **(JCCSA)**	Equipment includes switchboards, HF radio, troposcatter radios, medium speed DSN terminals, manual secure voice switch and terminal and SHF satellite terminals.

Medical Radiological Advisory Team **(MRAT)**	A team from the AFRRI of highly qualified radiation medicine physicians, health physicists and related scientists who provide state-of-the-art advice and assistance to the U.S. Combatant Commanders, allied forces, Federal Agencies, State and local governments and others on radiological matters including accidents and incidents of nuclear weapons, nuclear reactors, radiological dispersal devices and industrial and/or medical sources. The MRAT also provides expertise for managing and treating radiation casualties. The MRAT deploys as part of the DTRA CMAT.
Nuclear Emergency Search Team **(NEST)**	Primary DoE response element for threat incidents involving improvised nuclear devices and lost or stolen weapons.
Radiological Control Team **(RADCON)**	Performs detailed radiological surveys for alpha and beta-gamma radiation; supervises waste disposal measures and radiological safety services; provides health physics services; and provides technical advice for decontamination operations and containment of radiological contamination at an accident site.
Radiological Advisory Medical Team **(RAMT)**	A U.S. Army, national asset DoD rapid response team specifically designed to provide timely expert guidance and services to the Combatant Commander, the IC and/or local medical authorities and provides limited medical support to response teams in controlled areas. In peacetime or war, the RAMT is capable of responding to a
	wide variety of events involving limited or mass nuclear casualties, radiologically contaminated patients or exposed populations. The RAMT may deploy within 4 hours of notification and may operate in NSA, NDA and CNWDI access areas.
Response Task Force **(RTF)**	A DoD response force appropriately staffed, trained and equipped to coordinate all actions necessary to control and recover from a radiological accident. The specific purpose of the RTF is to recover weapons and provide radiological accident assistance. RTFs are organized and maintained by those Combatant Commanders whose Component Commands have custody of nuclear weapons or radioactive nuclear weapon components.

Table D-1. CBRNE Resources

AGENCY	MISSION
Air Force Radiation Assessment Team **(AFRAT)**	Radiological Incidents. On-site health physics, BEE and occupational medicine. Supports the IC.
Chemical Biological Incident Response Force **(CBIRF)**	Marine unit activated by USACOM. Provides consequence management through ID, casualty extraction, personnel decontamination, triage, treatment and stabilization in CB situations.

Chemical-Biological Rapid Response Team **(CB-RRT)**	DoD asset. Can assist in detection, neutralization, containment, dismantlement and disposal of WMD containing CB or related material.
Center for Disease Control **(CDC)** and Prevention	CB trained medical personnel. Can respond but more than likely will be contacted for information and medical consultation on chemical antidotes, decontamination practices and medical intervention for CB poisoning.
Department of Energy **(DoE)**	Specialized technical support for terrorist events involving radiological materials. More appropriate for long-term scenario for agent or material removal and disposal. Provides several capabilities such as the AMS, Federal Radiological Monitoring and Assessment Center and the Nuclear/Radiological Advisory Team.
Environmental Protection Agency **(EPA)**	Primary response agency for HAZMAT. Provides coordinated Federal response to actual/potential release of hazardous materials. Long-term remediation/ decontamination of the incident site.
Federal Bureau of Investigation **(FBI)**	Provides specialized resources such as the Hazardous Materials Response Unit and the Critical Incident Response Group in order to provide crime scene and evidence-related operations in terrorist events and cases involving chemical, biological and radiological materials and wastes.
Naval Medical Research Institute **(NMRI)**	Has a Biological Defense Research Program and developed a transportable biological field laboratory.
Naval Research Laboratory **(NRL)**	Member of the CB-RRT (noted above). Microbiologists trained in CB.
US Army Radiological Advisory Medical Team **(RAMT)**	DoD rapid response team specifically designed to provide timely expert guidance and services to the Combatant Commander, the Incident Commander and/or local medical authorities. In peacetime or war, the RAMT is designed to respond to events involving limited or mass nuclear casualties, radiologically contaminated patients or exposed populations.
Technical Escort Unit **(TEU)**	Army unit for escort of CB agents, material and munitions. Render safe munitions and/or disposes of CB weapons.

US Army Medical Research Institute of Chemical Defense **(USAMRICD)**	Provides input in developing operating procedures and training in management of CB agent casualties. Provides clinical advice and consultation in initial and long-term management of chemical casualties.
US Army Medical Research Institute of Infectious Diseases **(USAMRIID)**	Assessing and evaluating biological terrorist incidents. Two-person team (a medical doctor and scientist).
US Public Health Service **(USPHS)** Office of Emergency Preparedness	Supports development of NBC trained incident response teams. Tactical medical response team strike team mobilized for large-scale NBC terrorist event.

HAZARDOUS MATERIAL EMERGENCY PLANNING AND RESPONSE

EAFB PLAN 32-6

April 2018

96TH TEST WING
EGLIN AIR FORCE BASE

OPR: 96 CEG

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 96TH TEST WING (AFMC)
EGLIN AIR FORCE BASE FLORIDA

MEMORANDUM FOR INSTALLATION COMMANDER

FROM: 96 CEG/CC

SUBJECT: Eglin Air Force Base (EAFB) Plan 32-6, Hazardous Material Emergency Planning and Response Plan

1. Subject plan has been reviewed and coordinated in accordance with the Eglin AFB Plans Review process and is deemed accurate, complete and necessary to the execution of unit mission.

2. This plan supersedes the previous version dated Oct 13 and is effective upon receipt for planning purposes and for implementation on all of Eglin Main, Duke Field, 20 SPCS, 6th RTB and 7th SFG(A) compounds as directed by the Installation Commander (96 TW/CC).

3. The office of primary responsibility is 96 CEG/CEIEC, Spill Response Program Office, at (850) 882-7659.

4. Within 30 business days after receipt of this plan, all tasked organizations will prepare unit checklists to support and implement this plan. Once complete they must be signed by the unit commander and coordinated through 96 CEG/CEIEC before implementation.

SCHULIGER.JOHN.D.1044860313
Digitally signed by SCHULIGER.JOHN.D.1044860313
Date: 2018.03.06 18:13:07 -06'00'

JOHN D. SCHULIGER, Col, USAF
Commander, 96th Civil Engineer Group

1st Ind, INSTALLATION COMMANDER

MEMORANDUM FOR ALL EGLIN ORGANIZATIONS

Concur. Subject plan will be posted on the Installation Plans SharePoint site.

EVAN C. DERTIEN
Brigadier General, USAF
Commander

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EAFB PLAN 32-6
SECURITY INSTRUCTIONS/RECORD OF CHANGES

1. The long title of this document is Eglin Air Force Base Plan 32-6, Hazardous Material Emergency Planning and Response. The short title is EAFB Plan 32-6. It may also be referred to as the Hazardous Material (HAZMAT) Plan. All titles are unclassified.

2. This plan is unclassified and may be reproduced, in whole or in part, without the permission of the Office of Primary Responsibility (OPR).

3. Operations Security has been considered in accordance with (IAW) Air Force Instruction (AFI) 10-701, as supplemented. All organizations tasked by this plan will ensure necessary action is taken to safeguard any operational information that might fall within the scope of the Operations Security definition contained in AFI 10-701 and the Communications Security definition in AFI 33-201.

RECORD OF CHANGES

CHANGE NO.	DATED	DATE POSTED	POSTED BY

EAFB PLAN 32-6
TABLE OF CONTENTS

EAFB PLAN 32-6
PLAN SUMMARY

1. PURPOSE: Due to the diversity of the materials stored on Eglin AFB and the variable hazards present, every spill or release response will be unique and appropriate actions will vary. This plan guides the user through established procedures and roles, including applicable plans, notifications, spill response team (SRT) designations, containment actions and cleanup. On Eglin AFB, if any of the following criteria are met, the Eglin AFB Fire Department should be notified immediately by dialing 911 so that the appropriate response measures are activated.

1.1. Is there a threat of fire or other immediate threat to safety, health or life?

1.2. Is the spill/release on the water and is there a visible sheen on the water?

1.3. Is the spill/release beyond the capability of the responsible organization?

1.4. Do organization personnel lack adequate training to handle the spill/release?

1.5. Are adequate spill response supplies not on hand?

2. EXECUTION:

2.1. **Notification**: When notifying the Eglin AFB Fire Department the caller should provide the following information so appropriate response measures are activated.

2.1.1. Name, address and telephone number of person making report.

2.1.2. Time spill occurred and exact location.

2.1.3. Number of personnel affected and the nature of their injuries.

2.1.4. Name of material spilled or released.

2.1.5. Estimated quantity spilled or released.

2.1.6. Rate of discharge, if applicable.

2.1.7. Source of spilled material.

2.1.8. Cause of release.

2.1.9. Containment/cleanup actions performed.

NOTE: Otherwise, notify the Base Environmental Compliance Office of spill occurrence by submitting a Spill Discharge Report as soon as possible but not to exceed 4 duty hours (see TAB C to APPENDIX 1 to ANNEX B of this plan or https://em.eglin.af.mil/emcp/spill/Default.aspx). Submit electronically via fax (850) 882-7675 or hand deliver to Building 592 within 4 duty hours. The Base Environmental Compliance Office will make all necessary notifications to environmental regulatory authorities.

2.2. **Deployment**: When there is a threat of fire or other threat to safety, health or life, the Eglin Fire Department is notified via 911 and immediately responds to assess and/or control the situation. For spills/releases within the organization's capability, the responsible organization will respond with trained personnel and sufficient materials to control and clean up the release.

2.3. **Employment**: When notified, the Fire Department takes all necessary immediate actions to save lives and protect property. If the incident is beyond the control of first responders or is serious enough to warrant an installation response, Eglin AFB Installation Emergency Management Plan (IEMP) 10-2 will be implemented. Once the incident is controlled, the organization responsible for the spill/release must implement cleanup actions utilizing their trained personnel, local site spill response plan and pre-stocked cleanup supplies. Responsible organizations should contact their Unit Environmental Coordinator and the local Eglin AFB Environmental Compliance Office for advice and assistance. For more extensive environmental cleanup actions, it may be necessary to utilize a contracted company that specializes in environmental cleanup. The organization responsible for the spill/release must provide the necessary financial resources to clean up released hazardous materials and restore the environment.

3. OPERATIONAL CONSTRAINTS: Any deficiencies or inaccuracies noted in this plan must be identified to the Base Environmental Compliance Office.

EAFB PLAN 32-6
BASIC PLAN

1. SITUATION:

1.1. **General**: Eglin AFB is subject to spill and release of various toxic, hazardous and polluting substances that will require control, neutralization and cleanup. This plan provides the necessary guidance for personnel who work with these substances to report spills, leaks or releases and notify proper authorities when mishaps occur. This plan identifies the role of each Eglin AFB plan that addresses spills and releases. In addition, this plan outlines those measures necessary for compliance with federal antipollution regulations and supports national, regional and state contingency plans by delineating local response procedures for such pollution incidents. The following assumptions are made:

1.2. **Assumptions**:

1.2.1. Major spills or releases may temporarily disrupt normal operations.

1.2.2. Acts of nature may cause accidental releases of materials that may directly affect Eglin AFB and/or the surrounding communities.

1.2.3. Eglin AFB will be required to institute cleanup actions for any spill that occurs from a facility it controls or maintains.

1.2.4. Major or minor accidents on the Eglin Complex could cause a release of material that may directly affect Eglin AFB and/or the surrounding communities.

1.2.5. The following plans are in place at Eglin AFB to address spills and releases.

Plan	Plan Description	OPR
EAFB 10-2 IEMP	This plan identifies procedures for response and recovery from major accidents, natural disasters, attacks and terrorist use of chemical, biological, radiological, nuclear or high-yield explosive.	Readiness and Emergency Management Flight
EAFB FRP	This plan is to fulfill Clean Water Act (CWA) requirements for development and implementation of an oil spill contingency plan. This plan specifically addresses discovery, initial response and spill response procedures; implementation of tactical plan; sustained actions; and termination and follow-up actions for spills or releases of hazardous substances. A key element included in the FRP is an emergency response action plan.	Environmental Compliance

EAFB Plan 32-6	This plan provides guidance for preparation and response to a HAZMAT incident, integrating federal, state and local emergency planning and response requirements with Department of Defense emergency planning and response requirements.	Environmental Compliance
EAFB RMP for Handling Propane, Chlorine and Methylene Chloride	This plan identifies specific hazards that may result from accidental releases at the facility, provides a worst-case scenario analysis for each identified hazard and addresses emergency response provisions for minimizing the impact of a release.	Environmental Compliance
EAFB SPCC Plan	This plan establishes procedures, methods, equipment and other criteria to prevent the discharge of oil products from facilities into or on navigable waters of the United States or adjoining shorelines. It also requires development of an oil contingency plan, which fulfills the development/implementation of the EAFB FRP.	Environmental Compliance

2. <u>MISSION</u>: This plan provides information and procedures for response personnel and supporting teams that must control, contain, neutralize, absorb, decontaminate and/or suppress and report hazardous material releases and spills due to accidents, incidents or disasters.

2.1. This plan primarily supports national, regional and local oil and hazardous substance pollution contingency plans and EAFB 10-2 IEMP, and references the EAFB FRP and the SPCC Plan. This plan provides guidance on the discovery, notification, containment and cleanup of spills and releases occurring on Eglin AFB and is intended to support Eglin AFB's compliance with the following:

2.1.1. National Oil and Hazardous Substances Pollution Contingency Plan.

2.1.2. Spill prevention, response and reporting requirements and responsibilities.

2.1.3. EPCRA.

2.2. The policies, responsibilities and procedures in this plan are applicable to all base operations organizations, tenant organizations, private contractors and visitors at Eglin AFB. EAFB Plan 32-6 is in accordance with established federal, state and Air Force Contingency Plan guidance.

3. <u>EXECUTION</u>:

3.1. **Concept of Operations**:

3.1.1. Spill and release response programs are separated into six distinct phases. For descriptive purposes, the phases are:

3.1.1.1. Spill response (discovery and notification).

3.1.1.2. Containment and countermeasures.

3.1.1.3. Cleanup and disposal.

3.1.1.4. Restoration.

3.1.1.5. Recovery of damages and enforcement.

3.1.1.6. Ongoing spill prevention control and countermeasures.

NOTE: A detailed description of each phase and required actions is contained in Appendix 1.

3.2. **Tasks, Responsibilities and Criteria**:

3.2.1. **96 TW/CC will**:

3.2.1.1. Assign responsibility for EAFB Plan 32-6 execution.

3.2.1.2. Ensure development and publication of EAFB Plan 32-6.

3.2.1.3. Activate the Crisis Action Team, as necessary, to support operations required by EAFB 10-2 IEMP during major spills or releases.

3.2.1.4. Provide HAZMAT spill and release response support in accordance with EAFB 10-2 IEMP and FRP.

3.2.1.5. Ensure safe containment actions performed are by specialized teams and Disaster Response Force members with the proper training.

3.2.1.6. Ensure base organizations that store or handle HAZMAT have a current response plan or procedure.

3.2.2. All Will:

3.2.2.1. Individuals assigned, attached to or working at Eglin AFB are tasked to report any spill of oil or hazardous substances that meets any of the criteria below to the Eglin Fire Department by dialing 911 and to take every reasonable precaution to prevent the spillage of oil or hazardous substances.

3.2.2.1.1. Is there an immediate threat of fire or other threat to safety, health or life?

3.2.2.1.2. Is the spill/release on the water and is there a visible sheen on the water?

3.2.2.1.3. Is the spill/release beyond the capability of the responsible organization?

3.2.2.1.4. Do organization personnel lack adequate training to handle the spill/release?

3.2.2.1.5. Are adequate spill response supplies not on hand?

3.2.3. **96 CES/CEF will:**

3.2.3.1. Receive incoming reports of hazardous material release incidents, assess the incident, respond to the scene as necessary, advise if EAFB 10-2 IEMP implementation is appropriate and proceed with protection of lives and property.

3.2.3.2. Notify the Environmental Compliance Spill Response Program Manager of a hazardous material release incident for advice/assistance on environmental regulatory requirements as needed.

3.2.3.3. Turn over environmental cleanup actions to the organization responsible for the release after the incident is controlled and the scene is safe.

3.2.4. **96 CEG/CEIE will:**

3.2.4.1. Serve as advisor to the Eglin Fire Department/Emergency Operations Center for environmental concerns and issues.

3.2.4.2. Make all notifications and reports to local, federal and state regulatory agencies as required.

3.2.4.3. Serve as the OPR for this plan.

3.2.4.4. Request a Job Order Customer Accounting System (JOCAS) number/job order number (JON) from the responsible organization for collecting reimbursable expenses to mitigate contaminated site.

3.2.4.5. Oversee all immediate response cleanup activities by the responsible organization or any contractors hired to restore the environment back to its original state.

3.2.4.6. Provide Eglin AFB with an ongoing blanket purchase agreement (BPA) for contractor support in the event of an emergency.

3.2.4.7. Provide Eglin AFB with a staff member as a HAZMAT response advisor and EPCRA coordinator.

3.2.4.8. Notify AF Office of Special Investigation (OSI) in the event a spill or release to the environment appears intentional, sabotage, terrorist activity or any environmental crime requiring an investigation.

3.2.4.9. Assist in the identification and composition determination of spilled material to determine levels of contamination in all media (air, water, soil) where appropriate.

3.2.4.10. Provide guidance for neutralization/decontamination for environmental cleanup operations.

3.2.4.11. Retain the data obtained from the analysis of samples as required.

3.2.4.12. Provide an appointed and trained qualified individual for the Eglin AFB Marine Fuel Bulk Storage Facility.

3.2.5. **96 AMDS/SGPB will:**
3.2.5.1. Evaluate the magnitude and severity of the threat to public health, welfare and the environment using material safety data sheets (MSDS), toxicity reference materials or any other available reference manuals.

3.2.5.2. Advise the Incident Commander (IC) and recovery personnel on health precautions, including identification of any personal protective equipment required.

3.2.5.3. If necessary, advise the IC to evacuate the spill area and make it OFF LIMITS TO UNAUTHORIZED PERSONNEL. Take appropriate safety precautions to protect response personnel located in close proximity to the probable spill route.

3.2.6. **96 TW/JA will:**

3.2.6.1. Assess the potential liabilities of all the parties involved in the spill: Air Force, Air Force contractors and others as applicable.

3.2.6.2. Advise Commanders on possible claims by and against the Air Force.

3.2.7. **AFTC/PZ will:**

3.2.7.1. Assist in contracting commercial resources as requested by the IC.

3.2.7.2. Support Eglin Environmental Management's BPA for emergency contract support.

3.2.8. **96 CPTS/CC will:**

3.2.8.1. As requested, provide a local ESP code for tracking costs associated with the spill response.

3.2.8.2. Provide for the expenditure of funds as required for a spill response.

3.2.8.3. Coordinate with Environmental Compliance Office, USCG or EPA for the

reimbursement of Air Force expenditures on non-Air Force spills.

3.2.9. **96 SFS/CC will:**

3.2.9.1. Watch for and report any suspected tampering with or spillage from a storage facility during routine patrols.

3.2.9.2. Provide escort for vehicles and heavy equipment responding to a spill incident when required.

3.2.9.3. Coordinate with appropriate law enforcement agencies when off-base travel of heavy equipment (oversized load) is required.

3.2.9.4. When directed by the IC:

3.2.9.4.1. Establish a cordon with an entry control point around the spill control zone.

3.2.9.4.2. Order and ensure evacuation of personnel from the control zone.

3.2.10. **96 TW/PA will:**

3.2.10.1. Release situation reports or information on post-spill activities as directed by the IC.

3.2.10.2. Assist other federal agencies involved in a spill response in the preparation and/or release of information.

3.2.11. **96 LRS/CC will:**

3.2.11.1. Provide transportation support as required by the IC.

3.2.11.2. Have a containment boom available for deployment in Weekly Bayou.

3.2.11.3. On discovery or notification of a spill near the POL Dock or at the request of the IC, deploy the boom.

3.2.11.4. During working hours, report any Underground Storage Tank (UST) leak detection alarms to Liquid Fuels Maintenance at (850) 882-4840. After duty hours, report all leak detection alarms to the Eglin Fire Department at (850) 882-5856.

3.2.11.5. Ensure that adequate methods and precautions to minimize spill incidents are implemented during fueling operations.

3.2.12. **All organizations storing or handling petroleum, oil, lubricants, hazardous**

materials or hazardous waste (POL/HAZMAT/HAZWASTE) will:

3.2.12.1. Develop emergency response procedures in accordance with the base plans listed below and that meet the elements outlined in Appendix 1.

3.2.12.2. Maintain close surveillance for releases during operations of the facility or equipment.

3.2.12.3. Develop and maintain the capacity to contain and clean up at least a 100-gallon release of (or 100 percent of all POL/HAZMAT/HAZWASTE stored, if combined amounts are less than 100 gallons) hazardous materials or more as is practical. Facilities in close proximity may maintain one central spill response kit as long as it is readily available to all potential release locations.

3.2.12.4. Properly budget to reimburse for adequate equipment, supplies and disposal as outlined in Appendix 1. Organizations will be held accountable for reimbursement on the following:

3.2.12.4.1. All equipment and supplies used to contain a release to the environment.

3.2.12.4.2. All transportation/disposal costs.

3.2.12.4.3. Contractor-incurred expenses, if required.

3.2.12.4.4. All laboratory analysis, as well as any site assessments or long-term remediation efforts to return the environment back to its original state.

3.2.12.4.5. Any treatment of contaminated material (e.g., thermal treatment, landfill disposal, chemical treatment).

3.2.12.5. Ensure all workers are properly trained and equipped to report and respond to spills. Training must be sufficient for the type and quantity of hazardous materials in the work center. 29 CFR 1910.120q provides information on HAZMAT training. Work center training should address the use of applicable personal protective equipment, local response procedures, risk assessment, MSDS information, fire, health, environmental hazards and notification.

3.2.12.6. Ensure environmental protection/pollution abatement precautions are implemented.

3.2.12.7. Designate project officers and monitors as required. These persons will routinely inspect the work areas under their control to ensure effective pollution abatement procedures are practiced. They will also ensure site-specific contingency plans are developed and posted in prominent locations at potential spill sites.

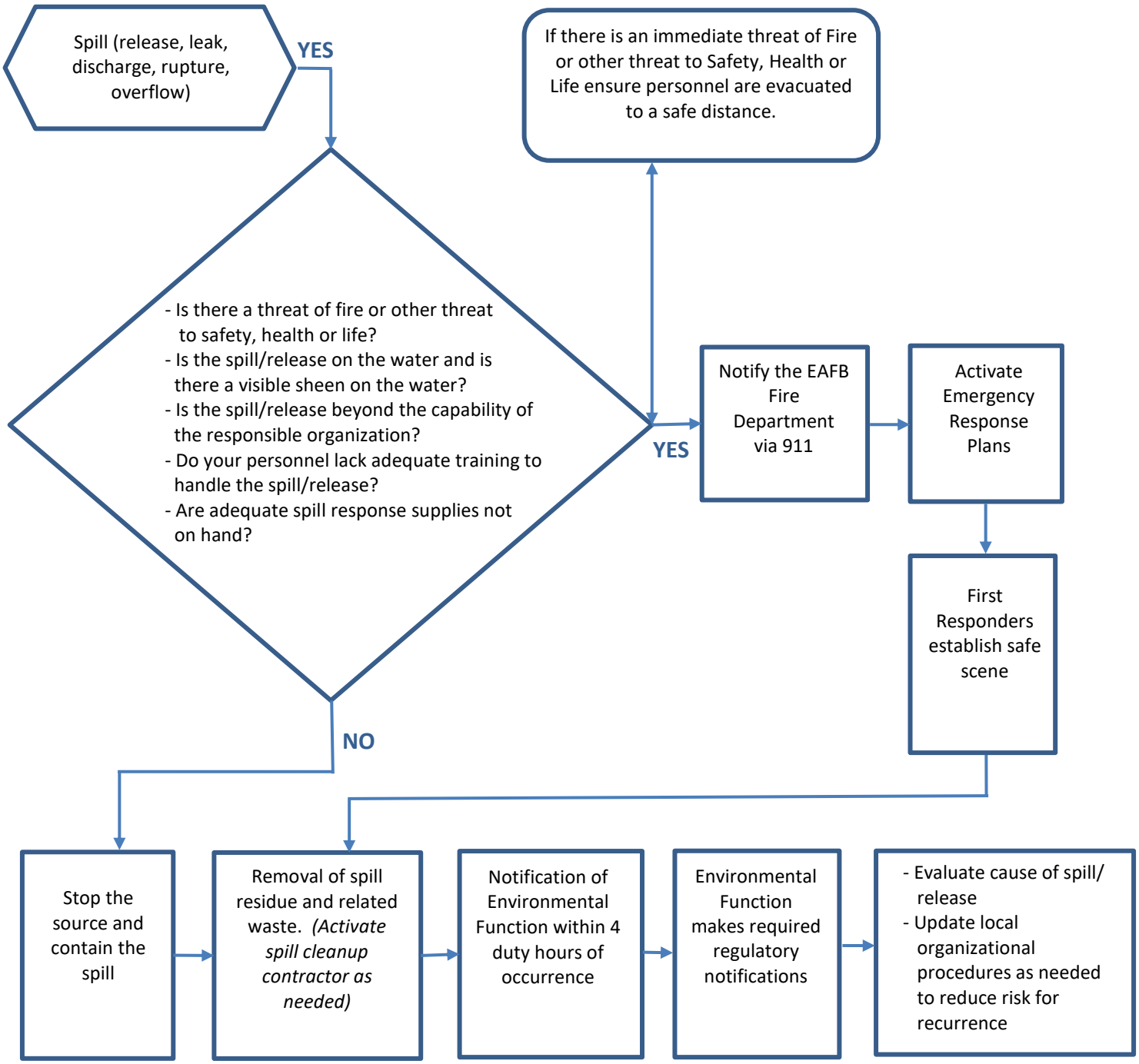
3.2.12.8. Develop emergency response procedures in accordance with the base plans listed

below.

3.2.12.8.1. Ensure appropriate personnel are operating in accordance with the following base spill and response plans:

Plan	Plan Description	OPR
EAFB 10-2 IEMP	This plan identifies procedures for response and recovery from major accidents, natural disasters, attacks and terrorist use of chemical, biological, radiological, nuclear or high-yield explosive.	Readiness and Emergency Management Flight
EAFB FRP USCG & EPA	This plan is used to fulfill CWA requirements for development and implementation of an Oil Spill Contingency Plan. This plan specifically addresses discovery, initial response and spill response procedures; implementation of tactical plan; sustained actions and termination and follow-up actions for spills or releases of hazardous substances. A key element included in the FRP is an emergency response action plan.	Environmental Compliance
EAFB Plan 32-6	This plan provides guidance for preparation and response to a HAZMAT incident, integrating federal, state and local emergency planning and response requirements with Department of Defense emergency planning and response requirements.	Environmental Compliance
EAFB RMP for Handling Propane, Chlorine and Methylene Chloride	This plan identifies specific hazards that may result from accidental releases at the facility, provides a worst-case scenario analysis for each identified and addresses emergency response provisions for minimizing the impact of a release.	Environmental Compliance
EAFB SPCC Plan	This plan establishes procedures, methods, equipment and other criteria to prevent the discharge of oil products from non-transportation-related facilities into or on navigable waters of the United States or adjoining shorelines. It also requires development of an oil contingency plan, which is fulfilled by the development/implementation of the EAFB FRP.	Environmental Compliance

NOTE: Follow the initial discovery, notification and response procedures as outlined below.



NOTE: Use Spill Discharge Report available on the Spill Planning and Response website https://em.eglin.af.mil/emcp/spill/Default.aspx. Submit electronically, hand-carry or fax to 882-7675.

4. <u>LOGISTICS AND ADMINISTRATION</u>:

4.1. **Logistics**: The service support required to execute this plan is listed in Appendix 1. The nature and extent of support is variable and depends on the severity and location of the spill.

4.1.1. Support of this plan is accomplished by normal procedures.

4.1.2. All emergency logistics support will be coordinated with the IC.

4.2. **Administration**: Normal procedures.

4.3. **Personnel**: Personnel utilized in support of this plan will come from existing resources.

4.3.1. Teams are established in accordance with AFI 10-2501, EAFB 10-2 IEMP and the FRP.

4.3.2. Additional duties assigned in support of this plan become primary duties upon implementation of this plan.

5. <u>COMMAND AND CONTROL</u>:

5.1. **Command**: IC will direct the spill response and exercise control over all on-scene forces.

5.2. **Control**: Refer to EAFB 10-2 IEMP.

Annexes:
A -- Tasked Organizations
B -- Environmental Services

ANNEX A TO EAFB PLAN 32-6
TASKED ORGANIZATIONS

96 TW/CC

96 CES/CEF

96 CEG/CEIE

96 AMDS/SGPB

96 TW/JA

AFTC/PZ

96 CPTS/CC

96 SFS/CC

96 TW/PA

96 LRS/CC

Eglin AFB, associate units and all on-base contractors as required by contract. All organizations on Eglin AFB storing or transporting POL/HAZMAT/HAZWASTE must abide by the procedures outlined in this plan.

ANNEX B TO EAFB PLAN 32-6
ENVIRONMENTAL SERVICES

REFERENCES: See Annex Y.

1. GENERAL: The purpose of this annex is to provide the necessary guidance for personnel who work with the substances to report spills, leaks or releases and make notification to proper authorities when mishaps occur. This annex identifies the role of each EAFB plan that addresses spills and releases. In addition, this annex outlines those measures necessary for compliance with federal anti-pollution regulations and supports national, regional and state contingency plans by delineating local response procedures for those pollution incidents, which do occur.

2. SITUATION: Eglin AFB may be required to respond to a wide range of pollution contingencies and must be prepared to manage, report on and remediate such events in a timely and effective manner. Elements of Eglin AFB as well as elements of both federal and state agencies are contacted depending upon the severity of the situation.

Appendices:
1 -- Spill Response Phase I – Discovery and Notification
2 -- Spill Response Phase II - Containment and Countermeasures
3 -- Spill Response Phase III - Cleanup and Disposal
4 -- Spill Response Phase IV - Restoration
5 -- Spill Response Phase V - Recovery of Damages and Enforcement
6 -- Spill Response Phase VI - Spill Prevention Control and Countermeasures (SPCC) Plan

APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE I - DISCOVERY AND NOTIFICATION

1. GENERAL: This phase covers those actions taken to:

1.1. Discover a spill or potential release.

1.2. Determine the location of a spill and the adjacent resources that may be affected.

1.3. Determine the nature and quantity of the pollutant.

1.4. Report the spill in accordance with existing directives.

2. DISCOVERY: As soon as a spill or release is discovered or suspected, the evaluation, notification and response process shown in the flow chart should be followed.

2.1. The discovery of a spill is made by the discharger or through inspection procedures or random discovery by the incidental observation of individuals.

2.2. Information reported should include the following:

2.2.1. Name, address and telephone number of person making report.

2.2.2. Exact location of spill.

2.2.3. Time spill occurred.

2.2.4. Number of injured personnel and nature of injuries.

2.2.5. Name of material spilled or released.

2.2.6. Estimated quantity spilled or released.

2.2.7. Rate of discharge, if applicable.

2.2.8. Source of spilled material.

2.2.9. Cause of release.

2.2.10. Containment/cleanup actions.

2.3. It is important to stop the spill at its source but **only if it is safe to do so!**

3. NOTIFICATION: Upon receipt of the initial report from the Fire Department, the Command Post will initiate the notification phase as outlined in EAFB 10-2.

3.1. **Internal Notification Procedures**: The most important action, which is taken to minimize the severity of a pollution incident, is the rapid deployment of a SRT. Once the assessment of the spill or release is performed, either the properly trained organizational personnel will respond or, once contacted via 911, the fire department will initiate appropriate response teams in accordance with EAFB 10-2 IEMP and the FRP.

3.1.1. First response to major accidents/incidents is outlined in EAFB 10-2 IEMP.

3.1.2. For spills or releases that do not activate EAFB 10-2 IEMP, the Senior Fire Officer will assume duties as the initial IC.

3.1.2.1. The IC will be responsible for directing and coordinating all spill response actions. The Command Post and/or IC will maintain an Incident Log, detailing all the actions taken during the course of the pollution response. The log will include a description of the pollutant, the actions taken to control and stop the release and any additional significant information.

3.1.2.2. The magnitude of the spill/leak will determine the level of response required to safely identify, isolate, contain or neutralize/decontaminate the effects of the hazardous material. The IC will use proper judgment to decide the nature of the response needed.

3.1.2.3. Upon activation of the FRP, SRT members called to assist will respond immediately upon notification to evaluate the emergency and take actions as necessary. With the exception of the *Multi-Product Emergency Response Plan for Inhalation Hazards*, the following guidance pertaining to response criteria applies:

Levels of HAZMAT Response

LEVEL	DESCRIPTION	CONTACT
I	An incident where the material can be controlled, cleaned and disposed of by the responsible organizations. The incident is confined to a small area. Only evacuation of the immediate is required.	Environmental Management
II	An incident for which containment/cleanup is beyond the responsible organization's capabilities and involving a greater or larger hazard.	Fire Department, Emergency Medical Service, Security Forces
III	An incident involving a severe hazard or large area that poses an extreme threat to life and property, probably requiring a large-scale evacuation; or an incident requiring the expertise or resources of county, state, federal or private agencies.	All level III agencies plus the Disaster Response Force

3.1.2.4. In the event a hazardous material is released on government property and could affect any personnel on Eglin AFB property, to include military base housing, the Eglin Fire Department IC will notify 96 SFS to provide warning or evacuation instructions to Eglin AFB personnel immediately.

3.1.3. Base personnel who discover a sewage discharge shall dial 911. After notification of the discharge, the security police or fire department shall, based on the scope and potential danger involved, respond either directly to the discharge or notify one or more of the following offices within the 96 CEG for response: Exterior Plumbing, 882-3376 for all base areas (not including Housing) and Housing Maintenance, 882-8589 for Military Housing Areas. If the discharge is discovered by 96 CEG personnel, the appropriate office may respond directly to the discharge.

3.2. **External Notification and Evacuation Procedures**: This section outlines the notification procedures for the appropriate off-base emergency response organization, as well as those for alerting key local, state and federal emergency response personnel and providing warning or evacuation instructions to the general public. Specific notification and evacuation procedures are outlined in EAFB 10-2 IEMP and the FRP as applicable.

3.2.1. Each county has designated a county warning point in the event of a hazardous materials emergency. The county warning points are monitored 24 hours a day, 7 days a week for emergency notifications. In the event hazardous materials are released on government property and could migrate off the facility thereby affecting the public, immediate notifications are made to the proper county. The telephone numbers and designated county warning points are as follows:

County Warning Points

BAY COUNTY - Communications Center of Division of Emergency Management (850) 784-4000 or (911 for off-base lines only)

ESCAMBIA COUNTY - Communications Center for Division of Emergency Management (850) 471-6400 or (911 for off-base lines only)

HOLMES COUNTY - Emergency Management (850) 547-1112

OKALOOSA COUNTY - Emergency Services Dispatch Office (850) 651-7150 or (911 for off-base lines only)

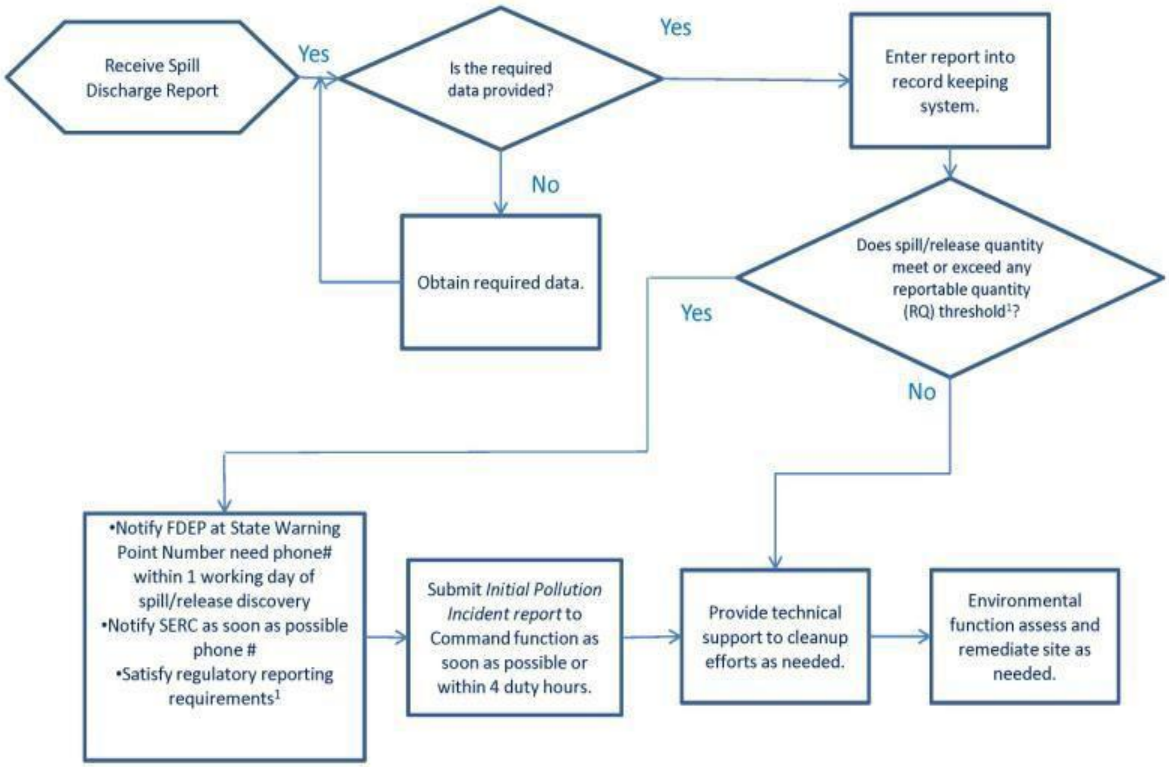
SANTA ROSA COUNTY - Emergency Management Communications Center (850) 983-5360 or (911 for off-base lines only)

WALTON COUNTY - Division of Emergency Management Sheriff's Office (850) 892-8186/8111

WASHINGTON COUNTY - Sheriff's Office (850) 638-6111

3.3. **Reporting**: All spills/releases and accidental discharges of POL/HAZMAT/HAZWASTE,

regardless of the quantity, must be reported by the responsible organization using a Spill Discharge Report (found on page 38). These must be submitted either electronically (https://em.eglin.af.mil/emcp/spill/Default.aspx), via fax (850) 882-7675 or hand delivered to Environmental Compliance, Building 592, within 4 duty hours of the spill occurrence. Staff at Environmental Compliance will complete all regulatory-required environmental release reports for all environmental releases caused by an Eglin AFB activity or that occur on Eglin AFB that could result in litigation or adverse publicity. In addition, Environmental Compliance will complete the reporting process and send to the Major Command and federal, state or local agencies pursuant to the CWA, RCRA, Toxic Substances Control Act (TSCA), CERCLA, SARA Title III, EPCRA, Clean Air Act (CAA) and HMTA.



3.3.1. If the Air Force is not the responsible party, the responsible party should be informed of the spill and their response actions should be evaluated by the IC. If their response actions are inadequate in the judgment of the IC, they are informed of their financial responsibility. If the spill response actions remain inadequate, the IC should seek the authority to assume control of the spill response. The base SJA is informed during all response actions (1) involving parties other than the Air Force, (2) where there exists a potential for claims against the Air Force because of damage or harm to individuals or (3) for spills significant enough to be reported to one of the regulatory agencies.

3.3.2. If a contractor is involved in a spill or is responsible for a spill, the Contractor Response Checklist included in Tab A to Appendix 1 to Annex B must be followed.

3.3.3. The requirements for formal notification and reporting of spillage depend upon the severity of the spill. Tab B to Appendix 1 to Annex B summarizes federal reporting requirements.

3.3.3.1. At the installation level, the Environmental Compliance Office is the OPR for all pollution incident reporting, both to external environmental regulatory authorities as well as internal Air Force contacts. Staff at the Environmental Compliance Office coordinate with SJA on reports involving legal issues or potential damage claims. Also, the environmental office notifies SJA and PA of all reports to external regulatory authorities.

3.3.3.2. The Environmental Compliance Office makes all decisions regarding either external or internal pollution incident reporting.

3.3.3.3. Initial Pollution Incident Reports are sent to HQ AFMC as soon as possible or within 24 hours after the incident.

3.3.3.4. Most spills are minor in nature and are not reportable to regulatory agencies outside of the installation. There are a number of factors to take into account when initially determining the severity of a spill, including the reliability of the source, the location, the quantity and type of material and the proximity and nature of adjoining water areas. Considering the severity, the spill will be classified as a Class I, II or III spill. The initial classification will be used to determine notification procedures until the degree of severity can be confirmed.

3.3.3.4.1. FAC 62-150.300 requires any owner or operator who has knowledge of any release of a hazardous substance from a facility in a quantity equal to or exceeding the Reportable Quantity (RQ) in any 24-hour period to notify Florida Department of Environmental Protection (FDEP) by calling the State Warning Point number, (800) 320-0519 or (850) 413-9911, within 1 business day of discovery of the release. 96 CEG/CEIE will make all local, state and federal regulatory agency notifications.

3.3.3.4.2. The following is a uniformed classification system for categorizing hazardous material incidents, when calling the State Warning Point and NRC to report a spill or release.

	DESCRIPTION	
CATEGORY I	**Severity of Incident**	**Minor** - A spill, release or potential release of a known hazardous substance. No deaths; if injuries, they are minor in nature.
	Extent of Incident	Limited to initial area of involvement and unlikely to spread. Example: a single structure or an area of 300 feet or less.
	Type of Material Involved	Identified hazardous substance that is not radioactive, water reactive or hypergolic. Generally, a flammable or combustible liquid could also include limited amounts of corrosives.
	Amount of Material Involved	A limited amount of hazardous substance or small container which would generally be less than 55 gallons.
	Population Affected	Evacuation will be limited to the immediate area that can be evacuated in a short period of time for a limited duration (evacuation duration usually does not exceed 4 hours). A limited number of populace will be affected.
	Resources	Local resources can handle; includes automatic mutual aid agreements.
CATEGORY II	**Severity of Incident**	**Moderate** - A spill, release or potential release of a known or unknown hazardous substance. No deaths. Injuries can be minor to severe.
	Extent of Incident	Release may not be controllable without special resources. Incident limited to several blocks or buildings.
	Type of Material Involved	Unknown or known hazardous substance that is toxic, reactive, flammable, corrosive or biological in nature.
	Amount of Material Involved	An amount limited by the size of the container and the release from it. For example, a small leak from a tanker that is controlled level III or IV.
	Population Affected	Evacuation is confined to a designated area that local resources can achieve. Extended sheltering is not required.
	Resources	Local response agencies may need assistance from outside sources.

	Notification	Requires notification of the State Warning Point at (800) 320-0519 or (850) 413-9911or NRC.
CATEGORY III		
	Severity of incident	**Severe** - A spill, release or potential release of a hazardous substance with an associated fire, explosion or toxic/corrosive cloud.
	Extent of Incident	Large area is impacted, possibly disrupting essential community services. Extensive environmental contamination is possible.
	Type of Material Involved	Unknown hazardous substance or a hazardous substance that is capable of producing a toxic/corrosive gas cloud, is highly reactive or unstable, has a flammable gas or produces significant flammable vapors and/or is radioactive or chemical/biological pathogen.
	Amount of Material Involved	Large amount of hazardous material or limited amount of very dangerous substance.
	Population Affected	Presents an immediate danger to the public and operating personnel. Evacuation will require movement of large numbers of populace and/or extending over areas that will have a significant impact on the community. It may require activation of shelters for evacuees.
	Resources	Local response agencies may need assistance from outside sources.
	Notification	If RQ requires notification of the State Warning Point at (800) 320-0519 or (850) 413-9911 or NRC.
CATEGORY IV		
	Severity of incident	**Major** - A spill or release of a hazardous substance that has resulted in a serious fire, explosion or environmental contamination over an extended area.
	Extent of Incident	Has an impact over a wide area with the probability that it will spread to a larger area. The area impacted can be smaller in a highly urbanized area with a large population impacted.

	Type of Material Involved	Unknown hazardous substance or a hazardous substance that is capable of producing a toxic/corrosive gas cloud, is highly reactive or unstable, is a flammable gas or produces significant flammable vapors and/or is radioactive or chemical/biological pathogen.
	Amount of Material Involved	Large amount of hazardous material or limited amount of very dangerous substance.
	Population Affected	Presents an immediate danger to the public and operating personnel. Evacuation will require movement of large numbers of populace and/or extending over areas that will have a significant impact on the community. It may require activation of shelters for evacuees.
	Resources	Local response agencies may need assistance from outside sources.
	Notification	If RQ requires notification of the State Warning Point at (800) 320-0519 or (850) 413-9911 or NRC.

NOTE: All categories, I through IV, may involve evacuation, from very limited to large scale over considerable periods of time. The resources required at the different levels will depend on urbanized area and the size of response agencies.

3.3.3.4.3. A reportable spill under EPCRA occurs when the amount of hazardous substance spilled meets or exceeds the RQ as listed below. If an amount equal to or exceeding the RQ released or spilled from a fixed facility, the Environmental Compliance Office shall notify the State Emergency Response Commission (SERC) and Local Emergency Response Committee (LERC) immediately by calling (800) 320-0519 or (850) 413-9911 (24-hour emergency number only). The Section 304 Reporting Form, Tab C to Appendix 1 to Annex B, is used to report a release to the SERC. This form guides a facility in providing required information when reporting a release over the telephone.

3.3.3.4.4. The Florida LERCs do not have response capabilities and only have information and planning responsibilities; therefore, notification to the SERC fulfills the SARA Title III LERC notification requirement. In addition, releases of CERCLA spills in quantities equal to or greater than their RQ are sent to the NRC at (800) 424-8802.

3.3.3.4.5. The purpose of the notification to NRC, SERC and LERC is to alert government officials that an emergency response may be needed to protect human health and the environment. The decision to respond to a reported release is on a case-by-case basis. Reporting a release does not free the responsible party from liability for cleanup costs (50 Federal Register 13459; April 1985).

3.3.3.4.6. Emergency Planning and Community Right-to-Know Act (EPCRA) utilizes the

following three lists of hazardous and toxic substances:

3.3.3.4.6.1. Extremely Hazardous Substance (EHS)

3.3.3.4.6.2. CERCLA hazardous substances

3.3.3.4.6.3. Toxic chemicals

3.3.3.4.7. A consolidated "List of Lists" for these three lists can be found on the EPA website section "Title III Consolidated List of Lists at http://www.epa.gov/emergencies/tools.htm#lol with the document version at: http://www.epa.gov/emergencies/docs/chem/list_of_lists_revised_7_26_2011.pdf. A link to the EPA site is on the Environmental Management Spill Planning and Response web page: https://em.eglin.af.mil/emcp/spill/EAFB_Plan326.asp as identified in Tab D to Appendix 1 to Annex B. The EHSs are the chemicals with an "X" under the column titled "302," and the CERCLA hazardous substances have an "X" under the column entitled "CERCLA." The list includes the following information on each chemical listed if available:

3.3.3.4.7.1. Chemical Abstract Service Registry number.

3.3.3.4.7.2. Chemical name.

3.3.3.4.7.3. 302 - EHSs as designated by EPA.

3.3.3.4.7.4. CERCLA - Hazardous substances as designated under the Comprehensive Environmental Response, Compensation and Liability Act.

3.3.3.4.7.5. 313 - Designated as reportable under 313, Toxic Release Inventory, Form R.

3.3.3.4.7.6. RCRA - Designated as a HAZWASTE under the Resource Conservation and Recovery Act.

3.3.3.4.7.7. RQ as defined by CERCLA and Section 304 of EPCRA.

3.3.3.4.7.8. Threshold Planning Quantities (TPQs) - TPQ1/TPQ2 for EHSs; if there is both a TPQ1 and TPQ2 listed, the TPQ1 applies under the following conditions:

3.3.3.4.7.8.1. The solid is a powder with a particle size less than 100 microns (1 micron = a millionth part of a meter).

3.3.3.4.7.8.2. It is handled in solution or molten form.

3.3.3.4.7.8.3. It has a National Fire Protection Association rating of 2, 3 or 4 for reactivity; otherwise, TPQ2 applies. A blank in the TPQ or RQ means there is no reporting requirement established for that specific chemical at this time. The TPQ and RQ are measured in pounds for the hazardous material covered.

3.3.3.4.7.8.4. If the RQ for any of the EHSs or CERCLA hazardous substances listed chemicals are met or exceeded, the following applies:

3.3.3.4.7.8.5. As soon as practical after a release, which requires notification, the owner or operator of the facility must provide written follow-up notice. The Section 304 Form is not for the written follow-up notice. The written follow-up notice must include the following:

3.3.3.4.7.8.5.1. Information updating the original notification.

3.3.3.4.7.8.5.2. Actions taken to respond to and contain the release.

3.3.3.4.7.8.5.3. Any known or anticipated acute or chronic health risks associated with the release.

3.3.3.4.7.8.5.4. Advice regarding medical attention necessary for exposed individuals.

3.3.3.4.7.8.6. This follow-up notice must be sent to:

3.3.3.4.7.8.6.1. The SERC, 2740 Centerview Drive, Tallahassee, Florida 32399-2149.

3.3.3.4.7.8.6.2. District 1 LEPC, Post Office Box 486, Pensacola, Florida 32593-0486.

3.3.3.4.7.8.7. In a letter to the Okaloosa County Emergency Management Office, it was reported that Eglin AFB uses only two extremely hazardous substances that may exceed the TPQ. They are:

3.3.3.4.7.8.7.1. Hydrazine (CASE #302-021-2), TPQ = 1,000 pounds.

3.3.3.4.7.8.7.2. Chlorine gas (CASE #7782-50-5), TPQ = 100 pounds.

3.3.3.4.7.8.8. In addition, the following EHSs may be used on Eglin AFB but do not exceed the TPQ:

3.3.3.4.7.8.8.1. Formaldehyde (CASE #50-00-0), TPQ = 500 pounds.

4. OFF-BASE NOTIFICATIONS

4.1. USCG National Response Center, (800) 424-8802.

4.2. EPA (Region IV), Atlanta, Georgia, (404) 526-5062.

4.3. When there is a discharge of raw sewage, the Environmental Compliance Office will notify the Domestic Wastewater Treatment Section of the FDEP at (850) 436-8360 and the Okaloosa County Health Department at (850) 833-9248.

4.4. Spills that threaten or pose hazards to coastal waters including the bayous and bays adjacent to Eglin AFB will be reported by the Environmental Compliance Office to the following agencies:

4.4.1. Florida Fish and Wildlife Conservation Commission; http://myfwc.com/:

4.4.1.1. Oil, Fuel or Hazardous Material Spills in Florida Waters: (800) 320-0519.

4.4.1.2. Regional Office Panama City: (850) 265-3676.

4.4.1.3. Destin–USCG, (850) 244-7147, http://www.uscg.mil/d8/stadestin/.

4.4.1.4. Following are websites with spill response guidance and information.

4.4.1.4.1. Florida State Emergency Response Team (http://www.floridadisaster.org/EMTOOLS/Hazmat/index.htm).

4.4.1.4.2. Florida Bureau of Emergency Response Reportable Incident (http://www.dep.state.fl.us/law/ber/reportable_incident.htm).

5. ADDITIONAL OFF-BASE NOTIFICATION: Any off-base notification should be reported to 96 TW/PA at (850) 882-3931 during duty hours or to the Eglin Command Post at (850) 883-4020 after normal hours.

6. In general, when in doubt, REPORT.

Tabs:
A -- Spill Response Checklist for Contractors and 96 CEG
B -- Summary of Federal and State Reporting Requirements
C -- Spill Discharge Report
D -- Consolidated List of Chemicals
E – Section 304 Reporting Form
F – Spill Plan Supplemental Information

TAB A TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE CHECKLIST FOR CONTRACTORS AND 96 CEG

ITEM	In the event of a spill, Eglin AFB contractors will:
1	If there is a threat to **LIFE, HEALTH, SAFETY** or a potential FIRE, immediately call Eglin Fire Department via 911.
2	If trained, have appropriate personal protective equipment and only if it is safe to do so, make every effort to contain the spill or release and then start cleaning up the spilled material.
3	Notify and inform the contract **COR AS SOON AS POSSIBLE** of the spill.
4	Report all spills, releases, and accidental discharges of petroleum, oils, lubricants, chemicals or hazardous materials regardless of quantity to 96 CEG/CEVC, (850) 240-1628.
5	Fill out an Eglin Air Force Base Spill Discharge Report and hand carry or fax it to 96 CEG/CEVCE at (850) 882-7675, Building 592, within 4 duty hours.
6	Complete an AF IMT 103, *Base Civil Engineer Work Clearance Form* (Digging Permit), if soil removal or excavation one foot or greater below surface is required and submit with spill report. Wait for approval before excavating deeper.
7	Obtain site cleanup verification from 96 CEG/CEIE prior to filling any soil removal or excavation. In some cases soil sampling and laboratory analysis will be required to confirm cleanup.
8	Pay for all associated costs for cleanup. Contractors may conduct cleanup efforts themselves if they have the capability, or may obtain services of a contracted environmental cleanup company.
	Coordinate all disposal manifests through 96 CEG/CEVC for signing and manifest control numbers.
	Ensure site cleanup and remediation restores the environment back to its original state.
9	Collect costs for the following:
	All equipment and supplies used to contain the release to the environment.
	All transportation/disposal costs.
	Any additional contractor incurred expenses if required.
	All lab analysis, as well as any site assessments or long-term remediation efforts to return the environment back to its original state.
	Any treatment/disposal of contaminated material (i.e., thermal treatment, land fill, chemical treatment).
	Contractor WILL NOT:
10	Contact any Federal, State or Local Regulatory Agency without coordinating with 96 CEG/CEVC.
11	Take any soil, water, air or any other samples for laboratory analysis without coordinating with 96 CEG/CEVC.

12	Fill in any cleanup excavation site without 96 CEG/CEVC approval confirming cleanup.
13	Start any long-term site remediation work that exceeds threshold of immediate response without 96 CEG/CEIE approval.
14	Allow leaking equipment to remain in-service or on Eglin AFB.
15	Dispose of cleanup material without a 96 CEG/CEV signed manifest.
	96 CEG/CEIEC will:
16	Report all RQ spills, releases, accidental discharges of petroleum, oils, lubricants, chemicals or hazardous materials to the appropriate Federal, State or Local Regulatory Agency.
	State Warning Point: (800) 320-0519
	National Response Center: (800) 424-8802
	Okaloosa County Emergency Management: (850) 651-7150
	FDEP: Mr. Bruce McNutt (850) 595-8300
	Eglin Fire Department: (850) 882-5856
17	Oversee all spill site cleanup efforts from spills, releases, and accidental discharges of petroleum, oils, lubricants, chemicals or hazardous materials caused by a contractor or their subcontractors.
18	Ensure that if the spill is ***below*** the chemical's RQ threshold, cleanup confirmation is done by on-site detection equipment and verify before authorizing backfill of excavation site.
19	Ensure that if the spill is ***at or above*** the chemical's RQ threshold, cleanup confirmation is done by sampling and laboratory analysis. Verify before authorizing backfill of excavation site.
20	Coordinate all remediation efforts with the appropriate Organizational Program Managers.
	Cultural: Mr. Mark Stanley (850) 882-8459
	IRP: Ms. Robin Bjorklund (850) 882-7791
	Storm Water: Mr. Russell Brown (850) 882-7660
	Wetlands: Mr. Russell Brown (850) 882-7660
	Drinking Water: Mr. Willard Pearson (850) 882-4897/Mr. Russell Brown (850) 882-7660
	Natural Resources Jackson Guard: Mr. Bruce Hagedorn (850) 882-8391
	Waste Water Treatment Plants: Mr. Jay Pearson (850) 882-4897/Mr. Russell Brown (850) 882-7660
	Spill Response Program Manager: Mr. Bruce Stippich (850) 240-1628
	Fuel Storage Tank Program Manager: Mr. Tim Langley (850) 882-7658

TAB B TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SUMMARY OF FEDERAL AND STATE REPORTING REQUIREMENTS

STATUTE	REPORTING REQ.	REPORTABLE QUANTITY NARRATIVE THRESHOLD	REC AUTH	REPORT DEADLINE	STATUTORY REGULATION REFERENCE
CAA	Excess emission report	Excess over amount allowed in permit.	EPA, Quarterly	Written report.	40 CFR 60.7(c)
CAA	Physical or operational changes in facility that may increase emission rate.	Change in facility that may increase emission of air pollutants to which the standard applies.	EPA	Written report 60 days or ASAP before change takes place.	40 CFR 60.7(a)
CAA	Vinyl chloride releases.	Relief valve discharge of vinyl chloride.	EPA; Within 10 days.	Written report.	40 CFR 61.65(a)
CERCLA	Haz substance release above RQ	Varies. Reporting is required when RQ is released in a 24-hour period CERCLA listed haz sub, 40 CFR 302.5(a) and Table 302.4, CERCLA unlisted haz sub, i.e., RCRA haz waste 40 CFR 302.5(b).	NRC	Immediately. 40 CFR 302	42 USC 9603(a)
CWA	Oil releases to navigable waters.	Release which either: (a) causes a film/sheen/discoloration of surface or adjoining shorelines or emulsion deposits or (b) violates applicable water quality standards.	NRC	Immediately.	33 USC 1321(b)(3) 40 CFR 110.10
CWA	Release of CWA haz substances to "Navigable Waters."	Varies: reporting is required when RQ released within a 24-hour period.	NRC	Immediately.	33 USC1321(b)(5) 40 CFR 117.21, 40 CFR Tb1 117.3
CWA	Reporting.	Reporting required when within a 24-hour period.	EPA	Written report.	40 CFR 112.4(a)
CWA	Reporting. Requirement for Facilities with SPCC Plan	Reporting required when within 12 months: (a) discharge of 1,000 gal or more of oil in navigable waters or (b) two spill events reportable under CWA 3319 (d)(5).	EPA	Written report within 60 days.	40 CFR 112.4(a)
CWA	NPDES permit exclusion	Any noncompliance with permit conditions that may endanger health of environment.	EPA reg admin	24 hours with written follow-up within 5 days of noncompliance	40 CFR 122.41 (1)(6)
HMTA	HAZMAT	See list of reportable incidents, 40 CFR 171 15-16, AFR 75-1.	NRC	Immediately/ written follow-up within 30 days.	40 CFR 171.15 and 171.16
RCRA	Emergency release at SD facility.	40 CFR 264.56 (a-c) and 265.56 (a-c).	State Local	Immediately.	40 CFR 264.56 and 265.56 (a-c)
RCRA	Possible release due to hazardous waste shipped and lost/ unaccounted for.	If generator does not receive signed manifest within 35 days, he must contact the transporter. If within 45 days signed manifest is not received, reporting is required.	EPA, Reg Admin	Within 45 days of date waste was accepted by original transporter written exception must be filed.	40 CFR 262.42

RCRA	Releases from solid waste mgt units to uppermost aquifer.	"Statistically significant" increase in constituents specified in permits.	EPA, Reg Admin	7 days.	40 CFR 264.99
RCRA	Releases from surface impoundments at permitted TSD facilities identified at 40 CFR 264.227(a).	When surface impoundments must be removed from surface as specified.	EPA, Reg Admin	7 days.	40 CFR 264.227(b)
RCRA	Release from tank system or secondary confinement system at TSD facility. (See UST below).	Release other than those under 1lb that are immediately cleaned up must be reported.	EPA, Reg Admin	24 hrs follow-up within 30 days.	40 CFR264.196 (d)(1)(3)
RCRA	Releases from TSD facilities w/interim status	Significant increase in constituents or significant increase or decrease in pH.	EPA, Reg Admin	7 days/15 days for written follow-up.	40 CFR 265.93(d)(1)(2)
RCRA USTs:	(a) Overfills/spills.	25 gal of petroleum of CERCLA RQ of hazardous substances.	Implementing agency, EPA or State	24 hrs.	40 CFR 280.53
	(b) Release (suspected).	See list of reportable conditions 40 CFR 280.50, FAC 62-761 and FAC 62-762.			40 CFR 280.50, FAC 62-761, FAC 62-762
	(c) Release (confirmed).			24 hrs/written follow-up within 20 days 2nd written follow-up 45 days of release.	
SARA Title39:6539 :7039:7639: 7939:8239:8 5F4239:613 9:8739:61	EHS release above RQ.	Varies. Reporting is required when RQ is released in a 24-hr period EHS, 40 CFR 355, Appendix A or B.	LEPC SERC	Immediately, if potential is leaving the base.	42 USC 110 40 CFR, 355.40
TSCA	Emergency incidents of environmental contamination.	Substance or mixture: seriously threatens people who have cancer, birth defects, mutation, serious or prolonged incapacitation -- seriously threatens nonhuman organism population.	EPA Reg Admin	Immediately/15 days for written report.	a) 43 Fed. Reg. 11110 3/16/1978 follow-up.
TSCA 15 USC 2607	Substantial risk information	Information that must be reported: any instance of cancer, birth defects, mutation or death or serious or prolonged incapacitation if one or a few chemicals strongly implicated or any pattern of effects or evidence that reasonably supports conclusion that substance or mixture causes cancer, mutation, birth defects, death or serious or prolonged incapacitation	EPA Doc processing center	5 days.	43 Fed. Reg. 11110 16, March 1978
TSCA	PCBs	Spills, 10lbs or more or PBC material in excess of 50 ppm.	NRC Reg Admin	Immediately NLT 25 hrs after discovery.	40 CFR 761.125 (a)(1) or other

TAB C TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SPILL DISCHARGE REPORT

REFERENCES: See Basic Plan. This form and electronic entry/submittal can be found at https://em.eglin.af.mil/emcp/spill/Default.aspx

SPILL/DISCHARGE REPORT

Eglin Air Force Base Spill Discharge Report

NOTE: this form is for reporting all spills and accidental discharges of petroleum, oils, lubricants, chemicals and hazardous waste regardless of the quantity. Please complete this form and hand carry or Fax to (850) 882-7675 to 96 CEG/CEIE, Building 592 within 4 duty hours of the spill occurrence.

Responsible Organization: _____	
POC: _____	**Telephone: _____**
Date of spill: _____	**Time of Spill: _____ hrs**
Type of Pollutant:	**Vehicle/Tail No.#: _____**
Est. Amount (gallons): _____	
Location of Spill: _____	
Latitude: _____	**Longitude: _____**
Cause of Spill:	

Human Error___	**Equipment Failure___**	**Act of Nature___**	**Over Pressure___**	**Accident___**	**Other___**

Containment/Cleanup Action:

Actions taken to prevent future occurrence:
Date: _____
Name/Grade of Commander
Commander/Supervisor Signature
NOTE: Any amounts that exceed the RQ or is 10 gallons or more must have the Commander's signature. Amounts less than 10 gallons must be signed by the shop-level supervisor.

TAB D TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
CONSOLIDATED LIST OF CHEMICALS

REFERENCES: See Annex Y.

1. GENERAL: A link to consolidated list of chemicals is at the Environmental Management Spill Response website https://em.eglin.af.mil/emcp/spill/EAFB_Plan326.asp. http://www.epa.gov/emergencies/docs/chem/list_of_lists_revised_7_26_2011.pdf

NAME	NAME INDEX	CAS	TPQ	RQ	S313	RCRA CODE	CAA_112R
[1,2-PhenylEnebis (iminocarbonothioyl)] biscarbamic acid diethyl ester	PHENYLENEBISIMINOCARBONOTHIOYLBISCARBAMIC ACID DIET	23564069	1000/10,000		X		
(1-aziridinyl)							
[2-(4-Phenoxy-phenoxy)-ethyl] carbamic acid ethyl ester	PHENOXYPHENOXYETHYLCARBAMICACIDETHYLESTER	72490018			X		
(4-Chloro-2-methylphenoxy) acetate sodium salt	CHLOROMETHYLPHENOXYACETATESODIUMSALT	3653483			X		
(4-Chloro-2-methylphenoxy) acetic acid	CHLOROMETHYLPHENOXYACETICACID	94746			X		
.alpha.-(2-Chlorophenyl)-.alpha.-4-chlorophenyl)-5-pyrimidinemethanol	CHLOROPHENYLCHLOROPHENYLPYRIMIDIN	60168889			X		
.alpha.-Butyl-.alpha.-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile	BUTYLCHLOROPHENYLTRIAZOLE-1-P	88671890			X		
1-[2-(2,4-Dichlorophenyl)-2-(2-propenyloxy)ethyl]-1H-imidazole	DICHLOROPHENYLPROPENYLOXYETHYLIMIDAZO	35554440			X		
1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4,-triazole	DICHLOROPHENYLPROPYLDIOXOLANYLMETHYL	60207901			X		
1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride	CHLOROALLYLTRIAZA-1-AZONIAADAMANTANE CHLOR	4080313			313		
1-(4-Chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone	CHLOROPHENOXYDIMETHYLTRIAZOLYL	43121433			X		
1,1,1,2-Tetrachloro-2-fluoroethane	TETRACHLOROFLUOROETHANE (HCFC-121A)	354110			313		

1,1,1,2-Tetrachloroethane	TETRACHLOROETHANE	630206		100	313	U208	
1,1,1-Trichloroethane	TRICHLOROETHANEA	71556		1,000	313	U226	
1,1,2,2-Tetrachloro-1-fluoroethane	TETRACHLOROFLUOROETHANE (HCFC-121)	354143			313		
1,1,2,2-Tetrachloroethane	TETRACHLOROETHANE	79345		100	313	U209	
1,1,2-Trichloroethane	TRICHLOROETHANEB	79005		100	313	U227	
1,1-Dichloro-1, 2,2,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225CC)	13474889			313		
1,1-Dichloro-1, 2,2-trifluoroethane	DICHLOROTRIFLUOROETHANE11	812044			313		
1,1-Dichloro-1, 2,3,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225EB)	111512562			313		
1,1-Dichloro-1-fluoroethane	DICHLOROFLUOROETHANE	1717006			313		
1,1-Dichloroethane	DICHLOROETHANE	75343		1,000	X	U076	
1,1-Dichloroethylene	DICHLOROETHYLENE	75354		100	X	U078	10,000
1,1-Dichloropropane	DICHLOROPROPANE11	78999		1,000			
1,1-Dimethyl hydrazine	DIMETHYLHYDRAZI	57147	1,000	10	313	U098	15,000
1,1-Methylene BIS (4-isocyanatocyclohexane)	METHYLENEBISISOCYANATOCYCLOHEXANE)	5124301			313#		
1,2,3-Trichloropropane	TRICHLOROPROPANE	96184			313		
1,2,4,5-Tetrachlorobenzene	TETRACHLOROBENZENE	95943		5,000		U207	
1,2,4-Trichlorobenzene	TRICHLOROBENZE	120821		100	313		
1,2,4-Trimethylbenzene	TRIMETHYLBENZ	95636			313		
1,2-Butylene oxide	BUTYLENEOXIDE	106887		1*	313		
1,2-Dibromo-3-chloropropane	DIBROMOCHLORO	96128		1	313	U066	
1,2-Dibromoethane	DIBROMOETHANEE	106934		1	313	U067	
1,2-Dichloro-1, 1,2,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225BB)	422446			313		
1,2-Dichloro-1, 1,2-trifluoroethane	DICHLOROTRIFLUOROETHANE12	354234			313		
1,2-Dichloro-1, 1,3,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225DA)	431867			313		
1,2-Dichloro-1, 1-difluoroethane	DICHLORODIFLUOROETHANE (HCFC-132B)	1649087			313		
1,2-Dichlorobenzene	DICHLOROBENZENEA	95501		100	313	U070	
1,2-Dichloroethane	DICHLOROETHANE	107062		100	313	U077	

1,2-Dichloroethylene	DICHLOROETHYLENE	156605		1,000		U079	
1,2-Dichloroethylene	DICHLOROETHYLENE	540590			313		
1,2-Dichloropropane	DICHLOROPROPANE12	78875		1,000	313	U083	
1,2-Diphenylhydrazine	DIPHENYLHYDRAZI	122667		10	313	U109	
1,2-Ethanediamine	ETHANEDIAMINE	107153	10,000	5,000			20,000
1,2-Phenylenediamine	PHENYLENEDIAMINE	95545			313		
1,2-Phenylenediamine dihydrochloride	PHENYLENEDIAMINEDIHYDROCHLORIDE	615281			313		
1,2-Propadiene	PROPADIENE	463490					10,000
1,3,5-Trinitrobenzene	TRINITROBENZENE	99354		10		U234	
1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro-	BENZENEDICARBONITRILETETRACHLORO-	1897456			X		
1,3-BIs (methylisocyanate) cyclohexane	BISMETHYLISOCYANATECYCLOHEXANE	38661722			313#		
1,3-Butadiene	BUTADIENE	106990		1*	313		10,000
1,3-Butadiene, 2-methyl-	BUTADIENEMETHYL	78795		100			10,000
1,3-Dichloro-1, 1,2,2,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225CB)	507551			313		
1,3-Dichloro-1, 1,2,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225EA)	136013791			313		
1,3-Dichlorobenzene	DICHLOROBENZENEB	541731		100	313	U071	
1,3-Dichloropropane	DICHLOROPROPANE13	142289		5,000			
1,3-Dichloropropene	DICHLOROPROPENE13	542756		100	X	U084	
1,3-Dichloropropylene	DICHLOROPROPYLEN	542756		100	313	U084	
1,3-Pentadiene	PENTADIENE	504609		100		U186	10,000
1,3-Phenylene diisocyanate	PHENYLENEDIISOCYANATE	123615			313#		
1,3-Phenylenediamine	PHENYLENEDIAMINE	108452			313		
1,3-Propane sultone	PROPANE SULTONE	1120714		10	X	U193	
1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	HEPTACHLOROTETRAHYDRO-4,7-METHANO-1	76448		1	X	P059	
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)	DIMETHANONAPHTHALENEHEXACHLORO-1,4,4	309002	500/10,000	1	X	P004	

1,4-BIS (methylisocyanate) cyclohexane	BISMETHYLISOCYANATECYCLOHEXANE	10347543			313#		
1,4-Cyclohexane diisocyanate	CYCLOHEXANEDIISOCYANATE	2556367			313#		
1,4-Dichloro-2-butene	DICHLORO2BUTENE	764410		1	313	U074	
1,4-Dichlorobenzene	DICHLOROBENZENEC	106467		100	313	U072	
1,4-Dioxane	DIOXANE	123911		100	313	U108	
1,4-Naphthoquinone	NAPHTHOQUINONE	130154		5,000		U166	
1,4-Phenylene diisocyanate	PHENYLENEDIISOCYANATE	104494			313#		
1,4-Phenylenediamine dihydrochloride	PHENYLENEDIAMINEDIHYDROCHLORIDE	624180			313		
1,5-Naphthalene diisocyanate	NAPHTHALENEDIISOCYANATE	3173726			313#		
1-Acetyl-2-thiourea	ACETYLTHIOUREA	591082		1,000		P002	
1-Amino-2-methylanthraquinone	AMINOMETHYLANTH	82280			313		
1-Bromo-1-(bromomethyl)-1,3-propanedicarbonitrile	BROMOBROMOMETHYL)-1,3-PROPANEDICARBONITRILE	35691657			313		
1-Buten-3-yne	BUTENYNE	689974					10,000
1-Butene	BUTENE1	106989					10,000
1-Butyne	BUTYNE	107006					10,000
1-Chloro-1,1,2,2-tetrafluoroethane	CHLOROTETRAFLUOROETHANE1	354256			313		
1-Chloro-1,1-difluoroethane	CHLORODIFLUOROETHANE	75683			313		
1-Chloropropylene	CHLOROPROPYLENE	590216					10,000
1H-Azepine-1 carbothioic acid, hexahydro-S-	AZEPINECARBOTHIOICACIDHEXAHYDRO-S-ETHYL ESTER	2212671			X		
1H-Isoindole-1,3(2H)-dione, 3a,4,7,7a-	ISOINDOLEDIONETETRAHYDROTRICHLO	133062		10	X		
1-Naphthalenol, methylcarbamate	NAPHTHALENOLMETHYLCARBAMATE	63252		100	X		
1-Nitropyrene	NITROPYRENE	5522430			313+		
1-Pentene	PENTENE	109671					10,000
1-Propene	PROPENE1	115071			X		10,000
1-Propene, 1-chloro	PROPENECHLORO-1	590216					10,000
1-Propene, 2-chloro	PROPENECHLORO-2	557982					10,000
1-Propene, 2-methyl	PROPENEMETHYL-	115117					10,000

1-Propyne	PROPYNE	74997					10,000
2-(3,4-Dichlorophenyl)-4-methyl-1, 2,4-oxadiazolidine-3, 5-dione	DICHLOROPHENYLMETHYLOXADIAZOLIDINEDIO	20354261			X		
2-(4-Methoxy-6-methyl-1, 3,5-triazin-2-yl) methylamino carbonyl, amino Sulfonyl - methyl ester	METHOXYMETHYLTRIAZINYLMETHYLAMINOCARBON	101200480			X		
2-(4-Thiazolyl)-1H-benzimidazole	THIAZOLYLBENZIMIDAZOLE	148798			X		
2,2,3,3-Tetramethylcyclopropane carboxylic acid cyano(3-phenoxyphenyl)methyl ester	TETRAMETHYLCYCLOPROPANECARBOXYLICACIDCYANOPHEN	39515418			X		
2,2,4-Trimethylhexamethylene diisocyanate	TRIMETHYLHEXAMETHYLENEDIISOCYANATE	16938220			313#		
2,2,4-Trimethylpentane	TRIMETHYLPENTANE	540841		1*			
2,2-Bioxirane	BIOXIRANE	1464535	500	10	X	U085	
2,2-Dibromo-3-nitrilopropionamide	DIBROMONITRILOPROPIONAMIDE	10222012			313		
2,2-Dichloro-1, 1,1,3,3-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225AA)	128903219			313		
2,2-Dichloro-1, 1,1-trifluoroethane	DICHLOROTRIFLUOROETHANE22	306832			313		
2,2-Dichloropropionic acid	DICHLOROPROPIONIC ACID	75990		5,000			
2,2-Dimethyl-1, 3-benzodioxol-4-ol methylcarbamate	DIMETHYLBENZODIOXOLOLMETHYLCARBAMATE	22781233			X		
2,2-Dimethyl-3- (2-methyl-1-propenyl) cyclopropanecarboxylic acid (1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester	DIMETHYLMETHYLPROPENYLCYCLOPROPANECARBOXYLIC A	7696120			X		
2,2-Dimethyl-3- (2-methyl-1-propenyl) cyclopropanecarboxylic acid (3-phenoxyphenyl) methyl ester	DIMETHYLMETHYLPROPENYLCYCLOPROPANECARBOXYLIC A	26002802			X		
2,2-Dimethylpropane	DIMETHYLPROPANE	463821					10,000
2,2-Methylenebis(4-chlorophenol)	METHYLENEBISCHLOROPHENOL	97234			X		

2,3,4,6-Tetrachlorophenol	TETRACHLOROPHENOL	58902		10			
2,3,4-Trichlorophenol	TRICHLOROPHENOL-A	15950660		10			
2,3,5-Trichlorophenol	TRICHLOROPHENOL-B	933788		10			
2,3,5-Trimethylphenyl methylcarbamate	TRIMETHYLPHENYLMETHYL CARBAMATE	2655154			313		
2,3,6-Trichlorophenol	TRICHLOROPHENOL-C	933755		10			
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	TETRACHLORODIBENZO-P-DIOXIN (TCDD)	1746016		1			
2,3-Dihydro-5,6-dimethyl-1,4-dithiin 1,1,4,4-tetraoxide	DIHYDRODIMETHYLDITHIIN TETRAOXIDE	55290647			X		
2,3-Dichloro-1, 1,1,2,3-pentafluoropropane	DICHLOROPENTAFLUOROPR OPANE (HCFC-225BA)	422480			313		
2,3-Dichloropropene	DICHLOROPROPENE23	78886		100	313		
2,4-(1H, 3H)-Pyrimidinedione, 5-bromo-6-methyl-3-(1-methylpropyl), lithium salt	PYRIMIDINEDIONEBROMOM ETHYLMETHYLPRO	53404196			X		
2,4,4-Trimethylhexamethylene diisocyanate	TRIMETHYLHEXAMETHYLEN EDIISOCYANATE	15646965			313#		
2,4,5-T acid	T ACID	93765		1,000		U232	
2,4,5-T amines	T AMINES	1319728		5,000			
2,4,5-T amines	T AMINES	2008460		5,000			
2,4,5-T amines	T AMINES	3813147		5,000			
2,4,5-T amines	T AMINES	6369966		5,000			
2,4,5-T amines	T AMINES	6369977		5,000			
2,4,5-T esters	T ESTERS	93798		1,000			
2,4,5-T esters	T ESTERS	1928478		1,000			
2,4,5-T esters	T ESTERS	2545597		1,000			
2,4,5-T esters	T ESTERS	25168154		1,000			
2,4,5-T esters	T ESTERS	61792072		1,000			
2,4,5-T salts	T SALTS	13560991		1,000			
2,4,5-TP esters	TP ESTERS	32534955		100			
2,4,5-Trichlorophenol	TRICHLOROPHENOL-D	95954		10	313		
2,4,6-Trichlorophenol	TRICHLOROPHENOL-E	88062		10	313		
2,4-D	D	94757		100	313	U240	
2,4-D 2-ethyl-4-methylpentyl ester	DETHYLMETHYLPENTYL ESTER	53404378			313		

2,4-D 2-ethylhexyl ester	DETHYLHEXYL ESTER	1928434			313		
2,4-D Acid	D ACID	94757		100	X	U240	
2,4-D butoxyethyl ester	BUTOXYETHYL ESTER-2,4-D	1929733		100	313		
2,4-D butyl ester	D BUTYL ESTER	94804		100	313		
2,4-D chlorocrotyl ester	CHLOROCROTYL ESTER	2971382		100	313		
2,4-D Esters	D ESTERS	94111		100	X		
2,4-D Esters	D ESTERS	94791		100			
2,4-D Esters	D ESTERS	94804		100	X		
2,4-D Esters	D ESTERS	1320189		100	X		
2,4-D Esters	D ESTERS	1928387		100			
2,4-D Esters	D ESTERS	1928616		100			
2,4-D Esters	D ESTERS	1929733		100	X		
2,4-D Esters	D ESTERS	2971382		100	X		
2,4-D Esters	D ESTERS	25168267		100			
2,4-D Esters	D ESTERS	53467111		100			
2,4-D isopropyl ester	D ISOPROPYL ESTER	94111		100	313		
2,4-D propylene glycol butyl ether ester	D PROPYLENE GLYCOL BUTYL ETHER ESTER	1320189		100	313		
2,4-D sodium salt	D SODIUM SALT	2702729			313		
2,4-D, salts and esters	D SALTS	94757		100		U240	
2,4-DB	DB	94826			313		
2,4-Diaminoanisole	DIAMINOANISOLE	615054			313		
2,4-Diaminoanisole sulfate	DIAMINOANISOLESULF	39156417			313		
2,4-Diaminotoluene	DIAMINOTOLUENEA	95807		10	313		
2,4-Dichlorophenol	DICHLOROPHENOL	120832		100	313	U081	
2,4'-Diisocyanatodiphenyl sulfide	DIISOCYANATODIPHENYLSULFIDE	75790873			313#		
2,4-Dimethylphenol	DIMETHYLPHENOL	105679		100	313	U101	
2,4-Dinitrophenol	DINITROPHENOLB	51285		10	313	P048	
2,4-Dinitrotoluene	DINITROTOLUENEB	121142		10	313	U105	
2,4-Dithiobiuret	DITHIOBIURET-2,4	541537	100/ 10,000	100	313	P049	
2,4-DP	DP	120365			313		
2,5-Cyclohexadiene-1, 4-dione, 2,3,5-tris	CYCLOHEXADIENEDIONETRIS (1-AZIRIDINYL)	68768			X		
2,5-Dinitrophenol	DINITROPHENOLC	329715		10			
2,6-Dichloro-4-nitroaniline	DICHLORONITROANILINE	99309			X		
2,6-Dichlorophenol	DICHLOROPHENOL	87650		100		U082	

2,6-Dimethylphenol	DIMETHYLPHENOL	576261			313		
2,6-Dinitrophenol	DINITROPHENOLD	573568		10			
2,6-Dinitrotoluene	DINITROTOLUENEC	606202		100	313	U106	
2,6-Xylidine	XYLIDINE	87627			313		
2-[(Ethoxyl)[(1-methylethyl)amino] [(phosphinothioyl)oxy] benzoic acid 1-methylethyl ester	ETHOXYLMETHYLETHYLAMINOPHOSPHINOTHIOYLOXYBENZOI	25311711			X		
2-[1-(Ethoxyimino) butyl]-5-[2-(ethylthio)propyl]-3-hydroxyl-2-cyclohexen-1-one	ETHOXYIMINOBUTYLETHYLTHIOPROPYLHYDROXYL	74051802			X		
2-[4-((6-Chloro-2-benzoxazolylen)oxy)phenoxy] propanoic acid, ethyl ester	CHLOROBENZOXAZOLYLENOXYPHENOXYPROPANOICACID,	66441234			X		
2-[4-((6-Chloro-2-quinoxalinyl)oxy)phenoxy] propanoic acid ethyl ester	CHLOROQUINOXALINYLOXYPHENOXYPROPANOIC ACID E	76578148			X		
2-[4-(2,4-Dichlorophenoxy)phenoxy)propanoic acid, methyl ester	DICHLOROPHENOXYPHENOXYPROPANOICACIDMETHYLEST	51338273			X		
2-[4-(5-(Trifluoromethyl)-2-pyridinyl)oxy]-phenoxy)propanoic acid, butyl ester	TRIFLUOROMETHYLPYRIDINYLOXYPHENOXYPROPANOIC	69806504			X		
2-Acetylaminofluorene	ACETYLAMINOFLUOREN	53963		1	313	U005	
2-Aminoanthraquinone	AMINOANTHRAQUINONE	117793			313		
2-Bromo-2-nitropropane-1, 3-diol	BROMONITROPROPANE-1, 3-DIOL	52517			313		
2-Butenal	BUTENAL	4170303	1,000	100	X	U053	20,000
2-Butenal, (e)	BUTENAL, (E)-	123739	1,000	100		U053	20,000
2-Butene	BUTENE2	107017					10,000
2-Butene, (E)	BUTENE-E	624646					10,000
2-Butene, 1,4-dichloro-	BUTENEDICHLORO-	764410		1	X	U074	
2-Butene-cis	BUTENE-CIS	590181					10,000
2-Butene-trans	BUTENE-TRANS	624646					10,000
2-Chloro-1, 1,1,2-tetrafluoroethane	CHLOROTETRAFLUOROETHANE2	2837890			313		
2-Chloro-1, 1,1-trifluoroethane	CHLOROTRIFLUOROETHANE (HCFC-133A)	75887			313		

2-Chloro-6-(trichloromethyl)pyridine	CHLOROTRICHLOROMETHYL PYRIDINE	1929824			X		
2-Chloroacetophenone	CHLOROACETOPHENONE	532274		1*	313		
2-Chloroethyl vinyl ether	CHLOROETHYLVINYL ETHER	110758		1,000		U042	
2-Chloro-N- (1-methylethyl)-N-phenylacetamide	CHLOROMETHYLETHYLPHENYLACETAMIDE	1918167			X		
2-Chloro-N- (2-chloroethyl)-N-methylethanamine	CHLOROCHLOROETHYL)-N-METHYLETHANAMINE	51752	10		X		
2-Chloro-N-([(4-methoxy-6-methyl-1, 3,5-triazin-2-yl) amino)] carbonyl)benzenesulfonamide	CHLOROMETHOXYMETHYLTRIAZINYLAMINO]CA	64902723			X		
2-Chloronaphthalene	CHLORONAPHTHALENE	91587		5,000		U047	
2-Chlorophenol	CHLOROPHENOL	95578		100		U048	
2-Chloropropylene	CHLOROPROPYLENE	557982					10,000
2-Cyclohexyl-4, 6-dinitrophenol	CYCLOHEXYLDINITROPHENOL	131895		100		P034	
2-Ethoxyethanol	ETHOXYETHANOL	110805		1,000	313	U359	
2-Mercaptobenzothiazole	MERCAPTOBENZOTHIAZOLE (MBT)	149304			313		
2-Methoxyethanol	METHOXYETHANOL	109864			313		
2-Methyl-1-butene	METHYLBUTENE2	563462					10,000
2-Methyllactonitrile	METHYLLACTONITRILE	75865	1,000	10	313	P069	
2-Methylpropene	METHYLPROPENE	115117					10,000
2-Methylpyridine	METHYLPYRIDINE	109068		5,000	313	U191	
2-Nitrophenol	NITROPHENOLA	88755		100	313		
2-Nitropropane	NITROPROPANE	79469		10	313	U171	
2-Pentene, (E)-	PENTENEE	646048					10,000
2-Pentene, (Z)-	PENTENEZ	627203					10,000
2-Phenylphenol	PHENYLPHENOL	90437			313		
2-Picoline	PICOLINE	109068		5,000	X	U191	
2-Propanamine	PROPANAMINE	75310					10,000
2-Propen-1-amine	PROPENAMINE	107119	500		X		10,000
2-Propen-1-ol	PROPENOL	107186	1,000	100	X	P005	15,000
2-Propenal	PROPENAL	107028	500	1	X	P003	5,000
2-Propenenitrile	PROPENENITRILE	107131	10,000	100	X	U009	20,000

2-Propenenitrile, 2-methyl-	PROPENENITRILEMETHYL-	126987	500	1,000	X	U152	10,000
2-Propenoyl chloride	PROPENOYLCHLORIDE	814686	100				5,000
3-([(Ethylamino)methoxyphosphinothioyl]oxy)-2-butenoic acid, 1-methylethyl ester	ETHYLAMINOMETHOXYPHOSPHINOTHIOYLOXYBUTENOIC ACID,	31218834			X		
3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropane carboxylic acid, (3-phenoxy-phenyl)methyl ester	DICHLOROETHENYLDIMETHYLCYCLOPROPANECARBOXYLI	52645531			X		
3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid, cyano(4-fluoro-3-phenoxyphenyl)methyl ester	DICHLOROETHENYLDIMETHYLCYCLOPROPANECARBOXYLIC A	68359375			X		
3-(2,4-Dichloro-5-(1-methylethoxy)phenyl)-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one	DICHLOROMETHYLETHOXYPHENYLDIMETHYLETH	19666309			X		
3-(2-Chloro-3, 3,3-trifluoro-1-propenyl)-2,2-Dimethylcyclopropanecarboxylic acid cyano(3-phenoxyphenyl) methyl ester	CHLOROTRIFLUOROPROPENYLDIMETHYLCYCLOPRO	68085858			X		
3-(3,5-Dichlorophenyl)-5-ethenyl-5-methyl-2, 4-oxazolidinedione	DICHLOROPHENYLETHENYLMETHYLOXAZOLIDINEDIO	50471448			X		
3,3-Dichloro-1, 1,1,2,2-pentafluoropropane	DICHLOROPENTAFLUOROPROPANE (HCFC-225CA)	422560			313		
3,3-Dichlorobenzidine	DICHLOROBENZIDINE	91941		1	313	U073	
3,3-Dichlorobenzidine dihydrochloride	DICHLOROBENZIDINEDIHYDROCHLORIDE	612839			313		
3,3-Dichlorobenzidine sulfate	DICHLOROBENZIDINESULFATE	64969342			313		
3,3-Dimethoxybenzidine	DIMETHOXYBENZID	119904		100	313	U091	
3,3-Dimethoxybenzidine dihydrochloride	DIMETHOXYBENZIDINEDIHYDROCHLORIDE	20325400			313		
3,3-Dimethoxybenzidine hydrochloride	DIMETHOXYBENZIDINEHYDROCHLORIDE	111984099			313		
3,3-Dimethoxybenzidine-4, 4-diisocyanate	DIMETHOXYBENZIDINEDIISOCYANATE	91930			313#		
3,3'-Dimethyl-4,4-diphenylene diisocyanate	DIMETHYLDIPHENYLENEDIISOCYANATE	91974			313#		
3,3-Dimethylbenzidine	DIMETHYLBENZIDI	119937		10	313	U095	
3,3-Dimethylbenzidine dihydrochloride	DIMETHYLBENZIDINEDIHYDROCHLORIDE	612828			313		

3,3-Dimethylbenzidine dihydrofluoride	DIMETHYLBENZIDINEDIHYDROFLUORIDE	41766750			313		
3,3-Dimethyldiphenylmethane-4,4-diisocyanate	DIMETHYLDIPHENYLMETHANEDIISOCYANATE	139253			313#		
3,4,5-Trichlorophenol	TRICHLOROPHENOL-F	609198		10			
3,4-Dinitrotoluene	DINITROTOLUENED	610399		10			
3,5-Dibromo-4-hydroxybenzonitrile	DIBROMOHYDROXYBENZONITRILE	1689845			X		
3,6-Dichloro-2-methoxybenzoic acid	DICHLOROMETHOXYBENZOICACID	1918009		1,000	X		
3,6-Dichloro-2-methoxybenzoic acid, sodium salt	DICHLOROMETHOXYBENZOICACIDSODIUM SALT	1982690			X		
3-Chloro-1,1,1-trifluoropropane	CHLOROTRIFLUOROPROPANE (HCFC-253FB)	460355			313		
3-Chloro-2-methyl-1-propene	CHLOROMETHYL-1-PROPENE	563473			313		
3-Chloropropionitrile	CHLOROPROPIONITRILE	542767	1,000	1,000	313	P027	
3-Iodo-2-propynyl butylcarbamate	IODOPROPYNYL BUTYLCARBAMATE	55406536			313		
3-Methyl-1-butene	METHYLBUTENE3	563451					10,000
3-Methylcholanthrene	METHYLCHOLANTHRENE	56495		10		U157	
4-(Dipropylamino)-3,5-dinitrobenzenesulfonamide	DIPROPYLAMINODINITROBENZENESULFONAMIDE	19044883			X		
4,4-Diaminodiphenyl ether	DIAMINODIPHENYL	101804			313		
4,4-Diisocyanatodiphenyl ether	DIISOCYANATODIPHENYLETHER	4128738			313#		
4,4-Isopropylidenediphenol	ISOPROPYLIDENED	80057			313		
4,4-Methylenebis(2-chloroaniline)	METHYLENEBISCHLORO	101144		10	313	U158	
4,4-Methylenebis(N,N-dimethyl)benzenamine	METHYLENEBISDIMETH	101611			313		
4,4-Methylenedianiline	METHYLENEDIANI	101779		1*	313		
4,4-Thiodianiline	THIODIANILINE	139651			313		
4,6-Dichloro-N-(2-chlorophenyl)-1,3,5-triazin-2-amine	DICHLOROCHLOROPHENYLTRIAZIN-2-AMINE	101053			X		
4,6-Dinitro-o-cresol	DINITROCRESOL	534521	10/10,000	10	313	P047	
4,6-Dinitro-o-cresol and salts	DINITROOCRESOL AND SALTS	534521		10		P047	

4,7-Methanoindan, 1,2,3,4,5,6,7,8,8-octachloro-2, 3,3a, 4,7,7a-hexahydro-	METHANOINDANOCTACHLORO-2, 3,3A, 4,7,7A	57749	1,000	1	X	U036	
4-Aminoazobenzene	AMINOAZOBENZENE	60093			313		
4-Aminobiphenyl	AMINOBIPHENYL	92671		1*	313		
4-Aminopyridine	AMINOPYRIDINE	504245	500/ 10,000	1,000		P008	
4-Bromophenyl phenyl ether	BROMOPHENYL PHENYL ETHER	101553		100		U030	
4-Chloro-5-(methylamino)-2-[3-(trifluoromethyl)phenyl]-3(2H)-pyridazinone	CHLOROMETHYLAMINOTRIFLUOROMETHYLPHENYL]-3(2H)	27314132			X		
4-Chloro-alpha-(1-methylethyl)benzeneacetic acid cyano(3-phenoxyphenyl)methyl ester	CHLOROMETHYLETHYLBENZENEACETICACIDCYANOPHE	51630581			X		
4-Chloro-o-toluidine, hydrochloride	CHLOROTOLUIDINE, HYDROCHLORIDE	3165933		100		U049	
4-Chlorophenyl phenyl ether	CHLOROPHENYLPHENYL ETHER	7005723		5,000			
4-Dimethylaminoazobenzene	DIMETHYLAMINOAZO	60117		10	313	U093	
4-Methyldiphenylmethane-3,4-diisocyanate	METHYLDIPHENYLMETHANEDIISOCYANATE	75790840			313#		
4-Nitrobiphenyl	NITROBIPHENYL	92933		1*	313		
4-Nitrophenol	NITROPHENOLB	100027		100	313	U170	
5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitro-2-ethoxy-1-methyl-2-oxoethyl ester	CHLOROTRIFLUOROMETHYLPHENOXYNITROETHOXYM	77501634			X		
5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitrobenzoic acid, sodium salt	CHLOROTRIFLUOROMETHYLPHENOXY)-2-NITROBENZOICACID,	62476599			X		
5-(2-Chloro-4-(trifluoromethyl)phenoxy)-N-methylsulfonyl)-2-nitrobenzamide	CHLOROTRIFLUOROMETHYLPHENOXYMETHYLSULFONYL)-2-	72178020			X		
5-(Aminomethyl)-3-isoxazolol	AMINOMETHYLISOXAZOLOL	2763964	500/ 10,000	1,000		P007	
5-(Phenylmethyl)-3-furanyl)methyl 2,2-dimethyl-3-(2-methyl-	PHENYLMETHYLFURANYLMETHYLDIMETHYLMETHYL	10453868			X		

1propenyl)cyclopropanecarboxylate							
5,6-Dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxamide	DIHYDROMETHYLPHENYLOXATHIINCARBOXAMIDE	5234684			X		
5-Bromo-6-methyl-3-(1-methylpropyl)-2,4-(1H,3H)-pyrimidinedione	BROMOMETHYLMETHYLPROPYLPYRIMIDINEDI	314409			X		
5-Chloro-3-(1,1-dimethylethyl)-6-methyl-2,4(1H,3H)-pyrimidinedione	CHLORODIMETHYLETHYLMETHYLPYRIMIDIN	5902512			X		
5-Fluorouracil	FLUOROURACIL,5-	51218	500/10,000		X		
5-Methylchrysene	METHYLCHRYSENE5	3697243			313+		
5-Nitro-o-anisidine	NITROANISIDINE	99592			313		
5-Nitro-o-toluidine	NITROTOLUIDINE	99558		100	313	U181	
6-Chloro-N-ethyl-N'-(1-methylethyl)-1,3,5-triazine-2,4-diamine	CHLOROETHYLMETHYLETHYL-1,3,5-TRIAZINE-2,4-DIAMI	1912249			X		
6-Methyl-1,3-dithiolo[4,5-b]quinoxalin-2-one	METHYLDITHIOLOQUINOXALIN-2-ONE	2439012			X		
7,12-Dimethylbenz[a]anthracene	DIMETHYLBENZAANTHRACENE	57976		1	313+	U094	
7H-Dibenzo(c,g)carbazole	DIBENZOCARBAZOLECG	194592			313+		
7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid, dipotassium salt	OXABICYCLOHEPTANEDICARBOXYLICACIDDIPOTASSIU	2164070			X		
Abamectin	ABAMECTIN AVERMECTIN B1	71751412			313		
Acenaphthene	ACENAPHTHENE	83329		100			
Acenaphthylene	ACENAPHTHYLENE	208968		5,000			
Acephate	ACEPHATE	30560191			313		
Acetaldehyde	ACETALDEHYDE	75070		1,000	313	U001	10,000
Acetaldehyde, trichloro-	ACETALDEHYDE, TRICHLORO-	75876		5,000		U034	
Acetamide	ACETAMIDE	60355		1*	313		
Acetic acid	ACETICACID	64197		5,000			
Acetic acid ethenyl ester	ACETICACIDETHENYLESTER	108054	1,000	5,000	X		15,000
Acetic acid, (2,4-dichlorophenoxy)-	ACETICACIDDICHLOROPHENOXY)-	94757		100	X	U240	
Acetic anhydride	ACETICANHYDRIDE	108247		5,000			

Acetone	ACETONE	67641		5,000	313	U002	
Acetone cyanohydrin	ACETONE CYANOHYDRIN	75865	1,000	10	X	P069	
Acetone thiosemicarbazide	ACETONE THIOSEMICARBAZIDE	1752303	1,000 / 10,000				
Acetonitrile	ACETONITRILE	75058		5,000	313	U003	
Acetophenone	ACETOPHENONE	98862		5,000	313	U004	
Acetyl bromide	ACETYLBROMIDE	506967		5,000			
Acetyl chloride	ACETYLCHLORIDE	75365		5,000		U006	
Acetylene	ACETYLENE	74862					10,000
Acetylphosphoramidothioic acid O,S-dimethyl ester	ACETYLPHOSPHORAMIDOTHIOICACIDDIMETHYL ESTER	30560191			X		
Acifluorfen, sodium salt	ACIFLUORFEN, SODIUM SALT	62476599			313		
Acrolein	ACROLEIN	107028	500	1	313	P003	5,000
Acrylamide	ACRYLAMIDE	79061	1,000 / 10,000	5,000	313	U007	
Acrylic acid	ACRYLICACID	79107		5,000	313	U008	
Acrylonitrile	ACRYLONITRILE	107131	10,000	100	313	U009	20,000
Acrylyl chloride	ACRYLYL CHLORIDE	814686	100				5,000
Adipic acid	ADIPIC ACID	124049		5,000			
Adiponitrile	ADIPONITRILE	111693	1,000				
Alachlor	ALACHLOR	15972608			313		
Aldicarb	ALDICARB	116063	100/ 10,000	1	313	P070	
Aldrin	ALDRIN	309002	500/ 10,000	1	313	P004	
Allyl alcohol	ALLYLALCOHOL	107186	1,000	100	313	P005	15,000
Allyl chloride	ALLYLCHLORIDE	107051		1,000	313		
Allylamine	ALLYLAMINE	107119	500		313		10,000
alpha - Endosulfan	ENDOSULFAN	959988		1			
alpha-BHC	BHC	319846		10	X		
alpha-Hexachlorocyclohexane	HEXACHLOROCYCLOHEXANEALPHA	319846		10	313		
alpha-Naphthylamine	NAPHTHYLAMINEA	134327		100	313	U167	

Aluminum (fume or dust)	ALUMINUM	7429905			313		
Aluminum oxide (fibrous forms)	ALUMINUMOXIDE	1344281			313		
Aluminum phosphide	ALUMINUMPHOSPHIDE	20859738	500	100	313	P006	
Aluminum sulfate	ALUMINUMSULFATE	10043013		5,000			
Ametryn	AMETRYN	834128			313		
Aminopterin	AMINOPTERIN	54626	500/ 10,000				
Amiton	AMITON	78535	500				
Amiton oxalate	AMITON OXALATE	3734972	100/ 10,000				
Amitraz	AMITRAZ	33089611			313		
Amitrole	AMITROLE	61825		10	313	U011	
Ammonia	AMMONIA	7664417	500	100	313		
Ammonia (anhydrous)	AMMONIA	7664417	500	100	X		10,000
Ammonia (conc 20% or greater)	AMMONIAS	7664417	500	100	X		20,000
Ammonium acetate	AMMONIUMACETATE	631618		5,000			
Ammonium benzoate	AMMONIUMBENZOATE	1863634		5,000			
Ammonium bicarbonate	AMMONIUMBICARBONATE	1066337		5,000			
Ammonium bichromate	AMMONIUMBICHROMATE	7789095		10			
Ammonium bifluoride	AMMONIUMBIFLUORIDE	1341497		100			
Ammonium bisulfite	AMMONIUMBISULFITE	10192300		5,000			
Ammonium carbamate	AMMONIUMCARBAMATE	1111780		5,000			
Ammonium carbonate	AMMONIUMCARBONATE	506876		5,000			
Ammonium chloride	AMMONIUMCHLORIDE	12125029		5,000			
Ammonium chromate	AMMONIUMCHROMATE	7788989		10			
Ammonium citrate, dibasic	AMMONIUMCITRATE, DIBASIC	3012655		5,000			
Ammonium fluoborate	AMMONIUMFLUOBORATE	13826830		5,000			
Ammonium fluoride	AMMONIUMFLUORIDE	12125018		100			
Ammonium hydroxide	AMMONIUMHYDROXIDE	1336216		1,000			
Ammonium nitrate (solution)	AMMONIUMNITRATE	6484522			313		
Ammonium oxalate	AMMONIUMOXALATE	5972736		5,000			
Ammonium oxalate	AMMONIUMOXALATE	6009707		5,000			
Ammonium oxalate	AMMONIUMOXALATE	14258492		5,000			

Ammonium picrate	AMMONIUMPICRATE	131748		10		P009	
Ammonium silicofluoride	AMMONIUMSILICOFLUORIDE	16919190		1,000			
Ammonium sulfamate	AMMONIUMSULFAMATE	7773060		5,000			
Ammonium sulfate (solution)	AMMONIUMSULFATE	7783202			313		
Ammonium sulfide	AMMONIUMSULFIDE	12135761		100			
Ammonium sulfite	AMMONIUMSULFITE	10196040		5,000			
Ammonium tartrate	AMMONIUMTARTRATE	3164292		5,000			
Ammonium tartrate	AMMONIUMTARTRATE	14307438		5,000			
Ammonium thiocyanate	AMMONIUMTHIOCYANATE	1762954		5,000			
Ammonium vanadate	AMMONIUMVANADATE	7803556		1,000		P119	
Amphetamine	AMPHETAMINE	300629	1,000				
Amyl acetate	AMYLACETATE	628637		5,000			
Anilazine	ANILAZINE	101053			313		
Aniline	ANILINE	62533	1,000	5,000	313	U012	
Aniline, 2,4,6-trimethyl-	ANILINE, 2,4,6-TRIMETHYL-	88051	500				
Anthracene	ANTHRACENE	120127		5,000	313		
Antimony	ANTIMONY	7440360		5,000	313		
Antimony Compounds	ANTIMONYCOMPOUNDS	0		**	N010		
Antimony pentachloride	ANTIMONYPENTACHLORIDE	7647189		1,000			
Antimony pentafluoride	ANTIMONYPENTAFLUORIDE	7783702	500				
Antimony potassium tartrate	ANTIMONYPOTASSIUM TARTRATE	28300745		100			
Antimony tribromide	ANTIMONYTRIBROMIDE	7789619		1,000			
Antimony trichloride	ANTIMONYTRICHLORIDE	10025919		1,000			
Antimony trifluoride	ANTIMONYTRIFLUORIDE	7783564		1,000			
Antimony trioxide	ANTIMONYTRIOXIDE	1309644		1,000			
Antimycin A	ANTIMYCIN A	1397940	1,000 / 10,000				
Antu	ANTU	86884	500/ 10,000	100		P072	
Aroclor 1016	AROCLOR 1016	12674112		1			
Aroclor 1221	AROCLOR 1221	11104282		1			
Aroclor 1232	AROCLOR 1232	11141165		1			
Aroclor 1242	AROCLOR 1242	53469219		1			

Aroclor 1248	AROCLOR 1248	12672296		1			
Aroclor 1254	AROCLOR 1254	11097691		1			
Aroclor 1260	AROCLOR 1260	11096825		1			
Arsenic	ARSENIC	7440382		1	313		
Arsenic acid	ARSENIC ACID	1327522		1			
Arsenic acid	ARSENIC ACID	7778394		1		P010	
Arsenic Compounds	ARSENIC COMPOUNDS	0		**	N020		
Arsenic disulfide	ARSENIC DISULFIDE	1303328		1			
Arsenic pentoxide	ARSENIC PENTOXIDE	1303282	100/ 10,000	1		P011	
Arsenic trioxide	ARSENIC TRIOXIDE	1327533	100/ 10,000	1		P012	
Arsenic trisulfide	ARSENIC TRISULFIDE	1303339		1			
Arsenous oxide	ARSENOUS OXIDE	1327533	100/ 10,000	1		P012	
Arsenous trichloride	ARSENOUS TRICHLORIDE	7784341	500	1			15,000
Arsine	ARSINE	7784421	100				1,000
Asbestos (friable)	ASBESTOS	1332214		1	313		
Atrazine	ATRAZINE	1912249			313		
Auramine	AURAMINE	492808		100	X	U014	
Avermectin B1	AVERMECTIN B1	71751412			X		
Azaserine	AZASERINE	115026		1		U015	
Azinphos-ethyl	AZINPHOS-ETHYL	2642719	100/ 10,000				
Azinphos-methyl	AZINPHOS-METHYL	86500	10/ 10,000	1			
Aziridine	AZIRIDINE	151564	500	1	X	P054	10,000
Aziridine, 2-methyl	AZIRIDINE, 2-METHYL	75558	10,000	1	X	P067	10,000
Barium	BARIUM	7440393			313		
Barium Compounds	BARIUM COMPOUNDS	0			N040		
Barium cyanide	BARIUM CYANIDE	542621		10		P013	
Bendiocarb	BENDIOCARB	22781233			313		
Benezeneamine, 2,6-dinitro-N, N-dipropyl-4-(trifluoromethyl)-	BENEZENEAMINEDINITRODIPROPYL-4-(TRIFLUOROMETHYL)-	1582098		1*	X		

Benfluralin	BENFLURALIN	1861401			313		
Benomyl	BENOMYL	17804352			313		
Benz[a]anthracene	BENZANTHRACENE	56553		10	313+	U018	
Benz[c]acridine	BENZACRIDINE	225514		100		U016	
Benzal chloride	BENZALCHLORIDE	98873	500	5,000	313	U017	
Benzamide	BENZAMIDE	55210			313		
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl	BENZAMIDE,3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL	23950585		5,000	X	U192	
Benzenamine, 3-(trifluoromethyl)-	BENZENAMINE, 3-(TRIFLUOROMETHYL)-	98168	500				
Benzene	BENZENE	71432		10	313	U019	
Benzene, 1-(chloromethyl)-4-nitro-	BENZENECHLOROMETHYL)-4-NITRO-	100141	500/ 10,000				
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-	BENZENETRICHLOROETHYLIDENE)BIS [4-METHOXY-	72435		1	X	U247	
Benzene, 1,3-diisocyanato-2-methyl-	BENZENEDIISOCYANATOMETHYLB	91087	100	100	X		10,000
Benzene, 1,3-diisocyanatomethyl-	BENZENEDIISOCYANATOMETHYLC	26471625		100	X	U223	10,000
Benzene, 2,4-dichloro-1-(4-nitrophenoxy)-	BENZENEDICHLORONITROPHENOXY)-	1836755			X		
Benzene, 2,4-diisocyanato-1-methyl-	BENZENEDIISOCYANATOMETHYLA	584849	500	100	X		10,000
Benzene, m-dimethyl-	BENZENEDIMETHYL-M	108383		1,000	X	U239	
Benzene, o-dimethyl-	BENZENEDIMETHYL-O	95476		1,000	X	U239	
Benzene, p-dimethyl-	BENZENEDIMETHYL-P	106423		1,000	X	U239	
Benzeneacetic acid, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-hydroxy-, ethyl ester	BENZENEACETICACIDCHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA	510156		10	X	U038	
Benzeneamine, N-hydroxy-N-nitroso, ammonium salt	BENZENEAMINEHYDROXYNITROSO, AMMONIUM SALT	135206			X		
Benzenearsonic acid	BENZENEARSONIC ACID	98055	10/ 10,000				
Benzeneethanamine, alpha,alpha-dimethyl-	BENZENEETHANAMINE, ALPAH, ALPHA-DIMETHYL- +	122098		5,000		P046	

Benzenemethanol, 4-chloro-.alpha.-4-chlorophenyl)-.alpha.-(trichloromethyl)-	BENZENEMETHANOLCHLORO-ALPHA-4-CHLOROPHENYL)-ALPHA	115322		10	X		
Benzenesulfonyl chloride	BENZENESULFONYL CHLORIDE	98099		100		U020	
Benzenethiol	BENZENETHIOL	108985	500	100		P014	
Benzidine	BENZIDINE	92875		1	313	U021	
Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-	BENZIMIDAZOLE, 4,5-DICHLORO-2-(TRIFLUOROMETHYL)	3615212	500/10,000				
Benzo(a)phenanthrene	BENZO(A)PHENANTHRENE	218019		100	313+	U050	
Benzo(j)fluoranthene	BENZOFLUORANTHENEJ	205823			313+		
Benzo(k)fluoranthene	BENZOFLUORANTHENEK	207089		5,000	313+		
Benzo(rst)pentaphene	BENZO(RST)PENTAPHENE	189559		10	313+	U064	
Benzo[a]pyrene	BENZOPYRENE	50328		1	313+	U022	
Benzo[b]fluoranthene	BENZOFLUORANTHENE	205992		1	313+		
Benzo[ghi]perylene	BENZOPERYLENE	191242		5,000			
Benzoic acid	BENZOICACID	65850		5,000			
Benzoic acid, 3-amino-2,5-dichloro-	BENZOICACIDAMINODICHLORO-	133904		1*	X		
Benzoic trichloride	BENZOICTRICHLORIDE	98077	100	10	313	U023	
Benzonitrile	BENZONITRILE	100470		5,000			
Benzotrichloride	BENZOTRICHLORIDE	98077	100	10	X	U023	
Benzoyl chloride	BENZOYLCHLORIDE	98884		1,000	313		
Benzoyl peroxide	BENZOYLPEROXIDE	94360			313		
Benzyl chloride	BENZYLCHLORIDE	100447	500	100	313	P028	
Benzyl cyanide	BENZYLCYANIDE	140294	500				
Beryllium	BERYLLIUM	7440417		10	313	P015	
Beryllium chloride	BERYLLIUM CHLORIDE	7787475		1			
Beryllium Compounds	BERYLLIUM COMPOUNDS	0		**	N050		
Beryllium fluoride	BERYLLIUM FLUORIDE	7787497		1			
Beryllium nitrate	BERYLLIUM NITRATE	7787555		1			
Beryllium nitrate	BERYLLIUM NITRATE	13597994		1			
beta - Endosulfan	ENDOSULFAN	33213659		1			
beta-BHC	BHC	319857		1			
beta-Naphthylamine	NAPHTHYLAMINEB	91598		10	313	U168	

beta-Propiolactone	PROPIOLACTONE	57578	500	1*	313		
Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chloro-6-[(methylamino)(carbonyl)(oxy)imino)]-, (1-alpha,2-beta,4-alpha,5-alpha,6E)-	BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE, 5-CHLORO-6-	15271417	500/10,000				
Bifenthrin	BIFENTHRIN	82657043			313		
Biphenyl	BIPHENYL	92524		1*	313		
Bis(2-chloro-1-methylethyl)ether	BISCHLOROMETHYLETHYL	108601		1,000	313	U027	
Bis(2-chloroethoxy) methane	BISCHLOROETHOXYMETHANE	111911		1,000	313	U024	
Bis(2-chloroethyl) ether	BISCHLOROETHYLETHER	111444	10,000	10	313	U025	
Bis(2-ethylhexyl) adipate	BISETHYLHEXYL	103231			313		
Bis(2-ethylhexyl)phthalate	BISETHYLHEXYLPHTHALATE	117817		100	X	U028	
Bis(chloromethyl) ether	BISCHLOROMETHYLETHER	542881	100	10	313	P016	1,000
Bis(chloromethyl) ketone	BISCHLOROMETHYLKETONE	534076	10/10,000				
Bis(tributyltin) oxide	BISTRIBUTYLTIN) OXIDE	56359			313		
Bitoscanate	BITOSCANATE	4044659	500/10,000				
Borane, trichloro-	BORANETRICHLORO-	10294345	500		X		5,000
Borane, trifluoro-	BORANETRIFLUORO-	7637072	500		X		5,000
Boron trichloride	BORON TRICHLORIDE	10294345	500		313		5,000
Boron trifluoride	BORON TRIFLUORIDE	7637072	500		313		5,000
Boron trifluoride compound with methyl ether (1:1)	BORON TRIFLUORIDE COMPOUND WITH METHYL ETHER (1:1)	353424	1,000				15,000
Boron, trifluoro[oxybis(methane)]-, (T-4)-	BORONTRIFLUORO[OXYBIS (METHANE)]-, (T-4)	353424	1,000				15,000
Bromacil	BROMACIL	314409			313		
Bromacil, lithium salt	BROMACIL, LITHIUM SALT	53404196			313		
Bromadiolone	BROMADIOLONE	28772567	100/10,000				
Bromine	BROMINE	7726956	500		313		10,000
Bromoacetone	BROMOACETONE	598312		1,000		P017	

Bromochlorodifluoromethane	BROMOCHLORODIFLUOROMETHANE	353593			313		
Bromoform	BROMOFORM	75252		100	313	U225	
Bromomethane	BROMOMETHANE	74839	1,000	1,000	313	U029	
Bromotrifluorethylene	BROMOTRIFLUORETHYLEN	598732					10,000
Bromotrifluoromethane	BROMOTRIFLUOROMETHANE	75638			313		
Bromoxynil	BROMOXYNIL	1689845			313		
Bromoxynil octanoate	BROMOXYNIL OCTANOATE	1689992			313		
Bronopol	BRONOPOL	52517			X		
Brucine	BRUCINE	357573		100	313	P018	
Butane	BUTANE	106978					10,000
Butane, 2-methyl-	BUTANEMETHYL-	78784					10,000
Butene	BUTENE	25167673					10,000
Butyl acetate	BUTYLACETATE	123864		5,000			
Butyl acrylate	BUTYLACRYLATE	141322			313		
Butyl benzyl phthalate	BUTYLBENZYLPHTHALA	85687		100			
Butylamine	BUTYLAMINE	109739		1,000			
Butylethylcarbamothioic acid S-propyl ester	BUTYLETHYLCARBAMOTHIOICACIDPROPYLESTER	1114712			X		
Butyraldehyde	BUTYRALDEHYDE	123728			313		
Butyric acid	BUTYRIC ACID	107926		5,000			
C.I. Acid Green 3	CIACIDGREEN3	4680788			313		
C.I. Acid Red 114	C.I. ACID RED 114	6459945			313		
C.I. Basic Green 4	CIBASICGREEN4	569642			313		
C.I. Basic Red 1	CIBASICRED1	989388			313		
C.I. Direct Black 38	CIDIRECTBLACK38	1937377			313		
C.I. Direct Blue 218	C.I. DIRECT BLUE 218	28407376			313		
C.I. Direct Blue 6	CIDIRECTBLUE6	2602462			313		
C.I. Direct Brown 95	CIDIRECTBROWN95	16071866			313		
C.I. Disperse Yellow 3	CIDISPERSEYELLOW	2832408			313		
C.I. Food Red 15	CIFOODRED15	81889			313		
C.I. Food Red 5	CIFOODRED05	3761533			313		
C.I. Solvent Orange 7	CISOLVENTORANGE	3118976			313		
C.I. Solvent Yellow 14	CISOLVENTYELLOWB	842079			313		
C.I. Solvent Yellow 3	CISOLVENTYELLOWA	97563			313		
C.I. Solvent Yellow 34	CISOLVENTYELLOWC	492808		100	313	U014	
C.I. Vat Yellow 4	CIVATYELLOW4	128665			313		
Cacodylic acid	CACODYLIC ACID	75605		1		U136	
Cadmium	CADMIUM	7440439		10	313		
Cadmium acetate	CADMIUM ACETATE	543908		10			
Cadmium bromide	CADMIUM BROMIDE	7789426		10			

Cadmium chloride	CADMIUM CHLORIDE	10108642		10			
Cadmium Compounds	CADMIUM COMPOUNDS	0		**	N078		
Cadmium oxide	CADMIUM OXIDE	1306190	100/ 10,000				
Cadmium stearate	CADMIUM STEARATE	2223930	1,000 / 10,000				
Calcium arsenate	CALCIUMARSENATE	7778441	500/ 10,000	1			
Calcium arsenite	CALCIUMARSENITE	52740166		1			
Calcium carbide	CALCIUMCARBIDE	75207		10			
Calcium chromate	CALCIUMCHROMATE	13765190		10		U032	
Calcium cyanamide	CALCIUMCYANAMIDE	156627		1*	313		
Calcium cyanide	CALCIUMCYANIDE	592018		10		P021	
Calcium dodecylbenzenesulfonate	CALCIUMDODECYLBENZENE SULFONATE	26264062		1,000			
Calcium hypochlorite	CALCIUMHYPOCHLORITE	7778543		10			
Camphechlor	CAMPHECHLOR	8001352	500/ 10,000	1	X	P123	
Camphene, octachloro-	CAMPHENE, OCTACHLORO-	8001352	500/ 10,000	1	X	P123	
Cantharidin	CANTHARIDIN	56257	100/ 10,000				
Caprolactam	CAPROLACTAM	105602		1*			
Captan	CAPTAN	133062		10	313		
Carbachol chloride	CARBACHOL CHLORIDE	51832	500/ 10,000				
Carbamic acid, diethylthio-S-(p-chlorobenzyl)	CARBAMIC ACIDDIETHYLTHIOCHLOROBENZYL)	28249776			X		
Carbamic acid, ethyl ester	CARBAMIC ACIDETHYL ESTER	51796		100	X	U238	
Carbamic acid, methyl-, O-{[(2,4-dimethyl-1,3-dithiolan-2-yl)methylene]amino}	CARBAMIC ACIDMETHYL-, O-2,4-DIMETHYL-1, 3-DIT	26419738	100/ 10,000				

Carbamodithioic acid, 1,2-ethanediylbis-, manganese complex	CARBAMODITHIOICACIDETHANEDIYLBIS-, MANGANESE COMPLEX	12427382			X		
Carbamodithioic acid, 1,2-ethanediylbis-, zinc complex	CARBAMODITHIOICACIDETHANEDIYLBIS-, ZINC COMPLEX	12122677			X		
Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl)ester	CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-S-(2,3-DICHLORO-)	2303164		100	X	U062	
Carbaryl	CARBARYL	63252		100	313		
Carbofuran	CARBOFURAN	1563662	100/ 10,000	10	313		
Carbon disulfide	CARBONDISULFIDE	75150	10,000	100	313	P022	20,000
Carbon oxide sulfide (COS)	CARBONOXIDESULFIDE	463581		1*	X		10,000
Carbon tetrachloride	CARBONTETRACHLORIDE	56235		10	313	U211	
Carbonic dichloride	CARBONICDICHLORIDE	75445	10	10	X	P095	500
Carbonic difluoride	CARBONIC DIFLUORIDE	353504		1,000		U033	
Carbonochloridic acid, 1-methylethyl ester	CARBONOCHLORIDICACIDMETHYLETHYL ESTER	108236	1,000				15,000
Carbonochloridic acid, methylester	CARBONOCHLORIDICACIDMETHYLESTER	79221	500	1,000	X	U156	5,000
Carbonochloridic acid, propylester	CARBONOCHLORIDICACIDPROPYLESTER	109615	500				15,000
Carbonyl sulfide	CARBONYLSULFIDE	463581		1*	313		10,000
Carbophenothion	CARBOPHENOTHION	786196	500				
Carboxin	CARBOXIN	5234684			313		
Catechol	CATECHOL	120809		1*	313		
CFC-11	CFC-11	75694		5,000	X	U121	
CFC-114	CFC-114	76142			X		
CFC-115	CFC-115	76153			X		
CFC-12	CFC-112	75718		5,000	X	U075	
CFC-13	CFC-13	75729			X		
Chinomethionat	CHINOMETHIONAT	2439012			313		
Chloramben	CHLORAMBEN	133904		1*	313		
Chlorambucil	CHLORAMBUCIL	305033		10		U035	
Chlordane	CHLORDANE	57749	1,000	1	313	U036	
Chlordane (Technical Mixture and Metabolites)	CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)	0		**			
Chlorendic acid	CHLORENDIC ACID	115286			313		
Chlorfenvinfos	CHLORFENVINFOS	470906	500				

Chlorimuron ethyl	CHLORIMURON ETHYL	90982324			313		
Chlorinated Benzenes	CHLORINATED BENZENES	0		**			
Chlorinated Ethanes	CHLORINATED ETHANES	0		**			
Chlorinated Naphthalene	CHLORINATED NAPHTHALENE	0		**			
Chlorinated Phenols	CHLORINATED PHENOLS	0		**	N084		
Chlorine	CHLORINE	7782505	100	10	313		2,500
Chlorine dioxide	CHLORINEDIOXIDE	10049044			313		1,000
Chlorine monoxide	CHLORINEMONOXIDE	7791211					10,000
Chlorine oxide	CHLORINEOXIDE	7791211					10,000
Chlorine oxide (ClO2)	CHLORINEOXIDE (CLO2)	10049044			X		1,000
Chlormephos	CHLORMEPHOS	24934916	500				
Chlormequat chloride	CHLORMEQUAT CHLORIDE	999815	100/ 10,000				
Chlornaphazine	CHLORNAPHAZINE	494031		100		U026	
Chloroacetaldehyde	CHLOROACETALDEHYDE	107200		1,000		P023	
Chloroacetic acid	CHLOROACETICACID	79118	100/ 10,000	1*	313		
Chloroalkyl Ethers	CHLOROALKYL ETHERS	0		**			
Chlorobenzene	CHLOROBENZENE	108907		100	313	U037	
Chlorobenzilate	CHLOROBENZILATE	510156		10	313	U038	
Chlorodibromomethane	CHLORODIBROMOMETHANE	124481		100			
Chlorodifluoromethane	CHLORODIFLUOROMETHANE	75456			313		
Chloroethane	CHLOROETHANE	75003		100	313		10,000
Chloroethanol	CHLOROETHANOL	107073	500				
Chloroethyl chloroformate	CHLOROETHYLCHLOROFORMATE	627112	1,000				
Chloroform	CHLOROFORM	67663	10,000	10	313	U044	20,000
Chloromethane	CHLOROMETHANE	74873		100	313	U045	10,000
Chloromethyl ether	CHLOROMETHYL ETHER	542881	100	10	X	P016	1,000
Chloromethyl methyl ether	CHLOROMETHYL	107302	100	10	313	U046	5,000
Chlorophacinone	CHLOROPHACINONE	3691358	100/ 10,000				
Chlorophenols	CHLOROPHENOLS	0		**	N084		
Chloropicrin	CHLOROPICRIN	76062			313		
Chloroprene	CHLOROPRENE	126998		1*	313		
Chlorosulfonic acid	CHLOROSULFONIC ACID	7790945		1,000			
Chlorotetrafluoroethane	CHLOROTETRAFLUOROETHANE	63938103			313		

Chlorothalonil	CHLOROTHALONIL	1897456			313		
Chlorotrifluoromethane	CHLOROTRIFLUOROMETHANE	75729			313		
Chloroxuron	CHLOROXURON	1982474	500/10,000				
Chlorpyrifos	CHLORPYRIFOS	2921882		1			
Chlorpyrifos methyl	CHLORPYRIFOSMETHYL	5598130			313		
Chlorsulfuron	CHLORSULFURON	64902723			313		
Chlorthiophos	CHLORTHIOPHOS	21923239	500				
Chromic acetate	CHROMIC ACETATE	1066304		1,000			
Chromic acid	CHROMIC ACID	7738945		10			
Chromic acid	CHROMIC ACID	11115745		10			
Chromic chloride	CHROMIC CHLORIDE	10025737	1/10,000				
Chromic sulfate	CHROMIC SULFATE	10101538		1,000			
Chromium	CHROMIUM	7440473		5,000	313		
Chromium Compounds	CHROMIUM AND COMPOUNDS	0		**	N090		
Chromous chloride	CHROMOUS CHLORIDE	10049055		1,000			
Chrysene	CHRYSENE	218019		100	X	U050	
Cobalt	COBALT	7440484			313		
Cobalt carbonyl	COBALT CARBONYL	10210681	10/10,000				
Cobalt Compounds	COBALT COMPOUNDS	0		1*	N096		
Cobalt, {[(2,2'-(1,2-ethanediylbis(nitrilomethylidyne)]bis(6-fluorophenylato))(2-)-N,N',O,O')]}	COBALT, ((2,2'-(1,2-ETHANEDIYLBIS (NITRILOMETHYLID)	62207765	100/10,000				
Cobaltous bromide	COBALTOUS BROMIDE	7789437		1,000			
Cobaltous formate	COBALTOUS FORMATE	544183		1,000			
Cobaltous sulfamate	COBALTOUS SULFAMATE	14017415		1,000			
Coke Oven Emissions	COKE OVEN EMISSIONS	0		1			
Colchicine	COLCHICINE	64868	10/10,000				
Copper	COPPER	7440508		5,000	313		
Copper Compounds	COPPER COMPOUNDS	0		**	N100		

Copper cyanide	COPPER CYANIDE	544923		10		P029	
Coumaphos	COUMAPHOS	56724	100/10,000	10			
Coumatetralyl	COUMATETRALYL	5836293	500/10,000				
Creosote	CREOSOTE	8001589		1	313	U051	
Cresol (mixed isomers)	CRESOLMIXEDISOMER	1319773		1,000	313	U052	
Crimidine	CRIMIDINE	535897	100/10,000				
Crotonaldehyde	CROTONALDEHYDE	4170303	1,000	100	313	U053	20,000
Crotonaldehyde, (E)-	CROTONALDEHYDE, (E)-	123739	1,000	100		U053	20,000
Cumene	CUMENE	98828		5,000	313	U055	
Cumene hydroperoxide	CUMENEHYDROPEROXIDE	80159		10	313	U096	
Cupferron	CUPFERRON	135206			313		
Cupric acetate	CUPRIC ACETATE	142712		100			
Cupric acetoarsenite	CUPRIC ACETOARSENITE	12002038	500/10,000	1			
Cupric chloride	CUPRIC CHLORIDE	7447394		10			
Cupric nitrate	CUPRIC NITRATE	3251238		100			
Cupric oxalate	CUPRIC OXALATE	5893663		100			
Cupric sulfate	CUPRIC SULFATE	7758987		10			
Cupric sulfate, ammoniated	CUPRIC SULFATE, AMMONIATED	10380297		100			
Cupric tartrate	CUPRIC TARTRATE	815827		100			
Cyanazine	CYANAZINE	21725462			313		
Cyanide Compounds	CYANIDE COMPOUNDS	0		**	N106		
Cyanides (soluble salts and complexes)	CYANIDES (SOLUBLE SALTS AND COMPLEXES) NOT OTHERWI	57125		10		P030	
Cyanogen	CYANOGEN	460195		100		P031	10,000
Cyanogen bromide	CYANOGEN BROMIDE	506683	500/10,000	1,000		U246	
Cyanogen chloride	CYANOGEN CHLORIDE	506774		10		P033	10,000

Cyanogen chloride [(CN)Cl]	CYANOGENCHLORIDE ((CN)CL)	506774		10		P033	10,000
Cyanogen iodide	CYANOGEN IODIDE	506785	1,000 / 10,000				
Cyanophos	CYANOPHOS	2636262	1,000				
Cyanuric fluoride	CYANURIC FLUORIDE	675149	100				
Cycloate	CYCLOATE	1134232			313		
Cyclohexanamine	CYCLOHEXANAMINE	108918	10,000				15,000
Cyclohexane	CYCLOHEXANE	110827		1,000	313	U056	
Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-	CYCLOHEXANEHEXACHLORO-,(1.ALPHA.,2.ALPHA.,3.BE	58899	1,000 / 10,000	1	X	U129	
Cyclohexanol	CYCLOHEXANOL	108930			313		
Cyclohexanone	CYCLOHEXANONE	108941		5,000		U057	
Cycloheximide	CYCLOHEXIMIDE	66819	100/ 10,000				
Cyclohexylamine	CYCLOHEXYLAMINE	108918	10,000				15,000
Cyclophosphamide	CYCLOPHOSPHAMIDE	50180		10		U058	
Cyclopropane	CYCLOPROPANE	75194					10,000
Cyfluthrin	CYFLUTHRIN	68359375			313		
Cyhalothrin	CYHALOTHRIN	68085858			313		
Daunomycin	DAUNOMYCIN	20830813		10		U059	
Dazomet	DAZOMET	533744			313		
Dazomet, sodium salt	DAZOMETSODIUM SALT	53404607			313		
DBCP	DBCP	96128		1	X	U066	
DDD	DDD	72548		1		U060	
DDE	DDE	72559		1			
DDE	DDE	3547044		1*			
DDT	DDT	50293		1		U061	
DDT and Metabolites	DDT AND METABOLITES	0		**			
Decaborane(14)	DECABORANE(14)	17702419	500/ 10,000				
Decabromodiphenyl oxide	DECABROMODIPHENYLOX	1163195			313		

DEF	DEF	78488			X		
DEHP	DEHP	117817		100	X	U028	
delta-BHC	BHC	319868		1			
Demeton	DEMETON	8065483	500				
Demeton-S-methyl	DEMETON-S-METHYL	919868	500				
Desmedipham	DESMEDIPHAM	13684565			313		
D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbo	GLUCOSE, 2-DEOXY-2-(METHYLNITROSOAMINO)-CARBO	18883664		1		U206	
Di(2-ethylhexyl) phthalate	DIETHYLHEXYLPHT	117817		100	313	U028	
Dialifor	DIALIFOR	10311849	100/ 10,000				
Diallate	DIALLATE	2303164		100	313	U062	
Diaminotoluene	DIAMINOTOLUENE	496720		10		U221	
Diaminotoluene	DIAMINOTOLUENE	823405		10		U221	
Diaminotoluene (mixed isomers)	DIAMINOTOLUENEMIXE	25376458		10	313	U221	
Diazinon	DIAZINON	333415		1	313		
Diazomethane	DIAZOMETHANE	334883		1*	313		
Dibenz(a,h)acridine	DIBENZACRIDINEAH	226368			313+		
Dibenz(a,j)acridine	DIBENZACRIDINEAJ	224420			313+		
Dibenz[a,h]anthracene	DIBENZANTHRACENE	53703		1	313+	U063	
Dibenz[a,i]pyrene	DIBENZPYRENE	189559		10	X	U064	
Dibenzo(a,e)fluoranthene	DIBENZOFLUORANTHENEAE	5385751			313+		
Dibenzo(a,e)pyrene	DIBENZOPYRENEAE	192654			313+		
Dibenzo(a,h)pyrene	DIBENZOPYRENEAH	189640			313+		
Dibenzo(a,l)pyrene	DIBENZOPYRENEAL	191300			313+		
Dibenzofuran	DIBENZOFURAN	132649		1*	313		
Diborane	DIBORANE	19287457	100				2,500
Diborane(6)	DIBORANE(6)	19287457	100				2,500
Dibromotetrafluoroethane	DIBROMOTETRAFLUOROETHANE	124732			313		
Dibutyl phthalate	DIBUTYLPHTHALATE	84742		10	313	U069	
Dicamba	DICAMBA	1918009		1,000	313		
Dichlobenil	DICHLOBENIL	1194656		100			
Dichlone	DICHLONE	117806		1			
Dichloran	DICHLORAN	99309			313		

Dichloro-1,1,2-trifluoroethane	DICHLOROTRIFLUOROETHANE	90454185			313		
Dichlorobenzene	DICHLOROBENZENE	25321226		100	X		
Dichlorobenzene (mixed isomers)	DICHLOROBENZENEMIX	25321226		100	313		
Dichlorobenzidine	DICHLOROBENZIDINE	0		**			
Dichlorobromomethane	DICHLOROBROMOMETHANE	75274		5,000	313		
Dichlorodifluoromethane	DICHLORODIFLUOROMETHANE	75718		5,000	313	U075	
Dichloroethyl ether	DICHLOROETHYLETHER	111444	10,000	10	X	U025	
Dichlorofluoromethane	DICHLOROFLUOROMETHANE	75434			313		
Dichloroisopropyl ether	DICHLOROISOPROPYL ETHER	108601		1,000	X	U027	
Dichloromethane	DICHLOROMETHANE	75092		1,000	313	U080	
Dichloromethyl ether	DICHLOROMETHYL ETHER	542881	100	10	X	P016	1,000
Dichloromethylphenylsilane	DICHLOROMETHYLPHENYLSILANE	149746	1,000				
Dichloropentafluoropropane	DICHLOROPENTAFLUOROPROPANE	127564925			313		
Dichlorophene	DICHLOROPHENE	97234			313		
Dichlorophenylarsine	DICHLOROPHENYLARSINE	696286	500	1		P036	
Dichloropropane	DICHLOROPROPANE	26638197		1,000			
Dichloropropane - Dichloropropene (mixture)	DICHLOROPROPANE - DICHLOROPROPENE (MIXTURE)	8003198		100			
Dichloropropene	DICHLOROPROPENE	26952238		100			
Dichlorosilane	DICHLOROSILANE	4109960					10,000
Dichlorotetrafluoroethane	DICHLOROTETRAFLUOROETHANE	76142			313		
Dichlorotrifluoroethane	DICHLOROTRIFLUOROETHANE	34077877			313		
Dichlorvos	DICHLORVOS	62737	1,000	10	313		
Diclofop methyl	DICLOFOPMETHYL	51338273			313		
Dicofol	DICOFOL	115322		10	313		
Dicrotophos	DICROTOPHOS	141662	100				
Dicyclopentadiene	DICYCLOPENTADIENE	77736			313		
Dieldrin	DIELDRIN	60571		1		P037	
Diepoxybutane	DIEPOXYBUTANE	1464535	500	10	313	U085	
Diethanolamine	DIETHANOLAMINE	111422		1*	313		

Diethatyl ethyl	DIETHATYLETHYL	38727558			313		
Diethyl chlorophosphate	DIETHYLCHLOROPHOSPHATE	814493	500				
Diethyl phthalate	DIETHYLPHTHALATE	84662		1,000	313	U088	
Diethyl sulfate	DIETHYLSULFATE	64675		1*	313		
Diethylamine	DIETHYLAMINE	109897		1,000			
Diethylarsine	DIETHYLARSINE	692422		1		P038	
Diethylcarbamazine citrate	DIETHYLCARBAMAZINE CITRATE	1642542	100/ 10,000				
Diethyldiisocyanatobenzene	DIETHYLDIISOCYANATOBENZENE	134190377			313#		
Diethyl-p-nitrophenyl phosphate	DIETHYLNITROPHENYL PHOSPHATE	311455		100		P041	
Diethylstilbestrol	DIETHYLSTILBESTROL	56531		1		U089	
Diflubenzuron	DIFLUBENZURON	35367385			313		
Difluoroethane	DIFLUOROETHANE	75376					10,000
Digitoxin	DIGITOXIN	71636	100/ 10,000				
Diglycidyl ether	DIGLYCIDYL ETHER	2238075	1,000				
Diglycidyl resorcinol ether	DIGLYCIDYLRESORCINOL ETHER	101906			313		
Digoxin	DIGOXIN	20830755	10/ 10,000				
Dihydrosafrole	DIHYDROSAFROLE	94586		10	313	U090	
Diisocyanates (includes only 20 chemicals)	DIISOCYANATES	0			N120		
Diisopropylfluorophosphate	DIISOPROPYLFLUOROPHOSPHATE	55914	100	100		P043	
Dimefox	DIMEFOX	115264	500				
Dimethipin	DIMETHIPIN	55290647			313		
Dimethoate	DIMETHOATE	60515	500/ 10,000	10	313	P044	
Dimethyl chlorothiophosphate	DIMETHYLCHLOROTHIOPHOSPHATE	2524030	500		313		
Dimethyl phosphorochloridothioate	DIMETHYLPHOSPHOROCHLORIDOTHIOATE	2524030	500		X		
Dimethyl phthalate	DIMETHYLPHTALATE	131113		5,000	313	U102	

Dimethyl sulfate	DIMETHYLSULFATE	77781	500	100	313	U103	
Dimethylamine	DIMETHYLAMINE	124403		1,000	313	U092	10,000
Dimethylamine dicamba	DIMETHYLAMINEDICAMBA	2300665			313		
Dimethylaminoazobenzene	DIMETHYLAMINOAZOBENZENE	60117		10	X	U093	
Dimethylcarbamyl chloride	DIMETHYLCARBAMYL	79447		1	313	U097	
Dimethyldichlorosilane	DIMETHYLDICHLOROSILANE	75785	500		313		5,000
Dimethylformamide	DIMETHYLFORMAMIDE	68122		1*	X		
Dimethylhydrazine	DIMETHYLHYDRAZINE	57147	1,000	10	X	U098	15,000
Dimethyl-p-phenylenediamine	DIMETHYLPHENYLENEDIAMINE	99989	10/10,000				
Dimetilan	DIMETILAN	644644	500/10,000				
Dinitrobenzene (mixed isomers)	DINITROBENZENE (MIXED)	25154545		100			
Dinitrobutyl phenol	DINITROBUTYL PHENOL	88857	100/10,000	1,000	313	P020	
Dinitrocresol	DINITROCRESOL	534521	10/10,000	10	X	P047	
Dinitrophenol	DINITROPHENOLA	25550587		10			
Dinitrotoluene (mixed isomers)	DINITROTOLUENEA	25321146		10	313		
Dinocap	DINOCAP	39300453			313		
Di-n-octyl phthalate	DIOCTYLPHTHALATE	117840		5,000		U107	
Dinoseb	DINOSEB	88857	100/10,000	1,000	X	P020	
Dinoterb	DINOTERB	1420071	500/10,000				
Di-n-propylnitrosamine	DIPROPYLNITROSAMINE	621647		10	X	U111	
Dioxathion	DIOXATHION	78342	500				
Diphacinone	DIPHACINONE	82666	10/10,000				
Diphenamid	DIPHENAMID	957517			313		
Diphenylamine	DIPHENYLAMINE	122394			313		
Diphenylhydrazine	DIPHENYLHYDRAZINE	0		**			

Diphosphoramide, octamethyl-	DIPHOSPHORAMIDE, OCTAMETHYL-	152169	100	100		P085	
Dipotassium endothall	DIPOTASSIUMENDOTHALL	2164070			313		
Dipropyl isocinchomeronate	DIPROPYLISOCINCHOMERONATE	136458			313		
Dipropylamine	DIPROPYLAMINE	142847		5,000		U110	
Diquat	DIQUAT	85007		1,000			
Diquat	DIQUAT	2764729		1,000			
Disodium cyanodithioimidocarbonate	DISODIUMCYANODITHIOIMIDOCARBONATE	138932			313		
Disulfoton	DISULFOTON	298044	500	1		P039	
Dithiazanine iodide	DITHIAZANINE IODIDE	514738	500/ 10,000				
Dithiobiuret	DITHIOBIURET	541537	100/ 10,000	100	X	P049	
Diuron	DIURON	330541		100	313		
Dodecylbenzenesulfonic acid	DODECYLBENZENESULFONIC ACID	27176870		1,000			
Dodecylguanidine monoacetate	DODECYLGUANIDINEMONOACETATE	2439103			X		
Dodine	DODINE	2439103			313		
d-trans-Allethrin	ALLETHRIN	28057489			313		
d-trans-Chrysanthemic acid of d-allethrone	CHRYSANTHEMICACID OF D-ALLETHRONE	28057489			X		
Emetine, dihydrochloride	EMETINE, DIHYDROCHLORIDE	316427	1/ 10,000				
Endosulfan	ENDOSULFAN	115297	10/ 10,000	1		P050	
Endosulfan and Metabolites	ENDOSULFAN AND METABOLITES	0		**			
Endosulfan sulfate	ENDOSULFAN SULFATE	1031078		1			
Endothall	ENDOTHALL	145733		1,000		P088	
Endothion	ENDOTHION	2778043	500/ 10,000				
Endrin	ENDRIN	72208	500/ 10,000	1		P051	
Endrin aldehyde	ENDRIN ALDEHYDE	7421934		1			
Endrin and Metabolites	ENDRIN AND METABOLITES	0		**			

Epichlorohydrin	EPICHLOROHYDRIN	106898	1,000	100	313	U041	20,000
Epinephrine	EPINEPHRINE	51434		1,000		P042	
EPN	EPN	2104645	100/ 10,000				
EPTC	EPTC	759944			X		
Ergocalciferol	ERGOCALCIFEROL	50146	1,000 / 10,000				
Ergotamine tartrate	ERGOTAMINE TARTRATE	379793	500/ 10,000				
Ethanamine	ETHANAMINE	75047		100			10,000
Ethane	ETHANE	74840					10,000
Ethane, 1,1,1,2-tetrachloro-	ETHANETETRACHLORO-	630206		100	X	U208	
Ethane, 1,1,2-trichloro-1,2,2,-trifluoro-	ETHANETRICHLOROTRIFLUORO-	76131			X		
Ethane, 1,1-difluoro-	ETHANEDIFLUORO	75376					10,000
Ethane, 1,1'-oxybis-	ETHANEOXYBIS-	60297		100		U117	10,000
Ethane, 1,1'-thiobis[2-chloro-	ETHANETHIOBISCHLORO-	505602	500		X		
Ethane, chloro-	ETHANECHLORO-	75003		100	X		10,000
Ethanedinitrile	ETHANEDINITRILE	460195		100		P031	10,000
Ethaneperoxoic acid	ETHANEPEROXOICACID	79210	500		X		10,000
Ethanesulfonyl chloride, 2-chloro-	ETHANESULFONYL CHLORIDE, 2-CHLORO-	1622328	500				
Ethanethiol	ETHANETHIOL	75081					10,000
Ethanimidothioic acid, N-[(methylamino)carbonyl]	ETHANIMIDOTHIOIC ACID, N-[[METHYLAMINO)CARBONYL]	16752775	500/ 10,000	100		P066	
Ethanol, 1,2-dichloro-, acetate	ETHANOL, 1,2-DICHLORO-, ACETATE	10140871	1,000				
Ethanol, 2-ethoxy-	ETHANOL, 2-ETHOXY-	110805		1,000	X	U359	
Ethene	ETHENE	74851			X		10,000
Ethene, 1,1-dichloro-	ETHENEDICHLORO	75354		100	X	U078	10,000
Ethene, 1,1-difluoro-	ETHENEDIFLUORO	75387					10,000
Ethene, bromotrifluoro-	ETHENEBROMOTRIFLUORO	598732					10,000
Ethene, chloro-	ETHENECHLORO-	75014			X		10,000
Ethene, chlorotrifluoro-	ETHENECHLOROTRIFLU	79389					10,000
Ethene, ethoxy-	ETHENEETHOXY-	109922					10,000
Ethene, fluoro-	ETHENEFLUORO-	75025					10,000

Ethene, methoxy-	ETHENEMETHOXY-	107255					10,000
Ethene, tetrafluoro-	ETHENETETRAFLUORO-	116143					10,000
Ethion	ETHION	563122	1,000	10			
Ethoprop	ETHOPROP	13194484	1,000		313		
Ethoprophos	ETHOPROPHOS	13194484	1,000		X		
Ethyl acetate	ETHYLACETATE	141786		5,000		U112	
Ethyl acetylene	ETHYLACETYLENE	107006					10,000
Ethyl acrylate	ETHYLACRYLATE	140885		1,000	313	U113	
Ethyl carbamate	ETHYLCARBAMATE	51796		100	X	U238	
Ethyl chloride	ETHYLCHLORIDE	75003		100	X		10,000
Ethyl chloroformate	ETHYLCHLOROFORMATE	541413			313		
Ethyl cyanide	ETHYLCYANIDE	107120	500	10		P101	10,000
Ethyl dipropylthiocarbamate	ETHYLDIPROPYLTHIOCARBAMATE EPTC	759944			313		
ethyl ester							
Ethyl ether	ETHYLETHER	60297		100		U117	10,000
Ethyl mercaptan	ETHYLMERCAPTAN	75081					10,000
Ethyl methacrylate	ETHYLMETHACRYLATE	97632		1,000		U118	
Ethyl methanesulfonate	ETHYLMETHANESULFONATE	62500		1		U119	
Ethyl nitrite	ETHYLNITRITE	109955					10,000
Ethyl-2-((((4-chloro-6-methoxyprimidin-2-yl)-carbonyl)-amino)sulfonyl)benzoate	ETHYLCHLOROMETHOXYPRIMIDINYLCARBONYLAMINO	90982324			X		
Ethylbenzene	ETHYLBENZENE	100414		1,000	313		
Ethylbis(2-chloroethyl)amine	ETHYLBIS(2-CHLOROETHYL)AMINE	538078	500				
Ethylene	ETHYLENE	74851			313		10,000
Ethylene dibromide	ETHYLENEDIBROMIDE	106934		1	X	U067	
Ethylene dichloride	ETHYLENEDICHLORIDE	107062		100	X	U077	
Ethylene fluorohydrin	ETHYLENEFLUOROHYDRIN	371620	10				
Ethylene glycol	ETHYLENEGLYCOL	107211		1*	313		
Ethylene oxide	ETHYLENEOXIDE	75218	1,000	10	313	U115	10,000
Ethylene thiourea	ETHYLENETHIOUREA	96457		10	313	U116	
Ethylenebisdithiocarbamic acid, salts & esters	ETHYLENEBISDITHIOCARBAMIC ACID, SALTS & ESTERS	111546		5,000	X	U114	
Ethylenebisdithiocarbamic acid, salts and esters	ETHYLENEBISDITHIOCARBAMIC ACID SALTS AND ESTERS	0			N171		

Ethylenediamine	ETHYLENEDIAMINE	107153	10,000	5,000			20,000
Ethylenediamine-tetraacetic acid (EDTA)	ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA)	60004		5,000			
Ethyleneimine	ETHYLENEIMINE	151564	500	1	313	P054	10,000
Ethylidene Dichloride	ETHYLIDENEDICHLLORIDE	75343		1,000	313	U076	
Ethylthiocyanate	ETHYLTHIOCYANATE	542905	10,000				
Ethyne	ETHYNE	74862					10,000
--Except Barium Sulfate (under 313)	BARIUM COMPOUNDS EXCEPTION	0					
--Except C.I. Pigment Blue 15 (under 313)	COPPER COMPOUNDS EXCEPTION2	0					
--Except C.I. Pigment Green 36 (under 313)	COPPER COMPOUNDS EXCEPTION4	0					
--Except C.I. Pigment Green 7 (under 313)	COPPER COMPOUNDS EXCEPTION3	0					
--Except copper phthalocyanine compounds (under 313)##	COPPER COMPOUNDS EXCEPTION1	0					
Explosives listed by DOT as Division 1.1	EXPLOSIVES	0					5,000
Famphur	FAMPHUR	52857		1,000	313	P097	
Fenamiphos	FENAMIPHOS	22224926	10/ 10,000				
Fenarimol	FENARIMOL	60168889			313		
Fenbutatin oxide	FENBUTATINOXIDE	13356086			313		
Fenitrothion	FENITROTHION	122145	500				
Fenoxaprop ethyl	FENOXAPROPETHYL	66441234			313		
Fenoxycarb	FENOXYCARB	72490018			313		
Fenpropathrin	FENPROPATHRIN	39515418			313		
Fensulfothion	FENSULFOTHION	115902	500				
Fenthion	FENTHION	55389			313		
Fenvalerate	FENVALERATE	51630581			313		
Ferbam	FERBAM	14484641			313		
Ferric ammonium citrate	FERRICAMMONIUMCITRATE	1185575		1,000			
Ferric ammonium oxalate	FERRICAMMONIUMOXALATE	2944674		1,000			
Ferric ammonium oxalate	FERRICAMMONIUMOXALATE	55488874		1,000			
Ferric chloride	FERRICCHLORIDE	7705080		1,000			
Ferric fluoride	FERRICFLUORIDE	7783508		100			

Ferric nitrate	FERRICNITRATE	10421484		1,000			
Ferric sulfate	FERRICSULFATE	10028225		1,000			
Ferrous ammonium sulfate	FERROUSAMMONIUM SULFATE	10045893		1,000			
Ferrous chloride	FERROUSCHLORIDE	7758943		100			
Ferrous sulfate	FERROUSSULFATE	7720787		1,000			
Ferrous sulfate	FERROUSSULFATE	7782630		1,000			
Fine mineral fibers	FINEMINERALFIBERS	0		1*			
Fluazifop butyl	FLUAZIFOPBUTYL	69806504			313		
Fluenetil	FLUENETIL	4301502	100/ 10,000				
Fluometuron	FLUOMETURON	2164172			313		
Fluoranthene	FLUORANTHENE	206440		100		U120	
Fluorene	FLUORENE	86737		5,000			
Fluorine	FLUORINE	7782414	500	10	313	P056	1,000
Fluoroacetamide	FLUOROACETAMIDE	640197	100/ 10,000	100		P057	
Fluoroacetic acid	FLUOROACETIC ACID	144490	10/ 10,000				
Fluoroacetic acid, sodium salt	FLUOROACETIC ACID, SODIUM SALT	62748	10/ 10,000	10	X	P058	
Fluoroacetyl chloride	FLUOROACETYL CHLORIDE	359068	10				
Fluorouracil	FLUOROURACIL	51218	500/ 10,000		313		
Fluvalinate	FLUVALINATE	69409945			313		
Folpet	FOLPET	133073			313		
Fomesafen	FOMESAFEN	72178020			313		
Fonofos	FONOFOS	944229	500				
Formaldehyde	FORMALDEHYDE	50000	500	100	313	U122	15,000
Formaldehyde (solution)	FORMALDEHYDE (SOLUTION)	50000	500	100	X	U122	15,000
Formaldehyde cyanohydrin	FORMALDEHYDE CYANOHYDRIN	107164	1,000				
Formetanate hydrochloride	FORMETANATE HYDROCHLORIDE	23422539	500/ 10,000				

Formic acid	FORMIC ACID	64186		5,000	313	U123	
Formic acid, methyl ester	FORMICACIDMETHYL	107313					10,000
Formothion	FORMOTHION	2540821	100				
Formparanate	FORMPARANATE	17702577	100/ 10,000				
Fosthietan	FOSTHIETAN	21548323	500				
Freon 113	FREON113	76131			313		
Fuberidazole	FUBERIDAZOLE	3878191	100/ 10,000				
Fumaric acid	FUMARIC ACID	110178		5,000			
Furan	FURAN	110009	500	100		U124	5,000
Furan, tetrahydro-	FURAN, TETRAHYDRO-	109999		1,000		U213	
Furfural	FURFURAL	98011		5,000		U125	
Gallium trichloride	GALLIUM TRICHLORIDE	13450903	500/ 10,000				
Glycidylaldehyde	GLYCIDYLALDEHYDE	765344		10		U126	
Glycol Ethers	GLYCOL ETHERS	0		1*	N230		
Guanidine, N-methyl-N'-nitro-N-nitroso-	GUANIDINE, N-METHYL-N'-NITRO-N-NITROSO-	70257		10		U163	
Guthion	GUTHION	86500	10/ 10,000	1			
Haloethers	HALOETHERS	0		**			
Halomethanes	HALOMETHANES	0		**			
Halon 1211	HALON1211	353593			X		
Halon 1301	HALON1301	75638			X		
Halon 2402	HALON2402	124732			X		
HCFC-121	HCFC-121	354143			X		
HCFC-121a	HCFC-121A	354110			X		
HCFC-123	HCFC-123	306832			X		
HCFC-123a	HCFC-123A	354234			X		
HCFC-123b	HCFC-123B	812044			X		
HCFC-124	HCFC-124	2837890			X		
HCFC-124a	HCFC-124A	354256			X		
HCFC-132b	HCFC-132B	1649087			X		
HCFC-133a	HCFC-133A	75887			X		

HCFC-141b	HCFC-141B	1717006			X		
HCFC-142b	HCFC-142B	75683			X		
HCFC-21	HCFC-21	75434			X		
HCFC-22	HCFC-22	75456			X		
HCFC-225aa	HCFC-225AA	128903219			X		
HCFC-225ba	HCFC-225BA	422480			X		
HCFC-225bb	HCFC-225BB	422446			X		
HCFC-225ca	HCFC-225CA	422560			X		
HCFC-225cb	HCFC-225CB	507551			X		
HCFC-225cc	HCFC-225CC	13474889			X		
HCFC-225da	HCFC-225DA	431867			X		
HCFC-225ea	HCFC-225EA	136013791			X		
HCFC-225eb	HCFC-225EB	111512562			X		
HCFC-253fb	HCFC-253FB	460355			X		
Heptachlor	HEPTACHLOR	76448		1	313	P059	
Heptachlor and Metabolites	HEPTACHLOR AND METABOLITES	0		**			
Heptachlor epoxide	HEPTACHLOR EPOXIDE	1024573		1			
Hexachloro-1,3-butadiene	HEXACHLOROBUTAD	87683		1	313	U128	
Hexachlorobenzene	HEXACHLOROBENZENE	118741		10	313	U127	
Hexachlorobutadiene	HEXACHLOROBUTADIENE	87683		1	X	U128	
Hexachlorocyclohexane (all isomers) CAS 608-73-1	HEXACHLOROCYCLOHEXANEALL	0		**			
Hexachlorocyclohexane (gamma isomer)	HEXACHLOROCYCLOHEXANEGAMMA ISOMER)	58899	1,000 / 10,000	1	X	U129	
Hexachlorocyclopentadiene	HEXACHLOROCYCLOPENTADIENE	77474	100	10	313	U130	
Hexachloroethane	HEXACHLOROETHANE	67721		100	313	U131	
Hexachloronaphthalene	HEXACHLORONAPHTHA	1335871			313		
Hexachlorophene	HEXACHLOROPHENE	70304		100	313	U132	
Hexachloropropene	HEXACHLOROPROPENE	1888717		1,000		U243	
Hexaethyl tetraphosphate	HEXAETHYL TETRAPHOSPHATE	757584		100		P062	
Hexakis(2-methyl-2-phenylpropyl)distannoxane	HEXAKISMETHYLPHENYLPROPYLDISTANNOXANE	13356086			X		

Hexamethylene-1,6-diisocyanate	HEXAMETHYLENEDI	822060		1*	313#		
Hexamethylenediamine, N,N'-dibutyl-	HEXAMETHYLENEDIAMINE, N,N'-DIBUTYL-	4835114	500				
Hexamethylphosphoramide	HEXAMETHYLPHOSPHO	680319		1*	313		
Hexane	HEXANE	110543		1*	X		
Hexazinone	HEXAZINONE	51235042			313		
Hydramethylnon	HYDRAMETHYLNON	67485294			313		
Hydrazine	HYDRAZINE	302012	1,000	1	313	U133	15,000
Hydrazine sulfate	HYDRAZINESULFATE	10034932			313		
Hydrazine, 1,1-dimethyl-	HYDRAZINEDIMETHYL-	57147	1,000	10	X	U098	15,000
Hydrazine, 1,2-diethyl-	HYDRAZINEDIETHYL-	1615801		10		U086	
Hydrazine, 1,2-dimethyl-	HYDRAZINEDIMETHYL-	540738		1		U099	
Hydrazine, 1,2-diphenyl-	HYDRAZINEDIPHENYL-	122667		10	X	U109	
Hydrazine, methyl-	HYDRAZINEMETHYL-	60344	500	10	X	P068	15,000
Hydrazobenzene	HYDRAZOBENZENE	122667		10	X	U109	
Hydrochloric acid	HYDROCHLORICACID	7647010		5,000	313		
Hydrochloric acid (conc 30% or greater)	HYDROCHLORICACID	7647010		5,000	X		15,000
Hydrocyanic acid	HYDROCYANICACID	74908	100	10	X	P063	2,500
Hydrofluoric acid	HYDROFLUORICACID	7664393	100	100	X	U134	
Hydrofluoric acid (conc. 50% or greater)	HYDROFLUORICACID (CONC>)	7664393	100	100	X	U134	1,000
Hydrogen	HYDROGEN	1333740					10,000
Hydrogen chloride (anhydrous)	HYDROGENCHLORIDE	7647010	500	5,000	X		5,000
Hydrogen chloride (gas only)	HYDROGENCHLORIDE (Gas Only)	7647010	500	5,000	X		5,000
Hydrogen cyanide	HYDROGENCYANIDE	74908	100	10	313	P063	2,500
Hydrogen fluoride	HYDROGENFLUORIDE	7664393	100	100	313	U134	
Hydrogen fluoride (anhydrous)	HYDROGENFLUORIDE(ANHYDROUS)	7664393	100	100	X	U134	1,000
Hydrogen peroxide (Conc.> 52%)	HYDROGENPEROXIDE (Conc.> 52%)	7722841	1,000				
Hydrogen selenide	HYDROGENSELENIDE	7783075	10				500
Hydrogen sulfide	HYDROGENSULFIDE	7783064	500	100	313	U135	10,000

Hydroperoxide, 1-methyl-1-phenylethyl-	HYDROPEROXIDE, 1-METHYL-1-PHENYLETHYL-	80159		10	X	U096	
Hydroquinone	HYDROQUINONE	123319	500/10,000	1*	313		
Imazalil	IMAZALIL	35554440			313		
Indeno(1,2,3-cd)pyrene	INDENO(1,2,3-CD)PYRENE	193395		100	313+	U137	
Iron carbonyl (Fe(CO)5), (TB-5-11)-	IRONCARBONYL (FE(CO)5), (TB-5-11)-	13463406	100		X		2,500
Iron, pentacarbonyl-	IRONPENTACARBONYL-	13463406	100		313		2,500
iso-Amyl acetate	AMYLACETATE-I	123922		5,000			
Isobenzan	ISOBENZAN	297789	100/10,000				
Isobutane	ISOBUTANE	75285					10,000
iso-Butyl acetate	BUTYLACETATE-I	110190		5,000			
Isobutyl alcohol	ISOBUTYL ALCOHOL	78831		5,000		U140	
iso-Butylamine	BUTYLAMINE-I	78819		1,000			
Isobutyraldehyde	ISOBUTYRALDEHYDE	78842			313		
iso-Butyric acid	BUTYRIC ACIDISO	79312		5,000			
Isobutyronitrile	ISOBUTYRONITRILE	78820	1,000				20,000
Isocyanic acid, 3,4-dichlorophenyl ester	ISOCYANIC ACID, 3,4-DICHLOROPHENYL ESTER	102363	500/10,000				
Isodrin	ISODRIN	465736	100/10,000	1	313	P060	
Isofenphos	ISOFENPHOS	25311711			313		
Isofluorphate	ISOFLUORPHATE	55914	100	100		P043	
Isopentane	ISOPENTANE	78784					10,000
Isophorone	ISOPHORONE	78591		5,000			
Isophorone diisocyanate	ISOPHORONE DIISOCYANATE	4098719	100		313#		
Isoprene	ISOPRENE	78795		100			10,000
Isopropanolamine dodecylbenzene sulfonate	ISOPROPANOLAMINE DODECYLBENZENE SULFONATE	42504461		1,000			
Isopropyl alcohol (mfg-strong acid process)	ISOPROPYLALCOHOL	67630			313		
Isopropyl chloride	ISOPROPYLCHLORIDE	75296					10,000
Isopropyl chloroformate	ISOPROPYLCHLOROFORMATE	108236	1,000				15,000
Isopropylamine	ISOPROPYLAMINE	75310					10,000

Isopropylmethylpyrazolyl dimethylcarbamate	ISOPROPYLMETHYLPYRAZOLYL DIMETHYLCARBAMATE	119380	500				
Isosafrole	ISOSAFROLE	120581		100	313	U141	
Isothiocyanatomethane	ISOTHIOCYANATOMETHANE	556616	500		X		
Kepone	KEPONE	143500		1		U142	
Lactofen	LACTOFEN	77501634			313		
Lactonitrile	LACTONITRILE	78977	1,000				
Lasiocarpine	LASIOCARPINE	303344		10		U143	
Lead	LEAD	7439921		10	313		
Lead acetate	LEADACETATE	301042		10		U144	
Lead arsenate	LEADARSENATE	7645252		1			
Lead arsenate	LEADARSENATE	7784409		1			
Lead arsenate	LEADARSENATE	10102484		1			
Lead chloride	LEADCHLORIDE	7758954		10			
Lead Compounds	LEADCOMPOUNDS	0		**	N420		
Lead fluoborate	LEADFLUOBORATE	13814965		10			
Lead fluoride	LEADFLUORIDE	7783462		10			
Lead iodide	LEADIODIDE	10101630		10			
Lead nitrate	LEADNITRATE	10099748		10			
Lead phosphate	LEADPHOSPHATE	7446277		10		U145	
Lead stearate	LEADSTEARATE	1072351		10			
Lead stearate	LEADSTEARATE	7428480		10			
Lead stearate	LEADSTEARATE	52652592		10			
Lead stearate	LEADSTEARATE	56189094		10			
Lead subacetate	LEADSUBACETATE	1335326		10		U146	
Lead sulfate	LEADSULFATE	7446142		10			
Lead sulfate	LEADSULFATE	15739807		10			
Lead sulfide	LEADSULFIDE	1314870		10			
Lead thiocyanate	LEADTHIOCYANATE	592870		10			
Leptophos	LEPTOPHOS	21609905	500/ 10,000				
Lindane	LINDANE	58899	1,000 / 10,000	1	313	U129	
Linuron	LINURON	330552			313		
Lithium carbonate	LITHIUMCARBONATE	554132			313		
Lithium chromate	LITHIUMCHROMATE	14307358		10			

Lithium hydride	LITHIUMHYDRIDE	7580678	100				
Malathion	MALATHION	121755		100	313		
Maleic acid	MALEICACID	110167		5,000			
Maleic anhydride	MALEICANHYDRIDE	108316		5,000	313	U147	
Maleic hydrazide	MALEICHYDRAZIDE	123331		5,000		U148	
Malononitrile	MALONONITRILE	109773	500/ 10,000	1,000	313	U149	
Maneb	MANEB	12427382			313		
Manganese	MANGANESE	7439965			313		
Manganese Compounds	MANGANESE COMPOUNDS	0		1*	N450		
Manganese, tricarbonyl methylcyclopentadienyl	MANGANESE, TRICARBONYL METHYLCYCLOPENTADIENYL	12108133	100				
MBOCA	MBOCA	101144		10	X	U158	
MBT	MBT	149304			X		
MCPA	MCPA	94746			X		
m-Cresol	CRESOLA	108394		1,000	313	U052	
MDI	MDI	101688		1*	X		
m-Dinitrobenzene	DINITROBENZENEM	99650		100	313		
Mechlorethamine	MECHLORETHAMINE	51752	10		X		
Mecoprop	MECOPROP	93652			313		
Melphalan	MELPHALAN	148823		1		U150	
Mephosfolan	MEPHOSFOLAN	950107	500				
Mercaptodimethur	MERCAPTODIMETHUR	2032657	500/ 10,000	10	X		
Mercuric acetate	MERCURICACETATE	1600277	500/ 10,000				
Mercuric chloride	MERCURICCHLORIDE	7487947	500/ 10,000				
Mercuric cyanide	MERCURICCYANIDE	592041		1			
Mercuric nitrate	MERCURICNITRATE	10045940		10			
Mercuric oxide	MERCURICOXIDE	21908532	500/ 10,000				
Mercuric sulfate	MERCURICSULFATE	7783359		10			
Mercuric thiocyanate	MERCURICTHIOCYANATE	592858		10			

Mercurous nitrate	MERCUROUSNITRATE	7782867		10			
Mercurous nitrate	MERCUROUSNITRATE	10415755		10			
Mercury	MERCURY	7439976		1	313	U151	
Mercury Compounds	MERCURY COMPOUNDS	0		**	N458		
Mercury fulminate	MERCURY FULMINATE	628864		10		P065	
Merphos	MERPHOS	150505			313		
Methacrolein diacetate	METHACROLEIN DIACETATE	10476956	1,000				
Methacrylic anhydride	METHACRYLIC ANHYDRIDE	760930	500				
Methacrylonitrile	METHACRYLONITRILE	126987	500	1,000	313	U152	10,000
Methacryloyl chloride	METHACRYLOYL CHLORIDE	920467	100				
Methacryloyloxyethyl isocyanate	METHACRYLOYLOXYETHYL ISOCYANATE	30674807	100				
Metham sodium	METHAMSODIUM	137428			313		
Methamidophos	METHAMIDOPHOS	10265926	100/ 10,000				
Methanamine	METHANAMINE	74895		100			10,000
Methanamine, N,N-dimethyl-	METHANAMINEDIMETHYL	75503		100			10,000
Methanamine, N-methyl-	METHANAMINEMETHYL	124403		1,000	X	U092	10,000
Methanamine, N-methyl-N-nitroso-	METHANAMINEMETHYLNITROSO-	62759	1,000	10	X	P082	
Methane	METHANE	74828					10,000
Methane, chloro-	METHANECHLORO-	74873		100	X	U045	10,000
Methane, chloromethoxy-	METHANECHLOROMETHOXY-	107302	100	10	X	U046	5,000
Methane, isocyanato-	METHANEISOCYANATO-	624839	500	1	X	P064	10,000
Methane, oxybis-	METHANEOXYBIS-	115106					10,000
Methane, oxybis[chloro-	METHANEOXYBIS[CHLORO-	542881	100	10	X	P016	1,000
Methane, tetranitro-	METHANETETRANITRO-	509148	500	10		P112	10,000
Methane, trichloro-	METHANETRICHLORO-	67663	10,000	10	X	U044	20,000
Methanesulfenyl chloride, trichloro-	METHANESULFENYLCHLORIDETRICHLORO-	594423	500	100			10,000
Methanesulfonyl fluoride	METHANESULFONYL FLUORIDE	558258	1,000				
Methanethiol	METHANETHIOL	74931	500	100	X	U153	10,000
Methanol	METHANOL	67561		5,000	313	U154	
Methapyrilene	METHAPYRILENE	91805		5,000		U155	

Methazole	METHAZOLE	20354261			313		
Methidathion	METHIDATHION	950378	500/ 10,000				
Methiocarb	METHIOCARB	2032657	500/ 10,000	10	313		
Methomyl	METHOMYL	16752775	500/ 10,000	100		P066	
Methoxone	METHOXONE	94746			313		
Methoxone sodium salt	METHOXONESODIUM SALT	3653483			313		
Methoxychlor	METHOXYCHLOR	72435		1	313	U247	
Methoxyethylmercuric acetate	METHOXYETHYLMERCURIC ACETATE	151382	500/ 10,000				
Methyl 2-chloroacrylate	METHYLCHLOROACRYLATE	80637	500				
Methyl acrylate	METHYLACRYLATE	96333			313		
Methyl bromide	METHYLBROMIDE	74839	1,000	1,000	X	U029	
Methyl chloride	METHYLCHLORIDE	74873		100	X	U045	10,000
Methyl chlorocarbonate	METHYLCHLOROCARBONATE	79221	500	1,000	313	U156	5,000
Methyl chloroform	METHYLCHLOROFORM	71556		1,000	X	U226	
Methyl chloroformate	METHYLCHLOROFORMATE	79221	500	1,000	X	U156	5,000
Methyl ether	METHYLETHER	115106					10,000
Methyl ethyl ketone	METHYLETHYLKETONE	78933		5,000	313	U159	
Methyl ethyl ketone (MEK)	METHYLETHYLKETONE (MEK)	78933		5,000	X	U159	
Methyl ethyl ketone peroxide	METHYLETHYLKETONEPEROXIDE	1338234		10		U160	
Methyl formate	METHYLFORMATE	107313					10,000
Methyl hydrazine	METHYLHYDRAZINE	60344	500	10	313	P068	15,000
Methyl iodide	METHYLIODIDE	74884		100	313	U138	
Methyl isobutyl ketone	METHYLISOBUTYLKETO	108101		5,000	313	U161	
Methyl isocyanate	METHYLISOCYANATE	624839	500	10	313	P064	10,000
Methyl isothiocyanate	METHYLISOTHIOCYANATE	556616	500		313		
Methyl mercaptan	METHYLMERCAPTAN	74931	500	100	313	U153	10,000
Methyl methacrylate	METHYLMETHACRYLATE	80626		1,000	313	U162	

Methyl parathion	METHYLPARATHION	298000	100/ 10,000	100	313	P071	
Methyl phenkapton	METHYLPHENKAPTON	3735237	500				
Methyl phosphonic dichloride	METHYLPHOSPHONIC DICHLORIDE	676971	100				
Methyl tert-butyl ether	METHYLTBUTYLET	1634044		1*	313		
Methyl thiocyanate	METHYLTHIOCYANATE	556649	10,000				20,000
Methyl vinyl ketone	METHYLVINYL KETONE	78944	10				
Methylene bromide	METHYLENEBROMIDE	74953		1,000	313	U068	
Methylene chloride	METHYLENECHLORIDE	75092		1,000	X	U080	
Methylenebis(phenylisocyanate)	METHYLENEBISPHENYL	101688		1*	313#		
Methylmercuric dicyanamide	METHYLMERCURIC DICYANAMIDE	502396	500/ 10,000				
Methylthiouracil	METHYLTHIOURACIL	56042		10		U164	
Methyltrichlorosilane	METHYLTRICHLOROSILANE	75796	500		313		5,000
Metiram	METIRAM	9006422			313		
Metolcarb	METOLCARB	1129415	100/ 10,000				
Metribuzin	METRIBUZIN	21087649			313		
Mevinphos	MEVINPHOS	7786347	500	10	313		
Mexacarbate	MEXACARBATE	315184	500/ 10,000	1,000			
Michler's ketone	MICHLERSKETONE	90948			313		
Mitomycin C	MITOMYCIN C	50077	500/ 10,000	10		U010	
m-Nitrophenol	NITROPHENOL-M	554847		100			
m-Nitrotoluene	NITROTOLUENE-M	99081		1,000			
Molinate	MOLINATE	2212671			313		
Molybdenum trioxide	MOLYBDENUMTRIOXIDE	1313275			313		
Monochloropentafluoroethane	MONOCHLOROPENTAFLUOROETHANE	76153			313		
Monocrotophos	MONOCROTOPHOS	6923224	10/ 10,000				

Monoethylamine	MONOETHYLAMINE	75047		100			10,000
Monomethylamine	MONOMETHYLAMINE	74895		100			10,000
Monuron	MONURON	150685			313		
MR. LEWISite	MR. LEWISITE	541253	10				
Muscimol	MUSCIMOL	2763964	500/ 10,000	1,000		P007	
Mustard gas	MUSTARDGAS	505602	500		313		
m-Xylene	XYLENEA	108383		1,000	313	U239	
Myclobutanil	MYCLOBUTANIL	88671890			313		
N-(1-Ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine	ETHYLPROPYLDIMETHYLDINITROBENZENAMINE	40487421			X		
N-(2-Chloro-4-(trifluoromethyl)phenyl)-DL-valine(+)-cyano(3-phenoxyphenyl)methyl ester	CHLOROTRIFLUOROMETHYLPHENYLVALINE(+)-CYANO(3-	69409945			X		
N-(3,4-Dichlorophenyl)propanamide	DICHLOROPHENYLPROPANAMIDE	709988			X		
N-(5-(1,1-Dimethylethyl)-1,3,4-thiadiazol-2-yl)-N,N'-dimethylurea	DIMETHYLETHYLTHIADIAZOLYLDIMETHY	34014181			X		
N,N'-(1,4-Piperazinediylbis(2,2,2-trichloroethylidene)) bisformamide	PIPERAZINEDIYLBISTRICHLOROETHYLIDENEBISF	26644462			X		
N,N'-Bis(1-methylethyl)-6-methylthio-1,3,5-triazine-2,4-diamine	BISMETHYLETHYLMETHYLTHIOTRIAZINEDIA	7287196			X		
N,N-Diethylaniline	DIETHYLANILINE	91667		1*			
N,N-Dimethylaniline	DIMETHYLANILINE	121697		1*	313		
N,N-Dimethylformamide	DIMETHYLFORMAMIDE,N,N-	68122		1*	313		
Nabam	NABAM	142596			313		
Naled	NALED	300765		10	313		
Naphthalene	NAPHTHALENE	91203		100	313	U165	
Naphthenic acid	NAPHTHENIC ACID	1338245		100			
n-Butyl alcohol	BUTYLALCOHOLA	71363		5,000	313	U031	
n-Butyl phthalate	BUTYLPHTHALATE	84742		10	X	U069	

N-Butyl-N-ethyl-2,6-dinitro-4-(trifluoromethyl) benzenamine	BUTYLETHYLDINITROTRIFLUOROMETHYLBENZENAMINE	1861401			X		
n-Dioctylphthalate	DIOCTYLPHTHALATE	117840		5,000		U107	
N-Ethyl-N'-(1-methylethyl)-6-(methylthio)-1,3,5,-triazine-2,4-diamine	ETHYLMETHYLETHYLMETHYLTHIO)-1,3,5,-TRIAZINE-2,	834128			X		
n-Hexane	HEXANE-N	110543		1*	313		
Nickel	NICKEL	7440020		100	313		
Nickel ammonium sulfate	NICKELAMMONIUM SULFATE	15699180		100			
Nickel carbonyl	NICKELCARBONYL	13463393	1	10		P073	1,000
Nickel chloride	NICKELCHLORIDE	7718549		100			
Nickel chloride	NICKELCHLORIDE	37211055		100			
Nickel Compounds	NICKELCOMPOUNDS	0		**	N495		
Nickel cyanide	NICKELCYANIDE	557197		10		P074	
Nickel hydroxide	NICKELHYDROXIDE	12054487		10			
Nickel nitrate	NICKELNITRATE	14216752		100			
Nickel sulfate	NICKELSULFATE	7786814		100			
Nicotine	NICOTINE	54115	100	100		P075	
Nicotine and salts	NICOTINE AND SALTS	54115		100		P075	
Nicotine and salts	NICOTINE AND SALTS	0			N503		
Nicotine sulfate	NICOTINE SULFATE	65305	100/ 10,000				
Nitrapyrin	NITRAPYRIN	1929824			313		
Nitrate compounds (water dissociable)	NITRATECOMPOUNDS	0			N511		
Nitric acid	NITRICACID	7697372	1,000	1,000	313		
Nitric acid (conc 80% or greater)	NITRICACID	7697372	1,000	1,000	X		15,000
Nitric oxide	NITRICOXIDE	10102439	100	10		P076	10,000
Nitrilotriacetic acid	NITRILOTRIACETICACI	139139			313		

Nitrobenzene	NITROBENZENE	98953	10,000	1,000	313	U169	
Nitrocyclohexane	NITROCYCLOHEXANE	1122607	500				
Nitrofen	NITROFEN	1836755			313		
Nitrogen dioxide	NITROGEN DIOXIDE	10102440	100	10		P078	
Nitrogen dioxide	NITROGEN DIOXIDE	10544726		10			
Nitrogen mustard	NITROGENMUSTARD	51752	10		313		
Nitrogen oxide (NO)	NITROGENOXIDE (NO)	10102439	100	10		P076	10,000
Nitroglycerin	NITROGLYCERINE	55630		10	313	P081	
Nitrophenol (mixed isomers)	NITROPHENOL (MIXED)	25154556		100			
Nitrophenols	NITROPHENOLS	0		**			
Nitrosamines	NITROSAMINES	0		**			
Nitrosodimethylamine	NITROSODIMETHYLAMINE	62759	1,000	10	X	P082	
Nitrotoluene	NITROTOLUENE	1321126		1,000			
Nitrous acid, ethyl ester	NITROUSACIDETHYL	109955					10,000
N-Methyl-2-pyrrolidone	METHYLPYRROLIDONE	872504			313		
N-Methylolacrylamide	METHYLOLACRYLAMIDE	924425			313		
N-Nitrosodiethanolamine	NITROSODIETHANOLAMINE	1116547		1		U173	
N-Nitrosodiethylamine	NITROSODIETHYLAMIN	55185		1	313	U174	
N-Nitrosodimethylamine	NITROSODIMETHYLAMI	62759	1,000	10	313	P082	
N-Nitrosodi-n-butylamine	NITROSODIBUTYLA	924163		10	313	U172	
N-Nitrosodi-n-propylamine	NITROSODIPROPYL	621647		10	313	U111	
N-Nitrosodiphenylamine	NITROSODIPHENYLA	86306		100	313		
N-Nitrosomethylvinylamine	NITROSOMETHYLVINYL	4549400		10	313	P084	
N-Nitrosomorpholine	NITROSOMORPHOLINE	59892		1*	313		
N-Nitroso-N-ethylurea	NITROSOETHYLURE	759739		1	313	U176	
N-Nitroso-N-methylurea	NITROSOMETHYLUR	684935		1	313	U177	
N-Nitroso-N-methylurethane	NITROSOMETHYLURETHANE	615532		1		U178	

N-Nitrosonornicotine	NITROSONORNICOTINE	16543558			313		
N-Nitrosopiperidine	NITROSOPIPERIDINE	100754		10	313	U179	
N-Nitrosopyrrolidine	NITROSOPYRROLIDINE	930552		1		U180	
Norbormide	NORBORMIDE	991424	100/ 10,000				
Norflurazon	NORFLURAZON	27314132			313		
n-Propylamine	PROPYLAMINE	107108		5,000		U194	
O-(2-(Diethylamino)-6-methyl-4-pyrimidinyl)-O,O-dimethyl phosphorothioate	DIETHYLAMINOMETHYLPYRIMIDINYLDIMETHYLPHO	29232937			X		
O-(4-Bromo-2-chlorophenyl)-O-ethyl-S-propylphosphorothioate	BROMOCHLOROPHENYLETHYLPROPYLPHOSPHOROTHIOATE	41198087			X		
O,O-Diethyl O-pyrazinyl phosphorothioate	DIETHYLPYRAZINYL PHOSPHOROTHIOATE	297972	500	100		P040	
O,O-Diethyl S-methyl dithiophosphate	DIETHYLMETHYLDITHIOPHOSPHATE	3288582		5,000		U087	
O,O-Dimethyl O-(3-methyl-4-(methylthio) phenyl) ester, phosphorothioic acid	DIMETHYLMETHYLMETHYLTHIOPHENYLESTERPHOSP	55389			X		
O,O-Dimethyl-O-(3,5,6-trichloro-2-pyridyl)phosphorothioate	DIMETHYLTRICHLOROPYRIDYLPHOSPHOROTHIOATE	5598130			X		
o-Anisidine	ANISIDINEA	90040		1*	313		
o-Anisidine hydrochloride	ANISIDINEHYDROCHL	134292			313		
o-Cresol	CRESOLB	95487	1,000 / 10,000	1,000	313	U052	
Octachloronaphthalene	OCTACHLORONAPHTHALEN	2234131			313		
Octanoic acid, 2,6-dibromo-4-cyanophenyl ester	OCTANOIC ACIDDIBROMOCYANOPHENYL ESTER	1689992			X		
o-Dianisidine dihydrochloride	DIANISIDINEDIHYDROCHLORIDE	20325400			X		
o-Dianisidine hydrochloride	DIANISIDINEHYDROCHLORIDE	111984099			X		

o-Dichlorobenzene	DICHLOROBENZENE	95501		100	X	U070	
o-Dinitrobenzene	DINITROBENZENEO	528290		100	313		
O-Ethyl O-(4-(methylthio)phenyl)phosphorodithioic acid S-propyl ester	ETHYLMETHYLTHIOPHENYL PHOSPHORODITHIOIC ACID S-PRO	35400432			X		
Oleum (fuming sulfuric acid)	OLEUM	8014957		1,000			10,000
o-Nitrotoluene	NITROTOLUENE-O	88722		1,000			
Organorhodium Complex (PMN-82-147)	ORGANORHODIUM COMPLEX (PMN-82-147)	0	10/ 10,000				
Oryzalin	ORYZALIN	19044883			313		
Osmium oxide OsO4 (T-4)-	OSMIUM OXIDE OSO4 (T-4)-	20816120		1,000	X	P087	
Osmium tetroxide	OSMIUMTETROXIDE	20816120		1,000	313	P087	
o-Tolidine	TOLIDINE	119937		10	X	U095	
o-Tolidine dihydrochloride	TOLIDINEDIHYDROCHLORIDE	612828			X		
o-Tolidine dihydrofluoride	TOLIDINEDIHYDROFLUORIDE	41766750			X		
o-Toluidine	TOLUIDINE	95534		100	313	U328	
o-Toluidine hydrochloride	TOLUIDINEHYDROCHL	636215		100	313	U222	
Ouabain	OUABAIN	630604	100/ 10,000				
Oxamyl	OXAMYL	23135220	100/ 10,000				
Oxetane, 3,3-bis(chloromethyl)-	OXETANE, 3,3-BIS(CHLOROMETHYL)-	78717	500				
Oxirane	OXIRANE	75218	1,000	10	X	U115	10,000
Oxirane, (chloromethyl)-	OXIRANECHLOROMETHYL)-	106898	1,000	100	X	U041	20,000
Oxirane, methyl-	OXIRANEMETHYL-	75569	10,000	100	X		10,000
Oxydemeton methyl	OXYDEMETONMETHYL	301122			313		
Oxydiazon	OXYDIAZON	19666309			313		

Oxydisulfoton	OXYDISULFOTON	2497076	500				
Oxyfluorfen	OXYFLUORFEN	42874033			313		
o-Xylene	XYLENEB	95476		1,000	313	U239	
Ozone	OZONE	10028156	100		313		
p-Anisidine	ANISIDINEB	104949			313		
Paraformaldehyde	PARAFORMALDEHYDE	30525894		1,000			
Paraldehyde	PARALDEHYDE	123637		1,000	313	U182	
Paraquat dichloride	PARAQUATDICHLORIDE	1910425	10/ 10,000		313		
Paraquat methosulfate	PARAQUAT METHOSULFATE	2074502	10/ 10,000				
Parathion	PARATHION	56382	100	10	313	P089	
Parathion-methyl	PARATHION-METHYL	298000	100/ 10,000	100	X	P071	
Paris green	PARIS GREEN	12002038	500/ 10,000	1			
p-Benzoquinone	BENZOQUINONE	106514		10	X	U197	
PCBs	PCBS	1336363		1	X		
p-Chloroaniline	CHLOROANILINE	106478		1,000	313	P024	
p-Chloro-m-cresol	CHLOROCRESOL	59507		5,000		U039	
p-Chloro-o-toluidine	CHLOROTOLUIDINE	95692			313		
p-Chlorophenyl isocyanate	CHLOROPHENYLISOCYANATE	104121			313		
PCNB	PCNB	82688		100	X	U185	
PCP	PCP	87865		10	X		
p-Cresidine	CRESIDINE	120718			313		
p-Cresol	CRESOLC	106445		1,000	313	U052	
p-Dinitrobenzene	DINITROBENZENEP	100254		100	313		
Pebulate	PEBULATE	1114712			313		
Pendimethalin	PENDIMETHALIN	40487421			313		

Pentaborane	PENTABORANE	19624227	500				
Pentachlorobenzene	PENTACHLOROBENZENE	608935		10		U183	
Pentachloroethane	PENTACHLOROETHANE	76017		10	313	U184	
Pentachloronitrobenzene	PENTACHLORONITROBENZENE (PCNB)	82688		100	X	U185	
Pentachlorophenol	PENTACHLOROPHENOLP	87865		10	313		
Pentadecylamine	PENTADECYLAMINE	2570265	100/ 10,000				
Pentane	PENTANE	109660					10,000
Pentobarbital sodium	PENTOBARBITALSODIUM	57330			313		
Peracetic acid	PERACETICACID	79210	500		313		10,000
Perchloroethylene	PERCHLOROETHYLENE	127184		100	X	U210	
Perchloromethyl mercaptan	PERCHLOROMETHYLMERCAPTAN	594423	500	100	313		10,000
Permethrin	PERMETHRIN	52645531			313		
Phenacetin	PHENACETIN	62442		100		U187	
Phenanthrene	PHENANTHRENE	85018		5,000	313		
Phenol	PHENOL	108952	500/ 10,000	1,000	313	U188	
Phenol, 2-(1-methylethoxy)-, methylcarbamate	PHENOLMETHYLETHOXYMETHYLCARBAMATE	114261		1*	X		
Phenol, 2,2'-thiobis[4-chloro-6-methyl-	PHENOLTHIOBIS[4-CHLORO-6-METHYL-	4418660	100/ 10,000				
Phenol, 3-(1-methylethyl)-, methylcarbamate	PHENOL, 3-(1-METHYLETHYL)-, METHYLCARBAMATE	64006	500/ 10,000				
Phenothrin	PHENOTHRIN	26002802			313		
Phenoxarsine, 10,10'-oxydi-	PHENOXARSINE, 10,10'-OXYDI-	58366	500/ 10,000				
Phenyl dichloroarsine	PHENYLDICHLOROARSINE	696286	500	1		P036	
Phenylhydrazine hydrochloride	PHENYLHYDRAZINE HYDROCHLORIDE	59881	1,000 / 10,000				

Phenylmercuric acetate	PHENYLMERCURIC ACETATE	62384	500/ 10,000	100		P092	
Phenylmercury acetate	PHENYLMERCURY ACETATE	62384	500/ 10,000	100		P092	
Phenylsilatrane	PHENYLSILATRANE	2097190	100/ 10,000				
Phenylthiourea	PHENYLTHIOUREA	103855	100/ 10,000	100		P093	
Phenytoin	PHENYTOIN	57410			313		
Phorate	PHORATE	298022	10	10		P094	
Phosacetim	PHOSACETIM	4104147	100/ 10,000				
Phosfolan	PHOSFOLAN	947024	100/ 10,000				
Phosgene	PHOSGENE	75445	10	10	313	P095	500
Phosmet	PHOSMET	732116	10/ 10,000				
Phosphamidon	PHOSPHAMIDON	13171216	100				
Phosphine	PHOSPHINE	7803512	500	100	313	P096	5,000
Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-,dimethyl ester	PHOSPHONICACIDTRICHLORO-1-HYDROXYETHYL)-,DIMETHYL	52686		100	X		
Phosphonothioic acid, methyl-, O-(4-nitrophenyl) O-phenyl ester	PHOSPHONOTHIOIC ACID, METHYL-,O-(4-NITROPHENYL) O-	2665307	500				
Phosphonothioic acid, methyl-, O-ethyl O-(4-(methylthio)phenyl) ester	PHOSPHONOTHIOIC ACID, METHYL-, O-ETHYL O-(4-(METHY	2703131	500				
Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester	PHOSPHONOTHIOIC ACID, METHYL-, S-(2-(BIS(1-METHYLE	50782699	100				
Phosphoric acid	PHOSPHORICACID	7664382		5,000	313		

Phosphoric acid, 2-chloro-1-(2,3,5-trichlorophenyl) ethenyl dimethyl ester	PHOSPHORICACIDCHLOROTRICHLOROPHENYL) ETHENYL	961115			X		
Phosphoric acid, 2-dichloroethenyl dimethyl ester	PHOSPHORICACIDDICHLOROETHENYL DIMETHYL ESTER	62737	1,000	10	X		
Phosphoric acid, dimethyl 4-(methylthio) phenyl ester	PHOSPHORICACIDDIMETHYL 4-(METHYLTHIO) PHENYL ES	3254635	500				
Phosphorodithioic acid O-ethyl S,S-dipropyl ester	PHOSPHORODITHIOICACIDETHYLDIPROPYL ESTER	13194484	1,000		X		
Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	PHOSPHOROTHIOICACIDDIETHYLNITROPHENYL) ESTER	56382	100	10	X	P089	
Phosphorothioic acid, O,O-dimethyl-5-(2-(methylthio)ethyl)ester	PHOSPHOROTHIOICACIDDIMETHYLMETHYLTHIO	2587908	500				
Phosphorous trichloride	PHOSPHOROUSTRICHLORIDE	7719122	1,000	1,000			15,000
Phosphorus	PHOSPHORUS	7723140	100	1			
Phosphorus (yellow or white)	PHOSPHORUS	7723140	100	1	313		
Phosphorus oxychloride	PHOSPHORUS OXYCHLORIDE	10025873	500	1,000			5,000
Phosphorus pentachloride	PHOSPHORUS PENTACHLORIDE	10026138	500				
Phosphorus pentoxide	PHOSPHORUS PENTOXIDE	1314563	10				
Phosphorus trichloride	PHOSPHORUS TRICHLORIDE	7719122	1,000	1,000			15,000
Phosphoryl chloride	PHOSPHORYLCHLORIDE	10025873	500	1,000			5,000
Phthalate Esters	PHTHALATE ESTERS	0		**			
Phthalic anhydride	PHTHALICANHYDRIDE	85449		5,000	313	U190	
Physostigmine	PHYSOSTIGMINE	57476	100/10,000				
Physostigmine, salicylate (1:1)	PHYSOSTIGMINE, SALICYLATE (1:1)	57647	100/10,000				
Picloram	PICLORAM	1918021			313		
Picric acid	PICRICACID	88891			313		
Picrotoxin	PICROTOXIN	124878	500/10,000				

Piperidine	PIPERIDINE	110894	1,000				15,000
Piperonyl butoxide	PIPERONYLBUTOXIDE	51036			313		
Pirimifos-ethyl	PIRIMIFOS-ETHYL	23505411	1,000				
Pirimiphos methyl	PIRIMIPHOSMETHYL	29232937			313		
Plumbane, tetramethyl-	PLUMBANETETRAMETHYL-	75741	100				10,000
p-Nitroaniline	NITROANILINE	100016		5,000	313	P077	
p-Nitrophenol	NITROPHENOL-P	100027		100	X	U170	
p-Nitrosodiphenylamine	NITROSODIPHENYLB	156105			313		
p-Nitrotoluene	NITROTOLUENE-P	99990		1,000			
Polybrominated Biphenyls (PBBs)	POLYBROMINATED BIPHENYLS (PBBS)	0			N575		
Polychlorinated alkanes (C10 to C13)	POLYCHLORINATED ALKANES	0			N583		
Polychlorinated biphenyls	POLYCHLORINATEDBIPH	1336363		1	313		
Polycyclic aromatic compounds (includes only 19 chemicals)	POLYCYCLIC AROMATIC COMPOUNDS	0			N590		
Polycyclic organic matter	POLYCYCLICORGANICMATTER	0		1*			
Polymeric diphenylmethane diisocyanate	POLYMERICDIPHENYLMETHANEDIISOCYANATE	9016879			313#		
Polynuclear Aromatic Hydrocarbons	POLYNUCLEAR AROMATIC HYDROCARBONS	0		**			
Potassium arsenate	POTASSIUMARSENATE	7784410		1			
Potassium arsenite	POTASSIUMARSENITE	10124502	500/10,000	1			
Potassium bichromate	POTASSIUMBICHROMATE	7778509		10			
Potassium bromate	POTASSIUMBROMATE	7758012			313		
Potassium chromate	POTASSIUMCHROMATE	7789006		10			
Potassium cyanide	POTASSIUMCYANIDE	151508	100	10		P098	
Potassium dimethyldithiocarbamate	POTASSIUMDIMETHYLDITHIOCARBAMATE	128030			313		

Potassium hydroxide	POTASSIUMHYDROXIDE	1310583		1,000			
Potassium N-methyldithiocarbamate	POTASSIUMMETHYLDITHIOCARBAMATE	137417			313		
Potassium permanganate	POTASSIUMPERMANGANATE	7722647		100			
Potassium silver cyanide	POTASSIUMSILVERCYANIDE	506616	500	1		P099	
p-Phenylenediamine	PHENYLENEDIAMINE	106503		1*	313		
Profenofos	PROFENOFOS	41198087			313		
Promecarb	PROMECARB	2631370	500/ 10,000				
Prometryn	PROMETRYN	7287196			313		
Pronamide	PRONAMIDE	23950585		5,000	313	U192	
Propachlor	PROPACHLOR	1918167			313		
Propadiene	PROPADIENE	463490					10,000
Propane	PROPANE	74986					10,000
Propane 1,2-dichloro-	PROPANE 1,2-DICHLORO-	78875		1,000	X	U083	
Propane sultone	PROPANESULTONE	1120714		10	313	U193	
Propane, 2,2-dimethyl-	PROPANEDIMETHYL	463821					10,000
Propane, 2-chloro-	PROPANECHLORO-	75296					10,000
Propane, 2-methyl	PROPANEMETHYL	75285					10,000
Propanenitrile	PROPANENITRILE	107120	500	10		P101	10,000
Propanenitrile, 2-methyl-	PROPANENITRILEMETHYL-	78820	1,000				20,000
Propanil	PROPANIL	709988			313		
Propargite	PROPARGITE	2312358		10	313		
Propargyl alcohol	PROPARGYL ALCOHOL	107197		1,000	313	P102	
Propargyl bromide	PROPARGYL BROMIDE	106967	10				
Propene	PROPENE	115071			X		10,000
Propetamphos	PROPETAMPHOS	31218834			313		
Propiconazole	PROPICONAZOLE	60207901			313		
Propionaldehyde	PROPIONALDEHYDE	123386		1*	313		
Propionic acid	PROPIONICACID	79094		5,000			

Propionic anhydride	PROPIONICANHYDRIDE	123626		5,000			
Propionitrile	PROPIONITRILE	107120	500	10		P101	10,000
Propionitrile, 3-chloro-	PROPIONITRILE, 3-CHLORO-	542767	1,000	1,000	X	P027	
Propiophenone, 4'-amino	PROPIOPHENONE,4-AMINO	70699	100/ 10,000				
Propoxur	PROPOXUR	114261		1*	313		
Propyl chloroformate	PROPYLCHLOROFORMATE	109615	500				15,000
Propylene	PROPYLENE	115071			313		10,000
Propylene oxide	PROPYLENEOXIDE	75569	10,000	100	313		10,000
Propyleneimine	PROPYLENEIMINE	75558	10,000	1	313	P067	10,000
Propyne	PROPYNE	74997					10,000
Prothoate	PROTHOATE	2275185	100/ 10,000				
p-Toluidine	TOLUIDINE	106490		100		U353	
p-Xylene	XYLENEC	106423		1,000	313	U239	
Pyrene	PYRENE	129000	1,000 / 10,000	5,000			
Pyrethrins	PYRETHRINS	121211		1			
Pyrethrins	PYRETHRINS	121299		1			
Pyrethrins	PYRETHRINS	8003347		1			
Pyridine	PYRIDINE	110861		1,000	313	U196	
Pyridine, 2-methyl-5-vinyl-	PYRIDINEMETHYLVINYL-	140761	500				
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)-	PYRIDINEMETHYLPYRROLIDINYL(S)-	54115	100	100		P075	
Pyridine, 4-amino-	PYRIDINEAMINO-	504245	500/ 10,000	1,000		P008	
Pyridine, 4-nitro-, 1-oxide	PYRIDINENITROOXIDE	1124330	500/ 10,000				

Pyriminil	PYRIMINIL	53558251	100/ 10,000				
Quinoline	QUINOLINE	91225		5,000	313		
Quinone	QUINONE	106514		10	313	U197	
Quintozene	QUINTOZENE	82688		100	313	U185	
Quizalofop-ethyl	QUIZALOFOPETHYL	76578148			313		
Reserpine	RESERPINE	50555		5,000		U200	
Resmethrin	RESMETHRIN	10453868			313		
Resorcinol	RESORCINOL	108463		5,000		U201	
S-(2-(Ethylsulfinyl)ethyl) O,O-dimethyl ester phosphorothioic acid	ETHYLSULFINYLETHYLDIMETHYLESTERPHOSPHOROTHIOI	301122			X		
S,S,S-Tributyltrithiophosphate	TRIBUTYLTRITHIOPHOSPHATE (DEF)	78488			313		
Saccharin (manufacturing)	SACCHARIN	81072		100	313	U202	
Saccharin and salts	SACCHARIN AND SALTS	81072		100		U202	
Safrole	SAFROLE	94597		100	313	U203	
Salcomine	SALCOMINE	14167181	500/ 10,000				
Sarin	SARIN	107448	10				
sec-Amyl acetate	AMYLACETATE-S	626380		5,000			
sec-Butyl acetate	BUTYLACETATE-S	105464		5,000			
sec-Butyl alcohol	BUTYLALCOHOLB	78922			313		
sec-Butylamine	BUTYLAMINE-S	513495		1,000			
sec-Butylamine	BUTYLAMINE-S	13952846		1,000			
Selenious acid	SELENIOUS ACID	7783008	1,000 / 10,000	10		U204	
Selenious acid, dithallium(1+) salt	SELENIOUS ACID, DITHALLIUM(1+) SALT	12039520		1,000		P114	
Selenium	SELENIUM	7782492		100	313		
Selenium Compounds	SELENIUMCOMPOUNDS	0		**	N725		

Selenium dioxide	SELENIUMDIOXIDE	7446084		10			
Selenium oxychloride	SELENIUMOXYCHLORIDE	7791233	500				
Selenium sulfide	SELENIUMSULFIDE	7488564		10		U205	
Selenourea	SELENOUREA	630104		1,000		P103	
Semicarbazide hydrochloride	SEMICARBAZIDE HYDROCHLORIDE	563417	1,000 / 10,000				
Sethoxydim	SETHOXYDIM	74051802			313		
Silane	SILANE	7803625					10,000
Silane, (4-aminobutyl)diethoxymethyl-	SILANE, (4-AMINOBUTYL)DIETHOXYMETHYL-	3037727	1,000				
Silane, chlorotrimethyl-	SILANECHLOROTRIMETHYL-	75774	1,000		X		10,000
Silane, dichloro-	SILANEDICHLORO-	4109960					10,000
Silane, dichlorodimethyl-	SILANEDICHLORODIMETHYL-	75785	500		X		5,000
Silane, tetramethyl-	SILANETETRAMETHYL-	75763					10,000
Silane, trichloro-	SILANETRICHLORO-	10025782					10,000
Silane, trichloromethyl-	SILANETRICHLOROMETHYL-	75796	500		X		5,000
Silver	SILVER	7440224		1,000	313		
Silver Compounds	SILVER AND COMPOUNDS	0		**	N740		
Silver cyanide	SILVERCYANIDE	506649		1		P104	
Silver nitrate	SILVERNITRATE	7761888		1			
Silvex (2,4,5-TP)	SILVEX (2,4,5-TP)	93721		100			
Simazine	SIMAZINE	122349			313		
Sodium	SODIUM	7440235		10			
Sodium arsenate	SODIUM ARSENATE	7631892	1,000 / 10,000	1			
Sodium arsenite	SODIUM ARSENITE	7784465	500/ 10,000	1			
Sodium azide (Na(N3))	SODIUM AZIDE (Na(N3))	26628228	500	1,000	313	P105	
Sodium bichromate	SODIUM BICHROMATE	10588019		10			

Sodium bifluoride	SODIUM BIFLUORIDE	1333831		100			
Sodium bisulfite	SODIUM BISULFITE	7631905		5,000			
Sodium cacodylate	SODIUM CACODYLATE	124652	100/ 10,000				
Sodium chromate	SODIUM CHROMATE	7775113		10			
Sodium cyanide (Na(CN))	SODIUM CYANIDE (Na(CN))	143339	100	10		P106	
Sodium dicamba	SODIUM DICAMBA	1982690			313		
Sodium dimethyldithiocarbamate	SODIUM DIMETHYLDITHIOCARBAMATE	128041			313		
Sodium dodecylbenzenesulfonate	SODIUM DODECYLBENZENESULFONATE	25155300		1,000			
Sodium fluoride	SODIUM FLUORIDE	7681494		1,000			
Sodium fluoroacetate	SODIUM FLUOROACETATE	62748	10/ 10,000	10	313	P058	
Sodium hydrosulfide	SODIUM HYDROSULFIDE	16721805		5,000			
Sodium hydroxide	SODIUM HYDROXIDE	1310732		1,000			
Sodium hypochlorite	SODIUM HYPOCHLORITE	7681529		100			
Sodium hypochlorite	SODIUM HYPOCHLORITE	10022705		100			
Sodium methylate	SODIUM METHYLATE	124414		1,000			
Sodium methyldithiocarbamate	SODIUM METHYLDITHIOCARBAMATE	137428			X		
Sodium nitrite	SODIUM NITRITE	7632000		100	313		
Sodium o-phenylphenoxide	SODIUM PHENYLPHENOXIDE	132274			313		
Sodium pentachlorophenate	SODIUM PENTACHLOROPHENATE	131522			313		
Sodium phosphate, dibasic	SODIUM PHOSPHATE, DIBASIC	7558794		5,000			
Sodium phosphate, dibasic	SODIUM PHOSPHATE, DIBASIC	10039324		5,000			
Sodium phosphate, dibasic	SODIUM PHOSPHATE, DIBASIC	10140655		5,000			

Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	7601549		5,000			
Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	7758294		5,000			
Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	7785844		5,000			
Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	10101890		5,000			
Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	10124568		5,000			
Sodium phosphate, tribasic	SODIUM PHOSPHATE, TRIBASIC	10361894		5,000			
Sodium selenate	SODIUM SELENATE	13410010	100/ 10,000				
Sodium selenite	SODIUM SELENITE	7782823		100			
Sodium selenite	SODIUM SELENITE	10102188	100/ 10,000	100			
Sodium tellurite	SODIUM TELLURITE	10102202	500/ 10,000				
Stannane, acetoxytriphenyl-	STANNANE,ACETOXYTRIPHENYL-	900958	500/ 10,000				
Strontium chromate	STRONTIUM CHROMATE	7789062		10			
Strychnine	STRYCHNINE	57249	100/ 10,000	10		P108	
Strychnine and salts	STRYCHNINE	0			N746		
Strychnine and salts	STRYCHNINE AND SALTS	57249		10		P108	
Strychnine, sulfate	STRYCHNINE, SULFATE	60413	100/ 10,000				
Styrene	STYRENEMONOMER	100425		1,000	313		
Styrene oxide	STYRENEOXIDE	96093		1*	313		
Sulfotep	SULFOTEP	3689245	500	100		P109	
Sulfoxide, 3-chloropropyl octyl	SULFOXIDE, 3-CHLOROPROPYL OCTYL	3569571	500				
Sulfur dioxide	SULFURDIOXIDE	7446095	500				
Sulfur dioxide (anhydrous)	SULFURDIOXIDE	7446095	500				5,000

Sulfur fluoride (SF4), (T-4)-	SULFURFLUORIDE (SF4), (T-4)-	7783600	100				2,500
Sulfur monochloride	SULFURMONOCHLORIDE	12771083		1,000			
Sulfur phosphide	SULFURPHOSPHIDE	1314803		100		U189	
Sulfur tetrafluoride	SULFURTETRAFLUORIDE	7783600	100				2,500
Sulfur trioxide	SULFURTRIOXIDE	7446119	100				10,000
Sulfuric acid	SULFURICACID	7664939	1,000	1,000	313		
Sulfuric acid (fuming)	SULFURICACID (FUMING)	8014957		1,000			10,000
Sulfuric acid, mixture with sulfur trioxide	SULFURICACIDMIXTURE WITH SULFUR TRIOXIDE	8014957		1,000			10,000
Sulfuryl fluoride	SULFURYLFLUORIDE	2699798			313		
Sulprofos	SULPROFOS	35400432			313		
Tabun	TABUN	77816	10				
Tebuthiuron	TEBUTHIURON	34014181			313		
Tellurium	TELLURIUM	13494809	500/ 10,000				
Tellurium hexafluoride	TELLURIUM HEXAFLUORIDE	7783804	100				
Temephos	TEMEPHOS	3383968			313		
Tepp	TEPP	107493	100	10		P111	
Terbacil	TERBACIL	5902512			313		
Terbufos	TERBUFOS	13071799	100				
tert-Amyl acetate	AMYLACETATE-T	625161		5,000			
tert-Butyl acetate	BUTYLACETATE-T	540885		5,000			
tert-Butyl alcohol	BUTYLALCOHOLC	75650			313		
tert-Butylamine	BUTYLAMINE-T	75649		1,000			
Tetrachloroethylene	TETRACHLOROETHYLENE	127184		100	313	U210	
Tetrachlorvinphos	TETRACHLORVINPHOS	961115			313		
Tetracycline hydrochloride	TETRACYCLINEHYDROCHLORIDE	64755			313		

Tetraethyl lead	TETRAETHYLLEAD	78002	100	10		P110	
Tetraethyl pyrophosphate	TETRAETHYLPYROPHOSPHATE	107493	100	10		P111	
Tetraethyldithiopyrophosphate	TETRAETHYLDITHIOPYROPHOSPHATE	3689245	500	100		P109	
Tetraethyltin	TETRAETHYLTIN	597648	100				
Tetrafluoroethylene	TETRAFLUOROETHYLENE	116143					10,000
tetrahydro-2-[(trichloromethyl)thio]-							
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	TETRAHYDRODIMETHYLTHIADIAZINETHIONE	533744			X		
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione, ion(1-), sodium	TETRAHYDRODIMETHYLTHIADIAZINETHIONEION(1	53404607			X		
Tetrahydro-5,5-dimethyl-2(1H)-pyrimidinone(3-(4-(trifluoromethyl)phenyl)-1-(2-(4-(trifluoromethyl)phenyl)ethenyl)-2-propenylidene)hydrazone	TETRAHYDRODIMETHYLPYRIMIDINONETRIFLUOROME	67485294			X		
Tetramethrin	TETRAMETHRIN	7696120			313		
Tetramethyllead	TETRAMETHYLLEAD	75741	100				10,000
Tetramethylsilane	TETRAMETHYLSILANE	75763					10,000
Tetranitromethane	TETRANITROMETHANE	509148	500	10		P112	10,000
Thallic oxide	THALLIC OXIDE	1314325		100		P113	
Thallium	THALLIUM	7440280		1,000	313		
Thallium chloride TlCl	THALLIUMCHLORIDE TICI	7791120	100/10,000	100		U216	
Thallium Compounds	THALLIUMCOMPOUNDS	0		**	N760		
Thallium sulfate	THALLIUMSULFATE	10031591	100/10,000	100			
Thallium(I) acetate	THALLIUMACETATE	563688		100		U214	

Thallium(I) carbonate	THALLIUMCARBONATE	6533739	100/ 10,000	100		U215	
Thallium(I) nitrate	THALLIUMNITRATE	10102451		100		U217	
Thallium(I) sulfate	THALLIUMSULFATE	7446186	100/ 10,000	100		P115	
Thallous carbonate	THALLOUS CARBONATE	6533739	100/ 10,000	100		U215	
Thallous chloride	THALLOUS CHLORIDE	7791120	100/ 10,000	100		U216	
Thallous malonate	THALLOUS MALONATE	2757188	100/ 10,000				
Thallous sulfate	THALLOUS SULFATE	7446186	100/ 10,000	100		P115	
Thiabendazole	THIABENDAZOLE	148798			313		
Thioacetamide	THIOACETAMIDE	62555		10	313	U218	
Thiobencarb	THIOBENCARB	28249776			313		
Thiocarbazide	THIOCARBAZIDE	2231574	1,000 / 10,000				
Thiocyanic acid, methyl ester	THIOCYANICACIDMETHYLESTER	556649	10,000				20,000
Thiodicarb	THIODICARB	59669260			313		
Thiofanox	THIOFANOX	39196184	100/ 10,000	100		P045	
Thiomethanol	THIOMETHANOL	74931	500	100	X	U153	10,000
Thionazin	THIONAZIN	297972	500	100		P040	
Thiophanate ethyl	THIOPHANATEETHYL	23564069			313		
Thiophanate-methyl	THIOPHANATEMETHYL	23564058			313		
Thiophenol	THIOPHENOL	108985	500	100		P014	

Thiosemicarbazide	THIOSEMICARBAZIDE	79196	100/ 10,000	100	313	P116	
Thiourea	THIOUREA	62566		10	313	U219	
Thiourea, (2-chlorophenyl)-	THIOUREA, (2-CHLOROPHENYL)-	5344821	100/ 10,000	100		P026	
Thiourea, (2-methylphenyl)-	THIOUREA, (2-METHYLPHENYL)-	614788	500/ 10,000				
Thiourea, 1-naphthalenyl-	THIOUREANAPHTHALENYL-	86884	500/ 10,000	100		P072	
Thiram	THIRAM	137268		10	313	U244	
Thorium dioxide	THORIUMDIOXIDE	1314201			313		
Titanium chloride (TiCl4) (T-4)-	TITANIUMCHLORIDE (TICL4) (T-4)-	7550450	100	1*	X		2,500
Titanium tetrachloride	TITANIUMTETRACHLOR	7550450	100	1*	313		2,500
Toluene	TOLUENE	108883		1,000	313	U220	
Toluene diisocyanate (unspecified isomer)	TOLUENEDIISOCYANATEM	26471625		100	X	U223	10,000
Toluene-2,4-diisocyanate	TOLUENEDIISOCYANATEB	584849	500	100	313		10,000
Toluene-2,6-diisocyanate	TOLUENEDIISOCYANATEA	91087	100	100	313		10,000
Toluenediamine	TOLUENEDIAMINE	25376458		10	X	U221	
Toluenediisocyanate (mixed isomers)	TOLUENEDIISOCYANATEC	26471625		100	313	U223	10,000
Toxaphene	TOXAPHENE	8001352	500/ 10,000	1	313	P123	
trans-1,3-Dichloropropene	DICHLOROPROPENE13T	10061026			313		
trans-1,4-Dichloro-2-butene	DICHLOROBUTENE	110576	500		313		
trans-1,4-Dichlorobutene	DICHLOROBUTENE	110576	500		X		
Triadimefon	TRIADIMEFON	43121433			313		

Triallate	TRIALLATE	2303175			313		
Triamiphos	TRIAMIPHOS	1031476	500/ 10,000				
Triaziquone	TRIAZIQUONE	68768			313		
Triazofos	TRIAZOFOS	24017478	500				
Tribenuron methyl	TRIBENURONMETHYL	101200480			313		
Tribromomethane	TRIBROMOMETHANE	75252		100	X	U225	
Tributyltin fluoride	TRIBUTYLTINFLUORIDE	1983104			313		
Tributyltin methacrylate	TRIBUTYLTINMETHACRYLATE	2155706			313		
Trichlorfon	TRICHLORFON	52686		100	313		
Trichloro(chloromethyl)silane	TRICHLOROCHLOROMETHYL)SILANE	1558254	100				
Trichloro(dichlorophenyl)silane	TRICHLORODICHLOROPHENYL)SILANE	27137855	500				
Trichloroacetyl chloride	TRICHLOROACETYL CHLORIDE	76028	500		313		
Trichloroethylene	TRICHLOROETHYLENE	79016		100	313	U228	
Trichloroethylsilane	TRICHLOROETHYLSILANE	115219	500				
Trichlorofluoromethane	TRICHLOROFLUOROMETHANE	75694		5,000	313	U121	
Trichloromethanesulfenyl chloride	TRICHLOROMETHANESULFENYL CHLORIDE	594423	500	100	X		10,000
Trichloromonofluoromethane	TRICHLOROMONOFLUOROMETHANE	75694		5,000	X	U121	
Trichloronate	TRICHLORONATE	327980	500				
Trichlorophenol	TRICHLOROPHENOL	25167822		10			
Trichlorophenylsilane	TRICHLOROPHENYLSILANE	98135	500				
Trichlorosilane	TRICHLOROSILANE	10025782					10,000

Triclopyr triethylammonium salt	TRICLOPYRTRIETHYLAMMONIUM SALT	57213691			313		
Triethanolamine dodecylbenzene sulfonate	TRIETHANOLAMINE DODECYLBENZENE SULFONATE	27323417		1,000			
Triethoxysilane	TRIETHOXYSILANE	998301	500				
Triethylamine	TRIETHYLAMINE	121448		5,000	313		
Trifluorochloroethylene	TRIFLUOROCHLOROETHYL	79389					10,000
Trifluralin	TRIFLURALIN	1582098		1*	313		
Triforine	TRIFORINE	26644462			313		
Trimethylamine	TRIMETHYLAMINE	75503		100			10,000
Trimethylchlorosilane	TRIMETHYLCHLOROSILANE	75774	1,000		313		10,000
Trimethylolpropane phosphite	TRIMETHYLOLPROPANE PHOSPHITE	824113	100/ 10,000				
Trimethyltin chloride	TRIMETHYLTIN CHLORIDE	1066451	500/ 10,000				
Triphenyltin chloride	TRIPHENYLTIN CHLORIDE	639587	500/ 10,000		313		
Triphenyltin hydroxide	TRIPHENYLTINHYDROXIDE	76879			313		
Tris(2,3-dibromopropyl) phosphate	TRISDIBROMOPROP	126727		10	313	U235	
Tris(2-chloroethyl)amine	TRIS(2-CHLOROETHYL)AMINE	555771	100				
Tris(dimethylcarbamodithioato-S,S')iron	TRISDIMETHYLCARBAMODITHIOATO-S,S')IRON	14484641			X		
Trypan blue	TRYPAN BLUE	72571		10	313	U236	
Uracil mustard	URACIL MUSTARD	66751		10		U237	
Uranyl acetate	URANYL ACETATE	541093		100			
Uranyl nitrate	URANYL NITRATE	10102064		100			
Uranyl nitrate	URANYL NITRATE	36478769		100			
Urea, N,N-dimethyl-N'-[3-(trifluoromethyl)phenyl]-	UREADIMETHYLTRIFLUOROMETHYL)PHENYL]-	2164172			X		
Urethane	URETHANE	51796		100	313	U238	

Valinomycin	VALINOMYCIN	2001958	1,000 / 10,000				
Vanadium (fume or dust)	VANADIUM	7440622			313		
Vanadium pentoxide	VANADIUM PENTOXIDE	1314621	100/ 10,000	1,000		P120	
Vanadyl sulfate	VANADYL SULFATE	27774136		1,000			
Vikane	VIKANE	2699798			X		
Vinclozolin	VINCLOZOLIN	50471448			313		
Vinyl acetate	VINYLACETATE	108054	1,000	5,000	313		15,000
Vinyl acetate monomer	VINYLACETATEMONOMER	108054	1,000	5,000	X		15,000
Vinyl acetylene	VINYLACETYLENE	689974					10,000
Vinyl bromide	VINYLBROMIDE	593602		1*	313		
Vinyl chloride	VINYLCHLORIDE	75014		1	313	U043	10,000
Vinyl ethyl ether	VINYLETHYLETHER	109922					10,000
Vinyl fluoride	VINYLFLUORIDE	75025					10,000
Vinyl methyl ether	VINYLMETHYLETHER	107255					10,000
Vinylidene chloride	VINYLIDENECHLORIDE	75354		100	313	U078	10,000
Vinylidene fluoride	VINYLIDENEFLUORIDE	75387					10,000
Warfarin	WARFARIN	81812	500/ 10,000	100	X	P001	
Warfarin and salts	WARFARIN AND SALTS	0			N874		
Warfarin sodium	WARFARIN SODIUM	129066	100/ 10,000				
Warfarin, & salts, conc.>0.3%	WARFARIN SALTS, WHEN PRESENT AT CONCENTRATIONS	81812		100	X	P001	
Xylene (mixed isomers)	XYLENEMIXEDISOMER	1330207		1,000	313	U239	
Xylenol	XYLENOL	1300716		1,000			
Xylylene dichloride	XYLYLENE DICHLORIDE	28347139	100/ 10,000				

Zinc	ZINC	7440666		1,000			
Zinc (fume or dust)	ZINC	7440666		1,000	313		
Zinc acetate	ZINCACETATE	557346		1,000			
Zinc ammonium chloride	ZINCAMMONIUM CHLORIDE	14639975		1,000			
Zinc ammonium chloride	ZINCAMMONIUM CHLORIDE	14639986		1,000			
Zinc ammonium chloride	ZINCAMMONIUM CHLORIDE	52628258		1,000			
Zinc borate	ZINCBORATE	1332076		1,000			
Zinc bromide	ZINCBROMIDE	7699458		1,000			
Zinc carbonate	ZINCCARBONATE	3486359		1,000			
Zinc chloride	ZINCCHLORIDE	7646857		1,000			
Zinc Compounds	ZINCCOMPOUNDS	0		**	N982		
Zinc cyanide	ZINCCYANIDE	557211		10		P121	
Zinc fluoride	ZINCFLUORIDE	7783495		1,000			
Zinc formate	ZINCFORMATE	557415		1,000			
Zinc hydrosulfite	ZINCHYDROSULFITE	7779864		1,000			
Zinc nitrate	ZINCNITRATE	7779886		1,000			
Zinc phenolsulfonate	ZINCPHENOLSULFONATE	127822		5,000			
Zinc phosphide	ZINCPHOSPHIDE	1314847	500	100		P122	
Zinc phosphide (conc. <= 10%)	ZINCPHOSPHIDE	1314847	500	100		U249	
Zinc phosphide (conc. > 10%)	ZINCPHOSPHIDE	1314847	500	100		P122	
Zinc silicofluoride	ZINCSILICOFLUORIDE	16871719		5,000			
Zinc sulfate	ZINCSULFATE	7733020		1,000			

Zinc, dichloro(4,4-dimethyl-5((((methylamino)carbonyl)oxy)imino)pentanenitrile)-, (T-4)-	ZINCDICHLORO(4,4-DIMETHYL-5((((METHYLAMINO) CARB	58270089	100/10,000				
Zineb	ZINEB	12122677			313		
Zirconium nitrate	ZIRCONIUMNITRATE	13746899		5,000			
Zirconium potassium fluoride	ZIRCONIUMPOTASSIUM FLUORIDE	16923958		1,000			
Zirconium sulfate	ZIRCONIUMSULFATE	14644612		5,000			
Zirconium tetrachloride	ZIRCONIUMTETRACHLORIDE	10026116		5,000			

TAB E TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SECTION 304 REPORTING FORM

REFERENCES: See Annex Y.

1. GENERAL: A reportable spill under EPCRA occurs when the amount of hazardous substance spilled meets or exceeds the reportable quantity as listed below. If an amount equal to or exceeding the reportable quantity is released or spilled from a fixed facility, the environmental function shall notify the State Emergency Response Commission (SERC) and Local Emergency Response Committee (LERC) immediately by calling (800) 320-0519 or (850) 413-9911 (this telephone is answered 24 hours a day and is an emergency number only). The Section 304 Reporting Form, Tab E to Appendix 1 to Annex B, should be used to report a release to the SERC. This form was developed by the SERC to guide a facility in providing required information when reporting a release over the telephone.

THIS FORM PROVIDES GUIDANCE FOR INITIAL NOTIFICATION
EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW-ACT
SECTION 304 REPORTING FORM
Reporting Number (850) 413-9911

1 General Information

SARA LOG #: _____

Time / Date: _____

Reported by (Name / Company): _____

POC (if different from above): _____

Location: _____

Telephone Number: _____

2 Release information

Substance(s) Involved: _____

Release Medium: Air _____ Water _____ (surface/ground) Land _____

Event Terminated: Yes _____ or No _____

Quantity Released _____

EHS Release: Yes _____ No _____ CERCLA Release: Yes _____ No _____

3 Is this a reportable incident/emergency under Section 304? Yes _____ No _____

4 Incident Description:

_____

_____

_____

_____

5 Action taken to respond or contain:

_____

_____

_____

_____

6 Potential health risk: (if known or anticipated)

Off site:

_____

Injuries:

_____

Release Related / Number: _____
Non-Release Related / Number: _____

7 Recommended Protective Actions: (where appropriate, advise regarding attention necessary for exposed individuals)

_____

_____

_____

_____

_____

8 Agencies Notified by Industry:

County EM_____ Local Health_____

Local FD_____ State DEP_____

Local Environmental_____ Other_____

Local Law Enforcement_____

9 Emergency Assistance Requested: Yes_____ No_____

If Yes, from who:

County EM_____ Local Health_____

Local FD_____ State DEP_____

Local Environmental_____ Other_____

Local Law Enforcement_____

10 Provide explanation if more than 15 minutes difference exists between release and reporting time. Explain the reason for not immediately reporting the incident:

Begin Time:_____

Reporting time:_____

_____

_____

_____

11 **Message Received By**:

Name:

_____

Time:

_____

Date:

_____

THIS DOES NOT FULFILL THE REQUIREMENTS FOR A FOLLOW-UP REPORT

TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SPILL PLAN SUPPLEMENTAL INFORMATION

REFERENCES: See Annex Y.

1. GENERAL: The following provides an overview of extremely hazardous substances at Eglin AFB, the associated assessments and response plans, and supplemental response information in the event that a release potentially may migrate from the installation boundaries or could possibly affect human health or the environment on-base. Also included are the basic elements of a spill plan that base organizations may reference when developing their own spill plan.

Exhibits:
1. Assumptions/Planning Factors (Sara Title III)
2. Toxic Chemical Overview
3. Hazard Analysis Summary
4. Supplemental Information
5. POL Overview
6. Spill Plan

EXHIBIT 1 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
ASSUMPTIONS/PLANNING FACTORS (SARA TITLE III)

1. ASSUMPTIONS:

1.1. This section outlines a plan to be implemented when a release of hydrazine, chlorine gas or an EHS has occurred and threatens to leave Eglin AFB boundaries. When public health and well-being are threatened and the base Fire Department has determined that EAFB 10-2, IEMP does not need to be initiated, rapid communications must be utilized to inform appropriate officials in order to obtain a rapid response. This section references the existing FRP in the event of a POL release from a UST.

1.2. All initial spill response actions and IC duties will be synonymous with those previously outlined in this plan.

1.3. Eglin emergency personnel will respond to incidents in their normal posture. If assistance is required from local, state, and federal jurisdictions, trained and equipped personnel will be available from agencies listed in this plan.

1.4. Many assumptions were made in the calculations for the "vulnerability zone." Even though worst case scenarios were used, no safe levels for exposure of these EHS chemicals have been established for the general population. Therefore, it is inappropriate to assume that areas outside the established zones, based solely on these estimates, are completely safe.

1.5. Response personnel are aware of detailed drawings/maps located in the Civil Engineer (CE) Drafting Office. Maps will be utilized should specific information regarding base utilities, storm drainage systems, or electrical systems be required by response personnel. Enclosure 1 to this exhibit contains a general map of sites throughout the Eglin AFB area. A more detailed map is provided for the hydrazine site in the specific plan and more detailed maps for chlorine gas cylinder and UST locations are referenced in their respective sections.

2. PLANNING FACTORS:

2.1. In calculating evacuation radius in the event of a hydrazine release, the following conditions were assumed: urban, D atmospheric stability, 11.9-mile-per-hour wind speed, distances are given in miles. Conditions used to evaluate chlorine gas and UST POL releases are specified in the *Risk Management Plan* and FRP, respectively.

2.2. A worst-case scenario was used for chemical quantities being stored at each facility (e.g., when 55-gallon drums were being stored, all were considered in a release scenario).

3. CONDITIONS FOR EXECUTION: This supplemental information plan is in effect continuously, and is implemented whenever a spill of an EHS occurs at Eglin AFB and the IC activates EAFB 10-2 IEMP.


FTFA0001
2 km
1 mi
USDA FSA, DigitalGlobe, GeoEye, Microsoft, CNES/Airbus DS

EXHIBIT 2 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
TOXIC CHEMICAL OVERVIEW

1. HYDRAZINE STORAGE BUILDING #138 INFORMATION

2. SPECIAL PRECAUTIONARY MEASURES:

2.1. Proper personal protective equipment (protective clothing, self-contained breathing apparatus, protective boots, gloves and face shields) shall be worn in accordance with 29 CFR 1910.120 when handling hazardous materials.

2.2. Refer to the MSDS for particular hazards and precautionary measures for specific chemical materials.

2.3. Prior to transferring a 55-gallon hydrazine container from 96 LRS into Building 138, Hydrazine Servicing Facility, place drain mats over the two storm drains located northwest of Building 138. Notify Maintenance Operations Control Center (MOCC) at (850) 882-4691, and the Environmental Compliance Division, 96 CEG/CEIC, at (850) 882-6282 prior to transfer of hydrazine outside of Building 138.

3. PROBABLE SPILL ROUTE:

3.1. Spills from the 55-gallon containers located in Building 138 would enter floor drains located within the concrete diked area in the building. This drain is tied into a 1,000-gallon underground storage tank (UST).

3.2. Spills outside of Building 138, Hydrazine Servicing Facility, during transfer of 55-gallon hydrazine containers from the 96 LRS into the building, would run into two storm drains located northwest of Building 138.

4. CONTAINMENT AND COUNTERMEASURES:

4.1. The following information and guidance is provided for cleaning up hydrazine spills.

4.1.1. No spill cleanup should be attempted until the personnel conducting the cleanup have put on personal protective clothing/equipment including positive pressure breathing apparatus and other required items.

4.1.2. The procedures outlined in this document are appropriate for accidental spills of hydrazine on the flight line ramp, hangar area or servicing area such as might occur with broken H-70 tank fittings or leaking fuel line.

4.1.3. The general idea is to mop up as much of the hydrazine as possible, neutralize any remaining damp spots with a 5 percent chlorine and water solution and flush the area with water. In those locations where drainage systems have been designed to include a holding

sump (e.g., Building 138), immediately flush a spill with water into the holding sump for subsequent neutralization treatment.

4.1.4. All personnel not essential to the cleanup operation or lacking protective equipment should be removed from the area to avoid breathing hydrazine vapors. Care must also be exercised to avoid contact with the skin since hydrazine is readily absorbed through the skin surface.

4.1.5. Until it has been neutralized, all possible care must be taken to avoid releases of hydrazine to the environment. Hydrazine is toxic (at 3 parts per million) to aquatic life.

4.2. The following materials will be required for accomplishing cleanup and neutralization of H-70 spills:

4.2.1. White cotton rags. At least three cubic yards of cotton rags should always be stored in the hydrazine response trailer and an additional two cubic yards stored in the hydrazine storage facility. The rags should be protected from moisture and other contaminated substances by being sealed in plastic bags.

4.2.2. In the event that the recommended polypropylene felt material is not available, alternative materials may be used. For containing the spill and mopping up, large pieces of clean, white cotton cloth may be used. Also, a clean cotton mop with wooden handle may be used.

4.2.3. Sodium hypochlorite solution, 5 percent (household bleach). This may be used to neutralize concrete surfaces contaminated with hydrazine, or to neutralize diluted water solutions of hydrazine mopped up after a spill.

4.2.4. Orthotolidine solution (NSN 6810-00-270-8289) for measuring chlorine residual.

4.2.5. A large container. This should be large enough to hold the entire contents of an H-70 tank/drum with room for a three-fold dilution. The container should have handles and be sturdy enough to transport while nearly full of water solution. Material should be compatible with hydrazine (polypropylene, polyethylene, stainless steel).

4.2.6. Field kit. To ensure availability of materials when personnel encounter hydrazine spills, a field kit should be assembled, prepackaged, and located where deemed appropriate by local managers.

4.2.7. pH paper which will indicate the potential presence of hydrazine by measuring higher than neutral levels.

4.3. The following procedures will be used with spills of H-70 on concrete surfaces:

4.3.1. Clear area of all personnel except cleanup team and summon the HRT. If inside Building 138, immediately open all doors and ventilate the area and suspend all operations immediately downwind. If outside, suspend all operations immediately downwind of the spill. Following the completion of all spill cleanup procedures, the area will be cleared for re-entry by the OSC as advised by bioenvironmental personnel.

4.3.2. Fuming and fire hazards may be reduced by covering the area with a damp cloth, periodically adding minimal amounts of water to maintain dampness. The amount of water to add here is up to the OSC. If a cloth of sufficient size to cover the spill area is not available, a volume of water equivalent to the volume of H-70 spilled would be sufficient to reduce fuming significantly and render the fuel nonflammable. However, avoid adding too much water as this would increase the area of the spill, making cleanup more difficult and the likelihood of environmental contamination greater.

4.3.3. Mop up as much of the spilled fuel as possible. Carefully place the pieces of felt in the large waste container partially filled with water. The volume of fluid in the container should be about 10 gallons or enough to cover the fuel soaked pieces of felt. The pieces of felt may be squeezed out over the container and placed down again to absorb more spilled fuel.

4.3.4. The damp area on the concrete must now be treated by adding small amounts of bleach. When excess chlorine can be detected on the spill area using an orthotolidine reagent, the spill can be considered neutralized.

4.3.5. Hydrazine vapors: water fog spray may be used to control hydrazine vapors from a spill.

CAUTION: SOLID HTH (POWDERED CHLORINE) SHOULD NEVER BE ADDED TO UNDILUTED HYDRAZINE SINCE A FIRE COULD RESULT.

Note: Water run-off containment measures will be implemented before fogging. Bioenvironmental engineers and Environmental Management Compliance should be consulted prior to fogging. Ensure all spillage/run-off is properly diluted in accordance with AFOSH STD 48-8 prior to recovery.

EXHIBIT 3 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
HAZARD ANALYSIS SUMMARY

1. HAZARD IDENTIFICATION (Major Hazard):

1.1. **Chemical**: Hydrazine

1.2**. Location:** Building 138, Latitude: North - 30° 28' 33.7" Longitude: West - 86° 30' 41.8" Map Section B.

1.3. **Quantity**: 950 pounds, 325 pounds on hand for standby.

1.4. **Properties**: Class IIIA liquid. Highly flammable and toxic liquid. Hydrazine is poisonous, very toxic by ingestion, inhalation, and skin absorption (acute and chronic).

2. VULNERABILITY ANALYSIS:

2.1. **Vulnerable zone**: A spill of 950 pounds of hydrazine from Building 138 could result in an area of radius greater than 0.1 mile where hydrazine vapors exceed the level of concern.

2.2. **Population within vulnerable zone**: Less than 50.

2.3. **Essential services within vulnerable zone**: None

3. RISK ANALYSIS:

3.1. **Probability of hazard occurrence**: Medium due to nature of servicing provided in the facility and past experience indicating no spills occurring at the facility.

3.2. **Consequences if people are exposed**: Overexposure to vapors can immediately irritate nose and throat. Burning and swelling of the eyes (possible temporary blindness if exposure is severe) and dermatitis are also possible. Possibility of pulmonary edema (water in lungs). Suspected cancer-causing agent.

3.3. **Consequences for property**: Extensive if hydrazine caused fire or explosion. Vapor is flammable and a severe explosive hazard with oxidizers or upon heating.

3.4. **Consequences of environmental exposure**: Damage to flora and fauna. Highly toxic to aquatic life.

3.5. **Probability of simultaneous emergencies**: Medium due to the close proximity of the facility to a facility that deals with liquid oxygen.

3.6. **Summary of likelihood and severity of occurrence**: Medium/medium.

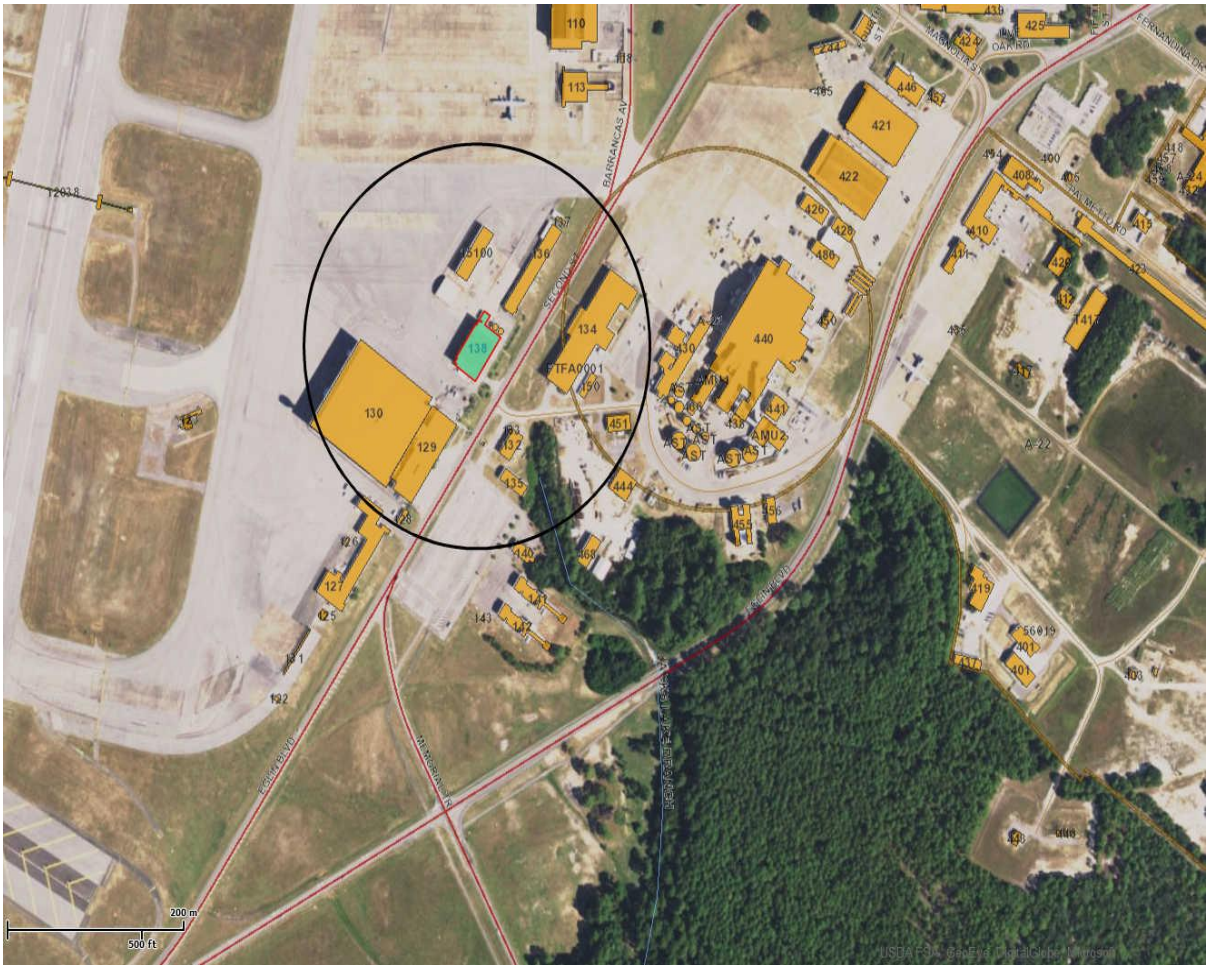

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EXHIBIT 4 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SUPPLEMENTAL INFORMATION

1. SPECIAL PRECAUTIONARY MEASURES:

1.1. Proper personal protective equipment (protective clothing, self-contained breathing apparatus, protective boots, gloves and face shields) shall be worn in accordance with 29 CFR 1910.120 when handling hazardous materials.

1.2. Refer to the MSDS for particular hazards and precautionary measures for specific chemical material or POL products.

2. PROBABLE SPILL ROUTE: Spills or releases of chlorine will enter the air as liquids or vapor emission. Some being heavier than air, vapors will travel in the direction of the prevailing wind and/or settle in low-lying areas. Caution should be taken; check MSDS for specific quantities.

3. CONTAINMENT AND COUNTERMEASURES: The following information is provided as guidance for responding to a chlorine gas release:

3.1. Protective equipment needed by all personnel being exposed to releases of any nature should refer to the MSDS for proper protective equipment.

3.2. Other equipment needs include: equipment to repair leaks (chlorine A kit); plugging and/or patching devices; sampling and monitoring devices; gas tube samplers and/or photoionization detectors for air and colorimetric kits for water; and ammonia solution in a spray bottle to be used to indicate the presence of chlorine vapors/leaks. **NOTE**: If chlorine vapors are present, a mist will form a green cloud. Neutralizing materials: fly ash cement powder, activated carbon, soda ash and caustic soda.

3.3. Air emissions should be combated with water mist and runoff contained and analyzed. For cylinders, patching and plugging should be one of the first procedures initiated when possible.

4. BASE CHLORINATED WATER WELLS AND SWIMMING POOLS

The information and procedures outlined in the following documentation shall apply to the chlorine gas facilities at Eglin AFB identified in the *Risk Management Plan (RMP) for Handling Propane, Chlorine, and Methylene Chloride*. Maps of the chlorine gas sites and vulnerable zones may be found in the RMP.

4.1. HAZARD ANALYSIS SUMMARY

4.1.1. **GENERAL:** The information and procedures outlined in the following documentation shall apply to the chlorine gas facilities at Eglin AFB identified in RMP. Maps of the chlorine gas sites and vulnerable zones may be found in the RMP.

5. HAZARD IDENTIFICATION (Major Hazard):

5.1. **Chemical**: Chlorine.

5.2. **Location**: Specified in RMP. The following is the list of when chlorine is used and stored.

5.3. **Quantity in Use:** Specified in RMP. The sites with chlorine as identified are listed below.

Bldg ID	Bldg #	Latitude	Longitude	Quantity Chlorine Bottles In Use			Quantity Chlorine Bottles Stored			Total #	Total Qty Chlorine (lb)
				#	Bottle Size (lb)	Total Chlorine (lb)	#	Bottle Size (lb)	Total Chlorine (lb)		
MB-1	859	30° 29' 18.517"	-86° 29' 53.798"	2	150	300	4	150	600	**6**	**900**
MB-2A	84	30° 29' 10.026"	-86° 30' 14.326"	2	150	300	4	150	600	**6**	**900**
MB-3	31	30° 29' 3.928"	-86° 30' 32.625"	2	150	300	4	150	600	**6**	**900**
MB-4	303	30° 28' 49.253"	-86° 30' 14.662"	2	150	300	4	150	600	**6**	**900**
MB-5	616	30° 28' 53.280"	-86° 29' 51.069"	2	150	300	4	150	600	**6**	**900**
MB-6	62	30° 29' 3.934"	-86° 30' 20.997"	2	150	300	4	150	600	**6**	**900**
MB-65	1216	30° 29' 22.714"	-86° 31' 22.097"	2	150	300	2	150	300	**4**	**600**
HO-07	2590	30° 28' 9.396"	-86° 32' 38.568"	2	150	300	3	150	450	**5**	**750**
HO-08	2594	30° 27' 48.811"	-86° 32' 50.556"	2	150	300	3	150	450	**5**	**750**
HO-09	10000	30° 28' 1.626"	-86° 32' 6.967"	2	150	300	4	150	600	**6**	**900**
HO-10	10941	30° 27' 44.169"	-86° 33' 1.513"	2	150	300	4	150	600	**6**	**900**
HO-11	2443	30° 27' 49.892"	-86° 32' 36.091"	2	150	300	4	150	600	**6**	**900**
HO-12	2829	30° 27' 33.709"	-86° 33' 13.419"	2	150	300	4	150	600	**6**	**900**
HO-13	2985	30° 27' 19.999"	-86° 32' 48.263"	2	150	300	4	150	600	**6**	**900**
HO-14	1308	30° 28' 34.354"	-86° 32' 54.349"	2	150	300	4	150	600	**6**	**900**
HO-15	1320	30° 28' 42.725"	-86° 33' 19.233"	2	150	300	3	150	450	**5**	**750**
HO-16	2755	30° 27' 25.711"	-86° 33' 46.745"	2	150	300	4	150	600	**6**	**900**
East Pool	813	30° 29' 19.149"	-86° 29' 45.662"	4	150	600	2	150	300	**6**	**900**

5.4. **Properties**: Poisonous; may be fatal if inhaled. Respiratory conditions aggravated by exposure. Contact may cause burns to skin and eyes. Corrosive effects may be delayed.

6. VULNERABILITY ANALYSIS:

6.1. **Vulnerable zone**: Specified in Risk Management Plan for Handling Propane, Chlorine, and Methylene Chloride.

6.2. **Population within vulnerable zone**: Specified in Risk Management Plan for Handling Propane, Chlorine, and Methylene Chloride.

6.3. **Essential services within vulnerable zone**: None.

7. RISK ANALYSIS:

7.1. **Probability of hazard occurrence**: Medium.

7.2. **Consequences if people are exposed**: High levels of chlorine gas could cause death or respiratory distress.

7.3. **Consequences for property**: Possible superficial damage to facility equipment.

7.4. **Consequences of environmental exposure**: Possible destruction of surrounding fauna.

7.5. **Probability of simultaneous emergencies**: Medium due to the heavy traffic within the zone.

7.6. **Summary of likelihood/severity of occurrence**: Medium/medium.

EXHIBIT 5 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
POL OVERVIEW

1. UNDERGROUND STORAGE TANKS (UST) CONTENTS AND QUANTITIES OF STORAGE TANKS

1.1. Identification of contents and quantities of USTs are addressed in the base SPCC and response plans are addressed in the base FRP.

EXHIBIT 6 TO TAB F TO APPENDIX 1 TO ANNEX B TO EAFB PLAN 32-6
SPILL PLAN

1. BASIC ELEMENTS OF A SPILL PLAN

1.1. Each organization will develop their own emergency response plan that should include, at a minimum, the elements provided in the table below. A Hazardous Material Worksheet is also provided in Tab A to Appendix 6 to Annex B for use in gathering information needed to develop the emergency response plan.

Elements	Description
Pre-emergency Planning	Identify potential hazards within the organization. (The **Hazardous Material Worksheet** aids in gathering the pertinent information for hazard identification.) Provide list of hazardous materials used by organization and identify locations of storage and use. (Provide or point to location where MSDSs are stored.) Identify probable spill routes (include identification of surrounding storm or sanitary drains that might be recipient of a release).
Personnel roles, lines of authority, training, and communication.	Present roles and responsibilities of those within the organization as they pertain to emergency response and reporting. Based on the hazards present within the organization, identify training requirements for personnel based on their roles.
Emergency recognition and prevention.	Identify emergency prevention procedures specific to hazards within the organization, such as: Proper handling and storage of materials, Proper operation of equipment, Proper personal protective equipment, Best management practices for spill prevention. Provide inspection procedures/forms for identifying/ recognizing an emergency.
Safe distances and places of refuge.	Provide map showing safe zones and places of refuge. **(Inclusion of section determined on hazards present; may not be applicable to an organization.)**
Site security and control.	Identify specific security and control procedures pertaining to hazards within the organization (e.g., locking fuel dispensers when not in use, ensuring drain valves are secured).
Evacuation routes and procedures.	Provide evacuation plan. Provide map identifying evacuation routes and emergency exits.

Emergency medical treatment and first aid.	Provide contact information for emergency medical treatment. Identify location of first aid kits for minor incidents.
Emergency alerting and response procedures.	Provide notification and initial spill response actions. Provide containment and cleanup procedures.
Personal Protective and Emergency Equipment	This should include an inventory list of cleanup materials and spill response equipment available to the organization and identify locations of storage.

APPENDIX 2 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE II - CONTAINMENT AND COUNTERMEASURES

1. GENERAL: This phase consists of actions to be initiated as soon as possible after discovery and notification of a spill. These may include public health protection activities, source control procedures, salvage operations, placement of physical barriers to halt or slow the spread of a pollutant, emplacement or activation of booms or barriers to protect specific installations or natural resources, control of the water discharge from upstream impoundments, and the employment of chemicals and other materials to restrain the pollutant and its effects on water related resources. The specific techniques to be used on any particular pollutant depend on its physical characteristics and which media are affected (air, water, soil). Information will be gathered to support requirements of Appendices 3 and 5 to Annex B.

2. **CONTROL**: Source control of the spill should be accomplished simultaneously with the containment operation. The origin of the material being discharged should be determined and the flow stopped. While each case must be considered individually, some examples of source control are: closing valves to stop the flow and pumping out of a holed tanker to prevent further discharge.

3. CONTAINMENT: The containment of a spill or release may be performed by persons or personnel who are properly trained, have the proper protective equipment, and when it is safe to do so.

3.1. Containment of spills in water may be accomplished through the use of an 18" wide floating boom as specified in the FRP.

3.2. Containment of spills on land can be accomplished by reducing or stopping the flow. This can be accomplished by the person(s) discovering the spill (if they are properly trained), and when it is safe to do so. The use of absorbent pads, sandbags, dirt or physical barriers (e.g., dikes, wood) can be used to prevent or stop a discharge and allow for the rapid deployment of a response team to close off the route of flow. Absorbent pads, sandbags or physical barriers (e.g., dikes, wood) can be used to prevent or stop a discharge from spreading to a drain, ditch or entering into waterways. Specific actions and resources for POL releases are identified in the base FRP.

3.3. Containment is only an interim measure. Cleanup (Appendix 3) must begin immediately to prevent ground absorption and possible contamination of the ground water.

4. EQUIPMENT: Organizations should maintain the equipment and supplies necessary to execute their response plan. Additional available equipment information may be found in EAFB 10-2 and the FRP. For large spills that reach the water, the source and availability of additional specialized equipment can be determined by the Environmental Compliance Office who in turn will notify the Coast Guard Regional Response Coordinator, New Orleans, (504) 589-6296 if necessary.

5. <u>SEWER PLANS</u>: Sanitary sewer and storm drainage plans showing probable routes of flow are available and can be obtained from the Civil Engineer Drafting Office, Building 634 (850) 883-1362. These drawings are not included in the plan due to the large size necessary to show adequate detail.

APPENDIX 3 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE III - CLEANUP AND DISPOSAL

1. GENERAL:

1.1. This phase includes those actions taken to remove the pollutant from the water or land. Removal must proceed as rapidly as circumstances permit, especially on large land spills where the substance can percolate into the ground and contaminate the ground water. Although several methods are available for combating a pollutant on a water surface, the only practical solution in this region is to physically remove the pollutant. Chemical agents and dispersing agents will only be used as a last resort, and then only with the concurrence of the Environmental Protection Agency (EPA) and the Coast Guard.

1.2. The method used to remove the pollutant will depend on a number of factors including the area involved, the hazards associated with the pollutant, and the availability of equipment and materials. Although some methods are better than others, most have limitations and disadvantages which must be considered. The following is a list of cleanup methods:

1.2.1. **Mechanical Removal**. This method can be used for both land and water spills.

1.2.1.1. Land Spills. If the substance has been contained, direct pumping into a collection tank, if possible. Exercise caution when a flammable material is involved. Explosion proof motors/pumps should be used. Contaminated soil or beach sand can be loaded on a truck and hauled to the Petroleum Contaminated Soil Storage Facility or another disposal site approved by the Environmental Compliance Office. The point of contact (POC) for the Petroleum Contaminated Soil Storage Facility will be Mr. Bruce Stippich, 882-7659 or cell 240-1628. The responsible organization with contaminated soils will provide a statement letter verifying contaminates, amount of soil to be disposed of, and provide a reimbursable Job Order Customer Account System (JOCAS) number or job order number (JON) sufficient to pay for soil disposal.

1.2.1.2. Water Spills. The removal of pollutants from a water surface is difficult. The mechanical process called "skimming" removes the surface layer of water and pollutant floating on it. Generally, skimmers are useful only in small, calm bodies of water. The rate at which these devices will collect is determined by the thickness of the oil layer, the rate at which the oil/water mixture can be separated and the storage capacity of the tank. The Environmental Compliance Office has an oil skimmer available for use. The skimmer is kept in the Environmental Compliance Office spill response trailer. The oil/water mixture collected by the skimmer should be drained through an oil/water separator connected to a sanitary sewer.

1.2.2. **Physical Absorption**. Physical absorption materials such as pads, straw, hay and shredded foam can be distributed over a spill area, both on land and water, with relative ease. Sand can be used to absorb spills occurring on hard surfaces, such as the aircraft-parking ramp and taxiways. These materials are readily available and can be used with minimum damage to the environment. The major limitation of absorption, however, is the spent, soaked material must be collected and properly disposed. The collection of the materials would be especially

difficult in a large body of water like Choctawhatchee Bay. These materials cannot be collected by pumping as they will rapidly clog the pumps. Therefore, the means of containment and subsequent removal must be considered prior to the use of absorbent material.

1.2.3. **Chemical Agents**. EPA approval must be obtained prior to the use of any chemical agents. Currently, Eglin does not have any chemical agents on hand and is unlikely to use them.

1.2.4. **Burning**. The burning of petroleum, oil, lubricant (POL) on water will leave a residue approximately 1/8 inch thick. Burning agents can be used to improve the combustibility if they do not in themselves, or in combination, increase the pollution hazard. Burning would only be effective on thick-slicks of freshly spilled oil in calm waters. Shoreline property and boats must be protected. State and local health and fire protection agencies must approve the burning. It is not a recommended cleanup method.

1.2.5. **Biological Degradation**. Biological agents are those bacteria and enzymes isolated, grown or produced for the specific purpose of encouraging or speeding biodegradation to mitigate the effects of a spill. Biological agents may be used to treat water spills only when the appropriate state and local public health and water pollution control officials approve such use.

2. DISPOSAL OF COLLECTED MATERIAL: Disposal of collected material is an important aspect of any cleanup operation. Petroleum products or other obnoxious or hazardous materials removed from the water may eventually find their way back to cause more pollution when carelessly disposed on nearby land areas. Serious pollution of the water table is an additional hazard inherent in this type of disposal.

2.1. All transfers of waste to Defense Reutilization and Marketing Office (DRMO) must be conducted under the direction of and processed through the Environmental Management and Compliance Office. Before turn-in of hazardous waste, the UEC or accumulation point manager should contact the Environmental Management and Compliance office for packaging and disposal instructions.

2.2. It is the responsibility of all generators to provide the Environmental Management function with as much information as possible concerning waste streams generated within their organizations.

APPENDIX 4 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE IV - RESTORATION

1. GENERAL: This phase includes those actions taken to restore the environment to its pre-spill condition. In all cases, the agency responsible for the pollution incident will be required to pay for the restoration.

1.1. The assessment of secondary damages resulting from a spill, such as the destruction of marine life, will require coordination with other agencies.

2. In most cases, the agency evaluating the damage can also recommend action to correct the situation. Although some restoration may be accomplished using Eglin AFB resources, extensive or technical projects must be accomplished by commercial contract.

3. Management of site restoration will be the responsibility of Environmental Management (EM). Below is a summary of tasks and reports involved in a contaminated site cleanup.

3.1 **Contamination Assessment Report**. This report analyzes the extent of contamination through a combination of interviews, soil vapor tests and groundwater monitoring wells.

3.2 **Remedial Action Plan (RAP)**. This report outlines remedial action alternatives and it is submitted to the Florida Department of Environmental Protection (FDEP) for review and approval. The RAP shall include a preliminary design, including equipment sizing for the preferred remediation system. Upon approval by the FDEP, site cleanup work can begin.

3.3 **Site Rehabilitation Completion Report**. This report documents that no further action is required to close the site. It is submitted to the FDEP for review and approval.

APPENDIX 5 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE V – RECOVERY OF DAMAGES AND ENFORCEMENT

1. GENERAL:

1.1. **Recovery of Damages**. This includes a variety of activities, depending on the location of, and circumstances surrounding, a particular spill. Recovery of federal cleanup costs for damages to federal, state or local government property is included. Enforcement activities under appropriate authority, such as the Resource Conservation and Recovery Act (RCRA), Superfund Amendment and Reauthorization Act (SARA) and state and local statutes or ordinances are also included. The collection of scientific and technical information to serve as a basis for research and development activities and for the enhancement of our understanding of the environment may also be considered. It must be recognized that the collection of samples and necessary data must be performed at the proper times.

1.2. **Enforcement**. The National and Regional Contingency Plans have established uniform enforcement procedures. The collection of information and samples must be performed for the purpose of later use in identifying the party responsible in cleanup cost recovery, damage recovery and civil and criminal enforcement actions under appropriate federal statutes. Time is of great importance since wind, tide and current may disperse or remove the evidence and witnesses may no longer be available. Thus, during the phases of discovery and notification, containment and countermeasures, cleanup, disposal and restoration, the IC must take the necessary action to put counsel on notice of the event and to ensure information, records and samples adequate for legal and research purposes are obtained and safeguarded for future use.

1.3. **Claims**. The Judge Advocate (JA) will determine the legal ramifications of any civil damage incurred as a result of a United States Air Force (USAF) caused spill and brief the Commander on his findings and recommendations. Initial emergency response costs, long-term cleanup costs and compensation for damages can be recovered by the Air Force under applicable environmental, procurement and tort statutes. Also, the Air Force can be the subject of federal, state and local enforcement actions under applicable environmental statutes. As such, it is imperative that evidence is collected and preserved from the outset in order to protect the Air Force's interests. This could include setting up special accounting procedures for tracking expenditures associated with the cleanup, taking statements, photographing the scene and collecting and analyzing chemical samples. The Base Judge Advocate will assess the Air Force's liability for any tort claims against the Air Force and advise the Commander.

1.4. **Reimbursement**. Each organization using or storing POL, hazardous material, or hazardous waste is required to have an Emergency Response Plan to include adequate equipment, supplies and disposal appropriate for potential releases resulting from their activities. Environmental Compliance has established EAFB Plan 32-6 to augment base emergency response plans EAFB 10-2 IEMP and FRP. When spills exceed the responsible organization’s capability, adequate equipment, supplies, disposal and remediation will be provided to base organizations on a reimbursement basis. Each organization must budget for **immediate reimbursement** of all equipment, supplies, response and disposal costs as required, and will be held accountable for **immediate reimbursement** on the following:

1.4.1. All equipment and supplies used as a result of a release to the environment.

1.4.2. All transportation/disposal costs.

1.4.3. Contractor incurred expenses, if required.

1.4.4. All laboratory analyses, as well as any site assessments or long-term remediation efforts to return the environment back to its original state.

1.4.5. Any treatment of contaminated material (i.e., thermal treatment, landfill, chemical treatment). Responsible organizations are required to provide the environmental function with a job order customer accounting system number for reimbursements. This is part of each organization's operational cost. Reimbursed funds will be used to replace any incurred costs to remediate the site of concern.

APPENDIX 6 TO ANNEX B TO EAFB PLAN 32-6
SPILL RESPONSE PHASE VI - SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

1. GENERAL:

1.1. **SPCC Plan**. Eglin Air Force Base (AFB) has a Spill Prevention Control and Countermeasure (SPCC) Plan that is accessible on the Environmental Management's (EM) document control web page: (https://em.eglin.af.mil/emc/emce/emcet/Eglin%20SPCC_2010_Final.pdf). The SPCC includes procedures for detection, reporting, containing, cleanup, and disposal of spills involving oils or hazardous substances.

1.2. **Site-Specific Spill Plans**. The first step in spill prevention is to identify all potential spill sites on base. It is the responsibility of all activities to develop site-specific spill prevention, control and countermeasures plans for all sites which meet or exceed the screening quantities. The plans should outline spill prevention control and countermeasures procedures, methods and equipment. Tab A to Appendix 6 to Annex B contains hazardous material worksheets, which list information needed to develop an adequate spill plan.

2. TRAINING: All personnel involved with the management and handling of oil and hazardous substances must be trained in accordance with the Occupational Safety and Health Administration (OSHA) 1910.1200 Hazardous Communication (HAZCOM) requirements. The OSHA 1910.1200 HAZCOM training program will consist of Train-the-Trainer education conducted electronically. HAZCOM training is a one-time requirement for all designated unit trainers. Public Health will be the point of contact for information on HAZCOM training and documentation in accordance with OSHA 19.10.1200 requirements. Unit supervisors will designate a trainer and ensure that their new employees, who might handle oil or hazardous substances, receive HAZCOM training. Furthermore, unit supervisors will ensure that each employee's HAZCOM training is properly documented in accordance with OSHA requirements. Training programs should include the following key features:

2.1. Potential health effects from the oil and hazardous substances.

2.2. Applicable first aid procedures to be used following exposure.

2.3. Protective equipment requirements and procedures for using equipment.

2.4. Evacuation procedures.

2.5. Combustibility of spill material and potential for flash back along vapor trails.

2.6. Applicable firefighting procedures and special hazards of combustion products.

2.7. Reactivity of spill material with common materials including water.

2.8. Use and maintenance of all alarms and monitoring equipment associated with spill prevention or response.

2.9. Initial notification procedures described in this plan.

2.10. Immediate spill response actions including the location of pump controls and valves to stop spill flows, and the location and use of fire extinguishers, absorbents, neutralizing agents and other immediate spill response procedures as appropriate.

2.11. The many aspects of visual inspection associated with the various areas.

2.12. The use of the SPCC plan, spill prevention aspects, spill response organizations including the function of the IC, designated spill response procedures and the location of spill response equipment.

2.13. Air Force personnel assigned to post-emergency cleanup must have training in all the areas listed below:

2.13.1. Emergency action plans [29 CFR 1910.38(a)].

2.13.2. Respiratory protection (29 CFR 1910.134).

2.13.3. Hazard communication (29 CFR 1910.1200).

2.13.4. Specific training in the safe handling of the hazardous substance(s) involved.

2.13.4.1. In addition to Hazardous Communication (HAZCOM) training, all personnel involved with hazardous material/waste emergency spill response and cleanup require some level of Hazardous Waste Operator (HAZWOPER) training in accordance with OSHA 29 CFR 1910.120. The base fire department and environmental function periodically schedule OSHA 29 CFR 1910.120 training classes for their emergency spill response personnel.

2.13.4.2. All organizations storing or handling oil or hazardous polluting substances will ensure policies have been developed to ensure appropriate training is provided to personnel in the applicable work areas.

Tab:
A--Hazardous Material Worksheet

TAB A TO APPENDIX 6 TO ANNEX B TO EAFB PLAN 32-6
HAZARDOUS MATERIAL WORKSHEET

REFERENCES: See Annex Y.

GENERAL: The following worksheet lists information needed to develop an adequate spill plan.

INSTALLATION: _____ **EVALUATOR / ORGANIZATION: _____** **DATE COMPLETED: _____**		
SOURCE OF INFORMATION		**HAZARDOUS MATERIALS WORKSHEET**
1	Site Visit	**Point of Contact / Organization / Phone: _____** _____
2	Grid Map	**Facility number: _____** **Grid Coordinates: _____** **BEE Workplace Identifier # (WPID): _____**
3	Site Visit	**Total Number Occupancy of Facility: _____ Day: ____ Night: _____**
4	Site Visit MSDS or Consolidated Chemical List Attachment 6 MSDS MSDS HAZMAT	**Hazardous Material present:** (For hazardous substances) Chemical Abstract Service (CAS) Numbers: _____ CERCLA RQ: UN#: _____ Potential Hazards: _____ Toxic: ____ Corrosive: ____ Fire Explosion: ____ Reactive: ____ Important physical characteristics (reference MSDS or data courses) Water: heavier than air ___ lighter than air: __ Float ___ Sink____ Mix ____
5	Site Visit	**Has there been a release/spill within the past 12 months? Yes _____ N _____** Date of occurrence: _____ Site Description: _____ Container Type: Tank: _____ Drum _____ Pipe _____ etc._____ Container Construction Material: _____ Quantity (gals/lbs): _____ Frequency container(s)changed/filled: _____ Number of Containers: _____ Location narrative/comments: _____ Maximum quantity present: _____ Average daily quantity: _____ Normal pipeline pressure (if applicable): _____ Probable flow quantity: <10gpm: _____ 10-100gmp: _____ >100gpm: ____

6	Site Visit	**Identify Source: _____** Identify who/how material is delivered: _____ Frequency of delivery: _____ Estimated storage time: _____ How is material stored? _____ Purpose of use: _____ How is it disposed? _____
7	Installation Maps	**Probable Spill Route: _____** Flow to oil water separator? Y _____ N _____ Discharge to sanitary or storm sewer? Y _____ N _____ Environmentally sensitive areas on flow path? Y _____ N _____ Adjacent ground cover (check) – sandy, clay, grass, concrete or asphalt:
8	Site Visit	**Secondary Containment:** ***(Reference Attachment 9)*** Dike Material: _____ Dike Height: _____ Dike Area (l x w): _____ Dike Volume - if known: _____ Dike floor material: _____ Other secondary containment present Y _____ N_____ Check for booms, berms, retaining walls, curbing, culverts, gutters, weirs, spill diversion ponds, retention ponds, absorbent materials, other: _____ Improvements needed: *(provide deficiency worksheet summary)*_____ Visual Inspection: _____ External: _____ Internal: _____
9	Site Visit	**Preventative Maintenance documents *(Procedures/Frequency)*: Y ___ N ___**
10	Site Visit	**Leak testing site(s) documents w/date & results up-to-date: Y ___N ___**
11	Site Visit	**Housekeeping:** Aisle Space: _____ Area Clean: Y _____ N _____ Proper storage of chemicals: Y _____ N _____ Other comments: _____
12	Site Visit	**Material compatibility present (liners, protective coatings or cathodic protection):** Internal: Y _____ N _____ External: Y _____ N _____

13	Site Visit	**Area Security** Fences and locked gates: Y _____ N _____ Traffic barriers: Y _____ N _____ Locked valves and pump controls: Y _____ N _____ Lighting: Y _____ N _____ Other: _____
14	Site Visit	**Monitoring (Type/Interlocks):** Liquid Level: _____ Flow Meters: _____ Flow Totalizers: _____ Material Inventory present / available: _____ Ground Water (for underground sites): _____ Other: _____
15	Site Visit	Detailed visual inspection and comments: _____
16	Site Visit	Emergency equipment available on site: _____
17	Site Visit	Release/spill prevention and response training received (HAZCOM/HAZMAT): _____
18	Site Visit	Site sketch: (Attach a site sketch to form): Take pictures, annotate a brief description of each photo:
19	Site Visit	Summary of deficiencies: _____ _____ _____ _____ _____ _____ _____ _____ **Include locations of high-risk facilities and mission impacted areas/facilities.**

ANNEX C TO EAFB PLAN 32-6
ACRONYMS AND DEFINITIONS

96 CEG/CEIEC	Base Environmental Engineering & Compliance Division
AFB	Air Force Base
AFI	Air Force Instruction
BPA	Blanket Purchase Agreement
CAA	Clean Air Act
IEMP	Installation Emergency Management Plan
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CWA	Clean Water Act
EAFB	Eglin Air Force Base
EHS	Extremely Hazardous Substance
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FRP	Facility Response Plan
F.S.	Florida Statute
HAZMAT	Hazardous Material
HMTA	Hazardous Materials Transportation Act
IC	Incident Commander
JOCAS	Job Order Customer Accounting System
JON	Job Order Number
LEPC	Local Emergency Planning Commission
LERC	Local Emergency Response Committee
MSDS	Material Safety Data Sheet
NRC	National Response Center
OPR	Office of Primary Responsibility
PA	Public Affairs
POL	Petroleum, Oil and Lubricant
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
RQ	Reportable Quantity
RRC	Regional Response Center
SARA	Superfund Amendments and Reauthorization Act
SERC	State Emergency Response Commission
SJA	Staff Judge Advocate
SPCC	Spill Prevention Control and Countermeasures

SRT	Spill Response Team
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TSD	Transportation, Storage and Disposal
USC	United States Code
USCG	United States Coast Guard
UST	Underground Storage Tank

Coastal Waters: Generally, those U.S. marine areas navigable by deep-draft vessels. In the Eglin AFB area, the Gulf of Mexico, Intracoastal Waterway and Choctawhatchee Bay and its bayous are coastal waters.

Code of Federal Regulations (CFR): A codification of the general and permanent rules the executive departments/agencies of the federal government publish annually in the Federal Register. There are 50 titles representing broad areas subject to federal regulations.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substance: Any substance listed in Table 302.4 of 40 CFR 302. See Tab D to Appendix 1 to Annex B.

Discharge: This includes but is not limited to spilling, leaking, pumping, pouring, emitting, emptying or dumping of oil or other hazardous substance. Any action that violates applicable water quality standards; causes a film, sheen or discoloration of the surface of the water or the adjoining shoreline; sludge or emulsions to be deposited beneath the surface of the water or upon the adjoining shoreline or affects the quality of the ground water.

Emergency Planning and Community Right-to-Know Act (EPCRA): This law establishes a structure at the state and local levels to assist communities in planning for chemical emergencies and requires facilities to provide information on various chemicals present in the community.

Extremely Hazardous Substance (EHS): Any substance listed in Appendix A or B of 40 CFR 355. See Tab D to Appendix 1 to Annex B.

Hazardous Substance: Any substance defined as a hazardous substance in 42 United States Code (USC) 9601(14) and designated as a hazardous substance in 40 CFR 302.4. This includes oil contaminated with hazardous substances.

Level of Concern: The concentration of an airborne EHS that may cause serious and/or irreversible health effects or death resulting from a single exposure for relatively short periods.

Local Emergency Planning Commission (LEPC): A committee established by the state

commission for each emergency planning district to plan and coordinate local emergency response actions.

National Response Center (NRC): National headquarters site for activities related to pollution spill incidents.

Operational Decontamination: Decontamination carried out by individuals and/or units restricted to specific parts of operationally essential equipment, material and/or working areas, to minimize contact and transfer hazards and sustain operations. This may include further decontamination of the individual as well as decontamination of mission-essential equipment and limited terrain decontamination.

Petroleum-Contaminated Soil Storage Facility: Facility for the on-site storage of soil contaminated with petroleum, oil and lubricants (POLs).

Petroleum, Oil and Lubricants (POLs): Oil of any kind or in any form including but not limited to petroleum, fuel, oil, sludge, oil refuse and oil mixed wastes other than dredged spoil. Oil mixed with a hazardous substance is treated as a hazardous substance.

Potential Spill: Any accident or other circumstance resulting in the discharge of oil or a hazardous polluting substance. A potential spill is categorized by its severity based on the criteria for actual spills.

Primary Agencies: Those departments or agencies that compose the NRC and are designated to have primary responsibility and resources to promote effective operation of the National Response Plan (Departments of Defense, Transportation, Interior, Energy and the Environmental Protection Agency [EPA]).

Public Affairs (PA): The office notified of all reports to external regulatory authorities.

Regional Response Center (RRC): Regional headquarters site for activities related to potential spill incidents. U.S. Coast Guard, Eighth District, New Orleans, Louisiana, is the RRC for northwest Florida coastal water spills. EPA Region IV, Atlanta, Georgia, is the RRC for inland spills.

Release: Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers and other closed receptacles) of any hazardous chemical, extremely hazardous substance or toxic chemical.

Reportable Quantity (RQ): That quantity, as set forth in Table 302.4 of 40 CFR 302.4. The release of which requires notification pursuant to Florida Administrative Code (FAC) 17-150.200.

Responsible Organizations: All organizations on Eglin AFB storing or handling oil or hazardous substances.

Spill Response Team (SRT): Individuals tasked under this plan to respond to, contain and clean up oil and hazardous substance spills as directed by the OSC.

Staff Judge Advocate (SJA): Coordinates with Eglin AFB Environmental Compliance Office on reports involving legal issues or potential damage claims.

Thorough Decontamination: Decontamination carried out by units (with or without external support) to reduce contamination on personnel, equipment, material and/or working areas to the lowest possible levels to permit the partial or total removal of personal protective equipment and maintain operations with minimum degradation. This may include further terrain decontamination.

Threshold Planning Quantity: For any extremely hazardous substance, the quantity listed in the "Threshold Planning Quantity" column in Appendix A or Appendix B of 40 CFR 355.

Vulnerable Zone: An area over which the airborne concentration of a chemical involved in an accidental release could reach the level of concern.

ANNEX Y TO EAFB PLAN 32-6
REFERENCES

Air Force Instructions:
AFI 10-2501, *Air Force Emergency Management Program*
AFI 32-7047 AFMCSUP I, *Environmental Compliance, Release and Inspection Reporting*
AFI 91-204 AFMCSUP I, *Safety Investigations and Reports*
AFI 91-204, *Safety Investigations and Reports*
AFI 90-801, *Environment, Safety, and Occupational Health Councils*
AFPD 32-70, *Environmental Quality*

Plans:
EAFB 10-2, *Installation Emergency Management Plan (IEMP)*
EAFB Facility Response Plan (FRP) United States Coast Guard (USCG)
EAFB Risk Management Plan (RMP) for Handling Propane, Chlorine and Methylene Chloride
EAFB Spill Prevention Control and Countermeasure (SPCC) Plan
Environmental Protection Agency, Region IV Oil and Hazardous Substance Pollution Plan (also known as Regional Area Contingency Plan)
U.S. Coast Guard, 8th District Oil & Hazardous Substance Contingency Plan, http://ocean.floridamarine.org/ACP/MOBACP/README.html
Florida Coastal Pollutant Spill Contingency Plan
State Emergency Response Commission - Superfund Amendment and Reauthorization Act (SARA) Title III How to Comply Handbook

Florida Statutes (F.S.):
Florida Hazardous Materials Response and Community Right to Know Act, F.S. 252.81, et seq.
Pollutant Spill Prevention and Control Act, F.S. 376.011, et seq.
Resource Recovery and Management Act, F.S. 403.721 and F.S. 316.302

Florida Regulations:
Notification Requirements: FAC 62 -150.300, FAC 62-761 and FAC 62-762.

Federal Statutes:
CERCLA, 42 USC 9601, et seq.
SARA Title III/EPCRA, 42 USC 11001, et seq.
Resource Conservation and Recovery Act (RCRA), 42 USC 6901, et seq.
Hazardous Materials Transportation Act (HMTA), 49 USC 1801, et seq.

Federal Planning Documents:
Technical Guidance for Hazards Analysis, Dec 87 (EPA, Federal Emergency Management Agency, Department of Transportation)

Federal Regulations:
National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300
Designation, Reportable Quantities and Notification, 40 CFR Part 302
List of Extremely Hazardous Substances, 40 CFR 355, Appendix A
HMTA, 49 CFR Part 171
Discharge of Oil, 40 CFR 110

ANNEX Z TO EAFB PLAN 32-6
DISTRIBUTION

NOTE: Hard copies of this plan will not be distributed. Approved Eglin Contingency Response Plans may be viewed/printed by personnel with access to the Eglin NIPRnet domain at https://org2.eis.af.mil/sites/21424/xp/xpr/default.aspx.

Final
Spill Prevention, Control, and Countermeasure Plan Update

Eglin Air Force Base, Florida

July 2019

For Official Use Only

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MANAGEMENT APPROVAL

This Spill Prevention, Control, and Countermeasure (SPCC) Plan was prepared for Eglin Air Force Base (AFB) in accordance with good engineering practices. It has the full approval of management at a level of authority to commit the necessary resources to ensure full SPCC Plan implementation. This SPCC Plan will be implemented as described herein, and will be reviewed and evaluated at least once every five years.

_____	_____
Signature	Date
_____	_____
Printed Name	Title

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LICENSED PROFESSIONAL ENGINEER'S CERTIFICATION

I hereby certify that I or my agent has visited and examined the facility, and being familiar with the provisions of 40 Code of Federal Regulations 112, *Environmental Protection Agency Regulations on Oil Pollution Prevention*, attest that the Spill Prevention, Control, and Countermeasure (SPCC) Plan for Eglin Air Force Base (AFB) has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part; that procedures for required inspections and testing have been established; and that the SPCC Plan is adequate for Eglin AFB – 112.3 (d).

This SPCC Plan supersedes the previous SPCC Plan (*Eglin Air Force Base Spill Prevention, Control, and Countermeasures Plan*), prepared and dated July 2011.

_____ _____

Signature Date
Eric S. Sculthorpe, P.E.
State of Florida P.E. No. 57737

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CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

FACILITY NAME: Eglin Air Force Base
FACILITY ADDRESS: United States Air Force
Eglin Air Force Base
Eglin AFB, Florida 32542-5000

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   YES X NO
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?
   YES NO X
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate USEPA formula or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?
   YES X NO
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate USEPA formula or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   YES NO X
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   YES NO X

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information. I believe that the submitted information is true, accurate, and complete.

_____ _____
Signature Title

_____ _____
Name (please type or print) Date

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.
[2] For the purposes of 40 Code of Federal Regulations (CFR) 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

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EXECUTIVE SUMMARY

This Spill Prevention, Control, and Countermeasure (SPCC) Plan for Eglin AFB was developed per 40 Code of Federal Regulations (CFR) 112 and supersedes the previous SPCC Plan prepared and dated July 2011.

Required Actions

On 17 July 2002, the U.S. Environmental Protection Agency (USEPA) published a final rule that amended the SPCC regulations (67 Federal Register [FR] 47042), effective on 16 August 2002. The final rule established compliance dates in §112.3 for preparing, amending, and implementing SPCC Plans. The original compliance dates were amended on 9 January 2003 (68 FR 1348), again on 17 April 2003 (68 FR 18890), a third time on 11 August 2004 (69 FR 48794), a fourth time on 17 February 2006 (71 FR 8462), a fifth time on 16 May 2007 (72 FR 27443), a sixth time on 19 June 2009 (74 FR 29136), and a seventh time on 14 October 2010 (75 FR 63097). As a result of the revisions in § 112.3(a)(1), an owner or operator of a facility (except for some drilling, production or workover facilities), that was in operation on or before 16 August 2002 must make any necessary amendments to his SPCC Plan, and implement that Plan, on or before 10 November 2011. This will allow the owner or operator time to prepare or amend and implement the SPCC Plan in accordance with the July 2002 (67 FR 47042, 17 July 2002), December 2006 (71 FR 77266, 26 December 2006), December 2008 (73 FR 285, 5 December 2008), and November 2009 (74 FR 218, 13 November 2009) amendments. The facility owner/operator must continue to maintain his existing SPCC Plan until he amends and fully implements the Plan to comply with the revised requirements.

In February 2005, Eglin AFB finalized an amended version of their SPCC Plan in accordance to the compliance dates amended on 11 August 2004, which required a facility in operation on or before 16 August 2002 to amend its Plan by 17 February 2006 and fully implement the Plan (including addressing and correcting identified regulatory deficiencies) by 18 August 2006. In the case where a facility could not fully implement their Plan by the required date, the facility was required to request an extension from the Regional Administrator. Since that time, the USEPA extended the compliance dates to amend and fully implement the Plan on or before 10 November 2011.

Recommended Actions

Eglin AFB is not required to implement the best engineering practice recommendations identified in this SPCC Plan. However, if funding is available, Eglin AFB should consider implementation of these recommendations as a means to further enhance spill prevention and control for the Base.

Regulatory Deficiencies and Best Engineering Practice Recommendations

There were no regulatory deficiencies identified in this SPCC Plan for Eglin AFB, as of May 2019.

It is recommended that Eglin AFB validate secondary containment capacity values for the storage tanks located at the Main Base Bulk Fuel Storage Area, Mid Field Bulk Fuel Storage Area, and West Side Bulk Fuel Storage Area.

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1. INTRODUCTION

The Eglin Air Force Base (AFB) Spill Prevention, Control, and Countermeasure (SPCC) Plan has been prepared to establish and implement those measures at Eglin AFB that will meet the requirements of 40 Code of Federal Regulations (CFR) 112, Oil Pollution Prevention. All oil delivery, storage, and handling practices must comply with 40 CFR 112 regulations.

40 CFR 112 establishes the "procedures, methods and equipment, and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines." This part applies to "owners or operators of non-transportation-related onshore or offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, and which, due to their location, could reasonably be expected to discharge oil in quantities that may be harmful, as defined in 40 CFR 110."

Petroleum, oils, and lubricants (POL) storage capacity and operations at Eglin AFB fall into a number of the applicable categories; therefore, an SPCC Plan must be developed and implemented.

1.1 PLAN UPDATE AND AMENDMENT

In accordance with 40 CFR 112.3 and 112.5 of the SPCC Plan regulations, there are three events that require an amendment to the Eglin AFB SPCC Plan. The dates listed below are based on a final rule effective 14 October 2010 (i.e., extension of SPCC Plan amendment and implementation deadlines in 40 CFR 112.3[a], [b], [c]).

Event A

If your onshore or offshore facility was in operation on or before 16 August 2002, you must maintain your SPCC Plan, amend it as required to ensure compliance with this part, and implement the Plan no later than 10 November 2011.

Event B

The owner or operator of a facility that has oil in:

(1) Any aboveground container;

(2) Any completely buried tank as defined in §112.2;

(3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in §112.2;

(4) Any "bunkered tank" or "partially buried tank" as defined in §112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part,

must review and amend the SPCC Plan when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge of oil into or upon

the navigable waters of the United States or adjoining shorelines or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

Examples of changes that may require amendment of the SPCC Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility. An amendment made under this section after 10 November 2011 must be prepared within six months (of the facility change), and implemented as soon as possible, but not later than six months following preparation of the amendment.

Event C

The facility owner or operator must complete a review and evaluation of the SPCC Plan at least once every five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in §112.1(b) from the facility. You must document your completion of the review and evaluation and must sign a statement as to whether you will amend the SPCC Plan, either at the beginning or end of the SPCC Plan or in a log or an appendix to the SPCC Plan. The following words will suffice:

> I have completed review and evaluation of the SPCC Plan for Eglin AFB on (date), and will (will not) amend the SPCC Plan as a result.

A licensed professional engineer must review and certify any technical amendments to this SPCC Plan for it to be effective to satisfy the SPCC rules.

Tables for Record of Review and Amendment

All records of amendments, five-year reviews, and associated signed certifications are maintained and provided in Appendix F.

1.2 PLAN PURPOSE

The purpose of the SPCC Plan is to establish procedures, methods, equipment, and other criteria to prevent the discharge of oil products from non-transportation-related onshore and offshore facilities into or upon navigable waters of the United States or adjoining shorelines.
At a minimum, the SPCC Plan will address the following:

- *Spill Prevention* – System components and characteristics, and operating procedures to prevent the occurrence of oil spills
- *Spill Control* – Control measures to prevent a spill from entering navigable waters

- *Spill Countermeasures* – Countermeasures to contain, clean up, and mitigate the effects of an oil spill that could impact navigable water

This plan is organized by key elements required in a SPCC Plan. Where applicable, regulatory requirements listed in 40 CFR 112 are cited in the section or subsection heading. A discussion regarding conformance with the regulatory requirement is presented followed by listing regulatory deficiencies as warranted.

State regulations including, but not limited to, the State of Florida Department of Environmental Protection (FDEP) Rules (Rules 62-740 [Petroleum Contact Water], 62-761 [Underground Storage Tank Systems], and 62-762 [Aboveground Storage Tank Systems]), and industry standards including, but not limited to, the American Petroleum Institute (API) standards, National Fire Protection Association (NFPA) standards, Steel Tank Institute (STI) standards, and other recommended practices are referenced as necessary throughout the SPCC Plan.

1.3 PLAN FOCUS

This SPCC Plan is designed to address all oil-filled containers at Eglin AFB, except for any container with capacity less than 55 gallons. As discussed in the preamble of the final SPCC rule published 17 July 2002 (initial effective date of 16 August 2002; seventh extension effective date of 14 October 2010), the following types of oil-filled equipment are specifically excluded from the U.S. Environmental Protection Agency (USEPA) definition of "bulk storage container":

- Electrical equipment (i.e., transformers, circuit breakers, and capacitors)
- Operating equipment (i.e., lawn mowers, snow blowers, elevator lifts, motive items [the latter being large construction equipment, such as bull dozers and graders, government passenger vehicles, and aircraft])
- Manufacturing equipment (i.e., hydraulic presses, hydraulic reservoirs, and enclosed lube systems)

In the final rule, USEPA clearly differentiated between the bulk storage of oil and the operational use of oil. Facilities with equipment containing "operational use" oil are not required to comply with the strict provisions of 40 CFR 112.8(c), such as secondary containment, testing and inspection, and fuel level gauges. The intent of 40 CFR 112.8(c) is to ensure oil spill prevention provisions are effectively in place for facilities that practice the bulk storage of oil. However, oil-filled operational equipment must meet other SPCC requirements, such as the general oil spill prevention requirements as described in 40 CFR 112.7(c)—to provide appropriate containment and/or diversionary structures (i.e., dikes, curbing, culverts, weirs/barriers, retention ponds, drainage systems, and sorbent material) to prevent discharged oil from reaching a navigable water course or affecting certain natural resources.

Throughout this SPCC Plan, the prevention of potential oil releases associated with oil-filled operational equipment is discussed via containment/diversionary controls.

1.4 PLAN ORGANIZATION AND REGULATORY REFERENCES

In general, this SPCC Plan follows the sequence of the regulatory requirements for SPCC Plans outlined in 40 CFR 112.7, 112.8, and 112.12; and discusses the facility's conformance to the applicable regulatory requirements of that section. For sections with regulatory references, the federal SPCC regulatory requirements and the related sections that present the Eglin AFB-specific material in the SPCC Plan are listed in the cross-reference matrix, Table 1-1.

Table 1-1
Regulatory Requirement and Text Cross-Reference Matrix
Eglin Air Force Base

Topic	CFR Citation	SPCC Plan Section
Physical Layout of the Facility	40 CFR 112.7(a)(3)	3.1
Oil Storage Inventory	40 CFR 112.7(a)(3)(i)	3.2
Discharge Prevention Measures	40 CFR 112.7(a)(3)(ii)	5 14
Discharge or Drainage Controls	40 CFR 112.7(a)(3)(iii)	5 13
Countermeasures for Discharge Recovery	40 CFR 112.7(a)(3)(iv)	Eglin AFB FRP
Methods of Disposal for Recovered Materials	40 CFR 112.7(a)(3)(v)	16.4
Facility Contact(s)	40 CFR 112.7(a)(3)(vi)	2.2
Discharge Reporting Procedures	40 CFR 112.7(a)(4)	Eglin AFB FRP
Discharge Emergency Response Procedures	40 CFR 112.7(a)(5)	Eglin AFB FRP
Potential Spill Predictions, Volumes, Rates, and Control	40 CFR 112.7(b)	4
Drainage Prevention Diversionary Structures and Containment	40 CFR 112.7(c)	5
Impracticability of Secondary Containment	40 CFR 112.7(d)	6
Inspection/Testing/Record-Keeping	40 CFR 112.7(e)	7
Personnel Training and Spill Prevention Procedures	40 CFR 112.7(f)(1-3)	8
Personnel Instructions	40 CFR 112.7(f)(1)	8.1
Designated Person Accountable for Spill Prevention	40 CFR 112.7(f)(2)	8.2
Spill Prevention Briefings	40 CFR 112.7(f)(3)	8.3
Site Security	40 CFR 112.7(g)	9
Loading/Unloading Rack	40 CFR 112.7(h)(1-3)	10
Adequate Secondary Containment for Vehicles	40 CFR 112.7(h)(1)	10.2

Table 1-1
Regulatory Requirement and Text Cross-Reference Matrix
Eglin Air Force Base

Topic	CFR Citation	SPCC Plan Section
Warning or Barrier System for Vehicles	40 CFR 112.7(h)(2)	10.3
Vehicles Examined for Lowermost Drainage Outlets before Leaving	40 CFR 112.7(h)(3)	10.4
Brittle Fracture or Other Catastrophe of Field-Constructed Containers	40 CFR 112.7(i)	11
Conformance with Other Applicable Requirements	40 CFR 112.7(j)	12
Qualified Oil-Filled Operational Equipment	40 CFR 112.7(k)(1-2)	3.5
Drainage Control	40 CFR 112.8(b)(1-5)	13
Drainage from Diked Storage Areas	40 CFR 112.8(b)(1)	13.1
Valves Used on Diked Storage Areas	40 CFR 112.8(b)(2)	13.2
Plant Drainage Systems from Undiked Areas	40 CFR 112.8(b)(3)	13.3
Final Discharge of Drainage	40 CFR 112.8(b)(4)	13.4
Facility Drainage Systems and Equipment	40 CFR 112.8(b)(5)	13.5
Bulk Storage Containers/Secondary Containment	40 CFR 112.8(c)(1-11)	14
Container Compatibility with Its Contents	40 CFR 112.8(c)(1)	14.1
Diked Area Construction and Containment Volume for Bulk Containers	40 CFR 112.8(c)(2)	14.2
Diked Area, Inspection and Drainage of Rainwater	40 CFR 112.8(c)(3)	14.3
Corrosion Protection of Buried Metallic Storage Tanks	40 CFR 112.8(c)(4)	14.4
Corrosion Protection of Partially Buried Metallic Tanks	40 CFR 112.8(c)(5)	14.5
Aboveground Container Periodic Integrity Testing	40 CFR 112.8(c)(6)	14.6
Control of Leakage through Internal Heating Coils	40 CFR 112.8(c)(7)	14.7
Liquid Level Sensing Devices	40 CFR 112.8(c)(8)	14.8
Observation of Disposal Facilities for Effluent Discharge	40 CFR 112.8(c)(9)	14.9
Visible Oil Leak Corrections from Container and Container Appurtenances	40 CFR 112.8(c)(10)	14.10

Table 1-1
Regulatory Requirement and Text Cross-Reference Matrix
Eglin Air Force Base

Topic	CFR Citation	SPCC Plan Section
Appropriate Position of Mobile or Portable Oil Storage Containers	40 CFR 112.8(c)(11)	14.11
Facility Transfer Operations, Pumping, and Facility Process	40 CFR 112.8(d)(1-5)	15
Buried Piping Installation Protection and Examination	40 CFR 112.8(d)(1)	15.1
Not-In-Service and Standby Service Terminal Connections	40 CFR 112.8(d)(2)	15.2
Pipe Supports Design	40 CFR 112.8(d)(3)	15.3
Aboveground Valve, Pipeline, and Appurtenances Inspection	40 CFR 112.8(d)(4)	15.4
Aboveground Piping Protection from Vehicular Traffic	40 CFR 112.8(d)(5)	15.5
Drainage Control (Cooking Oil)	40 CFR 112.12(b)(1-5)	13
Drainage from Diked Storage Areas	40 CFR 112.12(b)(1)	13.1
Valves Used on Diked Storage Areas	40 CFR 112.12(b)(2)	13.2
Facility Drainage Systems from Undiked Areas	40 CFR 112.12(b)(3)	13.3
Final Discharge of Drainage	40 CFR 112.12(b)(4)	13.4
Facility Drainage Systems and Equipment	40 CFR 112.12(b)(5)	13.5
Bulk Storage Containers/Secondary Containment (Cooking Oil)	40 CFR 112.12(c)(1-11)	14
Container Compatibility with Its Contents	40 CFR 112.12(c)(1)	14.1
Diked Area Construction and Containment Volume for Bulk Containers	40 CFR 112.12(c)(2)	14.2
Diked Area, Inspection and Drainage of Rainwater	40 CFR 112.12(c)(3)	14.3
Corrosion Protection of Buried Metallic Storage Tanks	40 CFR 112.12(c)(4)	14.4
Corrosion Protection of Partially Buried Metallic Tanks	40 CFR 112.12(c)(5)	14.5
Aboveground Container Periodic Integrity Testing	40 CFR 112.12(c)(6)	14.6
Control of Leakage through Internal Heating Coils	40 CFR 112.12(c)(7)	14.7
Liquid Level Sensing Devices	40 CFR 112.12(c)(8)	14.8
Observation of Disposal Facilities for Effluent Discharge	40 CFR 112.12(c)(9)	14.9

Table 1-1
Regulatory Requirement and Text Cross-Reference Matrix
Eglin Air Force Base

Topic	CFR Citation	SPCC Plan Section
Visible Oil Leak Corrections from Container and Container Appurtenances	40 CFR 112.12(c)(10)	14.10
Appropriate Position of Mobile or Portable Oil Storage Containers	40 CFR 112.12(c)(11)	14.11
Facility Transfer Operations (Cooking Oil)	40 CFR 112.12(d)(1-5)	15
Buried Piping Installation Protection and Examination	40 CFR 112.12(d)(1)	15.1
Not-In-Service and Standby Service Terminal Connections	40 CFR 112.12(d)(2)	15.2
Pipe Supports Design	40 CFR 112.12(d)(3)	15.3
Aboveground Valve, Pipeline, and Appurtenances Inspection	40 CFR 112.12(d)(4)	15.4
Aboveground Piping Protection from Vehicular Traffic	40 CFR 112.12(d)(5)	15.5
Amendment of SPCC Plan by Regional Administrator	40 CFR 112.4	16.1
Written Spill Report Guidelines	40 CFR 112.4(a)	16
Amendment of SPCC Plan by Owners or Operators	40 CFR 112.5	1.1
Internal Spill Report	—	16.2

Note:
FRP Facility Response Plan

1.5 PLAN LAYOUT

- Eglin AFB contains various facilities for the storage, use and management of petroleum substances, primarily jet fuel. Each fuel management operation falls under the control of one of several organizational groups/departments on Eglin AFB, each with varying reporting, operation and management protocols. Accordingly, regulatory compliance for these various facilities is provided under each regulatory citation for the following organizational groups/departments:
- Main Base Bulk Fuel Storage Area – primarily jet fuel
- Mid Field Bulk Fuel Storage Area – primarily jet fuel
- West Side Bulk Fuel Storage Area – primarily jet fuel; home of 33rd Fighter Wing
- Duke Field Bulk Fuel Storage Area – primarily jet fuel
- *Organizational Fuel Tanks (OFTs)* – primarily ground fuels, including FDEP-regulated (>550 gallons) and non-regulated (≤550 gallons) aboveground storage tanks (ASTs) and

FDEP non-regulated (≤110 gallons and industrial heating fuel) underground storage tanks (USTs)

- *Ranges* – including Eglin AFB Reservation's extensive ranges, Camp Rudder, 7th Special Forces Group, Camp Pinchot, Cape San Blas, and the Alabama National Guard facility
- *Facility-Wide Oil Management Issues* – Drum storage sites, hazardous waste accumulation points, emergency electrical generators, used cooking oil containers and grease traps, oil/water separators, permanently closed tanks, and oil-filled equipment.

2. FACILITY INFORMATION

2.1 FACILITY OWNER/OPERATOR, ADDRESS, AND TELEPHONE

United States Air Force
Department of the Air Force
Eglin Air Force Base
Eglin AFB, Florida 32542-5000
Telephone Assistance: 850.882.1113

2.2 FACILITY CONTACT(S)

112.7(a)(3)(vi): You must also address in your plan contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in 112.1(b).

2.2.1 Primary Contacts for the SPCC Plan

Title/Organization	Telephone Number
POL/Storage Tank Program Manager (96 CEG/CEIEC)	850.882.1856
Environmental Compliance (96 CEG/CEIEC)	850.882.4437

2.2.2 On-Scene Commanders

Title/Organization	Telephone Number
Base Fire Chief (96 CES/CEF)	911[1,2]
Asst. Base Fire Chief (96 CES/CEF)	911[1,2]

Notes:
1 From Base Telephone (land line) – 911 (direct to Response Center – first preference), 25856 (Base Fire Department 96 CES/CEF – second preference), 22502 (Base Security 96 SFS – third preference)
2 From Cell Telephone (air line) – 850.882.5856 (Base Fire Department 9`+6 CES/CEF – first preference), 850.882.2502 (Base Security 96 SFS – second preference), 911 (indirect to Response Center – not preferred)

The senior fire official (SFO) at Eglin AFB will assume duty of the on-scene incident commander unless relieved by a designated on-scene commander (OSC). The SFO's and/or OSC's primary responsibilities are responding to a spill, notifying appropriate Eglin AFB personnel and offsite emergency response agencies, and directing the spill response. Additional responsibilities and response strategies/protocol are detailed in the Eglin AFB Facility Response Plan (FRP).

2.2.3 Agencies to Contact When a Discharge of Hazardous Material and Oil Occurs

Agency	Refer to:
National Response Center (NRC)/Coast Guard	Eglin AFB FRP
Response Contractors	Eglin AFB FRP
All Appropriate Federal, State, and Local Agencies	Eglin AFB FRP

The office of primary responsibility for the Eglin AFB FRP is Environmental Compliance (96 CEG/CEIEC). Copies of the Eglin AFB FRP are also maintained by Disaster Preparedness,

the Disaster Control Group, Base Plans, Base Fuels, the Security Police, and the Base Fire Departments.

2.3 FACILITY DESCRIPTION AND PURPOSE

2.3.1 Geographical

Eglin AFB is located in the panhandle of Florida, roughly between the cities of Pensacola and Panama City, and north of the city of Fort Walton Beach. It is the largest military reserve in the world, covering 724 square miles (463,488 acres) in northwest Florida and spanning three counties—Santa Rosa, Okaloosa, and Walton. Eglin AFB's extensive Ranges stretch south to the Gulf of Mexico, encompassing 86,500 square miles of water ranges in the Gulf. Also to the south, the reservation is adjacent to Choctawhatchee Bay, while to the north and east it is bordered roughly by the Yellow River and Alaqua Creek. To the west, the reservation is adjacent to the Pensacola Bay System.

2.3.2 Purpose

Eglin AFB is an Air Force Materiel Command (AFMC) base and is hosted by the 96th Test Wing (TW). The Eglin Test and Training Complex (ETTC) mission has developed into the most diverse in the nation, hosting over 60 organizations from all military services, including the Air Force Special Operations Command, the U.S. Army with its Ranger Camp (Camp Rudder) and 7th Special Forces Group, and the U.S. Navy Explosive Ordnance Disposal School. While the ETTC has traditionally served the research, development, acquisition, test, and evaluation (RDAT&E) community, a number of training and operational units now call Eglin AFB home.

2.4 OPERATIONAL OVERVIEW

2.4.1 General

Eglin AFB consists of several operational areas: Eglin AFB Main Base; Eglin AFB Reservation Ranges; Duke Field; and Santa Rosa Island Ranges. Eglin AFB Main Base consists of the primary testing, administrative, and living facilities, along with the airfield. It consists of approximately 10,500 acres and is located in southern Okaloosa County between the Shalimar-Fort Walton Beach and Valparaiso-Niceville areas. The Eglin AFB land reservation consists of approximately 30 ranges and 10 auxiliary fields, most built during the 1930s and 1940s.

The ETTC is comprised of over 465,000 acres of land, with control of approximately 73,000 square nautical miles (nm^2) of over-land or over-water airspace and access to nearly 111,500 nm^2 of airspace in total.

2.4.2 Flight Support Facilities

Today, three airfields remain active: Eglin AFB Main, Duke Field, and Hurlburt Field. Hurlburt Field is no longer a part of Eglin AFB and is not covered under this SPCC Plan. It is now the independent headquarters of the Air Force Special Operations Command and is managed under its own SPCC Plan. Duke Field was one of the first auxiliary fields built. It is located approximately 12 miles north of the East Gate on Highway 85 and hosts the 919th Special Operations Wing (919 SOW).

2.5 TENANT UNITS AND RANGES

Facility operations include those primary activities of the host unit, 96 TW, and the operations of departments and tenant commands throughout the facility and ranges, including the 33rd Fighter Wing (33 FW), the 53rd Wing (53 WG), the 919 SOW, and the 20th Space Surveillance Squadron (20 SPSS). In addition, organizations such as Camp Pinchot, Camp Rudder, 7th Special Forces Group, Naval School Explosive Ordnance Disposal, 325th Fighter Wing (325 FW), Cape San Blas, and the Santa Rosa Island Ranges occupy portions of Eglin AFB as described below.

Much of the inspection and maintenance performed on bulk fuel storage tanks, organizational tanks, and related fuel equipment at the facility is conducted by Fuels Management (96 LRS/LGRF), Civil Engineering Group (96 CEG), and Water and Fuels Maintenance (796 CES/WFM). Small ancillary tanks (consumptive end-use tanks) are organizationally managed.

2.5.1 Air Force Research Laboratory's Munitions Directorate

The Air Force Research Laboratory's Munitions Directorate, located at Eglin AFB, develops conventional munition technologies to provide the Air Force with a strong technology base upon which future precision air-delivered conventional munitions are developed to neutralize potential threats to the United States.

2.5.2 96 TW

The host unit mission of the 96 TW consists of providing traditional military services as well as all the services of a small city, to include civil engineering, personnel, logistics, communications, planning/strategic management, computer, medical, security, and all other host services. Its people are responsible for material resources, mobility requirements, and meeting the needs of Eglin AFB personnel. The assigned mission of the 96 TW is research, development, testing, and evaluation (RDT&E) of air armaments in support of the Air Force Test Center and AFMC. The 96 TW performs RDT&E across the complete weapons system life cycle for various customers, including Air Force Systems Program Offices, other MAJCOMs, other DoD Services, other U.S. government agencies, foreign military sales, and private industry.

The Wing uses various aircraft to accomplish its test mission, including C-130s, UH-1s, A-10s, F--16s, and F-15s. They also maintain a number of special-purpose testing facilities. The 96 TW is comprised of more than 4,400 professionals in four organizations and 225 different skills. Of these personnel, 57% are military and 43% are civilians.

The Eglin AFB Gulf Test Range provides approximately 100,000 square miles of overwater airspace. The land range covers 724 square miles and contains 51 specific test and training areas, including an approved depleted uranium test range and the only qualified air-to-ground supersonic range east of the Mississippi River.

2.5.3 33 FW

The 33 FW "Nomads," the largest associate unit at Eglin AFB, is a joint graduate flying and maintenance training wing organized under the Air Education and Training Command (AETC). The 33 FW at Eglin AFB is home to the Joint Strike Fighter (JSF) Initial Joint Training Site and Integrated Training Center for the Air Force, Marine Corps, Navy, and international partner operators. The 33 FW's mission is to provide both academic and hands-on training to operators and maintainers of the F-35 Lightning II aircraft.

2.5.4 325 FW

The 325 FW is a temporary tenant at Eglin AFB. The unit was relocated from Tyndall AFB to Eglin AFB as a result of Hurricane Michael in 2018; they are projected to be at Eglin for three years. The mission of the 325 FW is to train and project unrivaled combat power. Aircraft currently used, maintained, and housed at Eglin as part of the 325 FW relocation are the F-22 and T-38.

2.5.5 53 WG

The 53 WG is a major associate unit at Eglin AFB and one of the most diverse wings in the Air Force. It has multi-faceted responsibilities including operational test and evaluation of armament and avionics, aircrew training devices, chemical defense, aerial reconnaissance improvements, electronic warfare systems. The wing tests every fighter, bomber, unmanned aerial vehicle, and weapon system in the Air Force inventory.

2.5.6 919 SOW

The 919 SOW, located at Duke Field, is the only Air Force Reserve unit in Air Force Special Operations Command. It consists of operations, maintenance, and mission support groups for 13 squadrons (11 reserve and 2 active duty and 3 flights). The 919 SOW is at two locations—Eglin AFB and Duke Field. The 919 SOW provides and maintains C-145A and C-146A special operations aircraft designed for covert operations. Both aircraft provide more than 60% of helicopter refueling training requirements to U.S. Special Operations Command.

2.5.7 20 SPSS

The mission of the 20 SPSS is to detect, track, identify, and report near earth and deep space objects in earth orbit, and provide space object identification data in support of United States Strategic Command's Space Control Mission. The 20 SPSS operates and maintains the AN/FPS-85 radar, the Air Force's only phased-array radar dedicated to tracking earth-orbiting objects. Located at Range C-6 on Eglin AFB, the squadron is a geographically separated unit of the 21st Space Wing and the only Air Force Space Command unit on Eglin AFB.

2.5.8 Camp Pinchot

This encampment was built in 1910 as the original headquarters for US Forest Service personnel assigned to the newly created Choctawhatchee National Forest, which was one of seven original National Forests created by President T. Roosevelt in 1908. Transferred to the War Department in 1940, Camp Pinchot gained further significance for its role in the development of Eglin AFB and in the United States preparation for World War II.

2.5.9 Camp Rudder

Auxiliary Field Six is the site of Camp James E. Rudder and the home of the Army's 6th Ranger Training Battalion. The 6th Ranger Training Battalion's parent organization is the Ranger Training Brigade located at Fort Benning, Georgia. The 6th Ranger Training Battalion conducts the jungle-phase (the last phase) of the U.S. Army Ranger Course. Camp Rudder is one of the oldest sub-installations on Eglin AFB, founded in 1951, with operating and quality of life facilities including family housing units, a small exchange annex, a community center, a gymnasium, a swimming pool, a tennis court, a chapel, a reptile facility, a billeting complex, an ammunition storage area, a troop dining facility, a troop medical clinic, civil engineering shop transportation sub-motor pool, a boathouse, a rappelling tower and an airborne staging area, plus an air strip capable of accommodating C-130 and C-17 aircraft.

2.5.10 7th Special Forces Group Compound

Starting in 2009, the 7th Special Forces Group began relocation from Fort Bragg to Eglin Air Force Base. The new compound is located on the Eglin Range area adjacent to Duke Field. The mission of the 7th Special Forces Group is to provide in-garrison training on specialized warfighting tactics to Special Operations Forces. Activities are conducted both within the Group's compound and on distant Eglin ranges. Facilities within the compound include bachelor housing, a small Army Air Force Exchange Service (AAFES) annex and service station, a community center, a fitness center, a swimming pool, a chapel, an ammunition storage area, a fire station, a canine kennel, a troop dining facility, a troop medical clinic, a civil engineering shop, a transportation sub-motor pool, a boathouse, a parachute tower, an airborne staging area, and a helipad.

2.5.11 Naval School Explosive Ordnance Disposal

Naval School Explosive Ordnance Disposal (NAVSCOLEOD) tenant facilities are located just inside the East Gate of Eglin AFB, including bachelor quarters complex and a training facility located in Building 845. NAVSCOLEOD also has an extensive practical training facility on Range D-51, including three demolition training areas at Ranges D-51 and C-52 West, and C-52 North, a training aid and facilities maintenance compound and six explosive storage magazines. The Advanced NAVSCOLEOD training facility is located on Range C-87. The command is tasked with the mission of training officers and enlisted personnel of the U.S. Navy, Marine Corps, Army, Air Force, certain DoD civilian personnel and select international military students in the most current procedures for the location, identification, render safe, recovery, technical evaluation, and disposal of conventional surface and underwater ordnance—both foreign and domestic.

2.5.12 Cape San Blas

Cape San Blas is located in the panhandle of Florida, on the Saint Joseph Peninsula in Gulf County, near the town of Port St. Joe. It is approximately 125 miles from Eglin AFB Main Base to Cape San Blas. Eglin AFB controls approximately 500 acres of the Cape, including over 3 miles of shoreline along the Gulf of Mexico. Site D-3 is primarily used for radar tracking of flying missions over the Gulf of Mexico, for various missile launches, and other military activities.

Site D-3 is suited to support Eglin AFB's test mission, particularly as a site for surveillance radar. Projecting into the Gulf, the site provides optimal coverage of missiles, aircraft and aerial targets operating over the Gulf. Air Force facilities and instrumentation located on Cape San Blas provide a wide variety of mission-support functions. These include flight termination, frequency control and analysis, communications and telemetry, time space-position information, microwave relay systems, and general mission support. The Cape is also ideally located for missile and sounding rocket launches.

2.5.13 Santa Rosa Island Ranges

Santa Rosa Island is a large barrier island to the south of Eglin AFB Main Base, on the Gulf of Mexico. Eglin AFB has testing facilities on a portion of the beach area of the island.

2.6 OIL MANAGEMENT OVERVIEW

The primary oil management activity at Eglin AFB is the receipt, storage, and transfer of jet fuel for use in military aircraft. The total oil storage capacity at Eglin AFB is approximately 7,000,000 gallons. Other oil management activities include the receipt, storage and consumption or use of the following:

- Fuel oil for heating systems
- Diesel fuel for emergency electrical power generation
- Diesel fuel and gasoline for motor vehicles
- Cooking oil for cooking facilities

Jet fuel is brought into Eglin AFB via barge at the Weekley Bayou Marine Terminal Point co-located with the Main Base Bulk Fuel Storage Area (details in Section 10, Loading/Unloading Operations). The jet fuel is then transferred from the Main Base Bulk Fuel Storage Area through underground piping to the Mid Field Bulk Fuel Storage Area (tank 92-1). The West Side Bulk Fuel Storage Area transfers fuel via underground piping to the AETC flight line hot-pit hydrant system. Jet fuel can also be trucked via R-11s from any of these bulk fuel storage areas throughout Eglin AFB and its flight line, and north on a U.S. public roadway, Highway 85, to the Duke Field Bulk Fuel Storage Area.

2.7 ONGOING AND PENDING PETROLEUM-RELATED PROJECTS OF SIGNIFICANT IMPACT

As with any major Department of Defense facility, the petroleum management infrastructure at Eglin AFB is constantly changing to keep pace with general maintenance and operational mission requirements. Most of these changes involve small-scale, low-risk petroleum-related actions such as the addition of a new emergency electrical generator or painting of the exterior of a double-wall tank. These small-scale and low-risk oil storage systems typically contain less than 5,000 gallons of oil, and on average contain only 500 gallons of oil. Though low in risk, these types of changes at the facility require Eglin AFB to amend the SPCC Plan in accordance with the instructions set forth at the beginning of the plan.

As stated previously under *Record of SPCC Plan Reviews/Amendments (Event B)* – The facility owner or operator must review and amend the SPCC Plan "when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shore lines…or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States …"

However, of particular interest are the large-scale, high-risk petroleum-related facility changes that obviously can materially affect the potential for Eglin AFB to impact the environment. Some of the most significant projects at Eglin AFB that are at various stages of technical and financial development and/or approval are listed below:

- Leak repair Tank 28 at Main Base Bulk Storage
- Replacement of underground fuel transfer pipeline between Main Base Bulk Storage and Mid-Field Bulk Storage and extension of new pipeline to West Bulk Fuel Storage.

As indicated by the above general summary, Eglin AFB has solid plans to ensure all their entire bulk fuel storage systems remain or become compliant with the requirements of FDEP 62-761 and 62-762. These state requirements include: bulk fuel storage tanks meeting the API 653 reconstruction standard, bulk fuel storage tanks being protected by a cathodic protection system, bulk fuel piping meeting specific performance standards and other stipulations related to release detection, maintenance, repair, operation, record-keeping, and incident and discharge reporting requirements.

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3. PETROLEUM STORAGE INFORMATION AND DRAINAGE PATHWAYS

3.1 FACILITY DIAGRAM

112.7(a)(3): Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under §112.1(d)(11).

3.1.1 Figures

Figures provided in Appendix A of this SPCC Plan present a general facility diagram for Eglin AFB, including Main Base, Duke Field, and the Ranges. These figures highlight geographical areas of Eglin AFB, including oil storage containers, major fuel transfer stations and piping, roads, buildings, and navigable waters. In addition, these figures include probable spill direction from fuel storage areas. Portable/mobile container storage areas, emergency generators, and locations of oil-filled equipment are also indicated on the figures.

3.1.2 Photographs

Refer to Appendix B, Photographs, for depictions of most aboveground storage tanks at Eglin AFB (i.e., Main Base, West Side, Duke Field, and the Ranges). Fuel tank truck and barge loading/unloading racks and other significant oil management features or areas at the bulk fuel storage areas are also included in Appendix B. However, underground storage tanks, drum storage areas, used cooking oil containers, generators, oil-filled equipment, and small portable/mobile containers (i.e., bowsers, fuel trailers) are not included as photographs in Appendix B.

40 CFR 112.7(a)(3), Facility Diagram
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

3.2 OIL STORAGE

112.7(a)(3)(i): You must also address in your Plan the type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities.

3.2.1 Oil Storage Summary

Table E-1 to Table E-5, listed below, are provided in Appendix E; these tables summarize the oil storage containers at Eglin AFB that are either directly or indirectly subject to SPCC requirements. These containers include aboveground and underground storage tanks/containers, drums, and mobile/portable containers.

- Table E-1, Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers
- Table E-2, Facility Oil Storage Inventory and Hazard Identification – Underground Petroleum Storage Tanks
- Table E-3, Facility Oil Storage Inventory and Hazard Identification – Oil Drum and Hazardous Substances Storage
- Table E-4, Facility Oil Storage Inventory and Hazard Identification – Mobile/Portable Oil Storage Containers
- Table E-5, Facility Oil Storage Inventory and Hazard Identification – Oil-Filled Equipment

Oil/water separators (OWSs) and permanently closed tanks are not listed in Table E-1 through Table E-5 but are thoroughly discussed in Section 3.3, Facility-Wide Oil Management Issues.

3.2.2 Good Engineering Practice and Liquid Level Sensing

Table E-1 to Table E-5 (Appendix E) contain information on the type of oil in each container and the container's storage capacity. If known or available, details are included on container construction, good engineering practices, and potential spill prediction and containment/diversion measures. Specific information regarding leak detection and liquid level gauges and alarms is also provided in the table sets.

Table 3-1, Facility Oil Storage Inventory, presents approximate oil storage capacity at Eglin AFB. The table also summarizes the category of containers, number of containers per category, and capacity range per category.

40 CFR 112.7(a)(3)(i), Oil Storage
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Table 3-1 Facility Oil Storage Inventory – Overall Eglin Air Force Base		
Number of Containers	**Container Capacity Range (gal)**	**Total Storage Capacity (gal)**
Aboveground Petroleum Storage Tanks		
270	65 - 1,138,400	6,733,085
Underground Petroleum Storage Tanks		
9	500 – 10,000	41,000
Oil Drum Storage		
315	55	17,325
Mobile/Portable Oil Storage Containers		
87	60 – 6,000	189,270
Oil-Filled Equipment		
77	60 - 300	9,112
Totals		
765	NA	6,989,792
The totals reported above are approximations based on the existing Eglin AFB SPCC Plan, field observations, and inventories provided by Eglin AFB Environmental Compliance. The quantity of oil storage containers maintained at Eglin AFB continually changes and the data reported in this table is intended to provide an estimate of the total oil storage capacity of the Base.		

3.3 DRAINAGE PATHWAYS AND DISTANCE TO NAVIGABLE WATERS

The final discharge of storm water drainage associated with oil storage and utilization activities on Eglin AFB (i.e., developed areas) is to storm water retention ponds and Weekley Bayou. Storm water runoff from the developed areas is conveyed by a system of earthen and concrete channels and, in some areas, by an underground storm drain system. The final discharge of storm water drainage associated with undeveloped areas of Eglin AFB, Duke Field and the Ranges is to forested lands, Choctawhatchee Bay, the Sound, or the Gulf of Mexico.

3.4 OIL USE OVERVIEW

For the purpose of this SPCC Plan, Eglin AFB is geographically separated into the following areas:

- Main Base
- Mid Field
- West Side (also referred to as AETC)
- Duke Field
- Ranges

In terms of quantity of oil stored or managed (i.e., throughput), Main Base, Mid Field, West Side, and Duke Field are the primary areas of focus for this SPCC Plan. All field-erected bulk fuel storage facilities, pipelines and tank truck fuel loading/unloading racks are located at Main Base, Mid Field, West Side, and Duke Field.

Oil is managed at Eglin AFB by various organizations. Jet fuel (primarily JET A) represents the bulk of the oil stored and used at Eglin AFB. Fuels Management (96 LRS/LGRF) is the organization that presently manages the bulk fuel storage facilities at Main Base, Mid Field, West Side, and Duke Field. Daily operations at Main Base Bulk Fuels Storage Area are overseen by a contractor.

Organizational fuel tanks are managed by various Air Force departments, tenant commands, and contractors. These tanks include those aboveground storage tanks greater than 550 gallons, which are regulated by FDEP, as well as those with a capacity less than or equal to 550 gallons, which are not regulated by FDEP.

Oil in the form of diesel, unleaded gasoline, and used cooking oil are also managed at Eglin AFB but not at the same quantities as the jet fuel. The balance of this SPCC Plan will describe the conformance of Eglin AFB with various portions of the new SPCC rule. Regulatory deficiencies and best engineering practice recommendations, where warranted, are included after the discussion of conformance with each regulatory citation.

3.5 FACILITY-WIDE OIL MANAGEMENT ISSUES

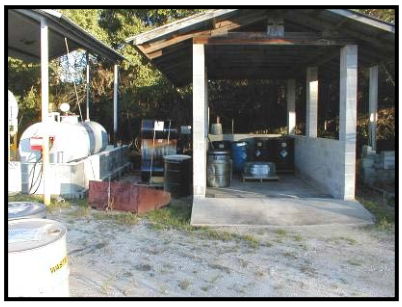
There are several facility-wide oil management issues at Eglin AFB that do not fall under the jurisdiction of one particular organization as listed above. These issues are summarized in the subsections below and include:

- Drum Storage Areas
- Hazardous Waste Accumulation Points
- Emergency Electrical Generators
- Used Cooking Oil Containers and Grease Traps
- Oil/Water Separators
- Permanently Closed Tanks
- Oil-filled Equipment

3.5.1 Drum Storage Areas

A list of the drum storage areas at Eglin AFB is included in Table E-3 in Appendix E, and locations are identified in figures in Appendix A. The list includes a description of the types of containers, contents, and release volume (capacity).

Eglin AFB houses hundreds of drums of material in various locations. These drums may contain oil as well as other hazardous wastes, nonhazardous wastes, cleaning compounds, solvents, spill cleanup equipment, and other miscellaneous materials. All drums of material, hazardous waste or other, are stored inside a building or under cover, with secondary containment to prevent possible discharges.



Bldg 444 Drum Storage Area

Source material is managed in accordance with the Eglin AFB Base Pharmacy Program. Under the Pharmacy Program, an empty drum of material must be turned in before a full drum can be received. This reduces the accumulation of drums of source material in various outside areas throughout the Eglin AFB, thus reducing the quantity of potential discharges. Also, limiting the quantity of drums to be stored will result in minimized storage space requirements.

There are a variety of types of secondary containment for drum storage. Plastic overpack containers can be used to store and completely cover up to four drums. The base of these containers has adequate volume to contain the contents of one drum of material in the event of a leak or spill. Drums can also be stored in a secondary containment berm on pallets. The berm must be equipped with a drain and a discharge valve that is maintained in the closed position. Storm water that accumulates in the containment area must be inspected for contamination prior to discharge. The containment areas are inspected daily for leaks and for containment and drum integrity.

The Eglin AFB SWPP Plan contains an in-depth building-to-building analysis of chemical storage, including references to drum storage locations and highlights of BMPs for these areas. Per the Eglin AFB SWPP Plan, BMPs for some representative drum storage areas include:

- Bulk materials are stored over spill containment with overhead protection
- All fluids stored in designated area
- Spill kits and spill response procedures available
- Drip pans and absorbent pads used for maintenance
- Drums provided for used absorbent pads
- Areas fenced with restricted access
- Parts washer with secondary containment
- Maintenance conducted indoors to extent possible

Most drum storage areas also have secondary containment in the form of spill pallets.

Facility-Wide Oil Management Issues – Drum Storage Areas
Regulatory Deficiencies • None **Best Engineering Practice Recommendations** • None

3.5.2 Hazardous Waste Accumulation Points

A list of the hazardous waste accumulation points that store POL at Eglin AFB is included in Table E-3 in Appendix E. Eglin AFB has several active satellite accumulation points with most typically storing 55 or more gallons of POL, either in drums or other containers. These hazardous waste accumulation points are shown as Drum Storage Areas on the figures in Appendix A. All accumulation points are inspected on a quarterly basis. All materials stored in satellite storage areas are either inside a building or an enclosed outside structure. When a container in a satellite storage area is ready for disposal, it is transported to a 90-day accumulation area.

Bldg 500 Hazardous Waste Accumulation Point

All 90-day accumulation areas are constructed of impermeable materials, have adequate secondary containment and spill control equipment to minimize the potential for discharge of hazardous waste. These areas are additionally covered or enclosed to minimize contact with storm water. All secondary containments are equipped with a discharge valve that is maintained in the closed position at all times. Storm water that accumulates in the containment area must be inspected for contamination prior to discharge. All storage areas are inspected daily for signs of leakage or degradation of secondary containment systems.

The BMPs presented under the Drum Storage Areas subsection above also apply to drum storage at all 90-day accumulation areas.

Facility-Wide Oil Management Issues – Hazardous Waste Accumulation Points
Regulatory Deficiencies
• None
Best Engineering Practice Recommendations
• None

3.5.3 Emergency Electrical Generators

Diesel tanks which supply emergency electrical generators at Eglin AFB are included in Table E-1 in Appendix E under the area-by-area listing of ASTs. The location of these diesel tanks is shown on the figures in Appendix A. Emergency generators with internal tanks are also identified in Table E-1 and on the figures. Most generators at Eglin AFB are managed by the 796 Civil Engineering Squadron Power Production Element (796 CES/CEOIP) with the fuel supplied by Fuels Management (96 LRS/LGRF). Generators at the Ranges are managed by contractors or the local tenant organization.

Bldg 44 Generator with Internal Tank

There is typically an emergency generator associated with large and critical mission buildings on Eglin AFB. The Main Base generators are visually inspected by Power Production at a minimum of once a month using Air Force Form 487 (EF-V3), Emergency Generator Operating Log (Inspection Testing) and a locally developed checklist. These inspection forms stipulate inspection

of fuel level, fuel leaks, and oil levels. Inspections are logged on Air Force Form 487 (EF-V3) and the forms are kept on file in the Civil Engineering Power Production Office. 796 CES/CEOIP personnel provide maintenance and repair to the Main Base generator units.

Emergency electrical generators at Duke Field and the Ranges are managed in a similar fashion as are emergency electrical generators at the Main Base. These generators are typically maintained and inspected by tenant organizations and/or contractors, with oversight by the 796 CES/CEOIP.

Most day tanks at Eglin AFB have a capacity between 25 and 60 gallons, though some day tanks exceed this capacity. Recently acquired day tanks at Eglin AFB are double-walled and equipped with level alarms and leak indicators or alarms.

Facility-Wide Oil Management Issues – Emergency Electrical Generators
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

3.5.4 Used Cooking Oil Containers and Grease Traps

Used cooking oil bins are maintained at the major cooking facilities at Eglin AFB, Ranger Camp, 7th Special Forces Group Compound, and Duke Field. These containers are included in Table E-1 in Appendix E.

A typical used cooking oil container used at military facilities is a single-wall steel container, 200 to 250 gallons in size with no unique engineering or overfill features. Eglin also utilizes cylindrical storage tanks for new and used oil storage. Grease traps, as well as OWSs, sumps, interceptors and floor drains are all considered "control devices" and not storage containers, and thus are not included in Table E-1 through Table E-5.

Cooking oil at Eglin AFB is delivered to the dining facilities and cooking facilities in either 50-pound cubes of solid shortening or small cans of liquid cooking oil with typically less than 8 gallons per container; however, in some cases cooking oil is delivered by a bulk tank trunk. The cooking oils are typically corn or soy-based. All cooking oil containers on Eglin AFB, Duke Field, Ranger Camp, and 7th Special Forces Group Compound are serviced by contractor(s). These services are regularly scheduled collections based on a calculated facility usage schedule. Square dumpster bins are typically used outside a facility for cooking oil disposal. These bins are approximately 250-gallon, single-wall metal containers with reinforced bottoms for lifting. The cylindrical bulk tanks are also single-walled but are generally stored inside.

The outside bins are maintained behind cooking facilities and regularly emptied by the contractor's disposal trucks. The bins are either rolled out or lifted directly by the disposal trucks and the contents dumped into the collection compartment on the truck. Some trucks are equipped with vacuum equipment that allows the bins to be suctioned out instead of lifted. Most bins are stored on concrete or paved surfaces to facilitate disposal truck access.

Contractor drivers are trained in spill prevention and cleanup practices. They carry instruction manuals in their trucks. In the case of a leak or spill, the drivers have been instructed to first contain the spill, and in the case of smaller spills, the driver will clean up the spill and notify the headquarters dispatch and the facility. The contractor's collection trucks are equipped with spill kits containing several bags of clay absorbent material, pigs, and absorbent wipes. In the case of larger spills, the drivers are instructed to contain the spill as best they can and then notify dispatch and the facility. Contractors have spill response teams that will respond and clean up the larger spills. The trucks with vacuum equipment are also able to vacuum up any spilled material and are used to respond to larger spill incidents.

When the driver collects the used cooking oil, they also inspect the disposal bins for any damage or leaks. All inspections are noted on forms and records are maintained by the contractor. In the case of a leak, the driver would respond as outlined above. In the case of a damaged container, the driver would note the issues and request replacement of the container with a new bin. In most cases, the new bin is delivered and the old bin removed on the next scheduled pick-up time. The contractors require their clients to have their bins serviced a minimum of twice per year. In addition, Eglin AFB is required to ensure that all used cooking oil containers 55 gallons and greater are visually inspected by the responsible custodian in accordance with the monthly frequency prescribed in Table 7-1. All designated personnel conducting inspections receive the appropriate SPCC training as required in 40 CFR 112.7(f)(1); these specific requirements are addressed in Section 8, Personal Training and Spill Prevention Procedures. Inspection records are maintained by user for a minimum period of three years, in accordance to recordkeeping requirements outlined in 40 CFR 112.7(e).

Secondary containment of the used cooking oil bins is impracticable based on the need for vehicle access and lifting of the bin. Furthermore, and though possible, the placement of these bins on raised spill pallets could adversely impact personnel safety and increase spill potential (i.e., tip-over, awkward unloading position/height for used cooking oil vendor) as well as add the additional operational burden of requiring Eglin AFB to properly document and drain spill pallets that are exposed to rainwater. The impracticability provision found in §112.7(d) allows facility owners/operators to substitute a combination of other measures in place of secondary containment; Section 6, Impracticability of Secondary Containment, addresses these measures.

Facility-Wide Oil Management Issues – Used Cooking Oil and Grease Traps

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- Recommend Eglin AFB ensure their used cooking oil containers remain stored on impermeable surfaces and remain situated away from nearby storm drains or other receiving waters. It is also recommended that Eglin AFB verify their used cooking oil contract personnel are trained in response methods/procedures and ensure that all associated used cooking oil handlers at Eglin AFB (i.e., mess halls, vendor restaurants, etc.) are also knowledgeable of response procedures.

3.5.5 Oil Water Separators

OWSs at Eglin AFB are considered "control devices," and thus are not listed in Table E-1 through Table E-5. All OWSs are managed in general accordance with practices established by the facility's OWS Management (OWSM) Plan entitled *Oil Water Separator Management Plan for*

Eglin AFB, Florida (May 2003). This management plan and tool identifies OWS locations at Eglin AFB, the individual equipment operation specifications, and specific guidance on maintenance and inspection.

Facility-Wide Oil Management Issues – Oil Water Separators
Regulatory Deficiencies • None **Best Engineering Practice Recommendations** • None

3.5.6 Permanently Closed Tanks

Closure in Accordance with Federal Regulations

The definition of "permanently closed" per 40 CFR 112 is listed below. If Eglin AFB intends to remove a tank from service, and thus SPCC planning, the tank must be rendered to meet the definition of "permanently closed."

40 CFR 112.2 Definitions:
Permanently closed *means any container or facility for which:* (1) *All liquid and sludge has been removed from each container and connecting line; and* (2) *All connecting lines and piping have been disconnected from the container and blanked off (i.e., capped or blank-flanged), all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.*

Closure in Accordance with State Regulations

Also note that Eglin AFB must comply with FDEP 62-762.801 (Out-of-Service and Closure Requirements). This state regulation places additional requirements on Eglin AFB to ensure its FDEP-regulated ASTs and USTs are properly closed or maintained while in a temporary out-of-service mode. Recommissioning requirements for temporarily closed storage tank systems are also detailed in Section 62-762.801. Both field-erected and shop-fabricated tanks are subject to this rule.

The following list highlights the general applicability and requirements of FDEP 62-762.801:

<u>Out-of-Service Systems (temporary and non-temporary systems)</u>

- Corrosion protection must be maintained.
- Vent lines must remain open.
- Release detection must be monitored monthly (for systems with leak detection).
- Tank system, lines, caps, etc. must be empty of product.
- System must be secured or closed off to outside access.
- Certain testing and/or inspections are required to return an out-of-service tank system to service.

- Time limits apply to how long a specific tank system may be classified as out-of-service. Otherwise the tank system is considered "unmaintained", and it becomes subject to closure requirements summarized below.

Closure

- All liquids and sludges must be removed.
- Disconnect and cap, or remove all internal piping, and secure manways.
- Complete a closure assessment per FDEP requirements.
- Close all inactive monitoring wells per FDEP requirements.
- Unmaintained tank systems shall be closed within 90 days of discovery.
- Tank shall be rendered free of vapors.
- Tank shall be protected from flotation per NFPA 30.

Facility-Wide Oil Management Issues – Permanently Closed Tanks
Regulatory Deficiencies • None. **Best Engineering Practice Recommendations** • None

3.5.7 Qualified Oil-Filled Operational Equipment

Oil-filled equipment owned and operated at Eglin AFB regulated by this plan include elevators, cardboard bailers, and miscellaneous aerospace ground equipment (AGE). There are 40 building elevators with varying oil capacities greater than 55 gallons. There is one cardboard bailer used at the Recycle Center; the bailer contains 160 gallons of hydraulic oil. Elevators and the cardboard bailer and their drive systems are inspected monthly by a contractor and or user with documented results. Elevators and the cardboard bailer are contained within a building; therefore, they have sufficient secondary containment and are not considered to have the capacity to negatively affect waterways on and near Eglin AFB. The documented monthly inspection requirement has been added to Eglin's SPCC training, which is provided quarterly unless required more often by a specific work center.

Oil-filled AGE equipment is stored near the Main Base and Duke Field flight lines. This equipment includes mobile air-conditioning units and diesel air carts, with fuel capacities ranging from 60 to 65 gallons per unit (Table E-5). Due to the location of these units on the flight line, the equipment does not have any structural secondary containment; however, adequate spill absorbent materials/equipment is kept in the vicinity as a form of active secondary containment.

Additional oil-filled equipment present at Eglin AFB includes transformers and substations. The transformers and substations are privately owned and maintained by Chelco; therefore, they are not addressed in this SPCC Plan.

3.6 AREAS EXCLUDED FROM SPCC PLANNING

Certain areas owned by Eglin AFB are leased for non-Air Force uses. These areas include the following:

- Alabama Army National Guard (Building 9103)
- Tank 9103-3 (4,000 gal. diesel)
- Tank 9103-4 (2,000 gal. mogas)
- Tank 9107-1 (480 gal. used oil)
- Tank 9107-2 (480 gal. used oil)
- Tank 9107-3 (280 gal. used oil)

Eglin AFB has a Host/Tenant Support Agreement (H/TSA) with the Alabama Army National Guard. The H/TSA ensures oil spill prevention and response liability is incurred by the Alabama Army National Guard and not Eglin AFB.

The following guidance is presented to assist Eglin AFB in managing leased operations and facilities with respect to this SPCC Plan.

Excluded Facilities Guidance
Onsite lessees of contiguous areas of Eglin AFB which are excluded from the Eglin AFB SPCC planning process are required to certify that they will comply with all applicable federal, state and local as well as facility environmental laws and regulations. Additionally, Eglin AFB is required to initiate a system of active management regarding these leased areas which are exempted from the Eglin AFB SPCC planning process. At a minimum, lease language is required to be modified to include verbiage which stipulates that the lessee shall comply with all applicable federal, state, local as well as Base laws and regulations. Combining adequate lease language with a program of active management for leased lands (i.e., field verification of compliance, inclusion of leased lands in the facilities internal environmental compliance audits) will serve to better ensure Eglin AFB that their lessees are complying with applicable regulations.

Areas Excluded From SPCC Planning
Regulatory Deficiencies • None **Best Engineering Practice Recommendations** • None

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4. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

112.7(b): Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

4.1 ABOVE AND UNDERGROUND STORAGE TANKS/CONTAINERS, DRUM STORAGE AREAS, AND GENERATORS WITH INTERNAL TANKS

Table E-1 through Table E-5 list Eglin AFB oil storage structures and the maximum volume that could be released if a failure occurred. The worst-case spill rate is assumed to be an instantaneous release of the entire structure (i.e., rupture for bulk ASTs, tip over for drums, overfill for USTs).

Additionally, figures provided in Appendix A show the direction of flow from the storage structure, should the secondary containment device (if present) hypothetically fail or be insufficient to handle the release. The estimated capacity of the secondary containment device for fixed aboveground and underground storage tanks/containers is included in Table E-1 and Table E-2. The secondary containment capacity estimates are based on rough field measurements and/or information provided by facility personnel.

4.2 TANK TRUCK FUEL LOADING/UNLOADING OPERATIONS

Table 10-1, Tank Truck Fuel Loading/Unloading Racks, provides information on Eglin AFB tank truck fuel transfer operations. This table includes facility type and location, potential release volume (or rate), storm water drainage control methods and adequacy of secondary containment (i.e., permeability and capacity). Fuel unloading racks at the Marine Transfer Point at Weekley Bayou are also included in Table 10-1, though this facility is primarily regulated under 33 CFR 154 (U.S. Coast Guard), not 40 CFR 112 (USEPA). The release potential of fuel unloading operations at the Marine Transfer Point is detailed in Table 10-1 as a best management practice summary.

4.3 MOBILE/PORTABLE STORAGE CONTAINERS

Table E-4, Mobile/Portable Oil Storage Containers, provides information on Eglin AFB mobile (i.e., tank trucks) and portable oil storage containers. This table includes location, type and quantity of equipment, container capacity and adequacy of secondary containment (i.e., capacity). A release associated with mobile/portable oil storage containers would be contained by the listed secondary containment and/or diversion system, or localized for tank truck or bowser staging areas that are presently not contained.

4.4 SECONDARY CONTAINMENT CONSIDERATIONS

Refer to Section 14.2, Diked Area Construction and Containment Volume for Bulk Containers, for a description of secondary containment considerations such as capacity estimates, freeboard determination and a listing of storage tanks with inadequate or inexistent secondary containment or suspect permeability issues.

40 CFR 112.7(b), Potential Spill Predictions, Volumes, Rates, and Control
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

5. DRAINAGE PREVENTION DIVERSIONARY STRUCTURES AND CONTAINMENT

112.7(a)(3)(ii): You must also address in your Plan discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.).

112.7(a)(3)(iii) You must also address in your Plan discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

112.7(c): Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in § 112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;
(ii) Curbing or drip pans;
(iii) Sumps and collection systems;
(iv) Culverting, gutters, or other drainage systems;
(v) Weirs, booms, or other barriers;
(vi) Spill diversion ponds;
(vii) Retention ponds; or
(viii) Sorbent materials.

5.1 ENGINEERED CONTROL METHODS

Except for areas noted in Section 10.2, Adequate Secondary Containment for Vehicles, or Section 14.2, Diked Area Construction and Containment Volume for Bulk Containers, or Section 14.11, Appropriate Position of Mobile or Portable Oil Storage Containers, all areas in which oil is stored are equipped with appropriate containment and/or diversionary structures to prevent discharged oil from reaching a navigable watercourse and are in conformance with industry standards. Table E-1 and Table E-2 (Appendix E) list the secondary containment/diversion structure for the primary oil storage areas (fixed aboveground and underground tank/container storage) at Eglin AFB.

5.2 ALTERNATE CONTROL METHODS

In addition to dikes, drainage systems, or spill diversion structures, each fuel loading/unloading area and oil storage structure is located within acceptable range of the spill response equipment/personnel should a release occur. Eglin AFB spill response training, procedures, equipment and notification procedures are detailed further in the Eglin AFB FRP, and discussed briefly in Sections 8, Personnel Training and Spill Prevention Procedures, and Section 16, Written Spill Report Guidelines. Furthermore, fuel loading/unloading rack operations are detailed in Section 10, Loading/Unloading Operations. As described in Section 2.2, Facility Contact(s), Environmental Compliance (96 CEG/CEIEC) has primary responsibility for the Eglin AFB FRP.

5.3 CONSIDERATION OF INDUSTRY STANDARDS

As a reference, the industry standards for "Impounding Around Tanks by Diking" and "Secondary Containment Tanks" are outlined below. These standards are generally incorporated into FDEP 62-762 and this SPCC Plan.

INDUSTRY STANDARD CONSIDERATION:

Impounding Around Tanks by Open Diking (NFPA 30-2018, Section 22.11.2)

(1) A slope of not less than 1% away from the tank shall be provided for at least 50 feet or to the dike base, whichever is less.

(2) The volumetric capacity of the diked area shall not be less than the greatest amount of liquid that can be released from the largest tank within the diked area, assuming a full tank.

(3) The outside base of the of the dike at ground level shall be no closer than 10 feet to any property line, where the property is or can be built upon**.**

(4) Walls of the diked area shall be of earth, steel, concrete, or solid masonry designed to be liquid-tight and to withstand a full hydrostatic head.

(5) Provisions shall be made for normal access, necessary emergency access, and egress from the diked enclosure for diked areas with walls of an average interior height greater than 6 feet.

(6) Each diked area containing two or more tanks shall be subdivided, preferably by drainage channels or at least by intermediate dikes to prevent spills from endangering adjacent tanks within the diked area.

(7) Draining water from diked areas shall be controlled to prevent liquids from entering natural water courses, public sewers, or public drains.

Secondary Containment Tanks (NFPA 30-2018, Section 22.11.4)

(1) Tank capacity of the listed primary tank for Classes I, II, and IIIA liquids should not exceed 50,000 gallons.

(2) Piping connections to the tank should be made above the maximum liquid level.

(3) Means shall be provided to prevent the release of liquid from the tank by siphon flow.

(4) Means shall be provided for determining the liquid level of tank (i.e., stick, gauge, etc.).

(5) Means shall be provided to prevent overfilling by sounding an alarm when the liquid level in tank reaches 90% capacity and automatically stopping delivery in the tank when liquid level reaches 95% capacity.

(6) Adjacent tanks shall be spaced in accordance with Table 22.4.2.1 (no less than 3 feet for smaller tanks).

(7) Tank shall be capable of resisting the damage from the impact of a motor vehicle or suitable collision barriers shall be provided.

(8) Where secondary containments are enclosed, it shall have appropriate emergency venting.

(9) Means shall be provided to establish the integrity of the secondary containment.

(10) Secondary containment should be designed to withstand hydrostatic head resulting from a leak from the primary tank of the maximum amount of liquid that can be stored in the primary tank.

40 CFR 112.7(c), Drainage Prevention Diversionary Structures and Containment

Regulatory Deficiencies

- Refer to Sections 10.2, 14.2 and 14.11

Best Engineering Practice Recommendations

- None

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6. IMPRACTICABILITY OF SECONDARY CONTAINMENT

112.7(d): If you determine that the installation of any of the structures or pieces of equipment listed in 40 CFR 112.7 (c) and (h)(1), and 112.8(c)(2), 112.8(c)(11), … to prevent a discharge as described in 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under 112.20, provide in your Plan the following:
An oil spill contingency plan following the provisions of 40 CFR 109.
A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

6.1 OIL SPILL CONTINGENCY PLAN AND COMMITMENT OF PERSONNEL AND RESOURCES

Eglin AFB has a strong oil spill response contingency action plan identified in the Eglin AFB FRP. In addition, Eglin AFB has a commitment of manpower and equipment from the Base Fire Departments that would expeditiously control a release of oil products.

In the event of spill or a release of a hazardous substance, response parties should refer directly to the Eglin AFB FRP. The plan is intended to address discovery, initial response, spill response procedures, implementation of tactical plan, sustained actions, and termination and follow-up actions.

6.2 EGLIN AFB FRP MANAGEMENT AND RESPONSIBLE OFFICES

The office of primary responsibility for the Eglin AFB FRP is Environmental Compliance (96 CEG/CEIEC). Copies of the Eglin AFB FRP are also maintained by Disaster Preparedness, the Disaster Control Group, Base Plans, Base Fuels, the Security Police, and the Base Fire Departments.

6.3 IMPRACTICABILITY OF SECONDARY CONTAINMENT FOR USED COOKING OIL

Secondary containment is considered impracticable for the used cooking oil storage bins, for the reasons outlined in Section 3.3.4, Used Cooking Oil Containers and Grease Traps, above. Spill response and absorbent materials located at each site will be used as the primary means of containment in these cases. Furthermore, Eglin AFB completes an extensive preventive maintenance program including regular inspection and maintenance of used cooking oil bins. Sections 7, Inspection/Testing/Record-Keeping, and 14.6, Aboveground Container Periodic Integrity Testing, address the inspection program as it is conducted at Eglin for all oil storage containers, including cooking oil.

6.4 IMPRACTICABILITY OF SECONDARY CONTAINMENT FOR FLIGHT LINE AIRCRAFT AND MOBILE/PORTABLE EQUIPMENT

Eglin AFB is comprised of several Air Force operational wings and squadrons as previously described in Section 2.4, Operational Overview. This wings and squadrons consist of the 20 SPSS, 33 FW, 96 TW, and the 53 WG. The primary flying wings are the 33 FW and 96 TW. As an armament development, design center, Eglin AFB also receives and temporarily bases numerous Air Force, Navy, and Marine test aircraft for specific weapons testing. Duke Field is comprised of one flying wing, the 919 SOW. Eglin AFB and Duke Field routinely host other transient U.S. or Allied Forces aircraft spanning a wide range of aircraft mission design series.

All aircraft are staged (i.e., parked while not in use) either on the flight line or inside adjacent maintenance hangars along the flight line. The aircraft on the flight line are typically maintained in a "flight ready" mode thereby requiring their tanks to be full with jet fuel.

AGE equipment that is staged near the Main Base and Duke Field flight lines includes several AM32A-60 generator units, multi-purpose generators, PAO servicing carts, diesel power carts, fuel pup reclaimers, and fuel bowsers. The locations and fuel capacities are provided in Table E-4 and Table E-5. These units are parked on a concrete surface when staged for use or during maintenance, but it is not considered completely impermeable due to typical surfacing irregularities and design features.

Due to operational restrains surrounding aircraft and flight line ground operations, the flight line at Eglin AFB (or any other commercial or military airport/airfield) does not act as adequate secondary containment in case of a fuel release. The entire surface of the Eglin AFB flight line is paved or is concrete, but is not considered completely impermeable due to typical surfacing irregularities and design features. As described throughout this plan, Eglin AFB maintains an active spill response contingency protocol. Spill response resources (labor and equipment), facility drainage controls and procedures as outlined in this SPCC Plan will be utilized in the event of a release of jet fuel from any staged Eglin AFB or transient aircraft and/or mobile/portable equipment.

6.5 EGLIN AFB FRP

The intent of this SPCC plan regulatory citation is additionally and adequately addressed by the Eglin AFB FRP.

40 CFR 112.7(d), Impracticability of Secondary Containment
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

7. INSPECTION/TESTING/RECORD-KEEPING

112.7(e): Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of 3 years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

A summary of inspection and integrity testing schedules for the variety of oil storage containers and systems at Eglin AFB is presented in Table 7-1 and Table 7-2.

7.1 ROUTINE VISUAL INSPECTIONS

Table 7-1 addresses required routine, visual inspections. The inspections listed in this table can be performed by qualified Eglin AFB personnel or contractors, such as Water and Fuels Maintenance (796 CES/WFM), Fuels Management (96 LRS/LGRF), Power Production (796 CES/CEOIP), Exterior Electric Shop (796 CES/CEOIE), Generator Owner, Tank/Container Custodian, Drum Storage Area Custodian, or Specialty Contractor (e.g., authorized API or STI inspector).

Air Force Technical Order (AFTO) inspection forms are currently used for all major oil storage and transfer facilities, including AFTO Form 39 for recording bulk tank inspections; AFTO Form 172 for bulk tank interior cleanings; AFTO Form 1807 for tank truck inspections; and AFTO Form 422 for pump inspections. These records are kept on file for at least 3 years.

The AFTO forms may continue to be utilized; however, example inspection forms for routine visual inspections are provided in Appendix C as an option. In addition, example forms for other containers are provided.

- Form 1 – Secondary Containment Drainage and Inspection Log
- Form 2 – Bulk Fuel Storage Tank Routine In-Service Inspection Checklist
- Form 3 – Cathodic Protection System Routine Operational Inspection Checklist
- Form 4 – Bulk Fuel Piping Routine In-Service Inspection Checklist
- Form 5 – Tank Truck Fuel Loading/Unloading Station Inspection Checklist
- Form 6 – Ancillary Aboveground Storage Tank, Generator, Pad-Mounted Transformer and Substation, and Used Cooking Oil Container Inspection Checklist
- Form 7 – Oil Drum Storage Area Inspection Checklist

Also note that Fuels Management (96 LRS/LGRF) inspects the bulk jet fuel systems and other non-organizational fuel tanks in accordance with T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section IV – Operator's Inspection and Maintenance).

These routine visual inspections satisfy the above requirements as follows:

- Daily, or prior to each use, inspections of loading/unloading areas for integrity, deterioration and leaks, including flexible hose lines
- Daily inspections for storage areas, secondary containment or diversions systems, and all aboveground pipes
- Weekly inspections for aboveground valves, pumps, flanges, connections, equipment, and all security fences and locks
- Monthly inspections of exterior of tank for leaks and corrosion

The results of the routine daily, weekly, and monthly visual tank inspections completed by Fuels Management (96 LRS/LGRF) are recorded on AFTO Form 39, Fuel System Inspection and Discrepancy Report. For any discrepancies which are identified during the inspection, they are noted on the form and a work order request is submitted. This work order is tracked through completion on this form. Water and Fuels Maintenance (796 CES/WFM) executes the work order and occasionally provides the inspection during routine maintenance.

In addition to these routine visual inspections, the following system checks are completed on a periodic basis by Eglin AFB fuel system operation personnel:

- Quarterly inspections to check product recovery tank (as applicable) for leaks and high level valve (via manual operation)
- Semi-annual inspection, cleaning and maintenance of tank vents
- Annual check of tank high level valve (via tank filling)

7.2 NON-ROUTINE INSPECTIONS AND INTEGRITY TESTING

Table 7-2 addresses minimum required integrity testing and non-routine inspections that must be performed by qualified inspectors. The integrity testing and inspections listed in this table must be performed in accordance with acceptable industry standards and/or regulatory requirements.

7.3 INSPECTION AUTHORITY PROOF

Each inspection form is signed and dated by an appropriate supervisor or inspector as noted on the top of the inspection forms in Appendix C.

7.4 RECORD MAINTENANCE

As indicated by Table 7-1 and Table 7-2, records of all inspections and integrity tests are maintained for a minimum of 3 years. However, records of non-routine inspections and integrity tests are maintained for an indefinite period of time or the lifetime of the equipment. These records are maintained by:

- Environmental Compliance (96 CEG/CEIEC)
- Civil Engineering Group (96 CEG)

- Fuels Management (96 LRS/LGRF)
- Water and Fuels Maintenance (796 CES/WFM)
- Power Production (796 CES/CEOIP)
- The office of authorized/certified inspector (e.g., API 653 authorized inspector, offsite)
- The office of specialty contractor

FDEP 62-762 Consideration: Section .711 (Record-Keeping) requires that all records, whether in paper or electronic format, be dated and available for review by FDEP or county personnel. Per Section .711(2), the following types of records generated on or after 11 January 2017 must be maintained for at least 3 years; records generated prior to 11 January 2017 must be maintained for 2 years – inventory records, release detection records, test data and results from annual operability tests and integrity tests, repair/operation/maintenance documentation, etc. Per Section .711(3), an example of some of the records that must be maintained for the life of the storage tank system include: internal inspections and nondestructive testing reports, installation/replacement/certification/upgrade records, cathodic protection system installation/maintenance/inspection/testing documentation, as-builts, etc.

FDEP 62-762 Consideration: Section .901 (Storage Tank Forms) provides general requirements and a listing of seven storage tank system forms potentially required by FDEP-regulated facilities. The forms (or reports) all have effective dates of January 2017 and are listed below:

- Discharge Report Form
- Storage Tank Facility Registration Form
- Alternative Procedure Form
- Incident Notification Form
- Closure Integrity Evaluation Report Form for ASTs
- Limited Closure Report Form for ASTs
- Storage Tank Equipment Registration Form

7.5 RECURRING MAINTENANCE

Eglin AFB Water and Fuels Maintenance (796 CES/WFM) employs a Recurring Work Program (RWP) in accordance with UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuel Systems Maintenance) to ensure a safe, efficient and economical operation of petroleum storage, dispensing systems and associated infrastructure. Components of the RWP include recurring maintenance and inspections of critical fuel-related systems as summarized below:

- Automatic Control Valves (Type II, III, IV, and V [hot pit])
- Hoses (offloading and issue)
- Manual Valves (lubricated plug, gate, non-lubricated plug)
- Meters (master meter, meter calibration, drain water)

- Miscellaneous (system areas, surge suppressors, signs and markers, pressure relief, service station dispensers, direct reading gauge, DP/PI transmitter, cathodic protection, PPE, electrical components, hydrant adapters, auto tank gauge, and strainer)
- Piping (pressure test, hydrostatic test, exposed piping control and identification)
- Pumps (general maintenance, lubrication and product recovery)
- Storage Tanks (vacuum/pressure vent, dikes, visual and API 653 inspections, floating roof/pan, and cleaning and inspections)

Furthermore, Air Force Pamphlet (AFPAM) 32-1004, Volume 2, Working in the Operations Flight – Maintenance Engineering, Chapter 8, documents the preventive maintenance methodology used by the Air Force Civil Engineering community.

Maintenance action sheets established by 796 CES/WFM include monthly, quarterly, semi-annual and annual maintenance checks of the following 28 components of bulk fuel storage tanks at Eglin AFB:

- Aboveground storage tanks
- Underground storage tanks
- Pumps
- Manual valves
- Liquid level gauges and low levels
- High level control valves
- Dual rate of flow control valves
- Refuel control valve
- Defueling control valve
- Pressure relief valve
- Fuel discharge valve
- Truck fillstand swing joint
- Ground cables
- Ground connections aboveground storage tanks
- Disconnect switches
- Starters and contactors
- Wiring and fuse boxes
- Emergency stop switches
- Meters
- Pressure gauges
- Tank entry safety equipment

- Dispensers
- High level alarms
- None surge check valves
- Pipeline underground
- Fuel issue valve
- Off-loading control valve
- Deadman control

7.6 API 653 INSPECTIONS

Refer to Section 11, Brittle Fracture or Other Catastrophe of Field-Erected Containers, of this SPCC Plan for summary details regarding API 653 inspections of the field-erected bulk fuel storage tanks at Eglin AFB. Field-erected tank systems include:

- Main Base Bulk Fuel Storage Area
- Mid Field Bulk Fuel Storage Area
- West Side Bulk Fuel Storage Area
- Duke Field Bulk Fuel Storage Area

The summary details in Section 11 include (1) suitability for service statements, (2) re-inspection interval development, and (3) brittle fracture consideration (if available from the current API 653 report).

40 CFR 112.7(e), Inspection/Record-Keeping
Regulatory Deficiencies ● Refer to Section 11, Brittle Fracture or Other Catastrophe of Constructed Containers **Best Engineering Practice Recommendations** ● None

Table 7-1
Routine Inspection Schedule
Eglin Air Force Base

Type of Inspection	Required Frequency	Responsible Person	Regulatory Driver	Example Inspection Form[1]	Record Retention
Secondary Containment Drainage					
Operational (Routine)	Within 7 days of rainfall event	Fuels Management (96 LRS/LGRF) or Tank Custodian	40 CFR 112 and FDEP 62-762	Form 1 Appendix C	3 years
Bulk Fuel Storage Tanks[2]					
External Visual In-Service (Routine)	Daily[3]	Fuels Management (96 LRS/LGRF)	40 CFR 112 and FDEP 62-762	Form 2 Appendix C AFTO 39	3 years
Cathodic Protection Systems					
Operational (Routine)	Every 2 months[4]	Exterior Electric Shop (796 CES/CEOIE)	FDEP 62-761	Form 3 Appendix C	Indefinite or lifetime of equipment
Operational (Routine)	Annually[4]	Defense Logistics Agency Energy (DLA-E) CMP	FDEP 62-761	Form 3 Appendix C	Indefinite or lifetime of equipment
Bulk Fuel Piping					
External Visual (Routine)	Daily[3]	Fuels Management (96 LRS/LGRF)	40 CFR 112 and FDEP 62-761	Form 4 Appendix C AFTO 39	3 years
Operational (Routine)	During fuel transfer	Fuels Management (96 LRS/LGRF)	40 CFR 112 and FDEP 62-761	Form 4 Appendix C AFTO 39	3 years
Tank Truck Fuel Loading/Unloading Stations					
External Visual (Routine)	Weekly	Fuels Management (96 LRS/LGRF)	40 CFR 112 and FDEP 62-762	Form 5 Appendix C AFTO 39	3 years
Ancillary Tanks[5]					
External Visual (Routine)	Monthly	Tank Custodian	40 CFR 112 and FDEP 62-762	Form 6 Appendix C	3 years
Generators[6]					
External Visual (Routine)	Monthly	Generator Owner/ Power Production (796 CES/CEOIP & 96 CES/CEOMFU)	40 CFR 112 and FDEP 62-762	Form 6 Appendix C	3 years

Table 7-1
Routine Inspection Schedule
Eglin Air Force Base

Type of Inspection	Required Frequency	Responsible Person	Regulatory Driver	Example Inspection Form[1]	Record Retention
Used Cooking Oil Containers					
External Visual (Routine)	Monthly	Dining Facility Staff	40 CFR 112 and FDEP 62-762	Form 6 Appendix C	3 years
Oil Drums and Portable/Mobile Containers					
External Visual (Routine)	Monthly	Shop Manager or Designee	40 CFR 112	Form 7 Appendix C	3 years

Routine Inspection can be performed by qualified Eglin AFB/contractor personnel (OPR, Liquid Fuels Maintenance, Fuels Management, Power Production, Exterior Electric, Generator Owner, Tank Custodian, OWS Management Contractor, Drum Storage Area Custodian, Specialty Contractor)
CFR Code of Federal Regulations
FDEP State of Florida Department of Environmental Protection

Notes:
1 AFTO Forms 39 (bulk tanks), 172 (internal cleaning of bulk tanks), 422 (pumps), and 1807 (tank trucks) can be used in lieu of several of the example inspection forms listed above
2 Bulk tanks are field-erected tanks and are used for bulk storage AND issue of fuel (i.e., Main Base, Mid Field, West Side and Duke Field Bulk Fuel Storage Areas).
3 This SPCC Plan stipulates daily visual in-service inspections for bulk fuel storage though FDEP 62-762 only requires monthly visual in-service inspections (< 35 days).
4 Applies to impressed current systems. DLA-E manages and inspects cathodic protection systems in tanks containing capitalized product.
5 Ancillary tanks are shop-fabricated tanks that are considered consumptive-use tanks (i.e., end-point tanks).
6 Applies to generators with internal fuel tanks.

Table 7-2
Non-Routine Inspection and Integrity Testing Schedule
Eglin Air Force Base

Type of Inspection	Required Frequency	Responsible Person	Report	Record Retention
Bulk Fuel Storage Tanks[1]				
Interior Cleaning	IAW internal inspection schedule	Fuels Personnel	AFTO Form 172	Indefinite or lifetime of equipment
External Visual (Non-Routine)	IAW API 653 6.3.2.1 or UFC 3-460-03[2]	Florida P.E. or API 653-Authorized Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment
External Ultrasonic[3] (Non-Routine)	IAW API 653 6.3.3.2 or UFC 3-460-03	Florida P.E. or API 653-Authorized Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment
Internal (Non-Routine)	IAW API 653 6.4.2 or 6.4.3, or UFC 3-460-03[4]	Florida P.E. or API 653-Authorized Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment
Cathodic Protection Systems[5] Defense Logistics Agency (DLA) CMP Program				
Operational (Non-Routine)	IAW API RP 651 or UFC 3-460-03	IAW API RP 651	Inspector Certified SSE	Indefinite or lifetime of equipment
General (Non-Routine)	Within 6 months of installation/repair and annually thereafter	Corrosion Professional or Cathodic Protection Tester	Inspector Certified SSE	Indefinite or lifetime of equipment
Bulk Product Piping (aboveground)				
Thickness Determination (Non-Routine)	Every 10 years (Class 3 circuit) IAW API 570	API 570-Authorized Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment
External Visual (Non-Routine)	Every 10 years (Class 3 circuit) IAW API RP 574	API 570-Authorized Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment
Hydrostatic Testing (Non-Routine)	IAW ASME B31.3, API RPs 574 and 579, or UFC 3-460-03	Certified Hydrostatic Tester	Inspector Certified SSE	Indefinite or lifetime of equipment
Pressure Testing (Non-Routine)	Annually IAW UFC 3-460-03	Fuels Personnel	Inspector Certified SSE	Indefinite or lifetime of equipment
Bulk Product Piping (buried)				
Pressure Testing (Non-Routine)	Every 2.5 to 15 years IAW API 570[6]	Certified Pressure Tester	Inspector Certified SSE	Indefinite or lifetime of equipment
Ancillary Tanks[7]				
Integrity Testing[8] (Non-Routine)	IAW STI SP001-03 or API 912	NA	NA	NA
Drums and Portable/Mobile Containers				
Integrity Testing[9] (Non-Routine)	IAW DoD Drum and Portable Container Policy	NA	NA	NA

Table 7-2
Non-Routine Inspection and Integrity Testing Schedule
Eglin Air Force Base

Type of Inspection	Required Frequency	Responsible Person	Report	Record Retention
Used Cooking Oil Containers				
Integrity Testing[9] (Non-Routine)	IAW STI SP001-03 or API 912	NA	NA	NA
Generators				
Integrity Testing[8] (Non-Routine)	IAW STI SP001-03 or API 912	NA	NA	NA
Underground Storage Tanks[10]				
Pressure Testing (Non-Routine)	Annually[11]	Qualified Tank Inspector	Inspector Certified SSE	Indefinite or lifetime of equipment

AFTO Air Force Technical Order
API American Petroleum Institute
ASME American Society of Mechanical Engineers
DoD Department of Defense
IAW In Accordance With
NA Not Applicable
Non-Routine Inspection is performed by qualified/certified personnel in accordance with regulatory requirements and/or industry accepted standards and/or Unified Facilities Criteria.
RP Recommended Practice
SSE Suitability-for-Service Evaluation (a technical document certifying suitability for service, presenting recommendations and required corrective actions, and presenting reinspection frequency)
STI Steel Tank Institute
UFC Unified Facilities Criteria

Notes:
1 Bulk tanks are field-erected tanks and are used for bulk storage AND issue of fuel (i.e., Main Base, Mid Field, West Side, and Duke Field Bulk Fuel Storage Areas).
2 Typically every 5 years or as determined by the calculated corrosion rate.
3 Internal (non-routine) inspection may substitute for external ultrasonic inspection if API 653 6.3.3.3 is met.
4 Typically every 10 years or as determined by the calculated corrosion rate.
5 Impressed current systems that are inoperative for a cumulative period exceeding 1,440 hours (60 days) shall be assessed by a Corrosion Professional to ensure the storage tank system is structurally sound, free of corrosion holes, and operating in accordance with design criteria (per FDEP 62-761).
6 Interval depends on soil resistivity and whether buried piping is cathodically protected (reference API 570 Table 9.1)
7 Ancillary tanks are shop-fabricated tanks and considered as consumptive-use tanks (i.e., end-point tanks).
8 See Section 14.6.1 to determine the integrity testing required for a shop-fabricated AST.
9 Previous Note 8 applies (for drums, portable/mobile containers, and used cooking oil containers).
10 Nonregulated completely buried metallic USTs.
11 Or when installed, modified, relocated, or replaced.

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8. PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES

Elements of this requirement are addressed below and in the Eglin AFB FRP.

8.1 PERSONNEL INSTRUCTIONS

112.7(f)(1): At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

8.1.1 Organizational Fuel Tank Custodian Training

All organizational fuel tank custodians at Eglin AFB receive initial spill prevention training which is provided by Environmental Compliance (96 CEG/CEIEC) and the Fuels Management Office (96 LRS/LGRF). This training focuses on safety, prevention, awareness, and spill response, and is offered quarterly and/or as required. Environmental Compliance (96 CEG/CEIEC) maintains a list of personnel trained on SPCC requirements. Fuels Management (96 LRS/LGRF) issues a Certificate of Competency (Air Force Form 483) to trained tank custodians.

Required Training Topics

- Operation and maintenance of equipment to prevent oil discharges
- Discharge prevention protocols
- Discussion of applicable pollution control laws, rules, and regulations
- General facility operations
- Purpose and overview of SPCC Plan

Other Training Topics

- Review of potential spill areas and drainage routes
- Review of emergency response procedures
- Review of spill cleanup equipment locations and the use of the equipment
- Recent spill events, subsequent response, and corrective action

8.1.2 Fuel System Operator and Water and Fuels Maintenance Training

Fuel system operator and Water and Fuels Maintenance training and education is provided to Eglin AFB Fuels Management (96 LRS/LGRF) and Water and Fuels Maintenance (796 CES/WFM) oil system personnel via career development courses and on-the-job training.

8.1.3 Update Training and Spill Response Exercises/Drills

Annual refresher training and spill response exercises/drills are completed in addition to the initial training. Intermediate training sessions are conducted for appropriate personnel as described above or when a process or procedure changes, and for new employees who are responsible for the implementation of any portion of the SPCC Plan. Eglin AFB Environmental Compliance (96 CEG/CEIEC) has developed a web- and classroom-based spill prevention training program that is accessible by all facility personnel to assure continued compliance with the annual training requirement.

8.1.4 Inspection Personnel Training

Specific individuals, who are designated as SPCC Plan inspection personnel as identified in Table 7-1 are also trained on the inspection procedures to be used, the frequency of inspections, record-keeping requirements, and procedures for reporting and correcting detected problems.

8.1.5 Contractor Training

Contractors working in areas associated with oils or hazardous substances are responsible for training their personnel in spill response and reporting procedures. The Eglin AFB contract quality assurance evaluator is responsible for providing onsite contractors with a summary of spill response and reporting procedures made available by Environmental Compliance (96 CEG/CEIEC).

40 CFR 112.7(f)(1), Personnel Instructions

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

8.2 DESIGNATED PERSON ACCOUNTABLE FOR SPILL PREVENTION

112.7(f)(2): Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

Each assigned organizational tank and oil system custodian is responsible for oil spill prevention and reporting to Environmental Compliance (96 CEG/CEIEC). The SPCC Lead at Environmental Compliance (96 CEG/CEIEC) is the designated person accountable for spill prevention at Eglin AFB.

The following Eglin AFB organizations are the primary contacts for the SPCC Plan:

Title/Organization	Telephone Number
POL/Storage Tank Program Manager (96 CEG/CEIEC)	850.882.1856
Environmental Compliance (96 CEG/CEIEC)	850.882.4437

40 CFR 112.7(f)(2), Designated Person Accountable for Spill Prevention

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

8.3 SPILL PREVENTION BRIEFINGS

112.7(f)(3): Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

Eglin AFB schedules and conducts spill prevention training quarterly and performs briefings as part of its annual training. The purpose of the briefings is to discuss (1) recent spill events, (2) causes of the spill, (3) corrective action to prevent recurrence of similar spills, and (4) general spill prevention techniques.

Personnel responsible for the oil storage areas/inspections and spill response personnel are typically included in the SPCC Plan briefings. This annual briefing and annual spill response exercise is previously described in Section 8.1, Personnel Instructions.

40 CFR 112.7(f)(3), Spill Prevention Briefings

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

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9. SITE SECURITY

Elements of this requirement are addressed below and in the Eglin AFB FRP.

112.7(g): Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.

9.1 ACCESS CONTROL

Perimeter facility security is ensured at Eglin AFB by the 96th Security Forces Squadron (96 SFS). 96 SFS controls access to Eglin AFB through four manned security gates/check-points. Access to the Range sites is also controlled by fencing and security gates.

Base-wide access is reserved for active and retired military personnel, civilian employees, and approved government contractors. Visitors and contractors must be pre-registered, have host approval and must check-in at these security gates/check-points prior to being allowed entry into Eglin AFB. All personnel and vehicles approaching Eglin AFB with the intent of entry are subject to search at any time by personnel from the 96 SFS.

It is not possible to fence the entire perimeter of Eglin AFB because of its vast size, mission requirements and logistics involved with monitoring such a security fence line. However, security personnel from the 96 SFS routinely patrol the Base perimeter, including the Ranges, as well as its interior.

9.1.1 High-Risk Oil Management Operations

Several areas within Eglin AFB such as Bulk Fuel Storage areas, all flight line operations, Ranges and several tenant organizations have additional levels of security to ensure only authorized personnel and vehicles are allowed in these areas. The additional levels of security involve fencing, site-specific security personnel and/or more strict security access requirements allowing entry to only mission essential/critical personnel. All high-risk oil-related areas (e.g., Bulk Fuel Storage areas) are fenced, gated, and monitored by the 96 SFS.

Any security fencing at Eglin AFB associated with oil storage locations generally conforms to the industry standard outlined for fencing and security (Section 11.3.6 of API 2610), which recommends the following:

INDUSTRY STANDARD CONSIDERATION:

(1) Fencing around the entire site should be employed to maintain facility security and prevent product loss and vandalism. The location of the fence line in relation to the property line shall conform to local code requirements.

(2) A review of the security requirements for the terminal facility should be included during the design consideration. The review should include physical security, disaster recovery planning, security incidents, security awareness, and security technology.

(3) Perimeter lighting may be provided to illuminate fences, access and egress gates, employee and truck parking, tank farm and manifold areas, loading racks, and marine docks. Refer to the IES Lighting Handbook or other applicable state or local code.

9.2 MASTER FLOW AND DRAIN VALVE SECURITY

The master flow and drain plugs (i.e., oil storage tank and pipeline, rather than secondary containment, flow and drain plugs) are maintained in a closed and secured position for all oil storage containers and pipelines at Eglin AFB. These Air Force procedures are conducted in accordance with local operational checklists, T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures and Section V – Low Point Drains) and UFC 3-460-03 (Unified Facilities Criteria – Petroleum Fuel Systems Maintenance). Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

9.2.1 Major Systems

The starter controls for major oil pumps (i.e., bulk fuel storage) are maintained in an off position and locked. Access to starter controls is limited to authorized personnel only. Each starter control is located in a secure area of a local building, or within a locked concrete-walled pump house adjacent to the applicable UST or AST. Only authorized personnel have access to keys to the local building, pump house and/or starter controls.

9.2.2 Minor Systems

Minor oil storage containers, such as generators with internal fuel tanks, have oil pumps that are secured within a locked generator housing shell. Access to the starter controls on the generators is limited to authorized personnel only. Most ancillary support fuel tanks (heating fuel oil for a boiler, diesel for a generator without internal fuel tank, etc.) use gravity and/or suction as a means to transfer fuel from the storage tank to the consumptive-use equipment. For these support tanks, the security of starter controls for oil pumps is not applicable.

These Air Force procedures are conducted in accordance with local operational checklists, T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures) and UFC 3-460-03 (Unified Facilities Criteria – Petroleum Fuel Systems Maintenance).

9.3 PIPELINE CONNECTION SECURITY

All oil pipeline loading/unloading connections are securely capped or blank-flanged when not in service or standby service. Designated personnel who observe fuel loading/unloading activities verify that these connections are properly capped following each fuel loading/unloading event.

These Air Force procedures are conducted in accordance with local operational checklists, T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures) and UFC 3-460-03 (Unified Facilities Criteria – Petroleum Fuel Systems Maintenance).

Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

9.4 SECURITY LIGHTING

Adequate overhead lighting at night is provided at all Eglin AFB bulk fuel storage areas (Main Base Bulk Fuel Storage Area, Mid Field Bulk Fuel Storage Area, Duke Field Bulk Fuel Storage Area, West Side Bulk Fuel Storage Area), certain buildings, along major roadways and thoroughfares, and at the primary tank truck parking areas for security and inspections.

The type and magnitude of security lighting is intended to be commensurate with the type and location of the oil storage facility. Obviously, some oil storage containers and systems near the flight line (i.e., fuel tanks for emergency electrical generators serving navigation aids, hydrant pits) do not include 24-hour lighting because of potential operational interferences with Eglin AFB ongoing night flight activities.

In general, lighting at Eglin AFB conforms to the industry standard (API 2610, Section 11.2.2), which recommends the following:

INDUSTRY STANDARD CONSIDERATION:

(1) Use high intensity discharge lamps such as mercury vapor or high pressure sodium lighting.

(2) Intersperse incandescent lighting fixtures in areas that require immediate return of lighting after power dips or outages.

(3) Consider photoelectric cell control where automatic switching of yard and rack lighting is required.

(4) Install explosion proof lighting in areas containing Class I liquids (those with a flash point below 100°F and having a vapor pressure not exceeding 40 pounds per square inch) conforming with NFPA 70 and maintained in good condition.

Main Base Bulk Fuel Storage Area

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.7(g), Security

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

10. LOADING/UNLOADING OPERATIONS

10.1 GENERAL FUEL TRANSFER OPERATIONS

Bulk fuel is received and transported throughout Eglin AFB by various means as listed below:

- Jet Fuel Receipt at Main Base Bulk Fuel Storage Area – via barge operations (e.g., Main Base Bulk Fuel Storage and Weekley Bayou Marine Transfer Point)
- Unleaded Gasoline Receipt at Main Base Bulk Fuel Storage Area – via commercial tank truck operations
- Diesel Receipt at Main Base Bulk Fuel Storage Area – via commercial tank truck operations
- Jet Fuel Receipt at Duke Field Bulk Fuel Storage Area – via commercial tank truck operations
- Jet Fuel Receipt at Mid Field and West Side Bulk Fuel Storage Areas – via intra-facility underground piping or via commercial tank truck operations

However, the largest receipt of jet fuel to Eglin AFB is via barge operations at Weekley Bayou Marine Transfer Point into the Main Base Bulk Fuel Storage Area. The type of facility and frequency of fuel request will dictate whether Fuels Management (96 LRS/LGRF) or commercial vendors (i.e., barge or tank truck operators) provide the fuel. Fuels Management (96 LRS/LGRF) also issues ground fuel to ancillary support tanks (immobile generators primarily) via C-300/301 tank trucks.

10.1.1 Tank Truck Fuel Transfer Operations

The vast majority of tank truck-related fuel loading and unloading at Eglin AFB occurs primarily with military tank trucks/refuelers (R-11s) and to a lesser extent, commercial tank trucks. The R-11s disburse fuel from the Main Base, West Side, Mid Field and Duke Field Bulk Fuel Storage Areas to aircraft on the flight line. The largest quantity of fuel transferred at Eglin AFB is jet fuel, followed by ground products fuel (unleaded gasoline, diesel and heating fuel oil). All ground fuel is delivered to Eglin AFB by commercial tank truck operators.

Fuel Loading/Unloading Area, Main Base Bulk Fuel Area

10.1.2 Barge Fuel Transfer Operations

Marine Transfer Point, Unloading Arm No. 2

Eglin AFB marine transfer operation consists of the Weekley Bayou Marine Transfer Point (co-located at the Main Base Bulk Fuel Storage). Two to four barges of JET A arrive each month in Weekley Bayou. These barges store a fuel load of 10,000 to 20,000 barrels. Fuel is transferred off the barges into the Main Base Bulk Fuel Storage tanks via aboveground piping at a rate of approximately 3,000 barrels per hour yielding an average unloading process of 10 to 24 hours. Florida Marine is the carrier of the fuel load and the source of the jet fuel is PetroMax (Houston, Texas). An oil absorption and spill recovery boom is deployed across the neck of Weekley Bayou (from side to side) south of the marine transfer point during all barge offloading events. This entire marine transfer area is under joint USEPA and U.S. Coast Guard regulatory authority.

Note that marine loading/unloading operations are applicable to facilities that are capable of transferring oil or hazardous materials, in bulk, to or from vessels with total bulk capacities of 250 barrels (10,500 gallons) or more. Therefore, Eglin AFB is also regulated under U.S. Coast Guard regulations established in 33 CFR 154 (for facilities transferring oil or hazardous material in bulk). Marine transportation related (MTR) facilities are not regulated per 40 CFR 112.7. Regulation under 40 CFR 112.7 applies only to the non-MTR facilities or at MTR facilities "downstream" from where the fuel transfer pipeline encounters its first manifold or shutoff valve inside the secondary containment at the issuing/receiving bulk tank. The Facility Response Plan identifies potential spill volumes, scenarios and spill response procedures and resources.

10.1.3 Tank Car Fuel Transfer Operations

Eglin AFB does not use tank cars (i.e., rail cars). Therefore, the focus of Section 10, Loading/Unloading Operations, of this SPCC Plan will be on fuel transfer operations associated with tank trucks, and to a lesser extent barges.

10.1.4 Standard Operating Procedures Applicable to High-Risk Fuel Transfer Operations

All of these high-risk (i.e., large throughput) Air Force fuel transfer procedures are conducted in accordance with various local operational checklists and Section III of T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems. In particular, the following paragraphs of T.O. 37-1-1 are followed by all Eglin AFB Fuels Management (96 LRS/LGRF) personnel:

- Paragraph 2-1-3 – Fuel Receipts
- Paragraph 2-1-5 – Receipt Operations Tank Truck/Car
- Paragraph 2-1-6 – Pipeline, Barge and Tanker Receipts
- Paragraph 2-1-4 – Filling Bulk Storage Tanks

- Paragraph 2-1-16 – Dispensing Fuel From Truck Fillstand Bottom Loading
- Paragraph 2-1-17 – Tank Truck/Car Top Loading Operation
- Paragraph 2-1-18 – Refueling Unit Return to Bulk Storage
- Paragraph 2-1-19 – Service Station Operations
- Paragraph 2-1-20 – Hydrant Issues to Aircraft or Refueling Units

In addition, the following local checklists are also used by all Fuels Management (96 LRS/LGRF) personnel:

- LCL 5-1: Fuel Transfer From Main Base Bulk Storage to Facility 92, Facility 945, West Side
- LCL 5-2: Preparation, Receive And Off-Loading Fuel Barges
- LCL 5-3: Product Recovery & Filter Separator Draining
- LCL 5-4: JET A Receipt From Commercial Tank Trucks and RTB Refueling Units
- LCL 5-5: JET A Issue To Commercial Tank Trucks
- LCL 5-6: Fillstand Issue Operations/Bottom Loader Refueling Units
- LCL 5-7: Receipt of Liquid Nitrogen/Oxygen
- LCL 5-8: Issue of Liquid Nitrogen/Oxygen
- LCL 5-9: Liquid Oxygen and Particulate Test Procedures
- LCL 5-10: Diesel Fillstand Operation
- LCL 5-11: Mogas Fillstand Operation
- LCL 5-12: MUR Receipt From Commercial Tank Trucks
- LCL 5-13: Diesel Receipt From Commercial Tank Trucks

10.1.5 Fuel Loading/Unloading Rack Defined

For the purpose of this SPCC Plan, a tank truck loading/unloading rack is defined as a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car that is located at a facility subject to the requirements of 40 CFR 112. A loading/unloading rack includes a loading or unloading arm and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices. The unloading/loading racks at Eglin AFB are primarily where fuel is transferred to or from large field-erected bulk ASTs used strictly for governmental purposes. Fuel throughput is considered significant for this type of fuel transfer operation and spill risk potential is managed in accordance with 40 CFR 112.

The large bulk fuel storage tanks are used primarily for the storage and distribution of fuel and are not considered end-use storage containers. This rule does not apply to intra-facility transfer of fuel by government vehicles or transfer of fuel to ancillary (i.e., end-use containers such as generators or small ASTs). Nor does it apply to fuel transfer into non-AST systems by commercial fuel

transporters (i.e., AAFES gas station). Fuel throughput associated with these latter systems and operations is considered low relative to throughput associated with the large bulk jet fuel storage tanks described above. For these low-risk operations, spill risk potential is managed in accordance with standard operating procedures described throughout this SPCC Plan.

The following areas at Eglin AFB meet the above definition for fuel loading/unloading rack:

- Main Base Bulk Fuel Storage Area (including barge operations)
- Mid Field Bulk Fuel Storage Area
- West Side Bulk Fuel Storage Area
- Duke Field Bulk Fuel Storage Area

10.1.6 Fuel Loading/Unloading Management

The office of primary responsibility (OPR) for the tank truck fuel loading/unloading racks at Eglin AFB is Fuels Management (96 LRS/LGRF).

Military tank trucks (i.e., R-11s and C-300/301s) are used by 96 LRS/LGRF during fuel loading and unloading operations at Eglin AFB. Except for the AAFES Gas Station, 96 LRS/LGRF oversees tank truck unloading from both military and occasional commercial tank trucks.

Most fuel servicing of aircraft on the Eglin AFB flight line is by tank truck (R-11) and is completed in accordance with T.O. 00-25-172CL-4, Aircraft Fuel Servicing with R-9, R-11, and Commercial Fuel Servicing Trucks and with Fuels Operational Readiness Capability Equipment (Force). Aircraft are also fueled through hydrant service pantographs attached to four hydrant system loops associated with the West Side Bulk Storage Area.

10.1.7 Fuel Transfer Management

A Scully Groundhog (brand name) system provides fail-safe engineering support for most tank truck fuel loading and unloading operations at Eglin AFB. This equipment is in service at Main Base Bulk Fuel Storage Area, Mid Field Bulk Fuel Storage Area, and Duke Field Bulk Storage Areas. In addition, deadman switches/handles and fuel count meters are used at all Eglin AFB Bulk Fuel Storage Areas.

The type of fuel transfer management system described above, Scully Groundhog, connects the pumping station to the receiving or issue tank truck and manages the safety aspects of the operation. It provides grounding between the tank truck and the fuel loading facility and provides tank truck fuel compartment overfill protection in three ways:

- Detection of an open ground and/or overfill condition will automatically shut down the loading/unloading operation.
- Overfill protection is activated by fuel contact with liquid-sensor probes in the fuel tank compartments.
- Ground-continuity-monitoring indicator lights (green “permit” and red “non-permit”) provide visual indication of the Scully Groundhog system status.

The operator holds a device called the "dead-man" control during fuel transfer. If this device is not kept closed, then the loading/unloading system automatically stops. The fuel loading facility is equipped with a backward counting meter that tracks the number of gallons transferred to the fuel truck and shuts off when the meter reaches zero (e.g., meter is set to required truck load).

10.1.8 U.S. Department of Transportation Regulations

All Eglin AFB tank truck fuel loading and unloading operations meet the minimum requirements and regulations established by U.S. Department of Transportation. Tank truck unloading and loading is conducted in accordance with standard operating procedures described throughout this SPCC Plan. If a discharge occurs outside of containment areas, other than approved rainwater discharges from secondary containment, the Eglin AFB Fire Department will be notified and the appropriate spill control procedures will be promptly implemented.

INDUSTRY STANDARD CONSIDERATION:
All transporters of oil to and from this facility are required to meet the minimum requirements and regulation established by the U.S. Department of Transportation. Loading/unloading procedures of hazardous materials, as defined in 49 CFR 172, at this facility are to meet the requirements of 49 CFR 177 Subpart B. Transporters who load/unload material at this facility must comply with the following requirements:

(1) Provide a qualified person to be in attendance at all times when a tank truck is loaded/unloaded.

(2) The attendant must be awake, have an unobstructed view of the tank truck, and be within 25 feet of the tank truck throughout the event.

(3) The attendant must be aware of the nature of the hazardous material which is to be loaded/unloaded, trained on the procedures to be followed in emergencies, authorized to move the tank truck, and have a means to move the cargo tank.

(4) Manholes and valves must be closed and secured during transport.

These additional requirements apply when the transporter is loading/unloading materials with flash points below 140°F. These materials meet the U.S. Department of Transportation definition of a Class 3 flammable liquid. Combustible materials with flash points from 140 to 200°F are not subject to these requirements:

- Unless the engine of the tank truck vehicle is to be used for the operation of a pump, the engine will not be running during the loading/unloading of the material.
- Bonding and grounding procedures for tanks trucks and containers during the transfer of material are to be implemented according to 49 CFR 177.837 (b) and (c). The current process for loading/unloading meets these requirements.

INDUSTRY STANDARD CONSIDERATION:
An industry standard (Section 28 of NFPA 30) outlines the following loading/unloading operational guidelines that are applicable to Eglin AFB:

(1) Tank vehicle loading/unloading facilities should be separated from ASTs, buildings, and nearest property lines by a distance of 25 feet for Class I and for Class II and Class III liquids handled at temperatures at or above their flash points and 15 feet for Class II and Class III liquids handled at temperatures below their flash points.

(2) Loading/unloading facilities shall be provided with drainage systems or other means to contain spills.

(3) Loading/unloading facilities that are used to load liquids into tank vehicles through open domes shall be provided with a means of electrically bonding to protect against static electricity hazards.

(4) Equipment used for the transfer of Class I liquids between tanks shall not be used for Class II or Class III liquids.

(5) Liquids shall be loaded only into tanks whose material of construction is compatible with the chemical characteristics of the liquid (see Section 28.11 of NFPA 30 for detailed loading/unloading guidelines).

(6) To prevent hazards due to a change in flash point of liquids, no tank car (rail) or tank vehicle that has previously contained a Class I liquid shall be loaded with a Class II or Class III liquid unless proper precautions are taken.

10.2 ADEQUATE SECONDARY CONTAINMENT FOR VEHICLES

112.7(h)(1): Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle spills, use a quick drainage system for tank car or tank truck loading/unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

The areas surrounding the jet and diesel fuel loading/unloading racks for Eglin AFB Bulk Fuel Storage Areas drain into onsite catchment basins (e.g., secondary containment structure at or adjacent the fuel transfer station).

Table 10-1 lists the fuel loading/unloading racks at Eglin AFB bulk fuel storage facilities. Fuel transfer areas are adequately contained are also considered impermeable.

Table 10-1 Tank Truck Fuel Loading/Unloading Racks Eglin Air Force Base					
Facility Type and Location	**Potential Release[1] (gal.)**	**SC Capacity (gal)**	**SC Adequate**	**SC Impermeable[2]**	**Storm Water Drainage Control**
Main Base Bulk Fuel Storage Area					
JET A L Area (north)	6,000	> 25,000	Yes	Yes	Storm water can be drained to adjacent grassed drainage basin (normally dry) via control valve after required inspections and logging of drain event.
Diesel L Area	8,000	> 15,000	Yes	Yes	Storm water can be drained to adjacent grassed drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A L Area (south)	6,000	> 45,000	Yes	Yes	Storm water can be drained to adjacent grassed drainage basin (normally dry) via control valve after required inspections and logging of drain event.
Unleaded Gasoline L/UL Area	8,000	>8,800	Yes	Yes	Storm water can be drained to adjacent grassed drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A UL Area (Marine Transfer Point - north)[3]	4,200	> 8,000	Yes	Yes	Storm water can be drained to adjacent Weekley Bayou via control valve after required inspections and logging of drain event.
JET A UL Area (Marine Transfer Point - south)[3]	4,200	> 6,000	Yes	Yes	Storm water can be drained to adjacent Weekley Bayou via control valve after required inspections and logging of drain event.
Mid Field Bulk Fuel Storage Area					
JET A L Area (west)	6,000	> 18,000	Yes	Yes	Storm water can be drained to adjacent drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A L Area (east)	6,000	> 18,000	Yes	Yes	Storm water can be drained to adjacent drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A UL Area	6,000	> 18,000	Yes	Yes	Storm water can be drained to adjacent drainage basin (normally dry) via control valve after required inspections and logging of drain event.
West Side Bulk Fuel Storage Area					
JET A L Area (west)	NA	NA	NA	NA	NA
JET A L Area (east)	NA	NA	NA	NA	NA
JET A UL Area	NA	NA	NA	NA	
Duke Field Bulk Fuel Storage Area					

Table 10-1
Tank Truck Fuel Loading/Unloading Racks
Eglin Air Force Base

Facility Type and Location	Potential Release[1] (gal.)	SC Capacity (gal)	SC Adequate	SC Impermeable[2]	Storm Water Drainage Control
JET A L Area (north)	6,000	>6,600	Yes	Yes	Storm water can be drained to adjacent concrete drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A L Area (south)	6,000	>6,600	Yes	Yes	Storm water can be drained to adjacent concrete drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A UL Area (north)	6,000	>6,600	Yes	Yes	Storm water can be drained to adjacent concrete drainage basin (normally dry) via control valve after required inspections and logging of drain event.
JET A UL Area (south)	6,000	>6,600	Yes	Yes	Storm water can be drained to adjacent concrete drainage basin (normally dry) via control valve after required inspections and logging of drain event.

Notes:

1 Based on maximum capacity of any single compartment in tank truck or tank car serving that particular fuel loading/unloading rack (in accordance with 40 CFR 112.7(h)(1)). Military R-11 (tank truck) – 6,000-gallon single compartment; Commercial (tank truck) - 8,000-gallon single compartment. Refer to note 3 for fuel barge transfer operations.

2 Secondary Containment Capacity = Gallons based on non-surveyed field measurements. Secondary Containment Adequate = Yes/No (Is there adequate capacity for the potential release volume? Refer to Note No. 1). Secondary Containment Impermeable = Yes/No (Is the containment structure sufficiently impermeable to allow for the cleanup of any release material before it enters the environment? Per FDEP 62-762, can containment area hold oil for 30 days or longer?).

3 The Marine Transfer Point is regulated under 33 CFR 154 (U.S. Coast Guard), not 40 CFR 112 (USEPA). However, as a best management practice the following fuel barge information was included. The potential release volume of 4,200 gallons equates to the amount of product released as a result of a response time of 2 minutes to identify and then activate a shut-down of fuel barge transfer at the unloading arms while incurring a transfer rate of 2,100 gallons per minute.

L Loading
L/UL Loading/Unloading
NA Not Applicable (because secondary containment does not exist)
UL Unloading

INDUSTRY STANDARD CONSIDERATION:
The fuel loading/unloading operations at Eglin AFB are in general conformance with industry standards. Section 28 of NFPA 30 specifies that "loading and unloading facilities shall be provided with drainage systems or other means to contain spills" and Section 9.3.1 of API 2610 specifies that "spill containment for truck loading rack areas *should* include concrete pavement with a raised edge (curbing) or other spill containment method provided around the loading rack perimeter. The raised edge *should* be sloped or rounded to facilitate truck access. Concrete joints *should* be sealed with petroleum resistant sealants to prevent leaks to subgrade. Pavement *should* be sloped toward catch basins and drains that are piped to containment or treatment facilities."

Main Base Bulk Fuel Storage Area

40 CFR 112.7(h)(1)
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.7(h)(1), Adequate Secondary Containment for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.7(h)(1), Adequate Secondary Containment for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.7(h)(1), Adequate Secondary Containment for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

10.3 WARNING OR BARRIER SYSTEM FOR VEHICLES

112.7(h)(2): Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle brake interlock system in the area adjacent to the loading/unloading rack, to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

10.3.1 Military Tank Truck Operations

For tank truck loading and unloading conducted by Fuels Management (96 LRS/LGRF), the driver chocks vehicle wheels to prevent departure before complete disconnection of loading/unloading lines in accordance with local operational checklists and T.O. 37-1-1, General Operation and

Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures) and T.O. 00-25-172CL-4, Aircraft Fuel Servicing with R-9, R-11, and Commercial Fuel Servicing Trucks and with Fuels Operational Readiness Capability Equipment (Force).

10.3.2 Commercial Tank Truck Operations

For tank truck unloading from commercial tank trucks, the driver uses a physical barrier (i.e., chocks or traffic cones) or brake interlock system in accordance with industry standards.

Main Base Bulk Fuel Storage Area

40 CFR 112.7(h)(2), Warning or Barrier System for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.7(h)(2), Warning or Barrier System for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.7(h)(2), Warning or Barrier System for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.7(h)(2), Warning or Barrier System for Vehicles
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

10.4 VEHICLES EXAMINED FOR LOWERMOST DRAINAGE OUTLETS BEFORE LEAVING

112.7(h)(3): Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

This requirement applies to fuel loading operations only. However, designated personnel are present during operations at all fuel loading and unloading racks at Eglin AFB. Following each fuel unloading process, the area and tank truck connections are examined for leakage by Fuels Management (96 LRS/LGRF) or contractor personnel. After each fuel loading process but before tank truck departure, 96 LRS/LGRF or contractor personnel perform a walk-around inspection of

the tanker to verify that all transfer lines have been disconnected and properly stowed and drains and valves are closed.

These checks are conducted in accordance with local operational checklists and T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures) and T.O. 00-25-172CL-4, Aircraft Fuel Servicing with R-9, R-11, and Commercial Fuel Servicing Trucks and with Fuels Operational Readiness Capability Equipment (Force). Equipment malfunctions are reported immediately to the 96th Transportation Squadron (96 LRS/LGRVM) and if necessary, the tank truck is removed from service until repaired or replaced.

Main Base Bulk Fuel Storage Area

40 CFR 112.7(h)(3), Vehicles Examined for Lowermost Drainage Outlets Before Leaving
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.7(h)(3), Vehicles Examined for Lowermost Drainage Outlets Before Leaving
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

West Side Bulk Fuel Storage Area

40 CFR 112.7(h)(3), Vehicles Examined for Lowermost Drainage Outlets Before Leaving
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.7(h)(3), Vehicles Examined for Lowermost Drainage Outlets Before Leaving
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

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11. BRITTLE FRACTURE OR OTHER CATASTROPHE OF FIELD-CONSTRUCTED CONTAINERS

112.7(i): If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

The API 653 inspection program is centrally managed by Defense Logistics Agency – Energy (DLA-E). Eglin AFB coordinates with DLA-E on local inspection and maintenance program consistent with the standards and protocols established with API 653 – Tank Inspection, Repair, Alteration, and Reconstruction. The program addresses all aspects associated with maintenance inspections, repair, alteration, relocation, and reconstruction of tanks, as applicable.

The program assesses and confirms suitability for continued service in instances where tank inspections indicate a change of service from original physical condition has occurred.

The inspection program incorporates procedures for the assessment of tanks for suitability for continued operation or change of service with respect to brittle fracture. Brittle fracture assessment considerations employ decision tree logic as outlined within API 653 (Figure 5-1, Brittle Fracture Considerations). In general, brittle fracture in bulk fuel storage tanks is associated with the combined effects of cold weather and high membrane stresses (the latter as a result from tank alteration, repairs, or reconstruction that does not meet API 653 standards). In addition, bulk fuel storage tanks that experience any change to a more severe service (such as operating at a lower temperature and/or handling a product of a higher specific gravity) may be at risk of brittle fracture. A copy of the brittle fracture assessment procedure decision tree is presented in Appendix D.

DLA-E in coordination with Eglin AFB employs the services of an authorized API inspector to establish an inspection frequency schedule for each tank that includes non-routine in service external inspections and also addresses nondestructive testing options and protocols as outlined in API 653 (i.e., non-routine out of service internal inspections). Inspection frequencies are established by the authorized API inspector based on historical inspection records and known or projected tank bottom corrosion rates. After each tank subject to API 653 has been evaluated, the authorized API inspector identifies suitability for service actions and determines when the next API inspection is required for the respective tank. Anticipated inspection frequencies can vary between 5, 10, and possibly 20 years. Refer to Table 7-2 and inspection report summary below.

Construction, inspection, repair/alteration history records and reports consistent with API 653 are maintained by the Eglin Fuel Tank Program Manager for the life of the tank system. Only authorized API certified inspectors direct these non-routine inspection and maintenance actions.

11.1 FIELD-ERECTED BULK FUEL STORAGE TANKS INSPECTION REPORT SUMMARY

The following list presents field-erected bulk fuel storage tanks at Eglin AFB that are subject to inspections and integrity testing in accordance with API 653. Following the list is a summary of

the activity conducted in accordance with API 653. Results of the inspections and tests for each field-erected bulk fuel storage tank are maintained by Eglin's Fuel Tank Program Manager. Note that tank 945-1 is a cut and cover tank of 49-foot diameter and 16-foot height. All other Eglin AFB field-erected bulk fuel storage tanks are exposed to the elements (i.e., not of a cut and cover design).

Main Base Bulk Fuel Storage Area

- Tank 762-27 (116,500 gal. diesel, constructed 1986 per unknown code)
- Tank 762-28 (844,600 gal. JET A, constructed 1948 per unknown code)
- Tank 762-29 (845,000 gal. JET A, constructed 1948 per API 12C)
- Tank 762-38 (573,000 gal. JET A, constructed 1954 per API 650)
- Tank 762-45 (1,138,400 gal. JET A, constructed 1960 per API 12C), Mid Field Bulk Fuel Storage Area
- Tank 92-1 (210,000 gal. JET A, constructed 1996 per API 650)
- Tank 945-1 (210,000 gal. JET A, constructed 1996 per API 650) – currently empty and out-of-service and to be removed.

West Side Bulk Fuel Storage Area

- Tank 1302-39 (1,138,400 gal. JET A, constructed 1958 per API 12C)
- Tank 1303-40 (1,138,400 gal. JET A, constructed 1958 per API 12C)

Duke Field Bulk Fuel Storage Area

- Tank 3126-1 (128,000 gal. JET A, constructed 2006 per API 12C)
- Tank 3126-2 (128,000 gal. JET A, constructed 2006 per API 12C)

11.1.1 Main Base Bulk Fuel Storage Area

Innovative Technical Solutions completed API 653 External Inspections on tanks 762-27, 762-29, 762-38, 762-45, in March 2005. TolTest Inc., performed an internal and external API 653 inspection on tank 762-27 in March 2009 in preparation for the installation of the secondary containment beneath the tank bringing the tank in compliance with Florida statutes. Space Science Services, Inc./Fuel Tank Maintenance Inc. performed an internal API 653 inspection on tank 38 in September 2009 in preparation for the installation of the secondary containment beneath the tank bringing the tank in-compliance with Florida statutes. As of this plan update, all tanks have had secondary containment installed beneath the tanks to bring the tanks in compliance with Florida statutes. As reported by Eglin AFB in January 2005, all of these tanks (except tank 762-28) received recent brittle fracture evaluations via an external in-service API 653 inspection by Innovative Technical Solutions and ITEQ Inspection of Houston, Texas under subcontract with Pond and Company of Atlanta, Georgia, November 2004. At that time, tank 762-28 was undergoing a significant modification to include a new double bottom. An API 653 inspection was later completed, to include brittle fracture evaluation, prior to the tank being placed back into

service in March 2005. An API 653 out-of-service inspection was completed on tanks 28, 38, and 27 by CAPE Environmental Management in May 2012, August 2013, and December 2014, respectively, for the purpose of collecting data and establishing a database for present and future inspections and evaluations. An API 653 suitability-for-service inspection was conducted on tank 45 by Integrity Consulting Services under subcontract with Robert and Company in March 2010. An API 653 external tank inspection and suitability-for-service evaluation was subsequently conducted on tank 45 in March 2017 by Powers Engineering & Inspection under subcontract to Tetra Tech.

11.1.2 Mid Field Bulk Fuel Storage Area

Pond and Company (Atlanta, Georgia) completed an inspection in accordance with API 653 on tank 945-1 in March 2011. Fuel Tank Maintenance, Inc, completed an internal inspection of tank 92-1 in November 2009, after the repair of the Cathodic Protection System. An API 653 out-of-service inspection was later completed on tank 92-1 by CAPE Environmental Management in December 2013, for the purpose of collecting data and establishing a database for present and future inspections and evaluations.

Note – As reported by Eglin AFB in January 2005, these two tanks have received brittle fracture evaluations via an external in-service API 653 inspection by Innovative Technical Solutions and ITEQ Inspection of Houston, Texas, under subcontract with Pond and Company of Atlanta, Georgia, November 2004.

11.1.3 West Side Bulk Fuel Storage Area

As of this plan update, tanks 1302-39 and 1303-40 have had secondary containment installed beneath the tanks in accordance with Florida statutes and have had modifications completed to bring them up to specifications for supporting the F-35 aircraft. Items modified included issue and receipt nozzles, piping, product recovery systems, etc. Robert and Company performed an API 653 internal inspection on these tanks in March 2011.

Note – As reported by Eglin AFB in January 2005, these two tanks have received brittle fracture evaluations via an external in-service API 653 inspection by Innovative Technical Solutions and ITEQ Inspection of Houston, Texas, under subcontract with Pond and Company of Atlanta, Georgia, November 2004.

11.1.4 Duke Field Bulk Fuel Storage Area

Two new tanks (3126-1 and 3126-2) were installed at Duke Field in July 2006, replacing Tanks 3208-31 and 3206-32. Installation was conducted in accordance with API 653. An API 653 out-of-service inspection was completed on tank 1 by CAPE Environmental Management in June 2012 for the purpose of collecting data and establishing a database for present and future inspections and evaluations.

11.2 EGLIN AFB RESPONSIBILITIES AND ACCOUNTABILITY TO API REPORT FINDINGS

To ensure continued safe and release-free operation at Eglin AFB and compliance with this SPCC Plan, Eglin AFB is required to address each recommendation in the above-referenced API 653 reports. Recommendations deemed critical for continued safe and prudent tank operations (i.e., suitability for service recommendations) by the authorized API 653 inspectors must be addressed and implemented by Eglin AFB. Other less critical recommendations such as re-coating tank exterior surfaces or other "considerations per the authorized API 653 inspector" can be addressed at the combined discretion of Eglin AFB Water and Fuels Maintenance (796 CES/WFM), Fuels Management (96 LRS/LGRF), contractor and Environmental Compliance (96 CEG/CEIEC) personnel.

Main Base Bulk Fuel Storage Area

40 CFR 112.7(i), Field-Constructed Tank Brittle Fracture or Other Catastrophe Evaluation
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.7(i), Field-Constructed Tank Brittle Fracture or Other Catastrophe Evaluation
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.7(i), Field-Constructed Tank Brittle Fracture or Other Catastrophe Evaluation
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.7(i), Field-Constructed Tank Brittle Fracture or Other Catastrophe Evaluation
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

12. CONFORMANCE WITH OTHER APPLICABLE REQUIREMENTS

112.7(j): In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

12.1 STATE RULES

12.1.1 FDEP 62-761 (Underground Storage Tank Systems) and FDEP 62-762 (Aboveground Storage Tank Systems)

Eglin AFB fully complies with the administrative and technical requirements of the Florida Department of Environmental Protection underground (i.e., USTs > 110 gallons capacity) and aboveground (i.e., ASTs > 550 gallons capacity) storage tank regulations. These requirements include, but are not limited to, the following:

- Storage tank system requirements
- Release detection
- Repairs, operation and maintenance
- Recordkeeping
- Out-of-service and closure requirements
- Alternate procedures, equipment registration, and registration of operator trainer providers
- Storage tank forms

Table 12-1 presents the regulatory sections and titles of FDEP Chapters 62-761 and 62-762.

Table 12-1
Florida Regulations for Underground and Aboveground Storage Tank Systems
Eglin Air Force Base

Chapter 62-761 (Underground Storage Tank Systems)		Chapter 62-762 (Aboveground Storage Tank Systems)	
Section	**Title**	**Section**	**Title**
.100	Intent	.101	Intent
.200	Definitions	.201	Definitions
.210	Reference Guidelines	.211	Reference Guidelines
.300	Applicability	.301	Applicability
.350	Operator Training and Certification	.401	Facility Registration
.400	Facility Registration	.411	Notification
.405	Notification	.421	Financial Responsibility
.420	Financial Responsibility	.431	Incidents
.430	Incidents	.441	Discharges
.440	Discharges	.451	Notification and Reporting (Repealed)
.450	Notification and Reporting (Repealed)	.501	Storage Tank System Requirements for Shop Fabricated Storage
.500	Storage Tank System Requirements	.502	Storage Tank System Requirements for Field Erected Storage Tanks
.510	Performance Standards for Category-A and Category-B Storage Tank Systems (Repealed)	.511	Performance Standards for Category-A and Category-B Storage Tank Systems (Repealed)
.600	Release Detection Requirements	.601	Release Detection Requirements for Shop Fabricated Storage Tanks
.610	Release Detection Methods (Repealed)	.602	Release Detection Requirements for Field Erected Storage Tanks
.640	Performance Standards for Release Detection Methods (Repealed)	.611	Release Detection Methods (Repealed)
.700	Repairs, Operation, and Maintenance	.641	Performance Standards for Release Detection Methods (Repealed)
.710	Recordkeeping	.701	Repairs, Operation, and Maintenance of Shop Fabricated Storage Tanks
.800	Out-of-Service and Closure Requirements	.702	Repairs, Operation and Maintenance of Field Erected Storage Tanks
.820	Incident and Discharge Response (Repealed)	.711	Recordkeeping
.850	Alternate Procedures, Equipment Registration and Registration of Operator Training Providers	.801	Out-of-Service and Closure Requirements for Shop Fabricated Storage Tanks
.900	Storage Tank Forms	.802	Out-of-Service and Closure Requirements for Field Erected Storage Tanks
		.821	Incident and Discharge Response (Repealed)
		.851	Alternate Procedures and Equipment Registration
		.891	Mineral Acid Storage Tank Requirements
		.901	Storage Tank Forms

Various elements of these storage tank regulations are discussed and/or listed as "FDEP 62-761, 62-762, and 62-740 Considerations" throughout this SPCC Plan, as applicable. In addition, the reference to FDEP requirements is sometimes blended into the SPCC Plan text.

12.1.2 FDEP 62-740 (Petroleum Contact Water)

Eglin AFB fully complies with the administrative and technical requirements of the Florida Department of Environmental Protection petroleum contact water (PCW) regulations. Affected operations at Eglin AFB involve tank water management, secondary containment drainage of storm water at non-diesel tanks and the management of any other water that has been in contact with petroleum product.

PCW requirements include, but are not limited to, management practices of the following entities and operations:

- Producers of petroleum contact water for product recovery,
- Transporters shipping petroleum contact water for product recovery, and
- Recovery facilities.

Table 12-2 presents the regulatory sections and titles of FDEP Chapter 62-740:

Table 12-2
Chapter 62-740 – Petroleum Contact Water
Eglin Air Force Base

Section	Title
.010	Declaration of Intent (Repealed)
.020	Applicability
.030	Definitions
.040	General
.100	Management Practices for Producers of PCW for Product Recovery
.200	Management Practices for Transporters Shipping PCW for Product Recovery
.300	Management Practices for Recovery Facilities

12.2 AIR FORCE STANDARD OPERATING PROCEDURES

Table 12-3 lists the Standard Operating Procedures (SOPs) establishing compliance with the requirements of 40 CFR 112. The OPR for each SOP ensures that modifications to the SOPs are incorporated prior to their implementation at Eglin AFB.

12.2.1 Industry Standards

Discussions regarding conformance with the requirements of API, NFPA and STI standards, and other industry standards are integrated where applicable throughout this SPCC Plan.

Eglin AFB complies with all applicable state rules and regulations, and Air Force Instructions pertaining to spill prevention, control, and countermeasure.

40 CFR 112.7(j), Conformance with Other Applicable Requirements
Regulatory Deficiencies ● As addressed in other relevant sections of this SPCC Plan **Best Engineering Practice Recommendations** ● As addressed in other relevant sections of this SPCC Plan

Table 12-3
List of Standard Operating Procedures
Eglin Air Force Base

Department of Defense	
UFC 3-460-03	Unified Facilities Criteria: Petroleum Fuel Systems Maintenance
Air Force Manuals (AFMANs)	
Air Force Instructions (AFIs)	
AFI 10-2501	Air Force Emergency Management Program
AFI 23-201	Fuels Management
AFI 23-204	Organizational Fuel Tanks
AFI 32-1054	Corrosion Control
AFI 32-7044	Storage Tank Environmental Compliance
AFI 36-2103	Individualized Newcomer Treatment and Orientation (INTRO) Program
AFI 91-301	Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program
Technical Orders (T.O.s)	
T.O. 00-25-172	Ground Servicing of Aircraft and Static Grounding/Bonding
T.O. 00-25-172CL-4	Aircraft Fuel Servicing with R-9, R-11, and Commercial Fuel Servicing Trucks and with Fuels Operational Readiness Capability Equipment (Force)
T.O. 36A12-13-31-1CL-1	Checklist Aircraft Servicing Procedures with the Hydrant Servicing Vehicle (HSV)
T.O. 37-1-1	General Operation and Inspection of Installed Fuel Storage and Dispensing Systems
Eglin AFB Compliance Plans	
HazComm	Eglin AFB Workplace Written Hazard Communication Program
HWMP	Eglin AFB Hazardous Waste Management Plan
FRP	Eglin AFB Facility Response Plan
SWPP Plan	Eglin AFB Storm Water Pollution Prevention Plan
OPlan	Eglin AFB Operations Plan
Other SOPs	
API 570	American Petroleum Institute, Piping Inspection Code (Inspection, Repair, Alteration, and Rerating of In-service Piping Systems)
API 653	American Petroleum Institute, Tank Inspection, Repair, Alteration, and Reconstruction
AFTO Form 39	Fuel System Inspection and Discrepancy Report
AF Form 55	Employee Safety and Health Record
AF Form 623	Individual Training Record
AF Form 1235	Physical Inventory (Fuels/Missile Propellants)
AF 500	Daily and Weekly Fuel Record
CEV OI 32-4002	Responsibilities of the Environmental Coordinator for Spills of Petroleum and Other Hazardous Substances
CFETP 2F0X1	Fuels Career Field Education and Training Program
MIL-STD 161-F	Identification Methods for Bulk Petroleum Products Systems Including Hydrocarbon Missile Fuels
Local Checklists	
LCL 5-1	Fuel Transfer From Main Base Bulk Storage to Facility 92, Facility 945, Westside
LCL 5-2	Preparation, Receiving and Off-Loading Fuel Barges
LCL 5-3	Product Recovery & Filter Separator Draining
LCL 5-4	JET A Receipt from Commercial Tank Trucks and RTB Refueling Units
LCL 5-5	JET A Issue to Commercial Tank Trucks
LCL 5-6	Fillstand Issue Operations/Bottom Loader Refueling Units
LCL 5-7	Receipt of Liquid Nitrogen/Oxygen

Table 12-3 List of Standard Operating Procedures Eglin Air Force Base	
LCL 5-8	Issue of Liquid Nitrogen/Oxygen
LCL 5-9	Liquid Oxygen and Particulate Test Procedures
LCL 5-10	Diesel Fillstand Operation
LCL 5-11	Mogas Fillstand Operation
LCL 5-12	MUR Receipt from Commercial Tank Trucks
LCL 5-13	Diesel Receipt from Commercial Tank Trucks

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13. DRAINAGE CONTROL

Refer to Section 3.3, Drainage Pathways and Distance to Navigable Waters, for a discussion on Eglin AFB drainage features and their relationship to navigable waters.

13.1 DRAINAGE FROM DIKED STORAGE AREAS

112.8(b)(1)/112.12(b)(1): Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

Diked storage area drain valves are kept secured (locked) in accordance with T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (paragraph 3-1-11e(2)) to prevent discharge into the drainage system or facility effluent treatment system. The drain valves remain locked and closed until rainwater accumulation is determined by visual inspection to be uncontaminated (in accordance with the Eglin AFB SWPP Plan).

Pumps or ejectors are not used at Eglin AFB to empty drainage from containment structures.

Rainwater in these diked storage areas is inspected for oil contamination as described in Section 14.3, Diked Area, Inspection, and Drainage of Rainwater.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(b)(1), Drainage from Diked Storage Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

13.2 VALVES USED ON DIKED STORAGE AREAS

112.8(b)(2)/112.12(b)(2): Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in 112.8(c)(3)(ii), (iii), and (iv)/112.12(c)(3)(ii), (iii), and (iv).

All drainage valves on secondary containment structures are manual gate or ball valves that are required to be normally closed and locked except during secondary containment draining events. Flapper type drain valves are not used for secondary containment structures at Eglin AFB. All accumulated rainwater is inspected per Section 14.3 prior to discharge. UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuels Systems Maintenance Environmental Protection) presents general requirements for dike system drain valves.

In general, base-wide drainage at Eglin AFB is not directed into an onsite wastewater treatment facility. However, pass-through flow from OWSs at Eglin AFB (main base) is directed to an offsite municipal wastewater treatment facility.

Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(b)(2), Valves Used on Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.12(b)(2), Drainage from Diked Storage Areas

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

13.3 PLANT DRAINAGE SYSTEMS FROM UNDIKED AREAS

112.8(b)(3)/112.12(b)(3): Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

13.3.1 Containers and Oil-Filled Electrical Equipment

All primary oil storage structures within Eglin AFB are contained in diked or otherwise contained areas, except some fuel transfer piping at Main Base Bulk Fuel Storage Area; the low-risk storage containers identified as lacking in secondary containment capacity in Table E-1 to Table E-5 and Section 14.2, Diked Area Construction and Containment Volume for Bulk Containers; and the used cooking oil areas and flight line aircraft and mobile/portable equipment noted previously in Section 6, Impracticability of Secondary Containment. The used cooking oil containers are considered low risk as detailed in the discussion in Section 3.5.4, Used Cooking Oil Containers and Grease Traps.

13.3.2 Bulk Product Piping

Aboveground bulk product piping is located at all four bulk fuel storage areas at Eglin AFB; Main Base, Mid Field, West Side, and Duke Field.

Due to the natural ground contours and an earthen berm along the Northern fence line in the Main Base Bulk Fuel Storage Area; a release from aboveground piping located in undiked areas would be contained on the ground surface within the facility, thus allowing ample time for spill response and cleanup. Additional spill response protocols are identified in the Eglin AFB FRP. Any releases from fill and drainage ports for cooking oil containers would be contained using spill pads/absorbent.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(b)(3), Plant Drainage Systems from Undiked Areas
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

13.4 FINAL DISCHARGE OF DRAINAGE

112.8(b)(4)/112.12(b)(4): If facility drainage is not engineered as in 112.8(b)(3)/112.12(b)(3), equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

Facility storm water drainage is discussed in Section 3.3, Drainage Pathways and Distance to Navigable Waters, and to a lesser extent in Section 13.3, Plant Drainage from Undiked Areas.

The final discharge of storm water drainage associated with oil storage and utilization activities (i.e., developed areas) is to storm water retention ponds and Weekley Bayou. Storm water runoff from the developed areas is conveyed by a system of earthen and concrete channels and, in some areas, by an underground storm drain system. The final discharge of storm water drainage associated with undeveloped areas of Eglin AFB, Duke Field and the Ranges is to forested lands, Choctawhatchee Bay, the Sound, or the Gulf of Mexico.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.12(b)(4), Final Discharge of Drainage

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

13.5 FACILITY DRAINAGE SYSTEMS AND EQUIPMENT

112.8(b)(5)/112.12(b)(5): Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.

Eglin AFB does not employ a continuous treatment system for facility drainage. Multiple levels of control are implemented to prevent a discharge from Eglin AFB. Facility drainage from undiked areas is described in Sections 13.3, Plant Drainage from Undiked Areas, and 13.4, Final Discharge of Drainage. Also spill response deployment sites have been strategically identified throughout Eglin AFB to control migration of potential spillage onsite and to prevent migration offsite. Refer to the Facility Response Plan for locations of spill response control areas/zones.

As part of the Eglin AFB Storm Water Sampling and Analysis (SWSA) Plan located in the SWPP Plan, storm water outfalls from Eglin AFB (Main Base and Duke Field) are quarterly monitored for indications of oil and grease to ensure that no harmful discharges reach navigable waters. The outfalls are also monitored for color, odor, clarity, floating solids, settled solids, suspended solids and foam, in addition to oil sheen.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(b)(5), Facility Drainage Systems and Equipment

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.12(b)(5), Facility Drainage Systems and Equipment

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

14. BULK STORAGE CONTAINERS/SECONDARY CONTAINMENT

14.1 CONTAINER COMPATIBILITY WITH ITS CONTENTS

112.8(c)(1)/112.12(c)(1): You must not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

All shop-fabricated aboveground oil storage tanks/containers at Eglin AFB are made of material (i.e., steel) that is compatible with its contents (i.e., jet fuel, vehicular diesel, unleaded gasoline, waste oil, lubrication oil, cooking oil) and therefore conform to the relevant industry standard (NFPA 30 Flammable and Combustible Liquids Code). All field-erected aboveground oil storage tanks are built of material (i.e., steel) according to API 650 (Welded Steel Tanks for Oil Storage) and applicable Air Force standards, or reconstructed according to API 653 (Tank Inspection, Repair, Alteration, and Reconstruction).

FDEP 62-761 and 62-762 Consideration: All FDEP regulated USTs and ASTs are required to be lined and made of a material that is compatible with the product stored.

All generators and drums are also built of materials (i.e., steel, plastic, polyethylene – the latter two for drums) that are compatible with their contents (i.e., diesel, miscellaneous oil, respectively). All of these oil storage tanks are designed to operate under ambient atmospheric conditions for pressure and temperature.

Refer to Table E-1 and Table E-2 for aboveground and underground tank/container content/capacity, tank and pipe material, year installed and best engineering practices (i.e., overfill and leak alarms, etc.). Refer to Table E-3 to Table E-5 for other container content/capacity.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(c)(1), Container Compatibility with Its Contents
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

14.2 DIKED AREA CONSTRUCTION AND CONTAINMENT VOLUME FOR BULK CONTAINERS

112.8(c)(2)/112.12(c)(2): You must construct all bulk storage container installations (except mobile refuelers and other non-transportation-related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

FDEP 62-761 Consideration: Secondary containment system performance standards include specific impermeability requirements, specific weather related durability, corrosion protection requirements, strength and thickness requirements, specific cathodic protection system requirements, and a release detection design that directs all releases to a monitoring point(s). Furthermore, all dike field areas are to conform with NFPA 30, be capable of containing 110% of the maximum capacity of single largest tank in the dike field area, have all integral piping sealed that penetrates secondary containment, be tested per UL 142 if steel, and if open to weather it must be constructed of a manual pump or gravity drain system where the drain valve would not be impacted by fire. All secondary containment areas made of concrete and/or engineered liner are required to meet the performance standards cited in Sections .500 of FDEP 62-761. As stated in Section 2.7(Ongoing and Pending Petroleum-Related Projects of Significant Impact) of this SPCC Plan, many projects at Eglin AFB are at various stages of technical and financial development and/or approval.

14.2.1 Secondary Containment Considerations

Refer to Table E-1 to Table E-5 for a listing of required secondary containment and/or actual capacities of various aboveground oil storage containers at Eglin AFB. In addition, refer to Sections 3.5, 10, and 14.11 for secondary containment provisions associated with facility-wide oil management issues, tank truck fuel loading/unloading operations, and mobile/portable oil storage containers (i.e., tank trucks and bowsers), respectively.

14.2.2 Freeboard Determination

The required freeboard depth to use for precipitation calculations is not defined in the SPCC regulation. Although the USEPA indicates that a 25-year/24-hour storm event standard is appropriate for most facilities and protective of the environment, it was not made a rule standard because of the difficulty and expense for some facilities to secure recent storm event information. A 25-year/24-hour storm event for the Eglin AFB area in the Florida panhandle is approximately 11 inches of rain. The source for this information is the U.S. Department of Commerce, Weather Bureau, Technical Paper No. 40, Washington, D.C., May 1961. Though dated, this technical paper is assumed accurate enough for the purpose of this SPCC Plan. The DLA-E has set a standard for secondary containment of 110% of tank capacity to provide for 10% freeboard to contain precipitation. FDEP 62-762.501(2)(d) also stipulates a 110% containment capacity for all FDEP-regulated ASTs.

Most bulk fuel storage tanks at Eglin AFB comply with the preferred USEPA precipitation requirement by meeting a 25-year/24-hour storm event (11 inches for the local area). Typically, most small ancillary tanks with secondary containment exposed to storm water fail this rather stringent yet preferred freeboard threshold. This applies to Eglin AFB.

As part of the December 2006 SPCC Rule Amendments, the USEPA exempted mobile refuelers from the sized secondary containment requirements for bulk storage containers; mobile refuelers are now only required to comply with the general secondary containment requirements of the rule (40 CFR part 112.7(c)).

14.2.3 Inadequate or Inexistent Secondary Containment

Used cooking oil containers at the major cooking facilities at Eglin AFB, Ranger Camp, Duke Field, and 7th Special Forces Group Compound, as well as mobile AGE equipment on the flight line, do not have secondary containment due to an impracticability determination. Section 3.5.4 explains the reasoning for the determination and identifies the measures being implemented in lieu of secondary containment in accordance with 40 CFR 112.7(d).

14.2.4 Impermeability of Secondary Containment

All diked tank areas at Eglin AFB are sufficiently impervious to contain discharged oil in accordance with FDEP 62-762.501(1)(b), and for a period of time adequate to respond to the discharge and remove the oil (i.e., at least 30 days).

14.2.5 Cut and Cover Tank Considerations

Tank 945-1 at the Mid Field Bulk Fuel Storage Area is a steel field-erected bulk jet fuel storage tank of a cut and cover design. Under federal law and the new SPCC rules, this tank is defined as a *bunkered tank* and considered an aboveground storage tank, according to the definition below. Furthermore and under state law, this tank is subject to applicable provisions of FDEP 62-762. Secondary containment is addressed at this bulk fuel storage tank with an impermeable geomembrane liner designed with interstitial leak detection. Tank 945-1 is no longer in service and is planned to be removed.

Tank 945-1, Cut and Cover Design

40 CFR 112.2 Definitions:
Bunkered tank means a container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, or that lies above grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage tank for purposes of this part.

14.3 DIKED AREA, INSPECTION, AND DRAINAGE OF RAINWATER

112.8(c)(3)\ 112.12(c)(3): You must not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:
(i) Normally keep the bypass valve sealed closed.
(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b).
(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and
(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with 40 CFR 122.41(j)(2) and 40 CFR 122.41(m)(3).

As previously described in Section 13.1, drainage of uncontaminated rainwater from diked areas into the storm system is completed in general accordance with the Eglin AFB SWPP Plan. Diked storage area drain valves are kept secured (locked) to prevent an accidental discharge into the drainage system or facility effluent treatment system. Scheduled inspections and routine observations are made of the diked storage area to determine if excess storm water has accumulated. Rain water in diked areas is checked for the presence of petroleum then drained within seven days of accumulation.

The manual drain valves are capable of directing retained storm water to either an OWS (if present) or the storm water drainage system. If retained storm water is suspected to be contaminated (e.g., sheen or noticeable odor) by the tank custodian or fuel system operator, Environmental Compliance (96 CEG/CEIEC) is notified and they obtain a storm water sample for subsequent laboratory analysis. All drain events occur under responsible supervision, typically by the tank custodian or fuel system operator.

Drain valves are re-secured after drainage is complete. Records of discharge from secondary containment are signed and maintained for each discharge event by the tank custodian or fuel

system operator in accordance with Section 7 of this SPCC Plan. An example secondary containment drainage and inspection log is included in Appendix C as Form 1.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.8(c)(3)/112.12(c)(3), Diked Area, Inspection and Drainage of Rainwater
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

14.4 CORROSION PROTECTION OF BURIED METALLIC STORAGE TANKS

112.8(c)(4)/112.12(c)(4): You must protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

Buried metallic storage tanks pose a risk of release because of their affinity for corrosion. Therefore, all buried metallic storage tanks are required to be adequately protected from corrosion by (1) coatings, and/or (2) wrappings, and/or (3) cathodic protection that is compatible with local soil conditions. These storage tanks must also be regularly tested for leaks.

14.4.1 Corrosion Protection

Eglin AFB has an active program to ensure all of its USTs, including unregulated USTs (per FDEP 62-761 – heating fuel oil < 30,000 gallons), are not at risk for a corrosion-related release. All unregulated USTs are coated or wrapped to ensure protection from corrosion. Furthermore, these unregulated USTs are pressure tested every 3 years and any unregulated UST that fails the pressure test is promptly removed from service via excavation and offsite disposal. Additionally, many of these heating fuel oil tanks are inactive and pending removal due to a change-over to natural gas for heating purposes.

All other FDEP-regulated USTs at Eglin AFB are in full compliance with FDEP 62-761 and are protected from corrosion by either material of construction (double-wall fiberglass tank system) or cathodic protection.

14.4.2 Buried Storage Tanks of Known Metallic Construction

In addition to the unregulated (per FDEP 62-761) heating fuel oil USTs described above and according to the Eglin AFB POL Database, there are also miscellaneous-use double-wall steel USTs at Eglin AFB. The waste oil USTs are protected from corrosion via coatings and wrapping.

14.4.3 Buried Storage Tanks of Fiberglass Construction

According to the Eglin AFB POL Database, there are multiple FDEP-regulated buried storage tanks of single- or double-wall fiberglass construction. All of these nonmetallic USTs are operated in compliance with FDEP 62-761.

14.4.4 Standards

Note that UFC 3-460-03 requires underground storage tanks to be constructed to industry standards NFPA 30 and NFPA 30A, as well as 40 CFR 280 and state environmental laws.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.8(c)(4)/112.12(c)(4), Corrosion Protection of Buried Metallic Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

14.5 CORROSION PROTECTION OF PARTIALLY BURIED METALLIC TANKS

112.8(c)(5)/112.12(c)(5): You must not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

Mid Field Bulk Fuel Storage Area consists of two tanks, tank 92-1 and tank 945-1, the latter of which is a bunkered (i.e., cut and cover) jet fuel tank. Tank 945-1 is protected from corrosion by an impressed current cathodic protection system that is operated and maintained in accordance with FDEP 62-761. Periodic and documented cathodic protection surveys are accomplished in accordance with AFI 32-1054 (Corrosion Control). Tank 945-1 is no longer in service and is planned to be removed.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** None

Organizational Fuel Tanks

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(c)(5), Corrosion Protection of Partially Buried Metallic Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

14.6 ABOVEGROUND CONTAINER PERIODIC INTEGRITY TESTING

112.8(c)(6)/112.12(c)(6)(i): Except for containers that meet the criteria provided in paragraph 112.12(c)(6)(ii), test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: Visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.

112.12(c)(6)(ii) For bulk storage containers that are subject to 21 CFR part 110, are elevated, constructed of austenitic stainless steel, have no external insulation, and are shop-fabricated, conduct formal visual inspection on a regular schedule. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. You must determine and document in the Plan the appropriate qualifications for personnel performing tests and inspections. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph (c)(6).

In addition to the visual inspection requirements, integrity testing requirements must also be met for certain containers depending on the use and construction of the container. The type of integrity testing selected for each container depends on the container size, configuration, and design (i.e., whether the container has ground contact, has a single wall or double wall, is cathodically protected, or has some means of alternative secondary containment).

14.6.1 Shop-Fabricated Tanks

Integrity Testing

Integrity testing requirements as outlined in 40 CFR 112.8(c)(6)/112.12(c)(6) include selection of one or more of the following methods: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. The method used for integrity testing of a container is to be based on industry standards. In accordance with the USEPA March 2004 industry settlement, integrity testing that includes NDE testing is not required for aboveground tanks that meet either of the following criteria:

- Well designed with a capacity less than 30,000 gallons on a pedestal or support that permits visual inspection of all sides or
- Well designed with a capacity less than 30,000 gallons resting on an impermeable surface (i.e., concrete, asphalt) so that releases can be readily observed

In these cases, the USEPA believes that visual inspection alone, along with elevation of container or placement of a barrier between container and ground, is sufficient to fulfill the integrity testing requirements.

All of the shop-fabricated ASTs at Eglin AFB meet the industry settlement criteria and are not subject to integrity testing requiring NDE testing.

Note: Aboveground shop-fabricated tanks with less than 50,000 gallon capacity were integrity tested by Conti Federal Services Inc. in April – June 2010. See inspection report dated October 2010 maintained by the Eglin Fuel Tank Program Manager.

Visual Inspections

Each shop-fabricated aboveground container must be visually inspected with documented results on a monthly basis, as described in Section 7, Inspection/Testing/Record-Keeping.

Petroleum Oil ASTs

To meet the visual inspection requirements, the following tank components shall be inspected at a minimum per STI SP001 (as applicable):

- Primary/secondary tank
- Tank supports, anchors, foundation, and external supports
- Tank gauges and alarms
- Overfill valves and alarms
- Insulation covering
- Tank appurtenances
- Normal and emergency vents
- Release prevention barriers
- Spill control systems
- Tank valves and connections

Example inspection forms are provided in Appendix C. These checklists can be used during a typical visual inspection of a shop-fabricated tank.

Cooking Oil ASTs

To meet the visual inspection requirements, each cooking oil AST is inspected monthly in accordance with procedures outlined in Sections 3.5.4, Used Cooking Oil Containers and Grease Traps and Section 7, Inspecting/Testing/Record-Keeping. Structural integrity is visually evaluated during the monthly inspections.

Required Integrity Testing for Future Installations, Material Repair, and Recommissioning

For any new shop-fabricated tanks that may be installed in the future, Eglin AFB should obtain certification of integrity testing from the manufacturer or installer prior to placing the tank into service. Likewise, if there is a material (significant) repair of the tank, the integrity of the tank must be tested by an appropriate method before the tank is returned to service.

STI SP001 requires that a tank be repaired, replaced, or closed and removed from service, in accordance with accepted good engineering practice, at any time a leak is found. If the tank has been exposed to a fire or other means which could cause possible damage, it must be inspected by a certified inspector for serviceability and leaks prior to being put into service. Consult with the tank manufacturer prior to making any alterations or repairs of leaks to a tank.

Should Eglin AFB ever install shop-fabricated ASTs that do not meet the industry settlement criteria, the industry standard that applies to integrity testing is STI SP001. Refer to the following industry standard table:

Shop-Fabricated ASTs (STI SP001 Standards)			
Tank Size (Gallons)	**Spill Control and Continuous Release Detection Monitoring (CRDM)**	**Spill Control Only**	**No Spill Control or CRDM**
0 – 1,100	P	P	P, E&L(10)
1,101 – 5,000	P	P, E&L(10)	[P, E&L(5), I(10)] or [P, E(5) & L(2)]
5,001 – 30,000	P, E(20)	[P, E(10)& I(20)] or [P, E(5) & L(10)]	[P, E&L(5), I(10)] or [P, E(5) & L(1)]
30,001 – 50,000	P, E(20)	P, E&L(5), I(15)	P, E&L(5), I(10)

P – Periodic inspection by Owner
E – External by inspector
I – Internal by inspector
L – Leak testing
( ) – indicates maximum inspection interval

Future Installations, Material Repair, and Recommissioning of Shop-Fabricated Tanks

For any new shop-fabricated tanks that it might install in the future, Eglin AFB should obtain certification of integrity testing from the manufacturer or installer prior to placing the tank into service. Likewise, if there is a material (significant) repair of the tank, the integrity of the tank must be tested by an appropriate method before the tank is returned to service.

STI SP001 requires that a tank be repaired, replaced, or closed and removed from service, in accordance with accepted good engineering practice, at any time a leak is found. The tank must then be repaired or replaced as required. If the tank has been exposed to a fire or other means which could cause possible damage, it must be inspected by a certified inspector for serviceability and leaks prior to being put into service. Consult with the tank manufacturer prior to making any alterations or repairs of leaks to a tank.

14.6.2 Field-Erected Tanks

West Side Bulk Fuel Storage Area, Tanks 1302-39 and 1303-40

Routine In-Service Inspections

The industry standard, API 653 (Tank Inspection, Repair, Alteration, and Reconstruction), provides for a routine in-service inspection to be conducted by experienced fuel system personnel at least monthly. The standard states "this inspection shall include a visual inspection of tank's exterior surfaces. Evidence of leaks; shell distortions; signs of settlement; corrosion; and condition of the foundation, paint coatings, insulation systems and appurtenances should be documented for follow-up action by an API Authorized Inspector." FDEP 62-762.602 expands the visual inspection requirement and includes "inspection of aboveground piping systems, secondary containment and any other storage system components." The FDEP requirement also states that the inspection "shall be conducted and documented at least once a month, but not exceeding 35 days." As previously discussed, Eglin AFB personnel visually inspect (i.e., routine in-service exterior inspections) on a daily basis.

Non-Routine In- and Out-of-Service Inspections

FDEP 62-762 also relies on API 653 to specify (in addition to the monthly visual inspection by owners/operators cited above) that external inspections by an authorized inspector must be conducted at least every five years or based on shell thickness/corrosion rate measurements. These requirements are outlined in Sections 6.3.2 and 6.3.3 of the industry standard. Internal out-of-service API 653 inspections are required at least once every 10 years on all field-erected tanks. FDEP 62-762 further requires that an internal out-of-service re-inspection frequency be established by the API 653 authorized inspector.

Internal tank inspections are also required to: (1) ensure tank bottoms are not severely corroded/leaking (2) to determine whether bottom and shell thickness meet the minimum requirements, and (3) identify and evaluate whether tank bottoms are settling. Formal inspections by a qualified inspector using ultrasonic inspections shall be used to determine the thickness, corrosion rate, and integrity of the tank bottom. With this information, an internal inspection interval should be established utilizing the methods included in API 653. The inspection interval shall be set to ensure that the bottom plate minimum thickness at the next inspection is not less than the criteria listed in Table 14-1.

Table 14-1 API 653 Tank Bottom Plate Guidelines Eglin Air Force Base	
Minimum Bottom Plate Thickness (inches)	**Foundation Design**
0.10	Foundation design with no means for detection and containment of a bottom leak
0.05	Foundation design with means to provide detection and containment of a bottom leak
0.05	Applied tank bottom reinforced lining, >0.05 inch thick, in accordance with API RP 652

In cases where external access to the tank bottom is allowed, external inspections in lieu of internal inspections can be used to meet the data requirements above. If corrosion rates and tank bottom thickness are not known, these must be determined within **10 years** of tank operation. All records, reports, and nondestructive examinations shall be maintained and performed as outlined in Section 6.8 through 6.10 of API 653.

Future Construction, Material Repair, and Recommissioning of Field-Erected Tanks

For any new field-erected tanks that it might construct in the future, Eglin AFB must obtain a satisfactory suitability-for-service evaluation from the tank design and construction firm prior to tank system commissioning. Likewise, if there is a material (significant) repair of the shell of any tank, the integrity of the tank must be tested by an appropriate method before the tank is returned to service.

Cathodic Protection Systems

FDEP 62-762 requires that all cathodic protection systems (i.e., sacrificial anode and impressed current) serving Eglin AFB oil storage containers and pipelines be operated, maintained and repaired per Section .702 (Repairs, Operation, and Maintenance of Field Erected Storage Tank Systems).

14.6.3 Record Maintenance

Inspections are documented and records maintained for at least 3 years by the respective office performing the routine inspections, and either an indefinite period of time of lifetime of the equipment for non-routine inspections. Table 7-1, Routine Inspection Schedule, and Table 7-2, Non-Routine Inspection and Integrity Testing Schedule, summarizes required inspection and testing requirements for oil storage containers at Eglin AFB such as bulk oil storage containers, ancillary oil storage containers, generators with internal tanks, used cooking oil containers, and oil drum storage areas. The tables also include required inspection and testing requirements for general oil-related systems such as bulk fuel piping, cathodic protection systems, tank truck loading/unloading facilities, pad-mounted transformers and electrical substations.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

Main Base OFTs – The following OFT at Main Base has rust and corrosion issues associated with the tank body and/or the tank appurtenances, including piping. It is recommended that Eglin AFB conduct preventative maintenance in the form of rust removal and repainting of tank exterior and tank appurtenance exterior to address surface rust and general deterioration. Per FDEP 62-762, recommend the use of Society for Protective Coatings (SSPC) paint application specification no. 1.

- 380-2 (Bldg 380, 500 gal. diesel)

Ranges

40 CFR 112.8(c)(6), Aboveground Tank Periodic Integrity Testing

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.12(c)(6), Aboveground Tank Periodic Integrity Testing
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

14.7 CONTROL OF LEAKAGE THROUGH INTERNAL HEATING COILS

112.8(c)(7)/112.12(c)(7): You must control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

No tanks equipped with internal heating coils exist at Eglin AFB; therefore, this section is not applicable.

40 CFR 112.8(c)(7)/112.12(c)(7), Control of Leakage Through Internal Heating Coils
Regulatory Deficiencies
● Not applicable
Best Engineering Practice Recommendations
● Not applicable

14.8 LIQUID LEVEL SENSING DEVICES

112.8(c)(8)/112.12(c)(8): You must engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:
(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.
(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.
(iii) Direct audible or code signal communication between the container gauger and the pumping station.
(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.
(v) You must regularly test liquid level sensing devices to ensure proper operation.

FDEP 62-762 Consideration: Overfill protection requirements include ensuring volume of product transferred does not exceed volume available in receiving tank, continuous monitoring during fuel transfer operations, complying with overfill requirements per NFPA 30 (for shop-fabricated tanks) and per API RP 2350 (for field-erected tanks), marking or tagging of fill boxes and fill pipes with product type (if there is no fill box for the shop-fabricated tank, then mark the actual tank for product type), and ensuring the tank system has some type of the following devices– level gauges, high level alarms, shut off valves, tank fill restriction to 90%, or impermeable dike field area, to list a few.

Eglin AFB uses multiple means to determine and control liquid level in its bulk fuel storage tanks such as:

- High level alarms,
- High level shut offs (closes receipt valve and/or shuts off pump),
- High high level alarms,
- Automatic float gauges (manual and remotely sensed), and
- Manual gauging

Non-bulk oil storage tanks at Eglin AFB typically have pop-up and clock float gauges or side sight gauges that are used to determine liquid levels. For most cooking oil containers, liquid levels are gauged by sight during filling operations. Typically these containers have a flip lid that is lifted prior to pouring in oil and liquid level is fully visible. All tanks at Eglin AFB are monitored for fuel level during fuel transfer by direct communication between the tank gauger and the pumping station (i.e., the tank truck operator for all tank truck-to-ancillary tank fuel transfers).

Inspection, maintenance and periodic testing of these liquid level sensing devices are conducted in accordance with UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuel Systems Maintenance, Chapter 8 – Petroleum Storage Tanks), T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures and Section III – Operator's Inspection and Maintenance), FDEP 62-762.501, and the NFPA 30 industry standard cited below.

Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

Industry Standard Consideration:
All gauging equipment, detector instrumentation, and related systems should be inspected and tested annually, at a minimum, as outlined in NFPA 30.

INDUSTRY STANDARD CONSIDERATION:
In addition to the general fuel loading/unloading guidelines outlined in Section 10 of this SPCC Plan, Eglin AFB personnel should be cognizant of the following overfill protection guidelines outlined in API 2350:

(1) If an electrical or mechanical failure occurs that affects the level detectors, product receipt shall stop and not recommence until (a) the detectors are functioning properly or (b) manual operations and procedures are implemented (as outlined in Section 10).

(2) When only one detector is used, this high-high level detector shall be located at or above the safe fill levels and shall alarm/signal to provide sufficient time to shut off or divert product flow before the overfill is reached.

(3) When used for overfill protection, the high-high level detector shall be independent of the automatic tank gauge system to provide greater reliability and to comply with the requirements of NFPA 30.

(4) If a tank is to be filled above its normal fill level (normal capacity) up to its safe fill level (tank rated capacity), a trained and qualified person shall be assigned by the operator to be present at the tank. API does not recommend routinely filling a tank above the safe fill level due to the increase in overfill risk.

(5) Any shutdown or diversion procedures should be compatible with the transporter's operations to prevent consequential damage such as hydraulic shock or overpressuring the piping system.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.8(c)(8)/112.12(c)(8), Liquid Level Sensing Devices

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

14.9 OBSERVATION OF DISPOSAL FACILITIES FOR EFFLUENT DISCHARGE

112.8(c)(9)/112.12(c)(9): You must observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b).

Wastewater from sources at Eglin AFB (Main Base) is directed to an offsite municipal wastewater treatment plant. As described in Section 3.5, Facility-Wide Oil Management Issues, storm water outfalls from Eglin AFB (Main Base and Duke Field) are quarterly monitored for indications of oil and grease to ensure that no harmful discharges reach navigable waters. The outfalls are also monitored for color, odor, clarity, floating solids, settled solids, suspended solids and foam, in addition to oil sheen. Furthermore, four outfalls are sampled and analyzed for various pollutant constituents as identified in the SWSA Plan.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Organizational Fuel Tanks

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Ranges

40 CFR 112.8(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

Cooking Oil

40 CFR 112.12(c)(9), Observation of Disposal Facilities for Effluent Discharge
Regulatory Deficiencies
● None
Best Engineering Practice Recommendations
● None

14.10 VISIBLE OIL LEAK CORRECTIONS FROM CONTAINER AND CONTAINER APPURTENANCES

112.8(c)(10)/112.12(c)(10): You must promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

14.10.1 Air Force Requirements

Visible oil leaks from tank seams, gaskets, piping, pumps, rivets, and bolts are promptly reported to Water and Fuels Maintenance (796 CES/WFM) and responsible Organizational Tank Custodian (i.e., Power Pro, Services, Contractor, etc.) for all operations.

796 CES/WFM personnel will clean up any leaked oil and correct the deficiency or damage responsible for causing the leakage in accordance with UFC 3-460-03 and T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems. Other Organizational Tank Custodians refer to AFI 23-204, Organizational Fuel Tanks, for guidelines on spill clean-up. Deficiencies observed and corrected and remedial actions taken are recorded on AFTO Form 39 or local checklists/maintenance records and kept on file.

Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

14.10.2 State of Florida Release Detection Requirements

In accordance with FDEP 62-762.601 (Release Detection Requirements), storage tank systems at Eglin AFB are required to have a method or combination of methods of release detection that:

- Can detect a new release
- Is installed, calibrated, operated and maintained per manufacturer instructions and tested annually
- Meets FDEP 62-762 Section .601 performance standards

All release detection systems must be checked/monitored every 35 days or less for a release. As discussed in Section 14.6, Aboveground Container Periodic Integrity Testing, all storage tank systems (i.e., tank, visible piping and appurtenances) must be visually checked monthly (every 35 days or less) unless the storage tank system is equipped with continuous or electronic release detection sensors as long as the sensors are inspected monthly.

14.10.3 State of Florida Operation, Maintenance, and Repairs Requirements

Storage tank systems at Eglin AFB are required to be operated, maintained and repaired in accordance with FDEP 62-761.700 and 62-762.701.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(c)(10), Visible Oil Leak Corrections from Tank Seams and Gaskets
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

14.11 APPROPRIATE POSITION OF MOBILE OR PORTABLE OIL STORAGE CONTAINERS

112.8(c)(11)/112.12(c)(11): Position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b). Except for mobile refuelers and other non-transportation-related tank trucks, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

Mobile (i.e., tank trucks) or portable oil storage tanks (i.e., bowsers, generators, AGE equipment) are used in daily operations at Eglin AFB. They are used to support a variety of operations including, but not limited to:

West Side R-11 Refueler and Bowser Parking Area

- Fueling/defueling of aircraft on the flight line (tank truck)
- Fueling of ground vehicles and emergency electricity generators (tank truck)
- Fuel storage for aircraft engine testing on the flight line (bowser)
- Fuel storage for aerospace ground equipment (bowser)
- Fuel and waste oil storage for various maintenance and fuel system facilities (bowser)

None of the mobile or portable oil storage tanks used at Eglin AFB are located in an area subject to flooding or washout. Table E-4, located in Appendix E, briefly describes the type of mobile or portable oil storage containers in use at Eglin AFB and lists the adequacy of containment.

14.11.1 Mobile Oil Storage Containers – Tank Trucks

As shown in Table E-4, mobile oil storage containers at Eglin AFB include R-11 tank trucks (single compartment – 6,000-gallon jet fuel) and C-300 tank trucks (dual compartment – 1,200-gallon diesel and unleaded gasoline).

Air Force R-11 and C-300 tank trucks used at Eglin AFB are primarily staged throughout the facility as indicated:

- Mid Field Bulk Fuel Storage Area – JET A R-11 tank trucks and diesel/unleaded gasoline C-300 tank trucks
- West Side Bulk Fuel Storage Area – JET A R-11 tank trucks
- Duke Field Bulk Fuel Storage Area – JET A R-11 tank trucks

The R-11 refuelers are operated and maintained by Fuels Management (96 LRS/LGRF). These refuelers are typically parked overnight with jet fuel in their storage tanks in order to provide rapid response service to the flight line operations 24 hours per day. Spill kits are maintained near each tank truck parking area.

As of December 2006 and December 2008, respectively, a new rule was passed exempting mobile refuelers and other non-transportation-related tank trucks from the sized secondary containment requirements for bulk storage containers; however, mobile refuelers and other non-transportation-related tank trucks remain subject to the general secondary containment requirements of the rule (40 CFR 112.7(c)), which requires secondary containment or some form of equivalent prevention system. Refuelers used at West Side and Duke Field are parked within secondary containment when not in use. Mid-Field refuelers are parked on asphalt or concrete, but not within a secondary containment dike; however, barriers (e.g., spill pads) or sorbent materials are used as a prevention system at mid-field. Each mobile refueler is equipped with a spill kit and inspections of the refuelers and parking area are conducted daily. There are no storm water drains in the near vicinity; the combination of barriers/sorbent materials and daily inspections would prevent a discharge from leaving the facility. Inspection records are signed by the inspector and maintained at the facility for a minimum of three years.

14.11.2 Portable Oil Storage Containers

Portable oil storage containers listed in Table E-4 (Appendix E) for Eglin AFB consist of bowsers, AGE equipment (i.e., generators, service and power carts) or other portable containers which are typically aluminum single-wall tanks that lack any significant good engineering features other than a potential fuel level gauge or spill bucket. These mobile containers are stored both indoors and outdoors at Eglin AFB, contain 60 to 6,000 gallons of oil, and usually do not have high fluid level or leak alarms.

As indicated in Table E-4, a portion of these bowsers or other portable containers are not adequately secondarily contained. As described in Section 6.4, providing sized secondary containment for the portable AGE equipment located along the Main Base, AETC, and Duke Field flight lines is impracticable. For those containers that are not located within or equipped with secondary containment, a combination of inspections and sorbent materials would be used to prevent a discharge from leaving the facility. See Table E-4 in Appendix E for a complete list of mobile containers and their locations.

INDUSTRY STANDARD CONSIDERATION:
Relevant industry standards (BOCA F-3210) related to portable tanks/tank vehicles include the following:

(1) All tank vehicles be designed and constructed in accordance with NFPA 385 listed in Chapter 44. These standards offer detailed information regarding thickness of material for tank construction versus tank capacities, etc.

(2) Tank vehicles shall not be parked or left unattended on any street, highway, avenue, or alley except for necessary stops. Tank vehicles shall not be parked out-of-doors at any one point for longer than 1 hour, except at flammable liquid bulk terminals, bulk plants, and other approved locations.

(3) Tank vehicles shall not be parked or garaged in any structure, except structures specifically approved for such purpose.

(4) Each tank vehicle shall be provided with at least one portable multi-use fire extinguisher with a minimum 2A, 20B, C rating. The "A" indicates suitability for ordinary combustibles (wood, trash, etc.), "B" indicates suitability for flammable liquids, and "C" indicates suitability for electrical fires.

(5) The driver, operator or attendant of any tank vehicle shall not remain in the vehicle cab and shall not leave the vehicle while being filled or discharged. If loading/unloading is performed without a power pump, the tank truck motor shall be shut down throughout such operations.

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Main Base Other

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

AETC Flight Line

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

AETC Other

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(c)(11), Appropriate Position of Mobile or Portable Oil Storage Tanks
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

15. FACILITY TRANSFER OPERATIONS, PIPING, AND PUMPING

General Operational and Maintenance Actions

Eglin AFB operates and maintains its fuel piping (and hydrant systems) in accordance with UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuel Systems Maintenance, Chapter 4 – Aircraft Fueling Facilities and Chapter 6 – Piping Systems). Operation of the on-base fuel systems is also conducted in accordance with AFI 23-201, Fuels Management, and T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section II – Operating Procedures). Furthermore, the Air Force RWP outlined in UFC 3-460-03 ensures all critical fuel-related systems and components at Eglin AFB are always maintained and operated in a safe and efficient manner.

Fuel Management System

In addition, Fuels Management (96 LRS/LGRF) maintains and monitors a Fuel Management System (FMS) that manages and electronically links all four bulk fuel storage areas; Main Base Bulk Fuel Storage Area (contractor), Mid Field Bulk Fuel Storage Area, West Side Bulk Fuel Storage Area and Duke Field Bulk Fuel Storage Area. The FMS electronically monitors tank fuel status such as fuel level, temperature, gross volume, density, water level, tank command modes and alarm feature via remote sensing hardware. 96 LRS/LGRF operators can review tank status on a real-time basis and can print monthly monitoring reports of liquid level alarms per FDEP 62-762. Displayed here is a tank status printout from the FMS for Main Base Bulk Fuel Storage Area tank 92-1.

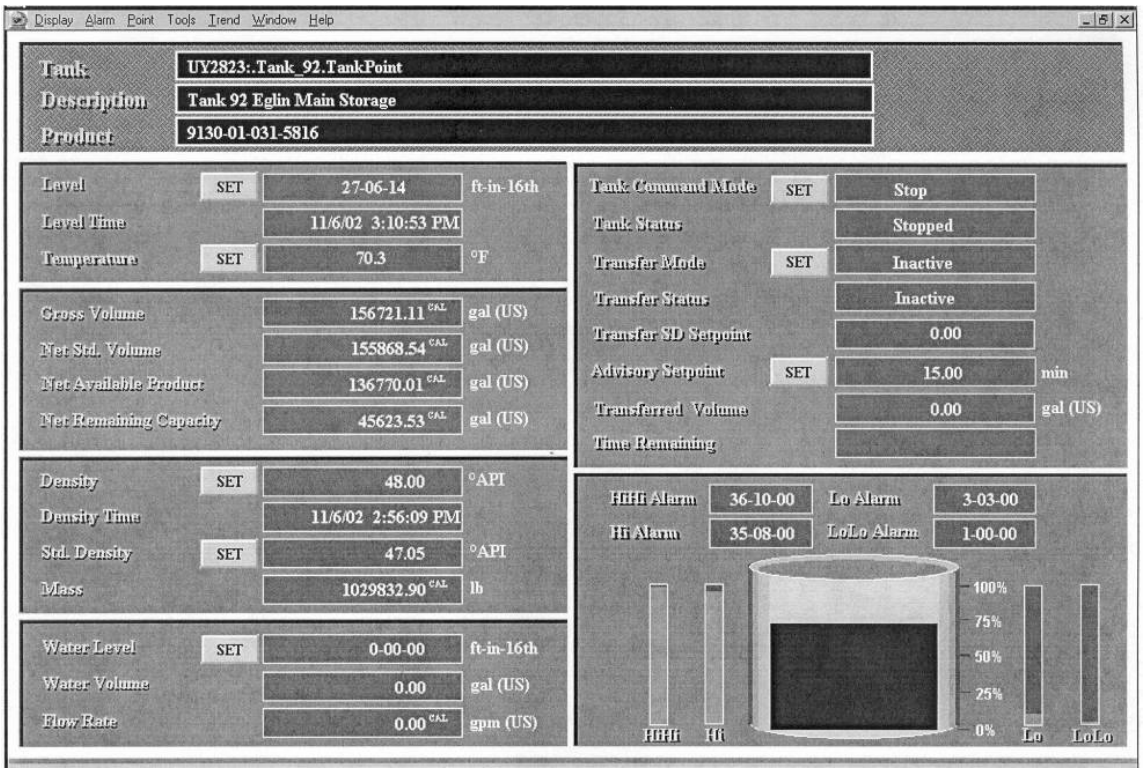

Figure 15-1. FMS Tank Status Printout for Tank 92-1

15.1 BURIED PIPING INSTALLATION PROTECTION AND EXAMINATION

112.8(d)(1)/112.12(d)(1): Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in 40 CFR 280 or a State program approved under 40 CFR 281. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

FDEP 62-761 Consideration: All cathodic protection systems are to be designed and installed per NACE International standards or another appropriate method and are to be operated, maintained and repaired per 62-761.700.

Most of the buried fuel piping at Eglin AFB that has been (or will be) installed or replaced on or after 16 August 2002 is (or will be) protected from corrosion. Otherwise, remaining Eglin AFB fuel piping will be installed aboveground with adequately designed supports and surface corrosion protection features. All FDEP regulated small diameter piping has been upgraded to double walled piping per FDEP 62-761 and 62-762.

Any section of existing buried fuel piping that is exposed for any reason, is carefully inspected for signs of corrosion or deterioration. If corrosion damage is found, 796 CEG/WFM personnel will complete required pipeline repairs in accordance with UFC 3-460-03 and FDEP 62-762.701.

There is no buried pipeline associated with cooking oil at Eglin AFB.

15.1.1 Jet Fuel Buried Piping

General

JET A fuel is supplied to the AETC loading racks and flight line hot-pit hydrant system via 12-inch double-walled underground pipeline that branches off of the main 16-inch double-walled underground pipeline from the West Side Bulk Fuel Storage Area. Pantographs at the hot-pit hydrant system have deadman switches and fuel rate/count meters and are operated in accordance with Air Force SOPs described throughout this SPCC Plan.

FDEP 62-762 Consideration: Bulk product piping is generally defined as product piping with an internal diameter greater than 3 inches (whereas small diameter piping is defined by FDEP as piping with an internal diameter of 3 inches or less). All buried bulk product piping installed after 13 July 1998 must be double wall and must comply with installation requirements per NFPA 30 and manufacturer specifications, if applicable. This piping must be pressure tested at the time of installation. Buried bulk product piping that is single wall was required to have secondary containment by 1 January 2010 or be permanently closed. However, the single-wall buried bulk product piping must be permanently closed, brought aboveground or re-installed as double-wall piping at the end of its API 570 certified useful life. All double-wall buried bulk product piping is required to have interstitial monitoring per FDEP 62-762.601, and visible parts periodically visually inspected. All single-wall buried bulk product piping is required to be tested per FDEP 62-762.601 and monthly monitored with a release detection system as described in Section 14 of this SPCC Plan. Piping sumps require interstitial monitoring, are to be designed to minimize water entry and are to be hydrostatically tested prior to service.

API 570 Piping Inspection Report

A full scale pipeline (aboveground and parts of the underground pipeline) inspection was completed in July 2011 in accordance with API 570, Piping Inspection Code. The report is maintained by the Eglin Fuel Tank Program Manager.

Visual Checks of Jet Fuel Buried Piping

Semi-annual visual inspections for underground jet fuel piping must consist of an evaluation of possible leaks. Eglin AFB personnel perform these inspections by either driving or boating along the pipeline, depending on tide conditions. Personnel note any changes in the surface contour of the ground, discoloration of the soil, softening of paving asphalt, pool formation, bubbling water puddles, or noticeable odor.

15.1.2 Ground Products Buried Piping

Miscellaneous ancillary support tanks at Eglin AFB contain ground product fuel or heating oil. Some of these support tanks have underground piping which is typically 0.25 inch or 0.5 inch in diameter and constructed of copper or carbon alloy steel. The buried piping typically runs a short distance to an adjacent building or emergency electricity generator. While most of the piping for such facilities was above ground, some of them appeared to be double cased (PVC casing mostly) at entry and exit points into and from the ground. For these systems, it has been assumed the entire buried pipe run is similarly protected from corrosion via double casing/piping.

FDEP 62-762 Consideration: Small diameter piping is generally defined as piping with an internal diameter of 3 inches or less (whereas bulk product piping is defined by FDEP as product piping with an internal diameter greater than 3 inches. All buried single-wall small diameter piping requires cathodic protection. This piping is also required to be double wall (or placed aboveground or permanently closed). If the piping (or remote fill ports) is located over surface waters, it also requires secondary containment. Note – Eglin AFB has met the secondary containment (i.e., typically double wall piping) for all small diameter piping over surface water.

15.1.3 Checks of the Cathodic Protection System

State Requirements

FDEP 62-762.701 states, "Storage tank systems with impressed current systems shall be inspected at intervals not exceeding once every 60 days. All sources of impressed current shall be inspected. Evidence of proper functioning shall be current output, normal power consumption, a signal indicating normal operation, or satisfactory electrical state of the protected structure. Impressed current systems that are inoperative for a cumulative period exceeding 2,976 hours in one year shall be assessed within 30 days by a Corrosion Professional to ensure that the storage tank system is structurally sound, free of corrosion holes, and operating in accordance with the design criteria or be taken out of service and assessed by a Corrosion Professional before being returned to service."

The regulation further states, "Storage tank systems with cathodic protection systems that cannot achieve or maintain protection levels in accordance with the design criteria shall: Be repaired … or be closed."

Eglin AFB Operational Considerations

Routine checks of active cathodic protection systems are conducted by Eglin AFB personnel. The monthly check consists of recording of rectifier readings and visual evaluation of above ground cathodic protection system components (electrical panels, bonding cables, alarm indicators if present, etc.). Table 7-1 and Table 7-2 present the inspection schedule for underground piping,

and an inspection form is included in Appendix C. Once per year, cathodic protection systems must be inspected by a cathodic protection specialist certified through the National Association of Corrosion Engineers (NACE). Semiannual visual inspections for underground piping must consist of an evaluation of possible leaks by noting any changes in the surface contour of the ground, discoloration of the soil, softening of paving asphalt, pool formation, bubbling water puddles, or noticeable odor. The annual inspection of the cathodic protection for aboveground piping must consist of an external visual inspection, leak testing, or line thickness testing as outlined in Sections 9.2.6 and 9.2.7 of API 570 — Piping Inspection Code. If corrosion damage is detected, appropriate corrective action must be taken.

Typical Industry Standards

The following industry standards are applicable to corrosion protection of new buried piping installations: (1) NACE Standard Practice 0169-2013, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems" and (2) STI R892, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems."

Main Base Bulk Fuel Storage Area

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(d)(1), Buried Piping Installation Protection and Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

15.2 NOT-IN-SERVICE AND STANDBY SERVICE TERMINAL CONNECTIONS

112.8(d)(2)/112.12(d)(2): Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

15.2.1 Capping or Otherwise Securing

Any piping associated with bulk fuel storage, cooking oil storage, or the hydrant system at Eglin AFB that is not in service or is in standby status is capped or blank-flanged and marked in accordance with UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuel Systems Maintenance, Chapter 6 – Piping Systems) or physically removed from the fuel system altogether.

15.2.2 Marking

Except as noted below, aboveground piping at Eglin AFB associated with bulk fuel storage or the hydrant systems is marked by NATO standard yellow color banding in accordance with MIL-STD 161-F, Identification Methods for Bulk Petroleum Products Systems Including Hydrocarbon Missile Fuels.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies None **Best Engineering Practice Recommendations** None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(d)(2), Not-In-Service and Standby Service Terminal Connections
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

15.3 PIPE SUPPORTS DESIGN

112.8(d)(3)/112.12(d)(3): Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

Except as noted below, and based on visual inspections only, piping supports at Eglin AFB have been designed and constructed in accordance with good engineering practice to minimize the potential for abrasion and corrosion and to allow for expansion and contraction.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Organizational Fuel Tanks

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Ranges

40 CFR 112.8(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

Cooking Oil

40 CFR 112.12(d)(3), Pipe Supports Design

Regulatory Deficiencies

- None

Best Engineering Practice Recommendations

- None

15.4 ABOVEGROUND VALVE AND PIPELINE AND APPURTENANCES INSPECTION

112.8(d)(4)/112.12(d)(4): Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

15.4.1 Periodic Inspections

Aboveground piping, valves and appurtenances related to bulk petroleum systems at Eglin AFB are regularly inspected by the OPRs and WFMWFM personnel in accordance with FDEP 62-762.601, UFC 3-460-03, Unified Facilities Criteria (Petroleum Fuel Systems Maintenance) and T.O. 37-1-1, General Operation and Inspection of Installed Fuel Storage and Dispensing Systems (Section III – Operator's Inspection and Maintenance). WFM preventative maintenance frequencies include daily, weekly, monthly, quarterly, semi-annual and annual inspections. The general condition of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, metal surfaces, etc., are assessed during these periodic inspections by qualified Eglin AFB personnel. These inspections for Eglin AFB aboveground valve and pipelines meet or exceed the standards established by FDEP 62-761.600.

Aboveground piping, valves, and appurtenances pertaining to ancillary tanks, generators, and cooking oil containers at Eglin AFB are inspected by the responsible custodian as part of the required monthly visual inspections.

15.4.2 Integrity and Leak Testing

Buried piping is checked for integrity and leak tested at the time of installation, modification, construction, relocation, or replacement in accordance with UFC 3-460-03 and T.O. 37-1-1.

As of 11 July 2006, DLA-E began centrally managing tank and pipeline leak detection programs and contracts all tank and leak line detection services. These services are conducted in accordance with FDEP 62-762 and 40 CFR 112. Annual pressure testing of all above and underground pipelines are conducted at the required operating pressure; every five years, these pipelines are pressure tested at 150% operating pressure. A monthly visual inspection is performed at each underground pipeline pit (approximately every 100 to 300 feet along each underground pipeline) to detect any leaks from the piping system. All leaks are promptly mitigated and repaired by Eglin AFB.

In addition to the annual and every five years pressure testing and as described in Section 14.6, Aboveground Container Periodic Integrity Testing, Eglin AFB completes monthly leak detection on its bulk fuel storage tanks (ASTs and USTs – diesel and jet fuel) and underground piping (jet fuel and unleaded gasoline).

The following bulk fuel pipelines are leak tested once per month by Praxair Services, Inc.:

- Main Base Bulk Fuel Storage Area – System 780 (approximately 60 ft. of underground piping, JET A)
- West Side Bulk Fuel Storage Area – System 1304 (approximately 6,170 ft. of underground piping, JET A)

Organizational Fuel Tank Custodians and Water and Fuels Maintenance (796 CES/WFM) personnel promptly remove released materials from secondary containment structures in accordance with T.O. 37-1-1.

Table 7-1 and Table 7-2 present the inspection and integrity testing schedules for aboveground and underground piping at Eglin AFB.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

West Side Bulk Fuel Storage Area

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Organizational Fuel Tanks

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(d)(4), Aboveground Valve and Pipeline Examination
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

15.5 ABOVEGROUND PIPING PROTECTION FROM VEHICULAR TRAFFIC

112.8(d)(5)/112.12(d)(5): Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Most fuel piping at the bulk fuel storage sites at Eglin AFB is isolated from vehicles by being either underground, within secondary containment structures or security structures, or located away from high vehicular traffic pattern areas.

Except as noted below, aboveground fuel piping is protected from vehicular collision or damage through a variety of methods on Eglin AFB. Fencing, warning signage, secured areas, concrete posts (i.e., bollards), secondary containment and distance from traffic areas are all employed to protect aboveground piping. Roads, parking areas, and driveways are clearly marked to control vehicular traffic.

In general, the design layout of fuel loading/unloading operations at Eglin AFB conforms to the industry standard (API 2610, Section 11.3.3 – Yard Arrangement and Dimensions), which recommends the following:

INDUSTRY STANDARD CONSIDERATION:
Example layouts for tank truck loading yards are shown in Figures 3 and 4 (as shown in API 2610, Section 11). Figure 3 (as shown in API 2610, Section 11) illustrates an installation without a garage. Figure 4 (as shown in API 2610, Section 11) illustrates an installation with a garage. The loading rack should be located so that there is a minimum of truck maneuvering within the yard area, particularly after loading. It is usually more efficient to locate the garage on the entrance side of the terminal away from the loading rack so that the trucks may be serviced before loading. Left turns for trucks are preferred to right turns for better visibility.

Entrance and exit roads should be sufficiently wide to permit a moving truck to pass a parked truck, or if practical, provide a minimum width of 20 feet (6.1 meters). If the yard gate is near the street curb line, the road and gate should be 30 feet (9.1 meters) wide, if practical, to allow extra space for a vehicle turning in from the street. At terminals where the driver must stop and open the gate, the entrance gate should be recessed from the road a distance equal to the longest vehicle.

An example of typical yard dimensions for movement to and from the loading rack is shown in Figure 5 (as shown in API 2610, Section 11). These dimensions are based on trucks that are 8.5-feet-wide (2.5 meters), require a turning radius of 60 feet (18.3 meters), have 55-foot-long (16.8 meters) semitrailers, and 70-foot-long (21.3 meters) tank trucks with full trailers. Recommended yard widths are designed to allow a truck to turn 90° and obtain a straight path by the time it reaches the loading position. In locations with limited area, the minimum yard width may be used; however, truck maneuvering is more difficult and parked vehicles may cause congestion. The yard dimensions for bottom loading racks show in Figure 5 allow an extra 15 feet (4.6 meters) of length at the rack exit to ensure truck clearance at the safety gate.

Main Base Bulk Fuel Storage Area

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic

Regulatory Deficiencies
- None

Best Engineering Practice Recommendations
- None

Mid Field Bulk Fuel Storage Area

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic

Regulatory Deficiencies
- None

Best Engineering Practice Recommendations
- None

West Side Bulk Fuel Storage Area

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic

Regulatory Deficiencies
- None

Best Engineering Practice Recommendations
- None

Duke Field Bulk Fuel Storage Area

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic

Regulatory Deficiencies
- None

Best Engineering Practice Recommendations
- None

Organizational Fuel Tanks

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Ranges

40 CFR 112.8(d)(5), Aboveground Piping Protection from Vehicular Traffic
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

Cooking Oil

40 CFR 112.12(d)(5), Aboveground Piping Protection from Vehicular Traffic
Regulatory Deficiencies ● None **Best Engineering Practice Recommendations** ● None

16. WRITTEN SPILL REPORT GUIDELINES

This section addresses written spill reporting requirements for government agencies and for internal record-keeping requirements. Additionally, Eglin AFB maintains a base-wide Facility Response Plan which incorporates written spill report guidelines.

16.1 AMENDMENT OF SPCC PLANS BY REGIONAL ADMINISTRATOR

According to 40 CFR 112.4, Eglin AFB is required to report a spill event to the Regional Administrator of the USEPA Region 4 if it meets either of the criteria shown at right:

USEPA Discharge Reporting Triggers
Greater than 1,000 gallons of oil into or upon the navigable water of the United States or adjoining shorelines in a single spill event
OR
More than 42 gallons of oil in each of two discharges occurring within any 12-month period

The owner or operator of the facility shall submit a written report within 60 days of the date of the spill. The following information must be provided in the report to the Regional Administrator:

- Name of the facility
- Your name
- Location of the facility
- Maximum storage or handling capacity of the facility and normal daily throughput
- Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements
- An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary
- The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred
- Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge

16.2 INTERNAL SPILL REPORT

All spills on the Eglin AFB and associated Ranges are to be reported to 96 CEG/CEIEC, with a subsequent Spill Report Form submitted, within four hours of the spill occurrence. The report should be completed by the facility representative who led the emergency response. Spill reports should be maintained as part of the Plan at least three years following the event.

FDEP 62-761.405 and 62-762.411 Consideration: There are various reporting requirements established for general notifications, incident notifications, incident responses, discharge reporting, and discharge response. These reporting requirements detail verbal and written notification elements and associated time frames.

16.3 DEFENSE LOGISTICS AGENCY - SPILL NOTIFICATION

As part of its environmental protection mission, DLA has a requirement to be notified of all reportable spills involving product owned by the DLA at DoD facilities worldwide. Spill reports are necessary for a variety of purposes, including the following:

- Informing program managers of fuel spills
- Allocating resources necessary for accomplishing timely and cost effective repairs and cleanups
- Ensuring affected fuel storage and distribution facilities are returned to service as quickly as possible
- Analyzing trends
- Assisting in the programming of the DLA environmental budget

Report within 24 Hours of Discovery: DoD facility fuel spills involving DLA-owned product to DLA. To accomplish this, DLA has established a central e-mail address to be used to report fuel spills from DoD facilities worldwide. This e-mail address is: desc.spillreports@dla.mil. Reports received at this e-mail address are reviewed by senior DLA environmental protection specialists daily.

16.4 METHODS OF DISPOSAL FOR RECOVERED MATERIALS

Small quantities of contaminated materials and waste product will be handled according to the Eglin AFB Hazardous Waste Management Plan (HWMP). Materials determined to exhibit hazardous waste characteristics will be prepared for disposal according to procedures outlined in the HWMP. Disposal should be undertaken according to appropriate local, state, and federal requirements. The following table summarizes disposal activities. Non-hazardous used or spent response materials, recovered product, contaminated soil, PPE, decontamination solution, absorbents, and spent chemicals should be containerized in compatible DOT-approved containers. 96 CEG should verify that transport and final disposal are performed in compliance with applicable regulations.

For medium- and large-quantity discharges, recovered product, contaminated soil, PPE, decontamination solution, absorbents, and spent chemicals should be containerized in storage containers (bulk storage/roll-offs, as necessary) compatible with the material being stored. All waste material will be disposed of by an approved contractor licensed to dispose of hazardous waste.

If possible, stored recovered product should be reclaimed. Liquid Fuels Maintenance (LFM) will determine if the recovered product can be reclaimed. Product that is too contaminated for reclamation should be disposed of through appropriate channels (DLA, contractors, etc.).

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APPENDIX A
FACILITY DIAGRAMS

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APPENDIX B

PHOTOGRAPHS

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West Side Bulk Fuel Storage Area

1302-39, AST - 1137800 gallon Jet Diesel Fuel BULK FUEL STORAGE

1303-40, AST - 1137800 gallon Jet Diesel Fuel BULK FUEL STORAGE

Range OFTs

12516-1, AST - 175 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

12522-1, AST - 336 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

12560-1, UST - 1000 gallon Vehicular Diesel FUEL SERVICE STATION

12560-2, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

12597-1, AST - 300 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

12723-1, AST - 300 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

12724-3, AST - 5000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

12724-4, AST - 280 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

12724-5, AST - 280 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1491-1, UST - 4000 gallon Vehicular Diesel FUEL SERVICE STATION

1491-2, UST - 4000 gallon Unleaded Gasoline FUEL SERVICE STATION

1523-1, AST - 308 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1545-1, UST - 6000 gallon Unleaded Gasoline FUEL SERVICE STATION

1545-2, UST - 4000 gallon Vehicular Diesel FUEL SERVICE STATION

2063-1, AST - 1125 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2063-2, AST - 1125 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2069-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4024-1, AST - 1000 gallon Vehicular Diesel VEHICULAR

5104-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

5105-2, AST - 500 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

5209-1, AST - 547 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

6024-1, AST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

6024-2, AST - 3000 gallon Vehicular Diesel VEHICULAR

6024-3, AST - 1000 gallon Waste Oil / Used Oil USED OIL STORAGE

6027-1, AST - 5000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

6027-2, AST - 300 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

6027-3, AST - 200 gallon Other Substance: Please Identify COOKING OIL STORAGE

6071-2, AST - 280 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

6071-3, AST - gallon Diesel Fuel - Emergency Generator

6102-1, AST - 540 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

666-8a, UST - 5 gallon Leaded Gasoline WASTE FUEL STORAGE

8352-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8636-1, AST - 15000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8636-2, AST - 15000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8636-3, AST - 300 gallon Vehicular Diesel VEHICULAR

8636-6, AST - 75 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8640-1, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8716-2, AST - 80 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8728-1, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

8728-2, UST - 500 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

8728-3, UST - 1000 gallon Other Substance: Please Identify OTHER

8759-2, AST - 500 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

8774-2, AST - 250 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8777-1, AST - 1000 gallon Vehicular Diesel VEHICULAR

8777-2, AST - 1000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

8779-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8842-2, AST - 500 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

8970-1, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

9002-1, AST - 250 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9002-2, AST - 250 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9103-3, AST - 4000 gallon Vehicular Diesel VEHICULAR

9103-4, AST - 2000 gallon Unleaded Gasoline VEHICULAR

9107-1, AST - 480 gallon Waste Oil / Used Oil USED OIL STORAGE

9107-2, AST - 480 gallon Waste Oil / Used Oil USED OIL STORAGE

9107-3, AST - 280 gallon Waste Oil / Used Oil USED OIL STORAGE

9207-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9207-3, AST - 396 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9277-1, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9284-1, AST - 250 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9285-3, AST - 425 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9352-1, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

9352-2, UST - 1000 gallon Vehicular Diesel FUEL SERVICE STATION

9353-1, AST - 120 gallon Diesel Fuel - Generator or Pump FIRE PUMP

9421-1, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

9461-1, UST - 1000 gallon Vehicular Diesel FUEL SERVICE STATION

9461-2, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

9485-1, UST - 2000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

9621-1, AST - 660 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9624-1, AST - 75 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

9625-1, UST - 2000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

9628-3, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9628-4, AST - 250 gallon Vehicular Diesel AIRCRAFT/EQUIPMENT
REFUELING

9633-1, AST - 176 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9955-1, AST - 1000 gallon Vehicular Diesel VEHICULAR

9963-3, AST - 5000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9963-5, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

9963-6, AST - 2000 gallon Unleaded Gasoline VEHICULAR

9963-7, AST - 450 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

Mid Field Bulk Fuel Storage Area

92-1, AST - 210000 gallon Jet Diesel Fuel BULK FUEL STORAGE

945-1, AST - 210000 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT REFUELING

Main Base OFTs

10000-2, AST - 420 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

100-2, UST - 600 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

100-3, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

101-1, UST - 10000 gallon Jet Diesel Fuel FUEL SERVICE STATION

101-2, UST - 5000 gallon Jet Diesel Fuel FUEL SERVICE STATION

10355-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

104-3, UST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

10478-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

10673-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

107-2, AST - 125 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1080-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

10870-1, AST - 380 gallon Other Substance: Please Identify COOKING OIL STORAGE

110-2, AST - 120 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

11057-1, UST - 10000 gallon Unleaded Gasoline VEHICULAR

11060-1, UST - 2500 gallon Other Substance: Please Identify OTHER

11060-2, UST - 2500 gallon Other Substance: Please Identify OTHER

11061-2, AST - 175 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1108-1, AST - gallon Diesel Fuel - Emergency Generator

116-2, UST - 1000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

116-3, AST - 25 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

118-1, AST - 220 gallon Jet Diesel Fuel AIRCRAFT MAINTENANCE

1-2, AST - 500 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1211-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1220-1, UST - 6000 gallon Vehicular Diesel FUEL SERVICE STATION

1222-1, AST - 250 gallon Unleaded Gasoline VEHICULAR

1247-1, AST - 450 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1278-1, AST - 120 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1-3, AST - 194 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

130-1, UST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

130-3, AST - 175 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

13-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

132-2, AST - 2000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

138-1, AST - 220 gallon Jet Diesel Fuel WASTE FUEL STORAGE

138-2, AST - 220 gallon Jet Diesel Fuel AIRCRAFT MAINTENANCE

141-1, AST - 7500 gallon Jet Diesel Fuel ENGINE TESTING

141-2, AST - 480 gallon Waste Oil / Used Oil USED OIL STORAGE

142-1, AST - 7500 gallon Jet Diesel Fuel ENGINE TESTING

1527-1, AST - 110 gallon Other Substance: Please Identify COOKING OIL STORAGE

1527-2, AST - 131 gallon Other Substance: Please Identify COOKING OIL STORAGE

1528-1, AST - 1000 gallon Unleaded Gasoline VEHICULAR

1540-1, AST - 2000 gallon Other Substance: Please Identify VEHICULAR

1545-3, AST - 110 gallon Jet Diesel Fuel SUPPORT TANK (FUEL)

1565-1, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1567-3, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

1567-4, AST - 153 gallon Vehicular Diesel VEHICULAR

1575-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1704-2, AST - 120 gallon Unleaded Gasoline ROADS & GROUNDS

1750-2, AST - 120 gallon Vehicular Diesel VEHICULAR

1750-3, AST - 120 gallon Vehicular Diesel VEHICULAR

1751-2, AST - 79 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1755-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1755-4, AST - 595 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1757-1, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1770-1, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

1770-2, AST - 153 gallon Vehicular Diesel VEHICULAR

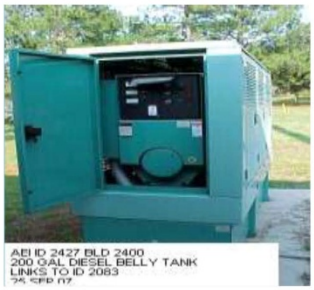
18-1, UST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

18-2, AST - 120 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

2300-4, AST - 366 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

2351-1, AST - 153 gallon Vehicular Diesel ROADS & GROUNDS

2351-2, AST - 153 gallon Vehicular Diesel ROADS & GROUNDS



2400-1, AST - 150 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

244-1, AST - 500 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT
REFUELING

247-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

249-1, UST - 15000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

250-2, AST - 250 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

252-2, UST - 600 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

252-3, AST - 25 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

253-2, AST - 175 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2590-1, AST - 185 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2595-2, AST - 280 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

272-2, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2751-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2755-1, AST - 350 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2796-1, AST - 8000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2798-1, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

2798-2, AST - 153 gallon Vehicular Diesel VEHICULAR

2810-2, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2810-3, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

2825-3, AST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

2825-8, AST - 125 gallon Other Substance: Please Identify COOKING OIL STORAGE

351-2, AST - 100 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

351-3, AST - 1000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

374-2, AST - 221 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

380-1, AST - 15000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

380-2, AST - 460 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

380-3, UST - 30000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

43-4, AST - 150 gallon Vehicular Diesel ROADS & GROUNDS

43-5, AST - 150 gallon Unleaded Gasoline ROADS & GROUNDS

440-1, AST - 160000 gallon Chlorine Compound SUPPORT TANK (NON-FUEL)

440-10, AST - 160000 gallon Other Substance: Please Identify SUPPORT TANK (NON-FUEL)

440-11, AST - 560493 gallon Chlorine Compound SUPPORT TANK (NON-FUEL)

440-12, AST - 560462 gallon Chlorine Compound SUPPORT TANK (NON-FUEL)

440-13, AST - 536473 gallon Mineral Acid SUPPORT TANK (NON-FUEL)

440-14, AST - 538079 gallon Mineral Acid SUPPORT TANK (NON-FUEL)

440-15, AST - 4000 gallon Other Substance: Please Identify SUPPORT TANK (NON-FUEL)

440-2, AST - 160000 gallon Chlorine Compound SUPPORT TANK (NON-FUEL)

440-3, AST - 95000 gallon Chlorine Compound SUPPORT TANK (NON-FUEL)

440-5, AST - 130000 gallon Mineral Acid SUPPORT TANK (NON-FUEL)

440-6, AST - 130000 gallon Mineral Acid SUPPORT TANK (NON-FUEL)

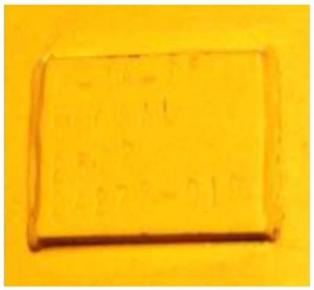
440-7, AST - 130000 gallon Mineral Acid SUPPORT TANK (NON-FUEL)

440-8, AST - 3000 gallon Other Substance: Please Identify SUPPORT TANK (NON-FUEL)

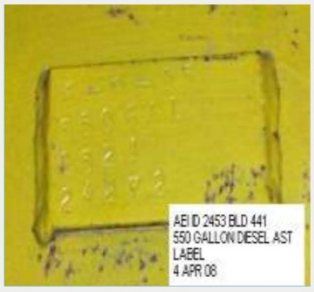
440-9, AST - 160000 gallon Other Substance: Please Identify SUPPORT TANK (NON-FUEL)

441-1, AST - 550 gallon Diesel Fuel - Generator or Pump FIRE PUMP

441-2, AST - 550 gallon Diesel Fuel - Generator or Pump FIRE PUMP



441-3, AST - 550 gallon Diesel Fuel - Generator or Pump FIRE PUMP



441-4, AST - 550 gallon Diesel Fuel - Generator or Pump FIRE PUMP

44-3, AST - 366 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

444-1, AST - 1000 gallon Unleaded Gasoline VEHICULAR

444-11, AST - 300 gallon Unleaded Gasoline AIRCRAFT/EQUIPMENT REFUELING

444-12, AST - 3000 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-13, AST - 1100 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-14, AST - 1100 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-3, AST - 1000 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-4, AST - 690 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-5, AST - 1000 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-6, AST - 300 gallon Waste Oil / Used Oil USED OIL STORAGE

444-7, AST - 600 gallon Waste Oil / Used Oil USED OIL STORAGE

444-8, AST - 1000 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

444-9, AST - 1000 gallon Other Substance: Please Identify SUPPORT TANK (FUEL)

500-2, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

509-2, AST - 79 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

51-1, AST - 131 gallon Other Substance: Please Identify COOKING OIL STORAGE

51-2, AST - 131 gallon Other Substance: Please Identify COOKING OIL STORAGE

535-1, AST - 500 gallon Vehicular Diesel VEHICULAR

536-1, AST - 630 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

536-2, AST - 360 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

536-3, AST - 360 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

536-4, AST - 360 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

536-5, AST - 360 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

536-6, AST - 360 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

536-7, AST - 360 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

536-8, AST - 630 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

541-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

545-2, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

545-3, AST - 103 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

55-2, UST - 25000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

552-1, UST - 10000 gallon Waste Oil / Used Oil USED OIL STORAGE

552-2, UST - 6000 gallon Waste Oil / Used Oil USED OIL STORAGE

552-3, UST - 2000 gallon Waste Oil / Used Oil USED OIL STORAGE

552-5, UST - 1000 gallon Waste Oil / Used Oil USED OIL STORAGE

552-6, AST - 5000 gallon Waste Oil / Used Oil USED OIL STORAGE

552-7, AST - 500 gallon Waste Oil / Used Oil RECYCLING

552-8, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

55-3, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

55-5, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

55-7, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

561-1, UST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

561-2, AST - 300 gallon New & Lube Oil USED OIL STORAGE

561-3, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

561-4, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

562-1, UST - 500 gallon Waste Oil / Used Oil WASTE FUEL STORAGE

562-2, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

562-3, AST - 150 gallon Waste Oil / Used Oil USED OIL STORAGE

576-1, AST - 120 gallon Vehicular Diesel ROADS & GROUNDS

576-2, AST - 120 gallon Unleaded Gasoline ROADS & GROUNDS

60-2, UST - 600 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

60-3, AST - 15 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

614-1, UST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

614-2, AST - 2500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

62-1, AST - 400 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

667-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

670-1, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

673-1, UST - 10000 gallon Vehicular Diesel FUEL SERVICE STATION

673-2, UST - 1000 gallon Unleaded Gasoline FUEL SERVICE STATION

677-1, AST - 240 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

68-2, AST - 420 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

687-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

689-1, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

689-2, AST - 153 gallon Vehicular Diesel VEHICULAR

693-1, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

693-2, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

693-3, AST - 280 gallon New & Lube Oil VEHICLE MAINTENANCE

693-4, AST - 300 gallon Waste Oil / Used Oil USED OIL STORAGE

696-1, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

697-1, AST - 66 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

697-2, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

697-5, AST - 66 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

697-6, AST - 66 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

72-1, UST - 2000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

732-3, AST - 2000 gallon Unleaded Gasoline VEHICULAR

762-1, AST - 560 gallon Petroleum-Base Additive Product FUEL ADDITIVE

80066-1, AST - 110 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

80067-1, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

80068-1, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

80077-1, AST - 366 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

82-1, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

825-1, AST - 132 gallon Other Substance: Please Identify COOKING OIL STORAGE

825-2, AST - 132 gallon Other Substance: Please Identify COOKING OIL STORAGE

849-1, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

85-1, AST - 2000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

85-2, AST - 135 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

85-3, AST - 135 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

862-1, AST - 333 gallon Other Substance: Please Identify COOKING OIL STORAGE

862-2, AST - 308 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

89-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

89-3, AST - gallon Diesel Fuel - Emergency Generator

898-1, AST - 10000 gallon Avaiation Gasoline AIRCRAFT/EQUIPMENT
REFUELING

899-3, AST - 79 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

901-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

901-3, AST - 10 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

907-1, AST - 150 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

91-1, UST - 15000 gallon Vehicular Diesel FUEL SERVICE STATION

91-2, UST - 15000 gallon Vehicular Diesel FUEL SERVICE STATION

912-1, AST - 1000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

912-2, AST - gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

91-3, UST - 15000 gallon Unleaded Gasoline FUEL SERVICE STATION

920-1, AST - 153 gallon Vehicular Diesel VEHICULAR

921-1, AST - 153 gallon Vehicular Diesel ROADS & GROUNDS

92-2, UST - 1000 gallon Jet Diesel Fuel SUPPORT TANK (FUEL)

92-3, AST - 560 gallon Petroleum-Base Additive Product FUEL ADDITIVE

92-4, AST - 560 gallon Petroleum-Base Additive Product FUEL ADDITIVE

926-2, AST - 500 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

927-1, AST - 500 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

940-1, UST - 500 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

945-2, UST - 1000 gallon Jet Diesel Fuel SUPPORT TANK (FUEL)

947-2, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

95-1, UST - 6000 gallon Jet Diesel Fuel SUPPORT TANK (FUEL)

973-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

999-2, AST - 1000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

Main Base Bulk Fuel Storage Area

762-22, AST - 24900 gallon Unleaded Gasoline BULK FUEL STORAGE

762-27, AST - 116500 gallon Vehicular Diesel BULK FUEL STORAGE

762-28, AST - 844600 gallon Jet Diesel Fuel BULK FUEL STORAGE

762-29, AST - 845000 gallon Jet Diesel Fuel BULK FUEL STORAGE

762-38, AST - 573000 gallon Jet Diesel Fuel BULK FUEL STORAGE

762-45, AST - 1138400 gallon Jet Diesel Fuel BULK FUEL STORAGE

Duke Field OFTs

3012-1, UST - 10000 gallon Unleaded Gasoline FUEL SERVICE STATION

3012-2, UST - 10000 gallon Vehicular Diesel FUEL SERVICE STATION

3031-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3038-3, AST - 250 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3040-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3043-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3052-1, AST - 238 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3053-1, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3053-2, UST - 10000 gallon Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals HEATING

3054-1, AST - 196 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3056-2, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3058-3, AST - 280 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3058-4, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3059-3, AST - 2500 gallon Jet Diesel Fuel ENGINE TESTING

3061-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3065-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3076-1, AST - 500 gallon Waste Oil / Used Oil USED OIL STORAGE

3080-1, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3081-1, UST - 2500 gallon Jet Diesel Fuel FUEL SERVICE STATION

3081-2, UST - 2500 gallon Jet Diesel Fuel FUEL SERVICE STATION

3086-1, AST - 500 gallon Waste Oil / Used Oil USED OIL STORAGE

3089-2, AST - 250 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3102-1, AST - 540 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3107-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3115-1, AST - 100 gallon Diesel Fuel - Generator or Pump FIRE PUMP

3115-2, AST - 100 gallon Diesel Fuel - Generator or Pump FIRE PUMP

3126-3, AST - 270 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3130-1, AST - 100 gallon Diesel Fuel - Generator or Pump FIRE PUMP

3150-1, AST - 194 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3201-1, AST - 725 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

3201-2, AST - 220 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

6064-1, AST - 145 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

Duke Field Bulk Fuel Storage Area

3126-1, AST - 126951 gallon Jet Diesel Fuel BULK FUEL STORAGE

3126-2, AST - 127446 gallon Jet Diesel Fuel BULK FUEL STORAGE

AETC OFTs

1304-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

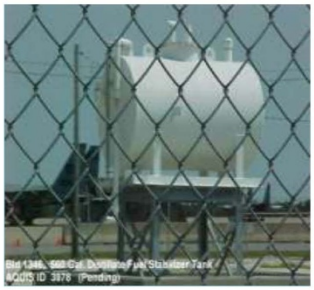
1315-1, AST - 2000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1326-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1331-1, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

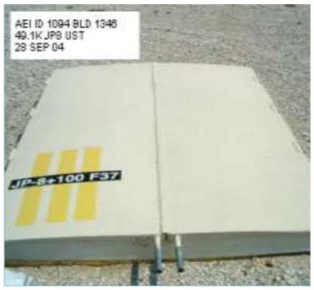
1339-1, AST - 400 gallon Jet Diesel Fuel AIRCRAFT MAINTENANCE

1339-2, AST - 400 gallon Jet Diesel Fuel AIRCRAFT MAINTENANCE



1346-1, AST - 560 gallon Petroleum-Base Additive Product FUEL ADDITIVE

1346-41, UST - 49000 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT REFUELING



1346-42, UST - 49100 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT REFUELING

1346-43, UST - 49100 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT REFUELING

1346-44, UST - 49100 gallon Jet Diesel Fuel AIRCRAFT/EQUIPMENT REFUELING

1355-1, AST - 107 gallon Other Substance: Please Identify COOKING OIL STORAGE

1357-2, AST - 250 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1358-2, AST - 1000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1358-4, AST - 103 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

1360-1, AST - 2000 gallon Waste Oil / Used Oil USED OIL STORAGE

1363-1, AST - 125 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1383-2, AST - 200 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1386-2, AST - 500 gallon Diesel Fuel - Generator or Pump FIRE PUMP

1391-2, AST - 3000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1391-3, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1396-2, AST - 500 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1396-3, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1408-1, AST - 153 gallon Unleaded Gasoline ROADS & GROUNDS

1408-2, AST - 153 gallon Vehicular Diesel VEHICULAR

1410-1, UST - 10000 gallon Jet Diesel Fuel FUEL SERVICE STATION

1410-2, UST - 10000 gallon Vehicular Diesel FUEL SERVICE STATION

1410-3, UST - 12000 gallon Unleaded Gasoline FUEL SERVICE STATION

1429-1, AST - 500 gallon Waste Oil / Used Oil USED OIL STORAGE

1429-2, AST - 65 gallon Waste Oil / Used Oil USED OIL STORAGE

1429-3, AST - 65 gallon Waste Oil / Used Oil USED OIL STORAGE

1429-4, AST - 5000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

1429-5, AST - 480 gallon New & Lube Oil WASTE FUEL STORAGE

JSF-02, AST - 500 gallon Unknown Substance TEMPORARY

JSF-3, AST - 500 gallon Unknown Substance TEMPORARY

AAFES OFTs

12-1, AST - 300 gallon Other Substance: Please Identify COOKING OIL STORAGE

1757-2, AST - 200 gallon Other Substance: Please Identify COOKING OIL STORAGE

1765-1, AST - 131 gallon Other Substance: Please Identify COOKING OIL STORAGE

2586-6, UST - 20000 gallon Unleaded Gasoline FUEL SERVICE STATION

2586-7, UST - 20000 gallon Unleaded Gasoline FUEL SERVICE STATION

2586-8, UST - 10000 gallon Unleaded Gasoline FUEL SERVICE STATION

3066-1, UST - 6000 gallon Unleaded Gasoline FUEL SERVICE STATION

3066-2, UST - 4000 gallon Unleaded Gasoline FUEL SERVICE STATION

3066-3, UST - 4000 gallon Unleaded Gasoline FUEL SERVICE STATION

6005-1, UST - 2500 gallon Unleaded Gasoline FUEL SERVICE STATION

707-1, UST - 10000 gallon Unleaded Gasoline FUEL SERVICE STATION

707-2, UST - 10000 gallon Unleaded Gasoline FUEL SERVICE STATION

707-3, UST - 10000 gallon Unleaded Gasoline FUEL SERVICE STATION

707-4, AST - 300 gallon Other Substance: Please Identify COOKING OIL STORAGE

7th Special Forces Group OFTs

4435-1, AST - 308 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

4485-1, AST - 1000 gallon Diesel Fuel - Emergency Generator EMERGENCY GENERATOR

4485-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4490-1, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4490-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4515-1, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4515-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4525-1, AST - 1000 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4525-2, AST - 300 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4545-1, AST - 850 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

4570-1, AST - 600 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

7 SF-1, AST - 12000 gallon Unknown Substance TEMPORARY

502-1, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

502-2, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

502-3, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

502-4, AST - 100 gallon Diesel Fuel - Emergency Generator
EMERGENCY GENERATOR

8874-1, AST - gallon Diesel Fuel - Emergency Generator

APPENDIX C
EXAMPLE DRAINAGE LOG AND INSPECTION FORMS

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FORM 1 – SECONDARY CONTAINMENT DRAINAGE AND INSPECTION LOG

Instructions: This log must be completed each time storm water is discharged from secondary containment. FDEP regulation [62-762.701(4)] requires that all storm water be removed from any secondary containment structure within 7 days of a rainfall event. The storm water shall not be discharged without treatment if it has a visible sheen. Furthermore, any product in the secondary containment structure must be removed within 3 days (per FDEP).

Notify SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112 and FDEP 62-762

Frequency: Within 7 days of rainfall event[1]

Site/Date	Oil Present[2] (Y/N)	Treatment Employed (Y/N)	Drain Valve Opened (time)	Drain Valve Closed (time)	Inspector Name	Comments

Notes:

1 If fuel operations or weather conditions prevent removal of storm water within 7 days, contact Environmental Compliance (96 CEG/CEIEC) and request an extension to 14 days.

2 Product or sheen

FORM 2 – BULK FUEL STORAGE TANK ROUTINE IN-SERVICE INSPECTION CHECKLIST

Instructions: Complete routine in-service external visual inspection of bulk fuel storage tanks (i.e.., JP-8 and diesel). Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112 and FDEP 62-762

Frequency: Daily (though FDEP 62-762 only requires monthly visual inspections[1])

Site/Date: _____ Inspector: _____

	SAT	UNSAT	NA	CAR	Comments
FOUNDATION					
Leaks	❑	❑	❑	❑	_____
Intact/Sound	❑	❑	❑	❑	_____
Settlement	❑	❑	❑	❑	_____
SHELL					
Leaks	❑	❑	❑	❑	_____
Distortion	❑	❑	❑	❑	_____
Paint Condition	❑	❑	❑	❑	_____
Pitting and Corrosion	❑	❑	❑	❑	_____
Bottom/Foundation Seal	❑	❑	❑	❑	_____
ROOF					
Leaks	❑	❑	❑	❑	_____
Paint Condition	❑	❑	❑	❑	_____
Pitting and Corrosion	❑	❑	❑	❑	_____
Drainage	❑	❑	❑	❑	_____
Seal Condition	❑	❑	❑	❑	_____
MANWAYS, MANIFOLDS AND NOZZLES					
Leaks	❑	❑	❑	❑	_____
Sealing	❑	❑	❑	❑	_____
Pitting and Corrosion	❑	❑	❑	❑	_____
PIPING					
Leaks	❑	❑	❑	❑	_____
Paint Condition	❑	❑	❑	❑	_____
Pitting and Corrosion	❑	❑	❑	❑	_____
Adequate Support	❑	❑	❑	❑	_____
SECONDARY CONTAINMENT					
Free of Storm Water[2, 3]	❑	❑	❑	❑	_____
Free of Debris and Vegetation	❑	❑	❑	❑	_____
Cracks, Holes or other Breaches	❑	❑	❑	❑	_____
Drain Valve Closed and Locked	❑	❑	❑	❑	_____
Drain Valve Functioning	❑	❑	❑	❑	_____
MISCELLANEOUS					
Grounding/Anode Straps	❑	❑	❑	❑	_____
High Level Alarms	❑	❑	❑	❑	_____
Remote/Side Gauges	❑	❑	❑	❑	_____

Notes:
1 – Not to exceed 35 days between inspections
2 – Storm water is to be drained within 7 days of rain event
3 – Storm water must be treated before discharge if sheen present

CAR – Corrective action required
NA – Not applicable
SAT – Satisfactory
UNSAT – Unsatisfactory

FORM 3 – CATHODIC PROTECTION SYSTEM ROUTINE OPERATIONAL INSPECTION CHECKLIST

Instructions: Complete routine external operational inspection of cathodic protection (CP) systems. Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: Indefinite or lifetime of equipment

Regulatory Driver: FDEP 62-762

Frequency: Every 2 months (for impressed current systems).

Site/Date: _____ Inspector: _____

	SAT	UNSAT	NA	CAR	Comments
BULK TANKS AND PIPING					
Test Stations	❑	❑	❑	❑	_____
Connections	❑	❑	❑	❑	_____
Electrical Panel Box	❑	❑	❑	❑	_____
Rectifier	❑	❑	❑	❑	_____
CP Cable (condition and connections)	❑	❑	❑	❑	_____
OPERATIONAL					
Output Normal	❑	❑	❑	❑	_____
Power Consumption Normal	❑	❑	❑	❑	_____
Satisfactory Electrical State	❑	❑	❑	❑	_____

Notes:
CAR – Corrective action required
NA – Not applicable
SAT – Satisfactory
UNSAT – Unsatisfactory

FORM 4 – BULK FUEL PIPING ROUTINE IN-SERVICE INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of bulk fuel piping. Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any <u>significant</u> deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112 and FDEP 62-762

Frequency: Daily – except continuously during bulk fuel transfers (though FDEP 62-762 only requires monthly visual inspections[1])

Site/Date: _____ Inspector: _____

	SAT	UNSAT	NA	CAR	Comments
LEAKS					
Piping	❑	❑	❑	❑	_____
Expansion Joints	❑	❑	❑	❑	_____
Clamps and Supports	❑	❑	❑	❑	_____
Valves	❑	❑	❑	❑	_____
MISALIGNMENT					
Piping Misalignment/Restricted Movement	❑	❑	❑	❑	_____
Expansion Joint Misalignment	❑	❑	❑	❑	_____
VIBRATION					
Excessive Overhung Weight	❑	❑	❑	❑	_____
Inadequate Support	❑	❑	❑	❑	_____
Thin, Small-bore, or Alloy Piping	❑	❑	❑	❑	_____
Threaded Connections	❑	❑	❑	❑	_____
Loose Supports Causing Metal Wear	❑	❑	❑	❑	_____
SUPPORTS					
Shoes off Support	❑	❑	❑	❑	_____
Hanger Distortion or Breakage	❑	❑	❑	❑	_____
Bottomed-Out Springs	❑	❑	❑	❑	_____
Excessive Pipe Sag	❑	❑	❑	❑	_____
Brace Distortion/Breakage	❑	❑	❑	❑	_____
Loose Brackets	❑	❑	❑	❑	_____
Slide Plates/Rollers	❑	❑	❑	❑	_____
Counter Balance	❑	❑	❑	❑	_____
CORROSION					
Piping	❑	❑	❑	❑	_____
Supports	❑	❑	❑	❑	_____
Insulation Interfaces	❑	❑	❑	❑	_____
Biological Growth	❑	❑	❑	❑	_____
MISCELLANEOUS					
Bolts and Nuts Present/Tight	❑	❑	❑	❑	_____
Pipe and Valve Labeling	❑	❑	❑	❑	_____
Grounding/Anode Straps	❑	❑	❑	❑	_____

Notes:
1 – Not to exceed 35 days between inspections

CAR – Corrective action required
NA – Not applicable
SAT – Satisfactory
UNSAT – Unsatisfactory

FORM 5 – TANK TRUCK FUEL LOADING/UNLOADING STATION INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of tank truck loading/unloading stations. Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112 and FDEP 62-762

Frequency: Weekly

Site/Date: _____ Inspector: _____

	SAT	UNSAT	NA	CAR	Comments
HOSES, PIPES AND VALVES					
Leaks	❑	❑	❑	❑	_____
Operation	❑	❑	❑	❑	_____
Deterioration	❑	❑	❑	❑	_____
Clamps and Supports	❑	❑	❑	❑	_____
STRUCTURE					
Bolts, Clamps and Supports	❑	❑	❑	❑	_____
Roofing and Ladders	❑	❑	❑	❑	_____
GENERAL					
Electrical Ground	❑	❑	❑	❑	_____
Portable Equipment Stowed	❑	❑	❑	❑	_____
Secondary Containment Structure	❑	❑	❑	❑	_____
Instruction/Warning Signage	❑	❑	❑	❑	_____
Traffic Control Devices	❑	❑	❑	❑	_____
Dispenser Labeling	❑	❑	❑	❑	_____
Security Lighting	❑	❑	❑	❑	_____
CONTROL DEVICES					
Early Departure Warning Device	❑	❑	❑	❑	_____
Starter Control	❑	❑	❑	❑	_____
Scully System	❑	❑	❑	❑	_____
Dead-man Controls	❑	❑	❑	❑	_____
Pumps	❑	❑	❑	❑	_____
SECONDARY CONTAINMENT					
Standing Water	❑	❑	❑	❑	_____
Valves Closed and Locked	❑	❑	❑	❑	_____
Oil Stains/Sheen	❑	❑	❑	❑	_____

Notes:
CAR – Corrective action required
NA – Not applicable
SAT – Satisfactory
UNSAT – Unsatisfactory

FORM 6 – ANCILLARY ABOVEGROUND STORAGE TANK, GENERATOR, AND USED COOKING OIL CONTAINER INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of ancillary aboveground storage tanks (ASTs) (i.e., end use tanks), diesel powered electrical generators, and used cooking oil containers. Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112 and FDEP 62-762

Frequency: Monthly – (FDEP 62-762 cites frequency to be no more than every 35 days for FDEP-regulated ASTs> 550 gal. capacity)

Site/Date: _____ Inspector: _____

	Yes	No	NA	CAR	Comments
STRUCTURAL INTEGRITY					
Surface free of leaks?	❑	❑	❑	❑	_____
Valves and gaskets free of leaks?	❑	❑	❑	❑	_____
Condition sound (no corrosion, pitting, etc.)?	❑	❑	❑	❑	_____
Bolts, rivets, welds and seams intact/sound?	❑	❑	❑	❑	_____
Foundation intact/sound?	❑	❑	❑	❑	_____
Level gauges and alarms working?	❑	❑	❑	❑	_____
Vents unobstructed?	❑	❑	❑	❑	_____
ATTACHED PIPING					
Surface free of leaks?	❑	❑	❑	❑	_____
Valves and fittings free of leaks?	❑	❑	❑	❑	_____
Piping adequately supported?	❑	❑	❑	❑	_____
Pipes and supports free of corrosion?	❑	❑	❑	❑	_____
Buried pipes exposed?	❑	❑	❑	❑	_____
Out-of-service pipes capped?	❑	❑	❑	❑	_____
Signs/barriers present near aboveground piping?	❑	❑	❑	❑	_____
Localized vegetation free of distress?	❑	❑	❑	❑	_____
SECONDARY CONTAINMENT					
Drainage valves closed and locked?	❑	❑	❑	❑	_____
Drainage valves free of leaks?	❑	❑	❑	❑	_____
Containment area free of drainable water?	❑	❑	❑	❑	_____
Standing water free of product/sheen?	❑	❑	❑	❑	_____
Debris absent?	❑	❑	❑	❑	_____
Containment structure intact/sound?	❑	❑	❑	❑	_____
SECURITY					
Unit locked?	❑	❑	❑	❑	_____
Gates/fences intact/sound?	❑	❑	❑	❑	_____
Gates/fences locked?	❑	❑	❑	❑	_____
Starter controls locked?	❑	❑	❑	❑	_____
Lighting adequate?	❑	❑	❑	❑	_____

Notes:
CAR – Corrective action required
NA – Not applicable

FORM 7 – OIL WATER SEPARATOR INSPECTION CHECKLIST

For maintenance problems and questions, contact 96 Civil Engineer Service Contracts Element at 882-9501.

Instructions: Complete routine external visual inspection of oil water separators (OWSs). Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum (recommended)

Regulatory Driver: Best Management Practice

Frequency: Quarterly

Site/Date: _____ Inspector: _____

	SAT	UNSAT	NA	CAR	Comments
DETECTION[1]					
Presence of Free Product	❑	❑	❑	❑	_____
Presence of Sheen	❑	❑	❑	❑	_____
Presence of Fuel Odor	❑	❑	❑	❑	_____
Presence of Dn. Stream Oil Source	❑	❑	❑	❑	_____
STRUCTURAL					
OWS Functioning	❑	❑	❑	❑	_____
Gate and Valve Condition	❑	❑	❑	❑	_____
Wall/Separator Condition	❑	❑	❑	❑	_____
Shoreline/OWS Contact and Seal	❑	❑	❑	❑	_____
FLOW					
OWS Free of Blockage	❑	❑	❑	❑	_____
Up/down Stream Free of Blockage	❑	❑	❑	❑	_____

Notes:
1 – Inspect OWS and effluent

CAR – Corrective action required
NA – Not applicable
SAT – Satisfactory
UNSAT – Unsatisfactory

FORM 8 – OIL DRUM STORAGE AREA INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of oil drum storage areas. Notify the SPCC Lead, Environmental Compliance (96 CEG/CEIEC), immediately if any significant deficiencies are identified.

Record Retention: 3 years minimum

Regulatory Driver: 40 CFR 112

Frequency: Monthly

Site/Date: _____ Inspector: _____

	Yes	No	NA	CAR	Comments
DRUM CONDITION					
Drum bung/cover in place?	❑	❑	❑	❑	_____
Drum free of bulges/upright?	❑	❑	❑	❑	_____
Condition sound (no corrosion, pitting, etc.)?	❑	❑	❑	❑	_____
Any signs of leaks?	❑	❑	❑	❑	_____
Drum contents identified on drum label?	❑	❑	❑	❑	_____
SECONDARY CONTAINMENT					
Containment structure present?	❑	❑	❑	❑	_____
Containment structure impermeable?	❑	❑	❑	❑	_____
Containment structure intact/sound?	❑	❑	❑	❑	_____
Debris/fluids absent?	❑	❑	❑	❑	_____
DRUM STORAGE AREA					
Secure?	❑	❑	❑	❑	_____
Aisle space adequate for drum movement?	❑	❑	❑	❑	_____
Debris/fluids absent?	❑	❑	❑	❑	_____
Lighting adequate?	❑	❑	❑	❑	_____
Area organized/orderly?	❑	❑	❑	❑	_____
Incompatible material segregated?	❑	❑	❑	❑	_____
SPILL RESPONSE					
Spill response materials nearby?	❑	❑	❑	❑	_____
Spill response materials adequate?	❑	❑	❑	❑	_____
Emergency telephone number/POC posted?	❑	❑	❑	❑	_____

Notes:
CAR – Corrective action required
NA – Not applicable
POC – Point of contact

APPENDIX D
API 653 BRITTLE FRACTURE CONSIDERATION DECISION TREE

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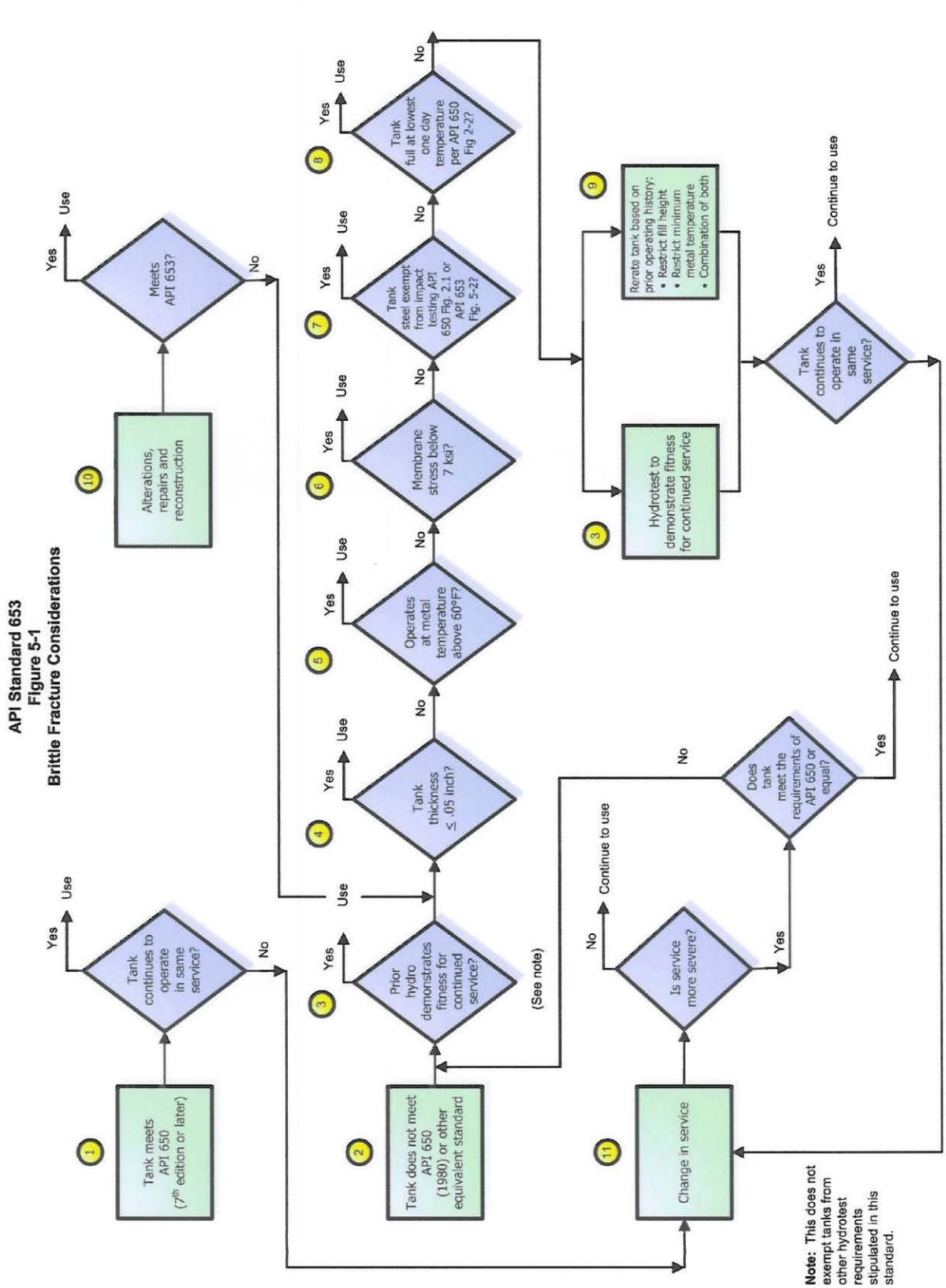
API Standard 653
Figure 5-1
Brittle Fracture Considerations
1
Tank meets API 650 (7th edition or later)
Tank continues to operate in same service?
Yes
Use
No
2
Tank does not meet API 650 (1980) or other equivalent standard
3
Prior hydro demonstrates fitness for continued service?
4
Tank thickness ≤ .05 inch?
5
Operates at metal temperature above 60°F?
6
Membrane stress below 7 ksi?
7
Tank steel exempt from impact testing API 650 Fig. 2.1 or API 653 Fig. 5-2?
8
Tank full at lowest one day temperature per API 650 Fig 2-2?
9
Rerate tank based on prior operating history:
• Restrict fill height
• Restrict minimum metal temperature
• Combination of both
3
Hydrotest to demonstrate fitness for continued service
Tank continues to operate in same service?
Continue to use
10
Alterations, repairs and reconstruction
Meets API 653?
11
Change in service
Is service more severe?
Does tank meet the requirements of API 650 or equal?
(See note)
Note: This does not exempt tanks from other hydrotest requirements stipulated in this standard.

E-1

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APPENDIX E

OIL STORAGE SUMMARY

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Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
7th Special Forces Group OFTs												
4410-1	4410	Waste Oil / Used Oil	1,000	07-SEP-11	Double-Wall				RUPTURE	N/A	>100%	
4425-1	4425	Waste Oil / Used Oil	1,000	07-SEP-11	Double-Wall				RUPTURE	N/A	>100%	
4435-1	4435	Diesel Fuel - Emergency Generator	308	20-JUL-10	Double-Wall	E, P	A	D	RUPTURE	N/A	>100%	
4445-1	4445	Waste Oil / Used Oil	1,000	07-SEP-11	Double-Wall				RUPTURE	N/A	>100%	
4460-1	4460	Waste Oil / Used Oil	1,000	07-SEP-11	Double-Wall				RUPTURE	N/A	>100%	
4470-1	4470	Diesel Fuel - Emergency Generator	400	03-OCT-11	Double-Wall				RUPTURE	N/A	>100%	
4485-1	4485	Diesel Fuel - Emergency Generator	1,000	20-JUL-10	Double-Wall	M, P, R	A	D	RUPTURE	N/A	>100%	
4485-2	4485	Diesel Fuel - Emergency Generator	300	20-JUL-10	Double-Wall	E	A		RUPTURE	N/A	>100%	
4490-1	4490	Diesel Fuel - Emergency Generator	1,000	20-JUL-10	Double-Wall	M, P, R	A	D, M	RUPTURE	N/A	>100%	
4490-2	4490	Diesel Fuel - Emergency Generator	300	20-JUL-10	Double-Wall		A		RUPTURE	N/A	>100%	
4515-1	4515	Diesel Fuel - Emergency Generator	1,000	20-JUL-10	Double-Wall	M, P, R	A	D, M	RUPTURE	N/A	>100%	
4515-2	4515	Diesel Fuel - Emergency Generator	300	20-JUL-10	Double-Wall	M, P, R	A	D, M	RUPTURE	N/A	>100%	
4525-1	4525	Diesel Fuel - Emergency Generator	1,000	20-JUL-10	Double-Wall	M, P, R	A	D, M	RUPTURE	N/A	>100%	
4525-2	4525	Diesel Fuel - Emergency Generator	300	20-JUL-10	Double-Wall	E, P	A	F	RUPTURE	N/A	>100%	
4527-1	4527	Diesel Fuel - Emergency Generator	2,525	16-JUL-12	Double-Wall				RUPTURE	N/A	>100%	
4545-1	4545	Diesel Fuel - Emergency Generator	850	20-JUL-10	Double-Wall	E, M, P	A	D, F	RUPTURE	N/A	>100%	
4570-1	4570	Diesel Fuel - Emergency Generator	600	20-JUL-10	Double-Wall	E, P	A	F	RUPTURE	N/A	>100%	
4605-1	4605	Vehicular Diesel	253	29-FEB-12	Double-Wall				RUPTURE	N/A	>100%	
4600-1	4600	Vehicular Diesel	153	29-FEB-12	Double-Wall				RUPTURE	N/A	>100%	
4600-2	4600	Vehicular Unleaded	153	29-FEB-12	Double-Wall				RUPTURE	N/A	>100%	
AAFES OFTs												
12-1	12	Cooking Oil	300		None	C		D, Q	RUPTURE	N/A	Active Containment	
1757-2	1757	Cooking Oil	200		None	C		D, Q	RUPTURE	N/A	Active Containment	
1765-1	1765	Cooking Oil	131	04-MAR-08	None				RUPTURE	N/A	Active Containment	
707-4	707	Cooking Oil	300		None	C		D, Q	RUPTURE	N/A	Active Containment	
AETC OFTs												
1315-3	1315	Diesel Fuel - Emergency Generator	145	20-MAY-13	Double-Wall				RUPTURE	N/A	>100%	
1331-1	1331	Diesel Fuel - Emergency Generator	145		Double-Wall	I	A		RUPTURE	N/A	>100%	
1355-1	1355	Cooking Oil	107		None	C		D, Q	RUPTURE	N/A	Active Containment	
1357-2	1357	Diesel Fuel - Emergency Generator	250	01-DEC-97	Double-Wall	C, M, P, R	A, B, D, I	F, M	RUPTURE	N/A	>100%	
1358-2	1358	Diesel Fuel - Emergency Generator	1,000	01-DEC-97	Double-Wall	C, M, O, P, R, X	A, B, I	F, Q	RUPTURE	N/A	>100%	
1358-4	1358	Diesel Fuel - Emergency Generator	103	01-DEC-97	Inside Building	C	A		RUPTURE	N/A	Active Containment	
1363-1	1363	Diesel Fuel - Emergency Generator	125	28-JUN-10	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
1383-2	1383	Diesel Fuel - Emergency Generator	200	05-NOV-06	Double-Wall	C, I	A		RUPTURE	N/A	>100%	
1386-2	1386	Diesel Fuel - Generator or Pump	300	28-APR-06	Double-Wall	E, M, P	B, M		RUPTURE	N/A	>100%	
1396-2	1396	Diesel Fuel - Emergency Generator	500	01-NOV-97	Double-Wall	E, M, P	A, B, D, I	F, M	RUPTURE	N/A	>100%	
1396-3	1396	Diesel Fuel - Emergency Generator	100	01-NOV-97	Inside Building	C	A		RUPTURE	N/A	Active Containment	
1408-1	1408	Unleaded Gasoline	153	10-DEC-10	Double-Wall	E, P	A	D, Q	RUPTURE	N/A	>100%	
1408-2	1408	Vehicular Diesel	153	10-DEC-10	Double-Wall	E, P	A	D, Q	RUPTURE	N/A	>100%	
1412-1	1412	Diesel Fuel - Emergency Generator	84	26-MAR-13	Double-Wall				RUPTURE	N/A	>100%	
1417-1	1417	Diesel Fuel - Emergency Generator	84	26-MAR-13	Double-Wall				RUPTURE	N/A	>100%	
1429-1	1429	Waste Oil / Used Oil	500	17-AUG-99	Double-Wall	C, M, P, R	A, B, D, J, M	F	RUPTURE	N/A	>100%	
1429-2	1429	Waste Oil / Used Oil	65	17-AUG-99	Double-Wall	S	B, J, M		RUPTURE	N/A	>100%	
1429-3	1429	Waste Oil / Used Oil	65	17-AUG-99	Double-Wall	E	A, B		RUPTURE	N/A	>100%	
1429-4	1429	Jet Diesel Fuel	5,000	10-MAR-99	Double-Wall	C, M, N, O, P, R, X	A, B	1, F, Q	RUPTURE	N/A	>100%	
1429-5	1429	New & Lube Oil	480	10-MAR-10	Double-Wall	E, P	A		RUPTURE	ND	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
Duke Field Bulk Fuel Storage Area												
3126-1	3126	Jet Diesel Fuel	126,951	17-APR-06	Dike	C, P, U	L	2	RUPTURE	139,646	>110%	
3126-2	3126	Jet Diesel Fuel	127,446	17-APR-06	Dike	C, U	B, E, F	3, J	RUPTURE	140,191	>110%	
Duke Field OFTs												
3031-1	3031	Diesel Fuel - Emergency Generator	145	18-SEP-10	Double-Wall	E	A		RUPTURE	N/A	>100%	
3054-1	3054	Diesel Fuel - Emergency Generator	196	26-AUG-08	Double-Wall		A	F	RUPTURE	N/A	>100%	
3056-2	3056	Diesel Fuel - Emergency Generator	1,000	01-DEC-97	Double-Wall	C, M, O, P, R	A, B, D, I	F, K, Q	RUPTURE	N/A	>100%	
3061-1	3061	Diesel Fuel - Emergency Generator	100		Double-Wall				RUPTURE	N/A	>100%	
3065-2	3065	Diesel Fuel - Emergency Generator	500	01-DEC-97	Double-Wall	E, M, P, R	A, B, D, I	F, M	RUPTURE	N/A	>100%	
3076-1	3076	Waste Oil / Used Oil	500	06-JAN-06	Double-Wall	C, I			RUPTURE	N/A	>100%	
3077-1	3077	Diesel Fuel - Emergency Generator	2,300	03-OCT-11	Double-Wall				RUPTURE	N/A	>100%	
3080-1	3080	Diesel Fuel - Emergency Generator	300	26-APR-06	Double-Wall				RUPTURE	N/A	>100%	
3086-1	3086	Waste Oil / Used Oil	500	06-JAN-06	Double-Wall				RUPTURE	N/A	>100%	
3102-1	3102	Diesel Fuel - Emergency Generator	540	27-APR-06	Double-Wall		A		RUPTURE	N/A	>100%	
3107-1	3107	Diesel Fuel - Emergency Generator	145	18-SEP-10	Double-Wall	E	A		RUPTURE	N/A	>100%	
3115-1	3115	Diesel Fuel - Generator or Pump	100		Inside Building				RUPTURE	N/A	Active Containment	
3115-2	3115	Diesel Fuel - Generator or Pump	100		Inside Building				RUPTURE	N/A	>100%	
3126-3	3126	Diesel Fuel - Emergency Generator	270	11-JAN-06	Double-Wall	I	A	F	RUPTURE	N/A	Active Containment	
3130-1	3130	Diesel Fuel - Generator or Pump	100		Inside Building				RUPTURE	N/A	Active Containment	
3139-1	3139	Diesel Fuel - Emergency Generator	600	21-JUN-11	Double-Wall				RUPTURE	N/A	>100%	
3150-1	3150	Diesel Fuel - Emergency Generator	194	28-JUN-06	Double-Wall				RUPTURE	N/A	>100%	
3201-1	3201	Diesel Fuel - Emergency Generator	725	15-JUL-08	Double-Wall		A	Q	RUPTURE	N/A	>100%	
3201-2	3201	Diesel Fuel - Emergency Generator	220	15-JUL-08	Double-Wall	E	A		RUPTURE	N/A	>100%	
3290-1	3290	Diesel Fuel - Generator or Pump	425	01-MAR-12	Double-Wall				RUPTURE	N/A	>100%	
Main Base Bulk Fuel Storage Area												
762-22	762	Unleaded Gasoline	24,900	01-OCT-99	Dike	C, K	A, B, L	D, Q	RUPTURE	27,390	35,919	
762-27	762	Vehicular Diesel	116,500	01-JAN-86	Dike	C, K, O, P, U	A, D, J, L	D, L, Q, U	RUPTURE	128,150	338,470	
762-28	762	Jet Diesel Fuel	844,600	01-JAN-48	Dike	C, H, K, O, P, U	A, B, D, J, L	D, L, P, Q, U	RUPTURE	929,060	2,052,717	
762-29	762	Jet Diesel Fuel	845,000	01-JAN-48	Dike	C, H, K, O, P, S	A, B, D, J, L	D, L, P, Q, U	RUPTURE	929,500	2,243,568	
762-38	762	Jet Diesel Fuel	573,000	01-JAN-54	Dike	C, K, U	A, B, J, L	D, L, P, Q, U	RUPTURE	630,300	1,541,744	
762-45	762	Jet Diesel Fuel	1,138,400	01-JAN-60	Dike	C, K, O, P, U	A, B, D, J, L	D, L, Q, U	RUPTURE	1,252,240	1,205,803	
Main Base OFTs												
1-2	1	Diesel Fuel - Emergency Generator	500	22-JUL-06	Double-Wall	E, M, P	A, B		RUPTURE	N/A	>100%	
1-3	1	Diesel Fuel - Emergency Generator	274	13-JAN-10	Double-Wall	E	A		RUPTURE	N/A	>100%	
1-4	1	Diesel Fuel - Emergency Generator	308	11-JAN-12	Double-Wall				RUPTURE	N/A	>100%	
10000-2	10000	Diesel Fuel - Emergency Generator	420	29-JAN-04	Double-Wall	C, I	A		RUPTURE	N/A	>100%	
100-3	100	Diesel Fuel - Emergency Generator	366	10-MAY-10	Double-Wall	E	A, N	D	RUPTURE	N/A	>100%	
101-3	101	Waste Oil / Used Oil	480	03-APR-13	Double-Wall				RUPTURE	N/A	>100%	
10355-1	10355	Diesel Fuel - Emergency Generator	145		Double-Wall				RUPTURE	N/A	>100%	
10478-2	10478	Diesel Fuel - Emergency Generator	100	12-JUL-10	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
10673-1	10673	Diesel Fuel - Emergency Generator	145		Double-Wall				RUPTURE	N/A	>100%	
107-2	107	Diesel Fuel - Emergency Generator	125		Double-Wall	C			RUPTURE	N/A	>100%	
1080-2	1080	Diesel Fuel - Emergency Generator	100	01-MAY-02	Double-Wall	C, I, P	A	D, Q	RUPTURE	N/A	>100%	
10870-1	10870	Cooking Oil	380		Double-Wall	C, I	A	D, Q	RUPTURE	N/A	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
110-2	110	Diesel Fuel - Emergency Generator	100	19-AUG-02	Double-Wall				RUPTURE	N/A	>100%	
11061-2	11061	Diesel Fuel - Emergency Generator	175	01-JUL-08	Double-Wall	E, P	A	F, Q	RUPTURE	N/A	>100%	
1108-1	1108	Diesel Fuel - Emergency Generator	172		Double-Wall				RUPTURE	N/A	>100%	
1211-1	1211	Diesel Fuel - Emergency Generator	145	01-JUL-05	Double-Wall				RUPTURE	N/A	>100%	
1220-3	1220	Vehicular Gasoline	153		Double-Wall				RUPTURE	N/A	>100%	
1222-1	1222	Unleaded Gasoline	250	03-OCT-94	Double-Wall	C, I, M, O, P, X	A, B, I	D, F, Q	RUPTURE	N/A	>100%	
1247-1	1247	Diesel Fuel - Emergency Generator	380	01-AUG-02	Double-Wall		A		RUPTURE	N/A	>100%	
1278-1	1278	Diesel Fuel - Emergency Generator	120	19-AUG-02	Double-Wall				RUPTURE	N/A	>100%	
130-3	130	Diesel Fuel - Emergency Generator	175	07-NOV-06	Double-Wall	I			RUPTURE	N/A	>100%	
1318-1	1318	Waste Oil / Used Oil	2,000		Double-Wall				RUPTURE	N/A	>100%	
13-2	13	Diesel Fuel - Emergency Generator	300	22-JUL-06	Double-Wall	C, I	A, B		RUPTURE	N/A	>100%	
132-2	132	Diesel Fuel - Emergency Generator	2,000	15-JUN-04	Double-Wall	I, M	A	D, F, Q	RUPTURE	N/A	>100%	
13-3	13A	Diesel Fuel - Emergency Generator	145	12-MAR-12	Double-Wall				RUPTURE	N/A	>100%	
1332-1	1332	Diesel Fuel - Emergency Generator	886	30-JAN-13	Double-Wall				RUPTURE	N/A	>100%	
134-1	134	Waste Oil / Used Oil	500	15-SEP-10	Double-Wall	R	A		RUPTURE	N/A	>100%	
1357-3	1357	Diesel Fuel - Emergency Generator	79		Double-Wall					N/A	>100%	
141-1	141	Jet Diesel Fuel	7,500	01-APR-96	Dike	C, K, P	A, B, D, J	2, D, M, Q	RUPTURE	8,250	9,291	
141-2	141	Waste Oil / Used Oil	480	25-MAR-09	Double-Wall	E, M, O, P	A	D, F	RUPTURE	N/A	>100%	
142-1	142	Jet Diesel Fuel	7,500	01-APR-96	Dike	C, K, P	A, B, D, J	Q	RUPTURE	8,250	9,291	
1527-1	1527	Cooking Oil (Golf Crs)	110		None	C	A	D, Q	RUPTURE	N/A	N/A	
1527-2	1527	Cooking Oil (Golf Crs)	131		None	C	A	D, Q	RUPTURE	N/A	N/A	
1528-1	1528	Unleaded Gasoline	1,000		Double-Wall	C, M, O, P, R, V	A, I	F, I, Q	RUPTURE	N/A	>100%	
1540-1	1540	UNLEADED/DIESEL	2,000	01-JUN-96	Double-Wall	C, L, M, O, P, R, X	A, I	F, Q	RUPTURE	N/A	>100%	
1565-1	1565	Diesel Fuel - Emergency Generator	100		Double-Wall				RUPTURE	N/A	>100%	
1575-2	1575	Diesel Fuel - Emergency Generator	100	04-JUN-10	Double-Wall		A		RUPTURE	N/A	>100%	
1750-2	1750	Vehicular Diesel	120	15-OCT-07	Berm	C	A		RUPTURE	132	311	Berm is in need of repair; in current state, approximately 219 gallons can be retained.
1750-3	1750	Vehicular Diesel	120	15-OCT-07	Berm	C	A		RUPTURE	132	311	Berm is in need of repair; in current state, approximately 219 gallons can be retained.
1751-2	1751	Diesel Fuel - Emergency Generator	79	09-APR-07	Double-Wall	C			RUPTURE	N/A	>100%	
1755-2	1755	Diesel Fuel - Emergency Generator	500	16-NOV-06	Double-Wall	E	A		RUPTURE	N/A	>100%	
1755-4	1755	Diesel Fuel - Emergency Generator	595	17-FEB-10	Double-Wall	E, M, P	A	1, 2, D	RUPTURE	N/A	>100%	
1757-1	1757	Diesel Fuel - Emergency Generator	500	01-FEB-97	Double-Wall	C, R	A		RUPTURE	N/A	>100%	
18-2	18	Diesel Fuel - Emergency Generator	120	01-JAN-00	Double-Wall	C, I	A	Q	RUPTURE	N/A	>100%	
2300-4	2300	Diesel Fuel - Emergency Generator	366	22-NOV-06	Double-Wall	I	A		RUPTURE	N/A	>100%	
2351-1	2351	Vehicular Diesel	153	03-SEP-08	Double-Wall	E	A	F	RUPTURE	N/A	>100%	
2351-2	2351	Unleaded Gasoline	153	03-SEP-08	Double-Wall	E	A	F	RUPTURE	N/A	>100%	
2400-2	2400	Diesel Fuel - Emergency Generator	145	25-JAN-12	Double-Wall				RUPTURE	N/A	>100%	
252-4	252	Diesel Fuel - Emergency Generator	500	29-OCT-14	Double-Wall				RUPTURE	N/A	>100%	
253-2	253	Diesel Fuel - Emergency Generator	175	01-JAN-09	Double-Wall				RUPTURE	N/A	>100%	
2590-1	2590	Diesel Fuel - Emergency Generator	185	26-JUL-10	Double-Wall		A		RUPTURE	N/A	>100%	
2595-2	2595	Diesel Fuel - Emergency Generator	280	02-MAY-07	Double-Wall	E	A		RUPTURE	N/A	>100%	
272-2	272	Diesel Fuel - Emergency Generator	366	15-OCT-06	Double-Wall	I	A		RUPTURE	N/A	>100%	
2751-1	2751	Diesel Fuel - Emergency Generator	100	09-FEB-11	Double-Wall	E, M, P	A	D, F	RUPTURE	N/A	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
2755-1	2755	Diesel Fuel - Emergency Generator	350	29-JAN-04	Double-Wall	C, I	A		RUPTURE	N/A	>100%	
2796-1	2796	Diesel Fuel - Emergency Generator	8,000	01-DEC-01	Double-Wall	C, M, N, O, P, R, X	A, B, D	F, L, Q	RUPTURE	N/A	>100%	
2825-3	2825	Fuel Oil: On-site Heating Only; USTs	10,000	28-JAN-98	Double-Wall	C, M, N, O, P, R	A, B, D, I	F, Q	RUPTURE	N/A	>100%	
2825-8	2825	Cooking Oil	125		None	C	A	D, Q	RUPTURE	N/A	N/A	
351-2	351	Diesel Fuel - Emergency Generator	100	01-JAN-99	Double-Wall	C, I	A	F	RUPTURE	N/A	>100%	
351-3	351	Diesel Fuel - Emergency Generator	1,000	02-MAY-05	Double-Wall	C, I, M, P	A, B, I	D, F, Q	RUPTURE	N/A	>100%	
380-1	380	Diesel Fuel - Emergency Generator	15,000	25-FEB-69	Dike	C, K, P	A	D, Q	RUPTURE	16,500	18,589	
380-2	380	Diesel Fuel - Emergency Generator	460	01-JAN-00	Dike	C, K	A	I	RUPTURE	506	18,589	
380-4	380	Diesel Fuel - Emergency Generator	3,000	23-JAN-15	Double-Wall				RUPTURE	N/A	>100%	
43-4	43	Vehicular Diesel	150	15-NOV-07	Double-Wall	E, M, P	A	2	RUPTURE	N/A	>100%	
43-5	43	Unleaded Gasoline	150	15-NOV-07	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
438-1	438	Diesel Fuel - Emergency Generator	414	24-FEB-14	Double-Wall				RUPTURE	N/A	>100%	
441-1	441	Diesel Fuel - Generator or Pump	550	01-APR-97	Inside Building	C, K	A, B, D	D, I	RUPTURE	N/A	>605	
441-2	441	Diesel Fuel - Generator or Pump	550	01-APR-97	Inside Building	C, K	A, B, D	D, I	RUPTURE	N/A	>605	
441-3	441	Diesel Fuel - Generator or Pump	550	01-APR-97	Inside Building	C, K	A, B, D	D, I	RUPTURE	N/A	>605	
441-4	441	Diesel Fuel - Generator or Pump	550	01-APR-97	Inside Building	C, K	A, B, D	D, I	RUPTURE	N/A	>605	
44-3	44	Diesel Fuel - Emergency Generator	366	27-MAY-08	Double-Wall	E	A	Q	RUPTURE	N/A	>100%	
444-11	444	Unleaded Gasoline	300	10-OCT-08	Dike	C	A		RUPTURE	330	3,053	
444-12	444	MULTI-FUEL	3,000	12-JUN-09	Double-Wall	E, O, P	A		RUPTURE	N/A	>100%	
444-13	444	MULTI-FUEL	1,100	12-JUN-09	Double-Wall	E, O	A		RUPTURE	N/A	>100%	
444-14	444	MULTI-FUEL	1,100	12-JUN-09	Double-Wall	E, O	A		RUPTURE	N/A	>100%	
444-15	444	Diesel Fuel - Generator or Pump	500	18-JAN-12	Double-Wall				RUPTURE	N/A	>100%	
500-2	500	New & Lube Oil	280	04-NOV-99	Double-Wall				RUPTURE	N/A	>100%	
509-2	509	Diesel Fuel - Emergency Generator	79	05-NOV-07	Double-Wall				RUPTURE	N/A	>100%	
541-1	541	Diesel Fuel - Emergency Generator	145	03-DEC-06	Double-Wall	C	A		RUPTURE	N/A	>100%	
545-2	545	Diesel Fuel - Emergency Generator	1,000	01-NOV-97	Double-Wall	C, E, M, P, R	A, B, D, I	F, Q	RUPTURE	N/A	>100%	
545-3	545	Diesel Fuel - Emergency Generator	103	01-NOV-97	Inside Building				RUPTURE	N/A	Active Containment	ASUS
552-6	552	Waste Oil / Used Oil	5,000	01-JUN-96	Dike	C, M, P	A, B	I	RUPTURE	5,500	8,758	
552-7	552	Waste Oil / Used Oil	500	15-JUN-07	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
552-8	552	Diesel Fuel - Emergency Generator	145		Double-Wall				RUPTURE	N/A	>100%	
561-3	561	New & Lube Oil	280	18-JUN-02	Double-Wall	E	A		RUPTURE	N/A	>100%	
561-4	561	New & Lube Oil	280	01-JAN-00	Double-Wall	E	A		RUPTURE	N/A	>100%	
562-2	562	New & Lube Oil	280	01-JAN-00	Double-Wall	C			RUPTURE	N/A	>100%	
614-2	614	Diesel Fuel - Emergency Generator	2,000	01-OCT-09	Double-Wall		A	D, F	RUPTURE	N/A	>100%	
614-3	614	Diesel Fuel - Emergency Generator	3,000	12-APR-16	Double-Wall				RUPTURE	N/A	>100%	
614-4	614	Diesel Fuel - Generator or Pump	500	06-MAY-16	Double-Wall				RUPTURE	N/A	>100%	
62-1	62	Diesel Fuel - Emergency Generator	400	01-JAN-09	Double-Wall				RUPTURE	N/A	>100%	
667-2	667	Diesel Fuel - Emergency Generator	100	02-APR-08	Double-Wall	E, M	A	F, Q	RUPTURE	N/A	>100%	
670-1	670	Diesel Fuel - Emergency Generator	145	14-MAR-08	Double-Wall	E	A		RUPTURE	N/A	>100%	
677-1	677	Diesel Fuel - Emergency Generator	240	01-APR-03	Double-Wall				RUPTURE	N/A	>100%	
68-2	68	Diesel Fuel - Emergency Generator	500	01-JAN-09	Double-Wall				RUPTURE	N/A	>100%	
689-1	689	Unleaded Gasoline	153	10-DEC-10	Double-Wall	E, P	A	D, Q	RUPTURE	N/A	>100%	
689-2	689	Vehicular Diesel	153	10-DEC-10	Double-Wall	E, P	A	Q	RUPTURE	N/A	>100%	
693-1	693	New & Lube Oil	280	01-JAN-00	Double-Wall	C			RUPTURE	308	>100%	
693-2	693	New & Lube Oil	280	01-JAN-00	Double-Wall	C			RUPTURE	308	>100%	
693-4	693	Waste Oil / Used Oil	300	17-OCT-01	Double-Wall				RUPTURE	N/A	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
697-1	697	Diesel Fuel - Emergency Generator	66	16-JUL-07	ND	E	A		RUPTURE	ND	>66	Standby location - Empty
697-2	697	Diesel Fuel - Emergency Generator	145	01-NOV-07	ND				RUPTURE	ND	>145	Standby location - Empty
697-5	697	Diesel Fuel - Emergency Generator	66	08-AUG-07	ND				RUPTURE	ND	>66	Standby location - Empty
697-6	697	Diesel Fuel - Emergency Generator	100	16-JUL-07	Double-Wall				RUPTURE	N/A	>100%	
732-3	732	Unleaded Gasoline	2,000	17-MAR-98	Double-Wall	C, M, N, O, P, R	A, B, J, K, M, N	1, 3, 5, F, H,	RUPTURE	N/A	>100%	
797-1	797	Diesel Fuel - Emergency Generator	366		Double-Wall				RUPTURE	N/A	>100%	
80066-1	80066	Diesel Fuel - Emergency Generator	145	27-OCT-08	Double-Wall	E, P	A	Q	RUPTURE	N/A	>100%	
80067-1	80067	Diesel Fuel - Emergency Generator	79	20-MAY-09	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
80068-1	80068	Diesel Fuel - Emergency Generator	145	20-SEP-08	Double-Wall		A	Q	RUPTURE	N/A	>100%	
80077-1	80077	Diesel Fuel - Emergency Generator	366	24-JUN-09	Double-Wall	E	A		RUPTURE	N/A	>100%	
82-1	82	Diesel Fuel - Emergency Generator	500		Double-Wall	C, I	A	Q	RUPTURE	N/A	>100%	
825-1	825	Cooking Oil	132		None	E	A		RUPTURE	N/A	N/A	
825-2	825	Cooking Oil	132		None	E	A	D, Q	RUPTURE	N/A	N/A	
836-1	836	Diesel Fuel - Emergency Generator	145	14-JAN-15	Double-Wall				RUPTURE	N/A	>100%	ASUS
849-1	849	Unleaded Gasoline	153	27-OCT-09	Double-Wall	M, P,	A		RUPTURE	N/A	>100%	
849-2	849	Unleaded Gasoline	153	02-SEP-13	Double-Wall				RUPTURE	N/A	>100%	
849-3	849	Vehicular Diesel	153	02-SEP-13	Double-Wall				RUPTURE	N/A	>100%	
85-1	85	Diesel Fuel - Emergency Generator	2,000	06-JAN-05	Double-Wall	C, I, M, P	A, I, N	1, F, Q	RUPTURE	N/A	>100%	
85-2	85	Diesel Fuel - Emergency Generator	135	01-OCT-07	Double-Wall				RUPTURE	N/A	>100%	ASUS
85-3	85	Diesel Fuel - Emergency Generator	135	01-JAN-06	Double-Wall				RUPTURE	N/A	>100%	
862-1	862	Cooking Oil	333		None	C		D, Q	RUPTURE	N/A	N/A	
862-2	862	Diesel Fuel - Emergency Generator	210	01-JAN-02	Double-Wall		A		RUPTURE	N/A	>100%	
873-2	873	Diesel Fuel - Emergency Generator	145	30-AUG-11	Double-Wall				RUPTURE	N/A	>100%	
89-3	89	Diesel Fuel - Emergency Generator	280	19-APR-11	Double-Wall				RUPTURE	N/A	>100%	
898-1	898	Avaiation Gasoline	10,000	20-JUL-06	Double-Wall	K, N, O, P	A, B		RUPTURE	N/A	>100%	
899-3	899	Diesel Fuel - Emergency Generator	150	01-JUL-08	Double-Wall				RUPTURE	N/A	>100%	
907-1	907	Diesel Fuel - Emergency Generator	150		Double-Wall	C			RUPTURE	N/A	>100%	
912-1	912	Diesel Fuel - Emergency Generator	1,000	20-FEB-08	Double-Wall	M, N, O, P, R	A	1, 2, D, F	RUPTURE	N/A	>100%	
920-1	920	Vehicular Diesel	153	10-DEC-10	Double-Wall	E, P	A	D, Q	RUPTURE	N/A	>100%	
921-1	921	Vehicular Diesel	153	01-OCT-09	Double-Wall	E, M, P	A		RUPTURE	N/A	>100%	
926-2	926	Diesel Fuel - Emergency Generator	500	01-DEC-97	Double-Wall	C, M, P, R	A, B, D, I	F, M	RUPTURE	N/A	>100%	
941-1	941	Diesel Fuel - Emergency Generator	3,000		Double-Wall					N/A	>100%	
947-2	947	Diesel Fuel - Emergency Generator	1,000	01-OCT-97	Double-Wall	C, M, P, R	A, B, D, I	F, M, Q	RUPTURE	N/A	>100%	
999-2	999	Fuel Oil: On-site Heating Only; USTs	1,000	01-NOV-00	Double-Wall	M, P, R, X	A		RUPTURE	N/A	>100%	
Mid Field Bulk Fuel Storage Area												
92-1	92	Jet Diesel Fuel	210,000	01-MAY-96	Dike	C, G, J, K, P, U	A, B, D, G	K, L, Q, R, U	RUPTURE	231,000	275,572	
945-1	945	Jet Diesel Fuel	210,000	01-MAY-96	Dike	C, J, K, P, U	A, B, D, G, J, L, I	K, L, M	RUPTURE	231,000	0	Out of service (empty)
Range OFTs												
12516-1	12516	Diesel Fuel - Emergency Generator	175	13-MAR-07	Double-Wall	C	A		RUPTURE	N/A	>100%	
12522-1	12522	Diesel Fuel - Emergency Generator	336	01-JUN-07	Double-Wall	E	A		RUPTURE	N/A	>100%	
12723-1	12723	Diesel Fuel - Emergency Generator	380	08-DEC-06	Double-Wall	E	A		RUPTURE	N/A	>100%	
1523-1	1523	Diesel Fuel - Emergency Generator	308	06-MAY-09	Double-Wall	E	A		RUPTURE	N/A	>100%	
2063-1	2063	Diesel Fuel - Emergency Generator	1,125	16-FEB-10	Double-Wall	E, M, P	A		RUPTURE	N/A	>100%	
2063-2	2063	Diesel Fuel - Emergency Generator	1,125	16-FEB-10	Double-Wall	E, M, P	A		RUPTURE	N/A	>100%	
2069-2	2069	Diesel Fuel - Emergency Generator	145	12-JUL-12	Double-Wall				RUPTURE	N/A	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
4024-1	4024	Vehicular Diesel	1,000	19-FEB-10	Double-Wall	M, N, P, R	A	D, F	RUPTURE	N/A	>100%	
5104-2	5104	Diesel Fuel - Emergency Generator	100	10-MAY-10	Double-Wall	E, P	A	D, F	RUPTURE	N/A	>100%	
5105-2	5105	Fuel Oil: On-site Heating Only; USTs	500	17-NOV-10	Double-Wall	E, P	A	D	RUPTURE	N/A	>100%	
5209-2	5209	Diesel Fuel - Emergency Generator	500	19-OCT-11	Double-Wall				RUPTURE	N/A	>100%	
6004-1	6004	Diesel Fuel - Emergency Generator	145	8-Nov-10	Double-Wall					N/A	>100%	
6009-1	6009	Diesel Fuel - Emergency Generator	145	8-Nov-10	Double-Wall					N/A	>100%	
6024-1	6024	Unleaded Gasoline	1,000	01-JAN-94	Dike	C, K, P	F, I	4, Q	RUPTURE	1,100	2,287	
6024-2	6024	Vehicular Diesel	3,000	01-JUN-94	Dike	C, K	F, I, K	Q	RUPTURE	3,300	6,472	
6027-1	6027	Fuel Oil: On-site Heating Only; USTs	5,000	01-JAN-92	Single Walled				RUPTURE	5,500	6,989	Out of service (empty)
6027-2	6027	Diesel Fuel - Emergency Generator	366		Double-Wall	C, I, P	A	D, Q	RUPTURE	N/A	>100%	
6027-3	6027	Cooking Oil	200		None	C		D, Q	RUPTURE	N/A	N/A	
6061-1	6061	Diesel Fuel - Emergency Generator	100	09-FEB-11	Double-Wall				RUPTURE	N/A	>100%	
6065-1	6065	Diesel/MOGAS	10,000	27-JUL-17	Double-Wall				RUPTURE	N/A	>100%	
6069-1	6069	Diesel Fuel - Emergency Generator	100		Double-Wall					N/A	>100%	
6071-3	6071	Diesel Fuel - Emergency Generator	79	01-FEB-11	Double-Wall				RUPTURE	N/A	>100%	
6102-1	6102	Diesel Fuel - Emergency Generator	540	03-APR-06	Double-Wall				RUPTURE	N/A	>100%	ASUS
8352-2	8352	Diesel Fuel - Emergency Generator	300	17-JUL-96	Double-Wall		A		RUPTURE	N/A	>100%	
8636-1	8636	Diesel Fuel - Emergency Generator	15,000	12-MAR-68	Dike	C, K, O, P	A, B, D, I	I, Q	RUPTURE	16,500	41,178	Out of service (empty)
8636-2	8636	Diesel Fuel - Emergency Generator	15,000	12-MAR-68	Dike	C, K	A, B, D, I	Q	RUPTURE	16,500	ND	Out of service (empty)
8636-5	8636	Diesel Fuel - Emergency Generator	300		Double-Wall				RUPTURE	N/A	>100%	
8636-6	8636	Diesel Fuel - Emergency Generator	75		Double-Wall	C	A	2, Q	RUPTURE	N/A	>100%	
8636-7	8636	Diesel Fuel - Emergency Generator	2,000	28-MAR-13	Double-Wall				RUPTURE	N/A	>100%	
8640-1	8640	Diesel Fuel - Emergency Generator	366	05-APR-07	Double-Wall		A		RUPTURE	N/A	>100%	
8716-2	8716	Diesel Fuel - Emergency Generator	80	01-FEB-10	Double-Wall	E	A		RUPTURE	N/A	>100%	
8759-2	8759	Diesel Fuel - Emergency Generator	500	31-JUL-06	Double-Wall	C, I			RUPTURE	N/A	>100%	
8774-2	8774	Diesel Fuel - Emergency Generator	250	01-DEC-97	Double-Wall	C, M, P, R	A, B, D, I	F, M	RUPTURE	N/A	>100%	
8777-2	8777	Fuel Oil: On-site Heating Only; USTs	1,000		Dike	C		Q	RUPTURE	1,100	4,578	
8777-3	8777	Vehicular Diesel	500	30-MAY-12	Double-Wall				RUPTURE	N/A	>100%	
8779-1	8779	Diesel Fuel - Emergency Generator	100		Double-Wall				RUPTURE	N/A	>100%	
8842-2	8842	Diesel Fuel - Emergency Generator	500	01-DEC-06	Double-Wall	E	A		RUPTURE	N/A	>100%	
8874-1	8874	Diesel Fuel - Emergency Generator	600	13-JAN-10	Double-Wall				RUPTURE	N/A	>100%	
9002-1	9002	Diesel Fuel - Emergency Generator	250	01-JAN-90	Double-Wall				RUPTURE	N/A	>100%	
9002-2	9002	Diesel Fuel - Emergency Generator	250	01-JAN-90	Double-Wall				RUPTURE	N/A	>100%	
9103-3	9103	Vehicular Diesel	4,000	18-DEC-95	Double-Wall	C, I, J, M, P	A, B, D, I, K	F, Q	RUPTURE	N/A	>100%	
9103-4	9103	Unleaded Gasoline	2,000	18-DEC-95	Double-Wall	I, J, M, O, P	A, B, D, I, K	4, F, Q	RUPTURE	N/A	>100%	
9107-1	9107	Waste Oil / Used Oil	480	15-FEB-01	Double-Wall	C, I, M		Q	RUPTURE	N/A	>100%	
9107-2	9107	Waste Oil / Used Oil	480	15-FEB-01	Double-Wall	C, I, M		Q	RUPTURE	N/A	>100%	
9107-3	9107	Waste Oil / Used Oil	280	15-JUN-99	Double-Wall	C, I		Q	RUPTURE	N/A	>100%	
9207-3	9207	Diesel Fuel - Emergency Generator	396	27-JUN-07	Double-Wall				RUPTURE	N/A	>100%	
9277-1	9277	Fire Pump	300		Inside Building				RUPTURE	N/A	Active Containment	
9285-3	9285	Diesel Fuel - Emergency Generator	425	02-JUL-07	Double-Wall	E	A	Q	RUPTURE	N/A	>100%	

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES
9353-1	9353	Water Pump Support	120	16-SEP-10	Inside Building		A	D, Q	RUPTURE	N/A		Single-walled - According to Bradley Prescott (882-1534), there is no spill kit located inside this facility and room is only visited on periodic basis. Determine if spill kit can be added to facility and active containment be utilized.
9621-1	9621	Diesel Fuel - Emergency Generator	660	19-NOV-08	Double-Wall	E, M, P	A	D, F	RUPTURE	N/A	>100%	
9624-1	9624	Diesel Fuel - Emergency Generator	75	01-SEP-02	Double-Wall		A		RUPTURE	N/A	>100%	
9628-3	9628	Diesel Fuel - Emergency Generator	500	06-DEC-06	Double-Wall	E	A		RUPTURE	N/A	>100%	
9628-4	9628	Vehicular Diesel	250	10-DEC-08	Double-Wall	E, P	A		RUPTURE	N/A	>100%	
9633-1	9633	Diesel Fuel - Emergency Generator	176	01-FEB-03	Double-Wall		A		RUPTURE	N/A	>100%	
9963-3	9963	Diesel Fuel - Emergency Generator	5,000	29-AUG-02	Double-Wall	C, M, N, O, P, R	A, B, D, I	F, Q	RUPTURE	N/A	>100%	
9963-5	9963	Diesel Fuel - Emergency Generator	200	29-AUG-02	Double-Wall	C, I, P	A	D, Q	RUPTURE	N/A	>100%	
9963-6	9963	Unleaded Gasoline	2,000	12-NOV-08	Double-Wall	M, P, R	A	D, F, Q	RUPTURE	N/A	>100%	
9963-7	9963	Diesel Fuel - Emergency Generator	450	20-JUL-10	Double-Wall		A		RUPTURE	N/A	>100%	
9963-8	9963	Vehicular Diesel	2,000	10-MAR-16	Double-Wall				RUPTURE	N/A	>100%	
West Side Bulk Fuel Storage Area												
1302-39	1302	Jet Diesel Fuel	1,137,800	01-JAN-58	Dike	B, C, H, K, P, U	A, B, D, E, J, L	L, M, P, Q, U	RUPTURE	1,251,580	1,255,568	
1303-3	1303	Diesel Fuel - Emergency Generator	615	10-JAN-12	Double-Wall				RUPTURE	N/A	>100%	
1303-40	1303	Jet Diesel Fuel	1,137,800	01-JAN-58	Dike	B, C, H, K, P, U	A, B, D, E, J, L	L, P, Q, U	RUPTURE	1,251,580	1,255,568	

Notes:
Direct communication between tank gauger and the fuel provider is maintained for all tanks.
25 Year/24 Hour Storm Event for Eglin AFB, Duke Field, and Ranges is 11 inches.
Actual secondary containment capacity based on rough field measurements.
Information on mobile and portable containers can be found in Section 14.0 and Table E-4 of the SPCC Plan.
NA = Not Applicable; ND = No Data; UK = Unknown

CONSTRUCTION
Primary Construction: C. Steel
D. Unknown **X.** Concrete
E. Fiberglass **Y.** Polyethylene
F. Fiberglass-clad steel **Z.** Other DEP approved tank material
Overfill/Spill: A. Ball check valve **O.** Tight fill
M. Spill containment bucket **P.** Level gauges, high-level alarms
N. Flow shut-off **Q.** Other DEP approved protection method
Corrosion Protection: G. Cathodic protection - sacrificial anode **H.** Cathodic protection - impressed current
Secondary Containment: I. Double wall construction: single material (outer tank material same as inner tank material)
R. Double wall construction: dual material (outer tank - concrete, approved synthetic material, or tank "jacket")
J. Synthetic liner in tank excavation
K. Concrete, synthetic material, and/or offsite clays beneath AST and in containment area
S. Other DEP approved secondary containment system
V. Pipeless UST with secondary containment
Miscellaneous attributes: B. Internal lining **U.** Field erected tank
L. Compartmented

PIPING
Primary Construction: B. Steel or galvanized metal **Y.** Unknown
C. Fiberglass **Z.** Other DEP approved piping material
N. Approved synthetic material
Corrosion Protection: D. External protective coating.
E. Cathodically protected with sacrificial anode or impressed current
Secondary Containment: F. Double wall construction: single material (outer pipe material same as inner pipe material)
M. Double wall construction: dual material (outer pipe - approved synthetic material or pipe "jacket")
G. Synthetic liner or box/trench liner in piping excavation or pipe containment area
P. Internal Piping: contained within an internal sump riser, directly connected to tank & located beneath dispenser
Miscellaneous attributes: A. Aboveground, no contact with soil **K.** Dispenser liners

Table E-1
Facility Oil Storage Inventory and Hazard Identification – Aboveground Petroleum Storage Tanks/Containers

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Required Secondary Containment Capacity for 110% Tank Capacity (gal)	Secondary Containment Capacity (gal)	NOTES

I. Suction piping system **L.** Bulk product system
J. Pressurized piping system **H.** Airport/seaport hydrant system

MONITORING
External: A. Site Suitability Plan **N.** Groundwater monitoring wells
B. Site Suitability Plan Exemption **O.** Vapor monitoring wells
C. Groundwater Monitoring Plan **P.** Vapor monitoring with dilution procedures
D. SPCC Plan **Q.** Visual inspection of AST systems
E. Interstitial monitoring of UST synthetic liners **W.** Fiber-optic technologies
Z. Other DEP approved monitoring method
Internal: F. Interstitial space - double wall tank **R.** Intensitix monitoring of AST tank bottom
L. Automatic tank gauging system (USTs) **S.** Statistical Invertory Reconciliation (SIR) (USTs)
M. Manual tank gauging system (USTs) **T.** Annual tightness test with inventory (USTs)
Piping monitoring: G. Electronic line leak detector with flow shutoff **U.** Bulk product piping pressure test
H. Mechanical line leak detector **V.** Suction pump check valve
J. Interstitial monitoring - piping line & External monitoring
K. Interstitial monitoring - double wall piping
Miscellaneous: 1. Not required - see rule for exemptions **2.** Visual inspections of piping sumps
X. None **3.** Electronic monitoring of piping sumps
Y. Unknown **4.** Visual inspections of dispenser liners
1. Continuous electronic sensing equipment **5.** Electronic monitoring of dispenser liners

Table E-2
Facility Oil Storage Inventory and Hazard Identification - Underground Petroleum Storage Tanks

Tank ID	Building Number	Product Stored	Container Capacity (gal)	Year Installed	Secondary Containment (Double-Wall, Dike)	Container Attributes	Piping Attributes	Monitoring	Type of Failure	Secondary Containment Capacity (gal)	Notes
Non-Exempt Underground Petroleum Storage Tanks											
72-1	72	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	2,000	01-JAN-92	N/A				RUPTURE	N/A	Out-of-Service Waiting to be removed.
940-1	940	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	500	01-JAN-92	N/A				RUPTURE	N/A	Out-of-Service Waiting to be removed.
1303-2	1303	Jet Diesel Fuel	4,000	08-DEC-11	Double-Walled (Steel)				RUPTURE	>100%	
3053-2	3053	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	10,000	01-JAN-54	N/A	Z	B, I, Y		RUPTURE	N/A	Out-of-Service Waiting to be removed.
4310-1	4310	Unleaded Gasoline	10,000	13-JUL-11	Double-walled (Fiberglass)				RUPTURE	>100%	
4310-2	4310	Unleaded Gasoline	10,000	12-JUL-11	Double-walled (Fiberglass)				RUPTURE	>100%	
8728-2	8728	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	500		N/A	D	Y	Y	RUPTURE	N/A	Out of Service Waiting to be removed
9485-1	9485	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	2,000		None	C	B	I	RUPTURE	N/A	In-Service - To be replaced (Single-Walled) AST on site. Waiting for concrete pad for tank placement.
9625-1	9625	Fuel Oil: On-site Heating Only; USTs or ASTs < 30K gals	2,000		N/A	C			RUPTURE	N/A	Out of Service Waiting to be removed

Notes:
Except for information regarding heating fuel oil USTs, all other UST information was obtained from a previous version of the Eglin AFB SPCC Plan (prepared by Taylor and Morgan, July 2000) and the Eglin Tanks database. Heating fuel oil UST information (container type and corrosion protection) was provided by Eglin AFB Environmental Management Division (96 CEG/CEV) to Joint Venture Petroleum Partners in November 2002.
Most USTs containing heating oil are presently INACTIVE and pending removal due to replacement with natural gas systems.
Disclaimer:
In the July 2000 SPCC Plan, tank information sheets were not included for the "Non-Florida Regulated USTs." The USTs were described in general as a group with the following information: the majority of the USTs were installed in the early 1990s, most are single walled configuration steel tanks with level gauges, and all receive regular inspections. Except for the heating fuel oil USTs previously mentioned above, each "Non-Regulated UST" in this table taken from the previous SPCC Plan is listed as having those characteristics.

CONSTRUCTION
Primary Construction: C. Steel
D. Unknown **X.** Concrete
E. Fiberglass **Y.** Polyethylene
F. Fiberglass-clad steel **Z.** Other DEP approved tank material
Overfill/Spill: A. Ball check valve **O.** Tight fill
M. Spill containment bucket **P.** Level gauges, high-level alarms
N. Flow shut-off **Q.** Other DEP approved protection method
Corrosion Protection: G. Cathodic protection - sacrificial anode **H.** Cathodic protection - impressed current
Secondary Containment: I. Double wall construction: single material (outer tank material same as inner tank material)
R. Double wall construction: dual material (outer tank - concrete, approved synthetic material, or tank "jacket")
J. Synthetic liner in tank excavation
K. Concrete, synthetic material, and/or offsite clays beneath AST and in containment area
S. Other DEP approved secondary containment system
V. Pipeless UST with secondary containment
Miscellaneous attributes: B. Internal lining **U.** Field erected tank
L. Compartmented

PIPING
Primary Construction: B. Steel or galvanized metal **Y.** Unknown
C. Fiberglass **Z.** Other DEP approved piping material
N. Approved synthetic material
Corrosion Protection: D. External protective coating
E. Cathodically protected with sacrificial anode or impressed current
Secondary Containment: F. Double wall construction: single material (outer pipe material same as inner pipe material)
M. Double wall construction: dual material (outer pipe - approved synthetic material or pipe "jacket")
G. Synthetic liner or box/trench liner in piping excavation or pipe containment area
P. Internal Piping: contained within an internal sump riser, directly connected to tank & located beneath dispenser
Miscellaneous attributes: A. Aboveground, no contact with soil **K.** Dispenser liners
I. Suction piping system **L.** Bulk product system
J. Pressurized piping system **H.** Airport/seaport hydrant system

MONITORING
External: A. Site Suitability Plan **N.** Groundwater monitoring wells
B. Site Suitability Plan Exemption **O.** Vapor monitoring wells
C. Groundwater Monitoring Plan **P.** Vapor monitoring with dilution procedures
D. SPCC Plan **Q.** Visual inspection of AST systems
E. Interstitial monitoring of UST synthetic liners **W.** Fiber-optic technologies
Z. Other DEP approved monitoring method
Internal: F. Interstitial space - double wall tank **R.** Interstitial monitoring of AST tank bottom
L. Automatic tank gauging system (USTs) **S.** Statistical Inventory Reconciliation (SIR) (USTs)
M. Manual tank gauging system (USTs) **T.** Annual tightness test with inventory (USTs)
Piping monitoring: G. Electronic line leak detector with flow shutoff **U.** Bulk product piping pressure test
H. Mechanical line leak detector **V.** Suction pump check valve
J. Interstitial monitoring - piping liner **6.** External monitoring
K. Interstitial monitoring - double wall piping
Miscellaneous: 1. Not required - see rule for exemptions **2.** Visual inspections of piping sumps
X. None **3.** Electronic monitoring of piping sumps
Y. Unknown **4.** Visual inspections of dispenser liners
I. Continuous electronic sensing equipment **5.** Electronic monitoring of dispenser liners

Table E-3
Facility Oil Storage Inventory and Hazard Identification - Oil Drum Storage

Site Number	Organization	Building Number	Product Stored	Container Capacity (gal)	Containerntainer Type	# Containers	Total Capacity
	HAZMAT CONTRACTOR FOR EGLIN	615	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	4	220
	HAZMAT CONTRACTOR FOR EGLIN	615	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	1	55
	HAZMAT CONTRACTOR FOR EGLIN	615	LUBRICANTING OIL, ENGINE 10W	55	Drum	3	165
	HAZMAT CONTRACTOR FOR EGLIN	615	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	1	55
	POSTAL POINT MARINA	110	LUBRICANT, MOTOR OIL, 2-CYCLE, MARINE	55	Drum	3	165
	GOLF COURSE MAINTENANCE	1512	LUBRICANT, MOTOR OIL, 10W-30	55	Drum	1	55
	GOLF COURSE MAINTENANCE	1512	LUBRICANT, ENGINE OIL, SAE 30	55	Drum	1	55
	96 MXS AGE MAINTENANCE (TRINITY) / IP33	101	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	4	220
	96 MXS AGE MAINTENANCE (TRINITY) / IP33	101	LUBRICANT, SYNTHETIC OIL, AIRCRAFT TURBINE	55	Drum	2	110
	96 MXS AGE MAINTENANCE (TRINITY) / IP33	101	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	1	55
	96 MXS AGE MAINTENANCE (TRINITY) / IP33	101	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	2	110
	96 MXS JET ENGINE TEST CELL (PAE) / IP36	140	LUBRICANT, OIL, AIRCRAFT TURBINE, GRADE 1010	55	Drum	1	55
	96 MXS JET ENGINE TEST CELL (PAE) / IP36	140	LUBRICANT, SYNTHETIC OIL, AIRCRAFT TURBINE	55	Drum	1	55
	96 MXS MACHINE (PAE) / IP36	129	ASTRO-CUT HIGH PRESSURE HD, METALWORKING FLUID	55	Drum	1	55
	96 MXS PNEUDRAULICS (PAE) / IP36	426	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	1	55
	96 MXS STRUCTURAL REPAIR (PAE) / IP36	129	LUBRICANT, HYDRAULIC FLUID, GENERAL PURPOSE	55	Drum	1	55
	VEHICLE MAINTENANCE	500	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	2	110
	VEHICLE MAINTENANCE	500	LUBRICANT, GEAR OIL, 85W-140	55	Drum	1	55
	VEHICLE MAINTENANCE	500	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	19	1045
	VEHICLE MAINTENANCE	500	LUBRICANT, MOTOR OIL, 5W-30	55	Drum	4	220
	VEHICLE MAINTENANCE	500	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	2	110
	VEHICLE MAINTENANCE	500	LUBRICANT, HYDRAULIC FLUID	55	Drum	4	220
	VEHICLE MAINTENANCE	500	LUBRICANT, AUTOMATIC TRANSMISSION FLUID	55	Drum	5	275
	VEHICLE MAINTENANCE	500	AUTOMATIC TRANSMISSION FLUID	55	Drum	6	330
	VEHICLE MAINTENANCE	500	PUREGREEN SUPREME SAE 5W-30 GF-5/SN	55	Drum	2	110
	AEROSPACE GROUND EQUIPMENT (POWERED AGE)	3067	LUBRICANT, MOTOR OIL, 40 GRADE	55	Drum	2	110
	AEROSPACE GROUND EQUIPMENT (POWERED AGE)	3067	LUBRICANT, AUTOMATIC TRANSMISSION FLUID	55	Drum	2	110
	FLIGHTLINE MAINTENANCE	3020	LUBRICANT, OIL, AIRCRAFT TURBINE	55	Drum	2	110
	GUIDED WEAPONS EVALUATION FACILITY	374	LUBRICANT, HYDRAULIC OIL, ISO 46	55	Drum	7	385
	VEHICLE MAINTENANCE (NAVY SCHOOL)	8840	LUBRICANT, MOTOR OIL, SAE 30	55	Drum	2	110
	VEHICLE MAINTENANCE (NAVY SCHOOL)	8840	PETROLEUM LUBRICATING OIL, FISKE AW-32/46/68/100	55	Drum	3	165
	VEHICLE MAINTENANCE (NAVY SCHOOL)	8840	HYDRAULIC OIL 1192	55	Container	5	275
	VEHICLE MAINTENANCE (NAVY SCHOOL)	8840	FORMULASHELL SAE 10W-30 MOTOR OIL	55	Drum	1	55
	FACILITY/RANGE MAINTENANCE [IP19D, IP19]	3031	LUBRICANT, HYDRAULIC OIL, GRADE 46	55	Drum	7	385
	MODELS SHOP	614	LUBRICANT, CUTTING FLUID, SEMI SYNTHETIC, COOLANT	55	Container	1	55
	MODELS SHOP	614	UNIVIS N 68	55	Drum	1	55
	MODELS SHOP	614	HAYES H-1 QUENCH OIL	55	Container	2	110
	ADVANCED WARHEAD EXPERIMENTATION FACILITY	9620	LUBRICANT, METAL WORKING FLUID	55	Drum	1	55
	METALS TECHNOLOGY (33RD WG)	1352	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	1	55
	AEROSPACE GROUND EQUIPMENT (AGE FLIGHT)	1318	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	2	110
	AEROSPACE GROUND EQUIPMENT (AGE FLIGHT)	1318	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	1	55
	AEROSPACE GROUND EQUIPMENT (AGE FLIGHT)	1318	LUBRICANT, TURBINE OIL, AIRCRAFT	55	Drum	3	165
	AEROSPACE GROUND EQUIPMENT (AGE FLIGHT)	1318	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	1	55
	AEROSPACE GROUND EQUIPMENT (NAVY AGE SHOP)	1318	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	11	605
	AEROSPACE GROUND EQUIPMENT (NAVY AGE SHOP)	1318	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	2	110

Table E-3
Facility Oil Storage Inventory and Hazard Identification - Oil Drum Storage

Site Number	Organization	Building Number	Product Stored	Container Capacity (gal)	Containerntainer Type	# Containers	Total Capacity
	AEROSPACE GROUND EQUIPMENT (NAVY AGE SHOP)	1318	LUBRICANT, TURBINE OIL, AIRCRAFT	55	Drum	7	385
	AEROSPACE GROUND EQUIPMENT (NAVY AGE SHOP)	1318	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	6	330
	PRATT & WHITNEY PROPULSION SYSTEM MAINTAINERS	1318	LUBRICANT, OIL, AIRCRAFT TURBINE, GRADE 1010	55	Drum	1	55
	GROUP SUPPORT BATT	4355	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	4	220
	GROUP SUPPORT BATT	4355	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	1	55
	2ND BATT	4490	LUBRICANT, GEAR OIL, 80W-90	55	Drum	1	55
	DIVE LOCKER	4365	LUBRICANT, ENGINE OIL, 2-CYCLE, MARINE	55	Drum	1	55
	C-146/AIRCRAFT MAINTENANCE	3032	LUBRICANT, OIL, AIRCRAFT TURBINE	55	Drum	2	110
	796 CES - MATERIAL CONTROL, BLDG 650 [IP19]	650	LUBRICANT, HYDRAULIC FLUID	55	Drum	1	55
	96 LRS TRANSPORTATION MATERIAL	500	AUTOMATIC TRANSMISSION FLUID	55	Drum	1	55
	96 RN / CONTRACTOR	956	2-CYCLE ENGINE OIL	55	Drum	1	55
	96 MXS/MXMG, TRINITY, BLDG 101 (IP33)	101	LUBRICANT, SYNTHETIC OIL, AIRCRAFT TURBINE	55	Drum	1	55
	96 MXS/MXMG, TRINITY, BLDG 101 (IP33)	101	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	1	55
	96 MXS/MXMG, TRINITY, BLDG 101 (IP33)	101	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	3	165
	NAVY UNDERWATER TOOLS AND TECH	797	QUICKSILVER SEMI SYNTHETIC 25W40 ENGINE OIL	55	Drum	2	110
	NAVEOD HAZMAT	8861	LUBRICANT, GEAR OIL, 80W90	55	Drum	1	55
	919 SOW HAZMAT ISSUE POINT	3032	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	1	55
	919 SOW HAZMAT ISSUE POINT	3032	LUBRICANT, MOTOR OIL, 40 GRADE	55	Drum	1	55
	33RD FW (IP71)	1413	LUBRICANT, HYDRAULIC FLUID, FIRE RESISTANT	55	Drum	9	495
	33RD FW (IP71)	1413	LUBRICATING OIL, AIRCRAFT TURBINE ENGINE	55	Drum	4	220
	33RD FW (IP71)	1413	LUBRICANT, DIELECTRIC COOLANT, HEAT TRANFER FLUID	55	Drum	8	440
	33RD FW (IP71)	1413	LUBRICANT, TURBINE OIL, AIRCRAFT	55	Drum	6	330
	33RD FW (IP71)	1413	LUBRICATING OIL, ENGINE 15W-40	55	Drum	1	55
	33RD FW (IP71)	1413	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	9	495
	7TH SFG-IP80	3018	LUBRICANT, GEAR OIL, 80W-90	55	Drum	22	1210
	7TH SFG-IP80	3018	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	8	440
	7TH SFG-IP80	3018	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	24	1320
	7TH SFG-IP80	3018	LUBRICANT, ENGINE OIL, 2-CYCLE, MARINE	55	Drum	2	110
	96 FSS/FSCG GOLF COURSE MAINT.	608	LUBRICANT, MOTOR OIL, 10W-30	55	Drum	1	55
	AFRL ISSUE POINT	13	LUBRICANT, CUTTING FLUID	55	Drum	1	55
	AFRL HERD FACILITY ISSUE POINT	1206	LUBRICANT, HYDRAULIC FLUID, TURBINE OIL	55	Container	2	110
	AFRL HERD FACILITY ISSUE POINT	1206	LUBRICANT, HYDRAULIC FLUID, TURBINE OIL	55	Container	2	110
	AFRL HERD FACILITY ISSUE POINT	1206	LUBRICANT, SYNTHETIC	55	Container	1	55
	AFRL SITE 64-A,B,C ISSUE POINT	9620	LUBRICANT, METAL WORKING FLUID	55	Drum	1	55
	ALL ADMIN SECTIONS NOT LINKED	615	LUBRICANT, ENGINE	55	Drum	5	275
	ALL ADMIN SECTIONS NOT LINKED	615	LUBRICANT, GEAR OIL, 80W-90	55	Drum	2	110
	MATERIAL THAT IS SHIPPED TO OT	600	LUBRICANT, MOTOR OIL, 30 GRADE	55	Drum	2	110
	MATERIAL THAT IS SHIPPED TO OT	600	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	2	110
	MARINE OPERATIONS	965	LUBRICANT, MOTOR OIL, 15W-40	55	Drum	2	110
	MARINE OPERATIONS	965	LUBRICANT, MOTOR OIL, SAE 40	55	Drum	1	55
	MARINE OPERATIONS	965	QUICKSILVER SEMI SYNTHETIC 25W40 ENGINE OIL	55	Drum	2	110
	MARINE OPERATIONS	965	QUICKSILVER 10W-30 MINERAL ENGINE OIL	55	Drum	2	110
	MARINE OPERATIONS	965	2-CYCLE ENGINE OIL	55	Drum	4	220
	FOREIGN TARGETS/CHICKEN LITTLE	8768	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	2	110
	FOREIGN TARGETS/CHICKEN LITTLE	8768	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	1	55
	FOREIGN TARGETS/CHICKEN LITTLE	8768	LUBRICANT, AUTOMATIC TRANSMISSION FLUID	55	Drum	2	110
	TRS	536	LUBRICANT, HYDRAULIC FLUID, TRANSMISSION	55	Drum	2	110
	TRS	536	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	4	220
	TRS	536	LUBRICANT, MOTOR OIL, SAE 30	55	Drum	3	165
	HE-RMT	534	HYDRAULIC FLUID, PETROLEUM BASE, AVIATION	55	Drum	1	55
	HE-RMT	534	LUBRICATING OIL,ENGINE, 15W-40	55	Drum	3	165

Table E-3
Facility Oil Storage Inventory and Hazard Identification - Oil Drum Storage

Site Number	Organization	Building Number	Product Stored	Container Capacity (gal)	Containerntainer Type	# Containers	Total Capacity
	HE-RMT	534	LUBRICANT, MOTOR OIL, 10 GRADE	55	Drum	1	55
	RECYCLE OIL FOR THE RECYCLING	552	LUBRICANT, HYDRAULIC FLUID	55	Drum	1	55
POL-1354-1		1354	USED OIL	55	Drum	1	55
SPW-42-1		42	OIL CONTAMINATED WITH FREON	55	Drum	1	55
HWA-524-1		524	WASTE FUELS (MOGAS, DIESEL, JP-8) W/WATER/OIL	55	Drum	1	55
HWA-524-1		524	WASTE FUELS (MOGAS, DIESEL, JP-8) W/WATER/OIL	55	Drum	1	55
HWA-524-1		524	WASTE FUELS (MOGAS, DIESEL, JP-8) W/WATER/OIL	55	Drum	1	55
HWI-1522-3		1522	WASTE FUELS (MOGAS, DIESEL, JP-8) W/WATER/OIL	55	Drum	1	55

Table E-4
Facility Oil Storage Inventory and Hazard Identification - Mobile/Portable Oil Storage Containers

Tank ID/Field Number	Building Number	Product Stored	Container Type	Container Type/Use	Container Capacity (gal)	Required Secondary Containment Capacity for 110%	Required Secondary Containment Capacity for 25 Year/ 24 Hour	Secondary Containment Capacity (gal)	Notes
Main Base OFTs									
138-1	138	Waste Jet A	Bowser	WASTE FUEL STORAGE	220	NA	NA	>100%	*Stored inside building which has containment.*
138-2	138	Jet A	Bowser	AIRCRAFT MAINTENANCE	220	NA	NA	>100%	*Stored inside building which has containment.*
444 -8	444	Multi-Fuel	Portable AST	SUPPORT TANK (FUEL)	1,000	NA	NA	Portable Containment	
444-3	444	Multi-Fuel	Portable AST	SUPPORT TANK (FUEL)	1,000	1,100	NA	1534	
444-4	444	Multi-Fuel	Portable AST	SUPPORT TANK (FUEL)	690	759	NA	UK	
444-5	444	Multi-Fuel	Portable AST	SUPPORT TANK (FUEL)	1,000	1,100	NA	1534	
444-6	444	Used Oil		USED OIL STORAGE	300	330	NA	UK	
444-7	444	Used Oil		USED OIL STORAGE	600	660	NA	None	
444-9	444	Multi-Fuel	Portable AST	SUPPORT TANK (FUEL)	1,000	NA	NA	UK	
693-?	693	Waste Oil	Bowser (Double-Walled)	WASTE OIL STORAGE	UK	NA	ND	>100%	
536-1	536	Diesel	Portable Generator	EMERGENCY GENERATOR	630	693	ND	Active Containment	
536-2	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-3	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-4	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-5	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-6	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-7	536	Diesel	Portable Generator	EMERGENCY GENERATOR	360	396	ND	Active Containment	
536-8	536	Diesel	Portable Generator	EMERGENCY GENERATOR	630	693	ND	Active Containment	
561-2	561	Used Oil	Double-Walled AST	USED OIL STORAGE	300	NA	NA	>100%	
1545	Jackson Guard	Diesel	Portable AST	EQUIPMENT FUELING	~ 90	99	ND	Active Containment	
Eglin Main Base AGE Equipment									
TG31	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG32	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG33	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG34	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG35	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG36	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG37	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG38	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG39	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG40	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG41	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG42	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG43	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG44	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG45	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG46	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG47	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG48	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
TG49	101	Jet A	Generator	GEN SET, AM32A-60/A	190	209		Active Containment	
Main Base/AETC/Duke Field Tank Trucks									
03C00003	114	Gasoline/Diesel	C-300 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	1,200	NA	ND	>1200/Active	
04C00056	114	Gasoline/Diesel	C-300 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	1,200	NA	ND	>1200/Active	
05C00036	114	Gasoline/Diesel	C-300 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	1,200	NA	ND	>1200/Active	
05L00015	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
05L00059	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
05L00061	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
07L00006	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
08L00064	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	

Table E-4
Facility Oil Storage Inventory and Hazard Identification - Mobile/Portable Oil Storage Containers

Tank ID/Field Number	Building Number	Product Stored	Container Type	Container Type/Use	Container Capacity (gal)	Required Secondary Containment Capacity for 110%	Required Secondary Containment Capacity for 25 Year/ 24 Hour	Secondary Containment Capacity (gal)	Notes
08L00067	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
08L00573	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00053	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00054	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00055	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00068	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00069	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00070	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00071	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
09L00072	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
10L00002	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
10L00003	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
89L01152	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00145	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00146	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00147	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00148	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00149	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
96L00151	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
97L00061	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
97L00062	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
98L00050	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
98L00 051	114	Jet A	R-11 TANK TRUCK	AIRCRAFT/EQUIPMENT REFUELING	6,000	NA	ND	>6000/Active	
AETC AGE Equipment									
GEN1	Flight Line/ Ready Line	Jet A		Generator, Multipurpose	60	66		Active Containment	
GEN3	Flight Line/ Ready Line	Jet A		Generator, Multipurpose	60	66		Active Containment	
PA01	Flight Line/ Ready Line	Jet A		Cart, PAO Servicing, Diesel	60	66		Active Containment	
PA02	Flight Line/ Ready Line	Jet A		Cart, PAO Servicing, Diesel	60	66		Active Containment	
PA03	Flight Line/ Ready Line	Jet A		Cart, PAO Servicing, Diesel	60	66		Active Containment	
PA43	Flight Line/ Ready Line	Jet A		Cart, PAO Servicing, Diesel	60	66		Active Containment	
PA81	Flight Line/ Ready Line	Jet A		Cart, PAO Servicing, Diesel	60	66		Active Containment	
DG01	Flight Line/ Ready Line	Jet A		Diesel Power Cart	60	66		Active Containment	
DG02	Flight Line/ Ready Line	Jet A		Diesel Power Cart	60	66		Active Containment	
DG81	Flight Line/ Ready Line	Jet A		Diesel Power Cart	60	66		Active Containment	
Duke Field AGE Equipment									
FR02	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
FR03	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
FR04	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
6B01	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
6B02	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
6B03	Flight Line/ Ready Line	Jet A		Fuel Pup Reclaimer	500	550		Active Containment	
FB03	Flight Line/ Ready Line	Jet A		Spokane Fuel Bowser	400	440		Active Containment	

Notes:

Additional information mobile and portable containers can be found in Section 14.0 of the SPCC Plan.

NA - Not Applicable; ND - No Data; UK - Unknown

Table E-5
Facility Oil Storage Inventory and Hazard Identification - Oil-Filled Equipment

Equipment ID	Building	Location	Capacity	Use	Manufacturer	Type	Year Installed	Container Capacity (gal)
Elevators								
	1	MAIN BASE	3500 LBS	PASS	BAGBY	HYDRAULIC	1990	200
	11	MAIN BASE	4000 LBS	PASS	ELEVATOR SYSTEMS	HYDRAULIC	1986	300
	13	MAIN BASE	6000 LBS	FREIGHT	MONTGOMERY	HYDRAULIC	1999	130
	22	MAIN BASE	5000 LBS	FREIGHT	GEMCO	HYDRAULIC	1969	98
	55	MAIN BASE	2500 LBS	FREIGHT	ROTARY LIFT	HYDRAULIC	1960	128
	64	MAIN BASE	2500 LBS	PASS	KONE	HYDRAULIC	1988	158
	68	MAIN BASE	5000 LBS	PASS	ALABAMA	HYDRAULIC	1988	78
	68	MAIN BASE	5000 LBS	PASS	ALABAMA	HYDRAULIC	1988	78
	85	MAIN BASE	5000 LBS	PASS	GAL	HYDRAULIC	2005	192
	85	MAIN BASE	8000 LBS	FREIGHT	COURION	HYDRAULIC	2005	192
	104	MAIN BASE	3500 LBS	FREIGHT	Humbaugh	HYDRAULIC	2014	162
	129	MAIN BASE	5000 LBS	FREIGHT	MONTGOMERY	HYDRAULIC	1999	182
	260	MAIN BASE	2500 LBS	PASS	WIGGLERS	HYDRAULIC	2000	112
	260	MAIN BASE	2500 LBS	PASS	WIGGLERS	HYDRAULIC	2000	112
	349	MAIN BASE	20000 LBS	FREIGHT	NATIONAL	HYDRAULIC	1986	150
	374	MAIN BASE	25000 LBS	FREIGHT	MONTGOMERY	HYDRAULIC	1993	189
	380	MAIN BASE	5000 LBS	PASS	GEMCO,ESCO	HYDRAULIC	1969	129
	380	MAIN BASE	5000 LBS	PASS	NATIONAL	HYDRAULIC	1993	239
	440	MAIN BASE	15000 LBS	PASS	BAGBY	HYDRAULIC	1995	134
	440	MAIN BASE	3500 LBS	PASS	ELEVATOR SYSTEMS	HYDRAULIC	2000	239
	614	MAIN BASE	2500 LBS	PASS	MONTGOMERY	HYDRAULIC	2003	139
	955	MAIN BASE	2000 LBS	PASS	NATIONAL	HYDRAULIC	1988	150
	1309	ACC	2500 LBS	PASS	MOWERY	HYDRAULIC	1998	127
	1323	F-35	4000	PASS	HUMBAUGH	HYDRAULIC	2010	261
	1416	F-35	3500	PASS	HUMBAUGH	HYDRAULIC	2010	156
	1416	F-35	5000	FREIGHT	HUMBAUGH	HYDRAULIC	2010	268
	2807	MAIN BASE	2000 LBS	PASS	DOVER	HYDRAULIC	1985	121
	3054	DUKE	2500 LBS	PASS	TYSSENKRUPP	HYDRAULIC	2008	86
	3055	DUKE	2500 LBS	PASS	TYSSENKRUPP	HYDRAULIC	2013	
	3077	DUKE	2500 LBS	PASS	NATIONAL	HYDRAULIC	2012	111
	3078	DUKE	2500 LBS	PASS	TYSSENKRUPP	HYDRAULIC	2013	178
	3107	DUKE	2500 LBS	PASS	CONTINENTAL	HYDRAULIC	1987	
	3144	DUKE	3500 LBS	PASS	MOWERY	HYDRAULIC	2016	
	2586	HOSPITAL		PASS		HYDRAULIC		128
	2586	HOSPITAL		PASS		HYDRAULIC		128
	2586	HOSPITAL		PASS		HYDRAULIC		225
	2586	HOSPITAL		PASS		HYDRAULIC		225
	2586	HOSPITAL		PASS		HYDRAULIC		101
	2586	HOSPITAL		PASS		HYDRAULIC		101
	612	RECYCLE YARD		PAPER BAILER		HYDRAULIC		160
	696	MAIN BASE				HYDRAULIC	2019	150
Eglin Main Base AGE Equipment								
AC20	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60

Table E-5
Facility Oil Storage Inventory and Hazard Identification - Oil-Filled Equipment

Equipment ID	Building	Location	Capacity	Use	Manufacturer	Type	Year Installed	Container Capacity (gal)
AC21	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC22	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC23	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC24	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC25	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC28	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC29	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC33	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC34	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AC35	101	Main Base	NA	AIR CONDITIONER MA-3D		Jet A		60
AETC AGE Equipment								
GA01	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA02	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA03	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA04	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA05	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA06	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA07	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA08	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA32	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA41	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA42	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA43	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA44	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA45	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
GA47	Flight Line/ Ready Line	West Side	NA	Cart, 270V/Air Conditioner Hybrid		Jet A		60
DA01	Flight Line/ Ready Line	West Side	NA	Diesel Air Cart		Jet A		60
DA02	Flight Line/ Ready Line	West Side	NA	Diesel Air Cart		Jet A		60
DA81	Flight Line/ Ready Line	West Side	NA	Diesel Air Cart		Jet A		60
Duke Field AGE Equipment								
AU02	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
AU03	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
AU04	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
6A01	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
6A02	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
6A05	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65
6A06	Flight Line/ Ready Line	Duke Field	NA	Trielectron RJ150 Air Conditioner		Jet A		65

APPENDIX F
RECORDS OF AMENDMENTS AND FIVE-YEAR REVIEW

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OWNER/OPERATOR RECORD OF SPCC PLAN AMENDMENTS

If applicable, briefly describe the type of amendment (i.e., administrative or technical). State how the amendment was completed (i.e., page change, addendum, etc.). Provide the date of the amendment and the printed name/position of person responsible for the amendment. A licensed professional engineer must review and certify all technical amendments. All technical amendments made to the Tank Inventory Database (e.g., addition or removal of tanks, change in tank status, relocation of tanks, etc.) are captured real-time in Table F-1 and Table F-2, located at the end of this section. Table F-1 provides an overall summary of amendments, including a general description, date entered, amendment initiator, P.E. reviewer, and certification date. Table F-2 contains a detailed report for each amendment listed in Table F-1, providing specifics on the type of amendment that took place, as well as any other pertinent details (e.g., site visit date, certification remarks, etc.).

For amendments made on or before 10 November 2011, Eglin AFB must implement the amended SPCC Plan by 10 November 2011 (except as noted on the Management Approval page). For any amendment to this SPCC Plan after 10 November 2011, Eglin AFB must implement the amended SPCC Plan within 6 months (except as noted on the Management Approval page).

All technical amendment certifications are provided at the end of this section.

Description of Change (Administrative or Technical and Method of Completion)	Date Entered	Posted By

OWNER/OPERATOR RECORD OF SPCC PLAN 5-YEAR REVIEWS

I have completed review and evaluation of the SPCC Plan for Hurlburt Field on the date indicated below, and will (will not) amend the SPCC Plan as a result.

Signature of Reviewer	Date of Review	Will Amend the SPCC Plan	Will Not Amend the SPCC Plan

Table F-1 Detail SPCC Amendment Tracking Report Eglin Air Force Base					
Tracking ID	**Amendment Description**	**Date Entered**	**Posted By**	**PE Certified By**	**Date of Certification**

Current table available from 96 CEG/CEIEC.

Table F-2 Detail SPCC Amendment Tracking Report Eglin Air Force Base
Amendment Tracking ID: **Tank ID:** **Amendment Date:** **Initiator:**
Amendment: **Description:**
Reviewer: **Review Description:** **Site Visit Date:**
Certifier: **Certifier Remarks:** **Certification Date:** **Amend SPCC Plan:** **SPCC Plan Update Text:**
Action Date: **Implementation Date:**

Current table available from 96 CEG/CEIEC.

BY ORDER OF THE COMMANDER, 96 CES

EOD FLIGHT OPERATING INSTRUCTION 32-3001

15 May 2017

Civil Engineering

EXPLOSIVE ORDANCE DISPOSAL (EOD) PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESIBILITY: 96 CES/CED instructions are available for downloading at S:\Files\Admin\FOI's\FOI's

RELEASIBILITY: There are no releasability restrictions on this publication.

OPR: 96 CES/CEDO

Certified by: 96 CES/CED (Maj Mattie)

Pages: 61

Supersedes: EODFOI 32-3001, 25 Mar 2016

This publication implements Air Force Policy Directive (AFPD) 32-30, *Explosive Ordnance Disposal*, Air Force Joint Instruction (AFJI) 32-3002, *Interservice Responsibility for Explosive Ordnance Disposal*, and Air Force Instruction (AFI) 32-3001, *Explosive Ordnance Disposal Program*. It establishes policy and responsibility for the management of the Eglin Air Force Base, Florida, Explosive Ordnance Disposal (EOD) program and applies to all United States Air Force EOD personnel assigned or attached to the 96th Civil Engineer Squadron, Eglin Air Force Base, Florida. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 through the appropriate chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). This publication may not be supplemented or further implemented/extended. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed. Major changes include hyperlinking pages in table of contents, removal of Chapter 6, COMSEC, addition of procedures to take in areas not served by lightning warnings and watches, and the addition of procedures for use of EOD Proficiency Range.

Chapter 1

RESPONSIBILITIES

1.1.Commander. The Commander, 96th Civil Engineer Squadron (CES), will:

1.1.1. Provide routine and emergency EOD support to the installation, including tenant units, support bases, and special mission taskings. Agencies needing assistance will make routine support requests directly to the EOD Flight. The primary means for requesting emergency EOD support is through the Wing Operations Center/Command Post or Emergency Operations Center. EOD will respond to other emergencies as requested by the Fire Alarm and Communications Center, Law Enforcement Desk or Central Security Control if routed from a certified Incident Commander. After hours requests for emergency support will be routed through the WOC/CP or EOC. Emergency support requirements for EOD response to an accident or incident are defined in AFJI 32-3002(I) and AFI 32-3001.

1.1.2. Provide the EOD Flight administrative and logistics support for administrative files, regulations, technical manuals, funding, facilities, and resources needed to perform the EOD mission.

1.1.3. Not assign EOD personnel to additional duties that negatively impact individual proficiency and/or team capabilities.

1.2. Flight Management. The EOD Flight Management will:

1.2.1. Ensure assigned EOD personnel are trained and qualified to provide routine and emergency EOD support as indicated in paragraph 1.1.1.

1.2.2. Ensure the EOD Operations Section publishes a stand-by roster with appropriately trained personnel.

1.2.3. Oversee compliance with this operating instruction and other applicable publications.

1.2.4. Ensure a comprehensive training program is in effect and training priorities are clearly defined. Wartime, as well as peacetime tasks must be continually taught, exercised, and evaluated to ensure the highest level of competency. EOD training will be prioritized above normal day-to-day work activities. Only EOD operations will receive a higher priority than training.

1.2.5. Notify the 96 CES Commander of any requests for assistance or response.

1.2.6. Ensure supervisors complete a post-deployment evaluation of members to ensure currency of training and document on an AF IMT 623a, *On-The-Job Training Record Continuation Sheet.* Documentation on the AF IMT 623a will also include any lapses in training.

1.2.7. Oversee the EOD Quality Assurance program and designate a NCO as the section NCOIC.

1.2.7.1. All individuals postured against a 4FPXC, 4FPXD, and 4FPXE UTC will be evaluated NLT once each calendar year on any of the following core competencies.

1.2.7.1.1. Aerospace Systems/Vehicles.

1.2.7.1.2. Conventional Ordnance (Peacetime).

1.2.7.1.3. Recovery of Airbase Denied by Ordnance.

1.2.7.1.4. Counter-IED Exercise (One Peacetime/One Contingency).

1.2.7.1.5. Weapons of Mass Destruction.

1.2.7.1.6. Nuclear Weapon Response–Broken Arrow (may be conducted via table top).

1.2.7.1.7. Chemical/ Biological Weapon (Contingency – including disposal).

1.2.7.1.8. Demolition Operation.

1.2.7.2. Evaluations listed above may be combined as long as the intent of each is met. i.e., demolition operations evaluated in conjunction with RADBO.

1.2.7.3. Personnel will be evaluated according to the roles they are postured for and/or skill level. i.e. a 4FPXC will not perform as a Team Leader or member and an individual postured against a 4FPXE will not perform as a Team Leader. **Exception**: 7-level assigned to a 4FPXE may be evaluated as a Team Leader.

1.2.7.4. Quality assurance evaluations will be conducted by a certified 7-level.

1.2.7.6. Training operations will not be counted as practical QA evaluations however QA evaluations may be counted as SORTS-reportable exercises IAW AFI 10-210, *Prime Base Engineer Emergency Force (Beef) Program*.

1.2.7.6. Only Flight Management, the Quality Assurance evaluator(s), and the individual(s) being evaluated will be present for the evaluation.

1.2.7.7. Evaluation ratings are as follows:

1.2.7.4.1. Pass. Successful accomplishment with no equipment, technical data, or personnel deficiencies that precluded completion of the operation.

1.2.7.4.2 Fail. Failures may be attributed to the entire team or to an individual(s). Any of the following constitute a failed rating:

1.2.7.4.2.1. The team commits a major safety error.

1.2.7.4.2.2. The team demonstrates a lack of professional competence to such a degree that the specific operation being evaluated could not be completed.

1.2.7.8. Re-evaluate individuals that receive a failed rating after necessary remedial training has been accomplished within 30 days. Repeat failures will result in decertification on the task that was evaluated.

1.2.7.9. Evaluations will be documented on an AF Form 2419, *Routing and Review of Quality Control Reports*, or locally produced equivalent, and filed in the flight's Quality Assurance folder.

1.3. Stand-By Team. The EOD Stand-By Team will:

1.3.1. The stand-by team will consist of a minimum of two qualified EOD personnel, one of which will be at a minimum a 7-skill level SSgt and one 5-skill level. **Exception:** a 3-skill level may be used in place of one 5-skill level as long the individual has met all stand-by requirements, has been approved by the supervisor, and is approved by flight management. A

standard three person EOD Team will be utilized when dictated by the accident/incident and flight management.

1.3.2. During periods of manning shortfalls, flight management may allow, on a temporary basis, the use of a 5-skill level SSgt as team leader if all 7-skill level requirements have been met with the exception of 7-skill level school. **Note:** in this situation, the remaining team member may not be substituted with a 3-skill level as indicated in paragraph 1.3.1.. The Team Leader for off-installation responses will be a 7-skill level.

1.3.3. Be familiar with the contents of this operating instruction.

1.3.4. Perform stand-by duties, as assigned, from 0630 Friday through 0630 the following Friday.

1.3.5. Upon assumption of stand-by duties, inventory all response munitions, inventory and function check all equipment, in the EOD Bomb Squad Emergency Response Vehicle (BSERV) and flightline response vehicle, and ensure response laptop is properly functioning. Document inventory/inspection in vehicle OI books.

1.3.6. Ensure all equipment is cleaned, serviceable and returned to its proper place upon completion of stand-by duties.

1.3.7. Immediately notify Flight Management of any requests for assistance or response. The need for an On-Scene Commander and/or Legal Representative will be determined by the 96 TW/CC.

1.3.8. Ensure that all trash is emptied from the common areas in the main EOD facility daily.

1.3.9. Perform end-of-day security checks and sign SF 701, *Activity Security Checklist.* Ensure SF 702, *Security Container Check Sheets*, are properly completed.

1.3.10. Perform daily pickup and delivery of official mail to the 96 CES, when necessary.

1.3.11. Carry a cell phone with them at all times. Carry a radio when away from the shop during duty hours.

1.3.12. Monitor the EOD Operations Section when operations personnel are not available or after normal duty hours, when required for test range support missions.

1.3.13. Submit a properly formatted Explosive Ordnance Disposal Information Management System (EODIMS) report NLT 5 duty days from completion of an incident or mission.

1.4. All EOD Personnel. All EOD personnel assigned to the EOD Flight will:

1.4.1. Conduct physical fitness training Monday thru Friday for a minimum of one hour or as otherwise dictated by Flight Management. If PT is not conducted in the morning, report for duty NLT 0630.

1.4.2. Report for roll-call at 0830, Monday thru Friday, or as otherwise dictated by Flight Management.

1.4.3. The duty day begins with PT and ends at 1530.

1.4.4. Lunch will be a 90 minute period between 1100 and 1300.

1.4.5. Carry a cell phone and/or land mobile radio at all times when away from the EOD facility. If traveling in groups, only one EOD member is required to possess a means of communications.

1.4.6. Prepare training classes as assigned, by the morning of the scheduled date.

1.4.7. Notify Flight Management of any requests for assistance or response.

1.4.8. Sign in and out utilizing the sign-out board in the EOD Operations Section. This applies to vehicles and radios, as well.

1.4.9. Carry a current recall roster with them at all times.

1.4.10. Respond to the EOD shop with required clothing and equipment immediately upon notification of a recall.

1.5. Physical Fitness Training. Physical fitness training (PT) will be conducted five days a week to improve and maintain maximum individual strength, stamina, and aerobic activity, as well as, boost and maintain unit camaraderie. Flight PT will be conducted Monday through Friday at the member's discretion (see 1.4. above). Squadron PT will be conducted as directed by the squadron commander. Attachment 8 will be utilized to assist flight physical fitness training.

Chapter 2

SAFETY

2.1. General.

2.1.1. The responding EOD team must positively identify ordnance using EOD technical data prior to performing EOD procedures. If no technical data exists for the item in question, then other means will be used to identify the ordnance.

2.1.2. The team chief will ensure that all applicable safety precautions are adhered to unless those safety precautions will further endanger the EOD team or other resources.

2.1.3. EOD personnel are authorized to deviate from EOD technical orders according to AF Technical Order 00-5-1, *Air Force Technical Order System*, 10.1.2. Notify flight management immediately following a deviation.

2.1.4. All explosive locations will have a minimum of two fire extinguishers rated 2A:10BC.

2.1.5. Restrict use of modern mobile emitters from within 10 feet of any exposed EED.

2.2. Transportation. The following procedures apply when transporting explosives.

2.2.1. There is no smoking allowed within 50 feet of explosive laden vehicles.

2.2.2. Do not load or unload explosives from a motor vehicle while the engine is running, except under emergency conditions. Diesel powered vehicles may continue to run during loading and unloading of explosives except when exposed explosives are involved.

2.2.3. Blasting caps, demolition material and unserviceable (but not dangerously unserviceable) munitions may be transported by the same vehicle, provided they are segregated to the maximum extent possible.

2.2.4. Transport only the minimum amount of explosive required to perform the operation.

2.2.5. The following is the minimum equipment required to transport explosives.

2.2.5.1. One first aid kit, large. Combat Life-Saver (CLS) bag is preferred.

2.2.5.2. Two each fire extinguishers rated 2A:10BC.

2.2.5.3. Communication equipment.

2.2.5.4. Tie down straps.

2.2.5.5. Wheel chocks.

2.2.6. Prior to use, inspect all vehicles used to transport explosives utilizing the AF Form 1800. The DD Form 626, *Motor Vehicle Inspection,* and DD Form 836, *Dangerous Goods Shipping Paper and Emergency Response Information,* will be utilized when transporting explosive off the Eglin Test and Training Complex (ETTC). Ensure all loads are secured prior to movement of vehicle.

2.2.7. An armed guard is required when transporting high-risk explosives off the ETTC.

2.2.8. Explosive laden vehicles will utilize the explosive movement routes to the greatest extent possible.

2.3. Emergency Procedures. In the event of an explosive mishap, all operations will cease until further notice.

2.3.1. Injury.

2.3.1.1. Render first aid, as applicable.

2.3.1.2. Notify the Emergency Communications Center (ECC) by the most expedient means available.

2.3.1.3. Notify the 96 CES/CC, 96 TW/SE and Unit Safety Representative (USR), as soon as possible.

2.3.1.4. Complete AF Form 978, *Supervisor's Mishap Report*, as soon as possible. Route completed from through 96 CES to 96 TW/SEG.

2.3.2. Area/Vehicle Fire.

2.3.2.1. Use all available means to extinguish the fire unless explosives are directly involved.

2.3.2.2. Immediately evacuate all non-essential personnel from the area.

2.3.2.3. Notify the ECC by the most expedient means available.

2.3.2.4. Notify the 96 CES/CC, 96 TW/SE and USR, as soon as possible.

2.3.2.5. Schedule time at least 24 hours after the fire has been extinguished to check the disposal location/detonation point

2.3.3. Ensure all first aid and/or firefighting equipment is reconstituted, as soon as possible.

2.3.4. In all emergencies, security of classified and protection of high-value resources is second only in priority to saving life, limb or eyesight.

2.4. Local Lightning Watch, Warning and Advisories. When operating on the ETTC, lightning monitoring and notification is primarily the responsibility of the Test Area Range Controller. When operating at other locations, on or off the ETTC, the EOD Team Leader is responsible for consulting the supporting weather unit and monitoring for advisories, watches, and warnings. The EOD Operations Section and or the Joint Test and Training Operations Control Center (JTTOC) monitor and notify personnel of hazardous weather conditions. The 96 OSS Weather Flight or the 26th Operational Weather Squadron may be contacted for weather information. Refer to Atch 3. Refer to AFMAN 91-201, *Explosive Safety Standards*, Section 7H – *Procedures in the Event of Electrical Storms,* for further information.

2.4.1. Weather Advisory. A weather advisory is a special notice to notify operational users of environmental conditions impacting operations. Team leaders will evaluate individual advisories and determine the potential impact on planned operations and whether to proceed, delay, or cancel those operations.

2.4.2. Lightning Watch. A lightning watch will be in effect 30 minutes prior to thunderstorms being within 5 nautical miles (5.75 land miles) of the affected area. If a lightning watch is issued, the team leader and or range safety officer will initiate an orderly termination of all explosive operations.

2.4.3. Lightning Warning. A lightning warning will be issued when lightning is within 5 nautical miles of the affected area. This may be observed by roughly a 28 second count of the observed lightning flash. Personnel will seek protective shelter immediately. An acceptable distance is equivalent to K24 and is calculated as 24 times the cube root of the NEW (24 x NEW ^1/3).

2.4.4. Areas not served by lightning warnings and watches. When operating in an area not served by the Air Force-approved local lightning warning system, explosives operations must be terminated before a thunderstorm is within 10 miles.

Chapter 3

TEST DIRECTIVES

3.1. General. This chapter outlines and establishes procedures for personnel using and creating Safe Handling and Recovery Procedures (SHRP) for testing of weapons systems on Eglin Ranges.

3.1.1. The SHRP is the EOD technical information and is an integral component of the overall test directive.

3.1.2. The EOD Test Directive (TD) Section is responsible for all SHRP development.

3.1.4. The application of a SHRP is to provide EOD teams with approved 96TW EOD procedures and information similar to 60 series for developmental test items.

3.1.4. SHRPs are required to be on range with the team during operations.

3.2. Responsibilities.

3.2.1. EOD Management will review and approve/disapproves all newly developed SHRPs.

3.2.2. Test Directives Section.

3.2.2.1. Assign SHRPs to a 7-skill level or qualified 5-skill level, with leadership coordination.

3.2.2.2. Ensure SHRPs are updated when email notifications are received from Eglin Livelink (https://livelink2.eglin.af.mil).

3.2.2.3. Track all SHRPS and maintain a historical archive for use during future range clearances and/or contractor projects on Eglin ranges through Livelink.

3.2.2.4. Coordinate with the EOD Operations Section to ensure appropriate representation at Safety Review Boards (SRB) and kick-off meetings.

3.2.2.5. The TD section is responsible for the maintenance, training, and operation of the AN/GJQ-34 Remote Fuze Disassembly System (RFDS).

3.2.2.6. Establish, maintain and delete all EOD Livelink user accounts.

3.2.3. EOD Team Leaders will ensure they have all applicable information available on range while supporting a test mission.

3.3. Test Directive Folder. Test Directive folders are established in a uniform manner for accuracy and standardization, all folders are created and maintained on Livelink (https://livelink2.eglin.af.mil/livelink/llisapi.dll?func=ll&objId=23896729&objAction=browse&viewType=1). All Test Directives are digital and accessed with tablets located in the TD's office or AEODPS laptops located in the vault.

3.3.1. Following is a list with a brief description of what should be included in each folder. Required templates are located at S:\Files\Test Directives\Procedures Library\Electronic Sharps\Templates.

3.3.1.1. Safe Handling and Recovery Procedures and Approval Cover Letter. Detailed procedures will be accomplished for all tests requiring EOD support; no generalized procedures will be included.

3.3.1.2. Test Directive Overview/SRB notes. This is a locally generated form highlighting information about the mission. Information is derived from a variety of sources including, the TD and appendices, notes from the Safety Review Board (SRB) and conversations with the Project Engineer. This form should be completed and signed upon initial receipt by the member assigned to that project.

3.3.1.3. Test History. This section is vital to the accuracy of the TD and continuity of the test. It will be annotated, signed and dated after every meeting, action or conversation with a Project or Test Engineer. It will also be used for entering detailed information about the events that occurred on a mission that a team has provided support to. As a minimum, include who was on the mission, what significant events took place during the mission and number of misfires or clean-up shots that took place. Be as descriptive as possible, and include any changes that may take place in the future, e.g. future SRBs, mission cancellations, etc.

3.3.1.4. Test Directive parent folder link. Test Directives are documents used by the 96 TW/CC to direct and authorize the conduct of a test program. It contains the detailed method of test and necessary supporting appendices such as Safety Appendixes (SA), contractor data, etc.

3.3.1.5. All technical information provided by the contractor, any photographs, diagrams and schematics used in developing a SHRP are also included in this folder.

3.3.2. All Tablets will be signed out on an AF Form 614, *Charge Out Record*. After mission completion, all Tablets will be returned to the appropriate slot in the server cabinet.

3.4. Test Directive Development Procedures.

3.4.1. An invite to Kickoff Meeting/SRB is sent and reviewed for its application to EOD procedures or support. Once the need for EOD support has been determined, the TD element will create a TD folder at S:\Files\Test Directives\Procedures Library\Electronic Sharps. All relevant documents, emails, etc. will be kept in this folder and transferred to Livelink once the SHRP is approved. The test is then assigned to an individual that will become the lead for any developments of the test.

3.4.2. The responsible individual will attend a kick off meeting, which will highlight the details of the test. During this meeting, all safety concerns should be addressed and any information that will be required from the contractor or Air Force personnel for the development of a SHRP should be requested. Request a source data package from the Test Engineer using the sample memorandum at S:\Files\Test Directives\Procedures Library\Electronic Sharps\Templates.

3.4.3. After receipt of the contractor data and before the SRB, the responsible individual will analyze the information to highlight any areas of EOD concern. Contractor data should be given to EOD 45 days prior to delivery of test assets.

3.4.4. The SRB is where principle members of the test come together to discuss resolutions to safety concerns of the test. The SRB must be attended by minimum 7-skill level SSgt or a member of the Test Directives Section.

3.4.5. A draft SHRP must completed no later than 5 duty days after SRB has concluded.

3.4.6. After development of a SHRP, the TD Section, Flight Management, and 96 TW Weapons Safety will review and sign via Livelink workflow process.

3.4.7. After the SHRP has been reviewed and signed by all required personnel a class will be given to shop personnel on the next training day.

3.5. Use of Test Directives for Range Missions.

3.5.1. No later than the day prior to an assigned mission, the team providing support to a JON will contact the project officer to get a schedule of events and compare that information to the contained in the EOD JON and parent TD folders and download all available information to a tablet for use on range, https://livelink2.eglin.af.mil/livelink. This is also the time to thoroughly review the SHRP, Method of Test (MOT), Safety Appendixes (SA), misc. supporting documents and review any referenced 60-series TOs and OIs.

3.5.2. If the SHRP requires the use of a 60-series TO to make the procedures complete, the team leader must ensure AEODPS is available while supporting the mission. This guarantees the latest revision of the applicable 60-series TO will be used on the next mission.

3.5.3. If a test mission utilizes non-modified production ordnance, a EOD JON folder will not be created and contain a MFR directing AEODPS use and a link to the parent JON folder at a minimum ; team will use 60-series TOs.

3.5.4. Upon completion of the test the team will accomplish the Test History and ensure they upload the changes to Livelink, return the tablet to the server cabinet and connect the LAN and power prior to leaving for the day. The history should include all information up to and including FOUO which will benefit teams on future missions and document test progression from an EOD standpoint.

Chapter 4

MUNITIONS STORAGE

4.1. Location. Explosive storage locations are Bldgs 1249, 1250, 1251, and 1252 in the Munitions Storage Area (MSA), and Bldg 1334.

4.2. Personnel limits. The explosive safety concept of minimum personnel on-site will be adhered to at all times.

4.2.1. Maximum. Limit entry in Bldgs 1249 Bays A, B and F, 1250, 1251 Bay A, and 1252 Bay B, to five personnel; one must be at least a 3E851 or a munitions account custodian.

4.2.2. Minimum. One person, who must be at least a 3E851 or a munitions account custodian, in Bldgs 1249 Bays A, B and F, 1250, 1251 Bay A, and 1252 Bay B while completing an inventory. Two personnel are required when moving explosives; one must be at least a 3E851.

4.2.3. There are no personnel limits in Bldg 1334.

4.2.4. The senior qualified EOD member will ensure compliance with all storage limitations.

4.2.5. Unescorted entry is limited to those listed on the entry authorization list (EAL).

4.3. Explosive Limits. Explosives are distributed between the munitions storage area and the EOD shop. The BSERV is used to store ready stocks of emergency response and training munitions.

4.3.1. Bldg 1249 (Bays A, B &F), 1250, 1251 and 1252. **Note:** Do not store HCD 1.1 in any bay in Bldg 1249 except Bay F due to compatibility issues.

Table 4.1. Authorized Storage Quantities Bldg 1249, 1250, 1251, & 1252.

NEW	1.1	1.2.1.	1.2.2.	1.2.3	1.3	1.4
1249	1800[1]	None	None	None	24,500	Capacity
1250	100,000	200,000	200,000	200,000	200,000	Capacity
1251	5,000	5,000	5,000	5,000	5,000	Capacity
1252[2]						

Note:

1 – HCD 1.1 will only be stored in Bldg 1249, Bay F, with coordination from Munitions Storage.

2 – Bldg 1252 is only used to store caliber .50 RAUFOSS rounds, HCD 1.2G at capacity.

4.3.2. Bldg 1334. **Note:** Only HCD 1.4 is authorized to be stored in Bldg 1334. Do not store HCD 1.1, 1.2 or 1.3 in Bldg 1334.

Table 4.2. Authorized Storage Quantities Bldg 1334.

NEW Limits	Mk 274[1]	Mk 275[2]	Mk 276[3]	Mk 277[4]	Mk 279[5]	Mk 280[6]	Med. Velocity	Shock Tube	9mm Ball	Cal .50 Blank
Cat D	40	60	50	60	0	0	50	5,000’	0	24
Cat T	40	40	40	40	40	40	40	5,000’	60	24
Note: 1 – Ultra Velocity; 2 – AVON; 3 – Low Velocity; 4 – Enhanced; 5 – Steel; 6 - Aluminum										

4.4. Safety Precautions and General Information.

4.4.1. Do not mix operational and training stocks. Operational stocks will be solely used for real-world operations.

4.4.2. BSERV stocks will be replaced as soon as possible.

4.4.3. EOD emergency response and training munitions expenditures will be reported to the EOD Resource Element after each operation.

4.4.4. Refer to emergency procedures listed in paragraph 2.3., as needed.

4.4.5. Storage bays will be kept clean and orderly; free of excess dunnage and debris.

4.4.6. Reseal and accurately remark the containers after the completion of each mission. Record the changes on the HE Inventory Sheet(s).

4.4.7. Inform the Primary Munitions Custodian of any shortages so orders can be made through the Munitions Operations Element.

4.4.8. Resources Section.

4.4.8.1. Ensure set-up boxes are stocked and ready for use. There will be at a minimum, three explosive set-up boxes; one for caps, one for igniters and one for time fuze.

4.4.8.2. Maintain an accurate count of all explosives on-hand, issued or expended; provide these figures to the Primary Munitions Custodian at the end of the week.

4.4.8.3. Ensure adequate levels of explosives are on hand to support normal operations.

4.5. Key Control. Keys for all EOD facilities containing High Risk Munitions require dual signatures.

4.5.1. Individuals withdrawing explosives must have their personal issue MSA access badges and Restricted Area Badge. Shop members that are on the key log will sign out all access keys from Munitions Control, Building 1108. The key access listing will be maintained by EOD Munitions custodians. Munitions Control will be given an updated copy monthly. After withdrawing explosives, all keys will be returned to Munitions Control by the same individual that signed them out.

4.5.2. Daily Operations.

4.5.2.1. Responsibility for withdrawing explosives falls on the teams.

4.5.2.2. Obtain all required keys from Munitions Control upon entering the MSA.

4.5.2.3. Only personnel listed on the Key Control Roster in Munitions Control will be allowed to sign out keys on the Key Issue Log.

4.5.2.4. Maintain positive control of all keys signed out.

4.5.2.5. When all explosives are accounted for (either consumed or returned) return all keys to Munitions Control and sign them back in on the Key Issue Log.

4.5.3. After-hours Operations. Coordinate with Munitions Control to pull keys after-hours. Contact the standby Munitions Controller or have the Command Post contact them.

4.6. Withdrawing Explosives. A minimum of two flight members are required to sign for explosives. One individual must be at least a 3E851.

4.6.1. Sign out keys to required buildings from Munitions Control.

4.6.2. Once at the storage facility, perform the following steps.

4.6.1.1. Shut off the vehicle, set vehicle parking brake and chock rear tire. Park vehicles not being loaded with explosives a minimum of 25 feet from storage facility.

4.6.1.2. Gain access to the required bays.

4.6.1.3. Secure all explosives in the vehicle cargo compartment, cover explosives with tarp and placard vehicle.

4.6.1.4. Ensure all explosives withdrawn are entered in the Explosive Control Log and signed for by two personnel.

4.6.1.5. Return any unused explosives in the same manner outlined above.

4.6.1.6. Ensure all storage facilities are secured when complete with operation.

4.6.1.7. Report all explosives expended or returned to the Resources Section.

4.6.3. Munitions containers will not be opened for the purpose of issuing items from storage locations.

4.6.4. The following operations are authorized in explosives storage spaces.

4.6.4.1. Palletizing, removing and replacing shipping crates incidental to transportation.

4.6.4.2. Replacing unserviceable strapping on boxes.

4.6.4.3. Opening outer containers to remove inner packages. Complete any further processing of these items in an approved operating location.

4.6.4.4. Opening “lite” boxes for inventory purposes.

4.6.4.5. Opening containers of HD 1.4 explosives to allow inventory. Unpack, inspect, and repack in the storage location if building content is limited to HD 1.4 items.

4.7. Gaining Access to Building 1250. Note: If the alarm malfunctions or the wrong code is entered causing the alarm to function while opening or securing the building, immediately contact the Security Forces desk utilizing the phone on the side of the building and identify yourself and

your location. The phone numbers are written inside the cover. You will be tasked to authenticate your PIN.

4.7.1. Accessing Building.

4.7.1.1. Press face of touch screen to pull up keypad.

4.7.1.2. Enter the four digit building code number (located on wall above keypad) into the keypad.

4.7.1.3. Enter your three-digit personal identification number (PIN).

4.7.1.4. Press “ENTER” on the alarm system panel.

4.7.1.5. Screen will indicate that “Security is Off”. If this does not work, repeat the above steps.

4.7.2. Securing Building.

4.7.2.1. Close door while remaining inside Building 1250.

4.7.2.2. Press face of touch screen, Press “Turn On” to turn on alarm.

4.7.2.3. Enter the four digit building code number located on wall above keypad and your three digit PIN.

4.7.2.4. Press “ENTER”.

4.7.2.5. Screen will display “Arming in 40 Seconds” and begin counting down.

4.7.2.6. You should hear a continuous beep; exit the building and secure the door.

4.7.3. Entry under duress. At any time you come under duress, enter the four-digit duress code number into the keypad, then enter your three-digit PIN and press “ENTER” on the alarm system panel.

Chapter 5

SECURITY

5.1. Personnel.

5.1.1. A primary and alternate(s) Controlled Area Monitor, Key and Lock Custodian, and Safe Custodian will be appointed in writing.

5.1.2. The Controlled Area Monitor will conduct annual self-inspections and forward to security forces.

5.1.3. All assigned personnel will receive initial security training within 30 days of being assigned to the work center. Annual security training is also required. Documentation will be maintained by the Resource Protection Monitor. Combinations will be changed upon reassignment/separation of assigned personnel.

5.2. Facility.

5.2.1. Entry Authorization.

5.2.1.1. Building 1334 uses cipher lock secured doors to control entry. Additionally, the secure storage area in Bldg 1334 is secured with cipher lock (separate code) and an X-09 electronic lock. Inside the secure storage, the firearms vault with a GSA Class 5-A Armory Door and monitored intrusion alarm panel.

5.2.1.2. At no time will there be temporary access granted to the above areas.

5.2.1.3. Assigned personnel will not receive combinations until they have been properly trained on security measures, alarm systems, emergency procedures, and personal accountability. Training will be documented in the Resource Protection folder.

5.2.1.4. At a minimum, combinations will be changed when individuals PCS or separate.

5.2.2. Escorts. Escorts will verify that an official reason exists before allowing visitors actual entry into Bldg 1334 and or the secured storage area. Visitors will be escorted at all times by personnel granted unescorted access to the secure storage area.

5.2.2.1. Visitors will be logged on an AF Form 1109, *Visitor Register Log*.

5.2.2.2. Escorts will brief visitors where the designated smoking area is.

5.2.2.3. Escorts will brief visitors on emergency evacuation procedures and actions.

5.2.2.4. Escorts will accompany visitors until they depart the facility.

5.2.3. Emergency Procedures. Verify all emergencies prior to allowing unrestricted access. Once verified, emergency response personnel (e.g., security forces, medical technicians, fire protection, etc.) will be granted unimpeded access to controlled areas when responding to emergencies.

5.2.3.1. Personnel assigned to controlled areas will ensure all emergency response personnel and/or vehicles remain under constant surveillance except during evacuation.

5.2.3.2. Once the emergency situation has been terminated, the responding personnel will take a head count to ensure all personnel are accounted for prior to departing.

5.2.4. Evacuation. In the event of an evacuation from Bldg 1334, personnel will assemble at the evacuation location and the senior member present will account for all personnel. Notify Flight Management as soon as practical.

5.3. Combination and Lock Control.

5.3.1. Access to munitions facilities is defined as any structure or room assigned to the flight designed for munitions storage or maintenance. EOD Management will appoint the Combination and Lock custodians within the Flight. The EOD Flight Chief authorizes personnel to issue and/or receive Combinations to munitions facilities within the EOD facility. A master key system will be used for weapons racks located inside the Bldg 1334 weapons vault.

5.3.2. A mandatory semiannual inventory of keys and locks will be maintained.

5.3.3. Keys to weapon racks in Bldg 1334 weapons vault must be maintained separately from other keys and accessible to only those individuals whose official duties require access to them. A current roster or letter of these individuals must be kept with the key custodian. The letter or roster will be protected from public view.

5.3.4. Keys to weapon racks in Bldg. 1334 weapons vault must not be left unsecured or unattended at any time.

5.3.5. When not in use, keys to weapon racks can be stored in Bldg. 1334, rm. 120 in a designated safe and equipped with a GSA-approved, changeable combination lock.

5.3.6. Key control registers must be maintained on AF Form 2432, *Key Issue Log.* Accountability records must contain the name and signature of the individual receiving the key, date and hour of issuance, serial number or other identifying information of the key, signature of individual issuing the key, keys return date and hour and name and signature of individual receiving returned keys.

5.3.7. Locks must be secured when the area container is opened to prevent theft, loss, or substitution of the lock.

5.3.8. In the event of lost, misplaced or stolen keys, the affected locks or cores must be replaced immediately. The facility must be inventoried and guarded by owner/user personnel until the area can be properly secured.

5.4. Classified Material.

5.4.1. Ensure all classified media/hardware is properly marked and secured when not in use.

5.4.2. Notes prepared for classified briefings and training classes will be properly marked as derivative information according to DoDM 5200.01, Vol 1, *DoD Information Security Program: Overview, Classification, and Declassification*. They will be properly classified according to DoDM 5200.01, Vol 2, *DoD Information Security Program: Marking of Classified Information*.

5.4.3. Each classified computer will have an authorized user list indicating those individuals that have been granted access to the system.

5.4.4. Prior to beginning classified processing, doors and windows will be secured to prevent unauthorized viewing and a classified processing sign will be posted on the door.

5.4.5. Users must remain EMSEC conscious at all times and maintain at least one meter of separation between classified and unclassified equipment and six inches between classified and unclassified power and transmit lines.

5.4.6. Only process classified information on an approved computer system.

5.4.7. Do not move or rearrange classified systems without approval of the Computer System Security Officer (CSSO).

5.4.8. Do not place telephones, communications equipment, or any other non-TEMPEST electronics equipment within one (1) meter of any portion of the system. This includes government or personal cellular and or radio frequency (RF), infrared (IR) wireless devices, and other devices such as cell phones and tablets, and devices that have photographic or audio recording capabilities. Report this activity as a security incident if discovered.

5.4.9. Do not attach any peripheral device not listed in your original request for Designated Approving Authority (DAA) approval.

5.4.10. Control classified in a means to prevent unauthorized personnel from viewing it.

5.4.11. Refer to paragraph 6.9. for guidance in the event of fire, natural disaster, civil disturbance, terrorist activities, or enemy action based on the threats/risks of these incidents occurring.

5.4.12. Comply with the requirements in AFI 16-1404, *Air Force Information Security Program,* and AFMAN 17-1201, *User Responsibilities and Guidance for Information Systems*.

5.5. Weapons and Arming.

5.5.1. Accountability.

5.5.1.1. A monthly serialized inventory will be accomplished and annotated using the AF IMT 1473, *Gun Equipment Room Inventory.*

5.5.1.2. Issued weapons will be signed out using an AF IMT 1297, *Temporary Issue Receipt.*

5.5.1.3. Weapons and ammunition will be inventoried each time the safe is opened.

5.5.2. Handling of weapons.

5.5.2.1. Arming will be performed IAW AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures.*

5.5.2.2. Contact Base Defense Operations Center (BDOC) each time weapons are to be transported from the EOD facility and advise them when they have safely reached their intended destination.

5.5.3. Refer to emergency procedures listed in paragraph 2.3. to 2.5., as needed.

5.6. Duress Procedures.

5.6.1. Do not attempt to activate one of the duress switches unless you can do so without being detected. Make every effort to pass the wing duress code to munitions control, security forces, or any personnel available and capable of relaying your situation to BDOC.

5.6.2. When safe and practical to do so, dial 911 to alert security forces.

5.6.3. Involved personnel must follow the anti-robbery procedures contained in the emergency action checklist and this instruction.

5.7. Bomb Threat Procedures. In the event of bomb threat against the EOD facilities, perform the following minimum procedures.

5.7.1. Notification.

5.7.1.1. Complete the AF Form 440, *Bomb Threat Aid Card.*

5.7.1.2. Notify BDOC.

5.7.2. Evacuation.

5.7.2.1. Evacuate all personnel to the nearest EOD facility not affected by the threat.

5.7.2.2. Evacuate surrounding facilities, as deemed necessary.

5.8. Anti-Robbery Procedures. In the event of robbery, or attempted robbery, against the EOD facilities perform the following minimum procedures.

5.8.1. Actions.

5.8.1.1. Fake compliance and activate the duress alarm if safe to do so.

5.8.1.2. Observe physical characteristics of the perpetrator and determine direction and mode of travel.

5.8.1.3. Cease all activities and stand-by until a Security Forces patrol responds.

5.8.1.4. Perform a complete inventory of the affected asset(s).

5.8.2. Notification.

5.8.2.1. Notify the BDOC.

5.8.2.2. Complete the AF Form 439, *Robbery Checklist.*

5.9. Force Protection Conditions (FPCON). The EOD Operations Section is the focal point during periods of increased security.

5.9.1. During increased security measures the EOD Operations Section will issue instructions on proper procedures to follow.

5.9.2. All sections will take implement designated measures.

5.9.3. Any person discovering a possible or confirmed security violation will report their findings to the EOD Operations Section.

5.10. Intrusion Detection System (IDS). Personnel whose duties require them to access alarmed facilities will be trained in alarm access procedures by their duty section prior to being authorized to access to these facilities. Procedures listed below will be used for both alarm testing and inadvertent alarms.

5.10.1. Contact BDOC and inform them of your name, rank, organization, alarm account number, state your intentions to test the alarm system and prepare to authenticate using the matrix.

5.10.2. Maintain constant contact with BDOC during the testing process.

5.10.3. In the event an alarm fails testing, implement appropriate security measures through Munitions Control and immediately notify Civil Engineering to request a work order to effect repairs.

5.10.4. If an alarm will not reset after three attempts, personnel will immediately notify Security Forces and EOD Management who will call alarm maintenance.

5.10.5. If an alarm is still inoperative at the completion of the duty day, arrangements must be made to relocate assets or post guards for the facility.

5.10.6. Testing will be performed by quarterly and documented using an AF IMT 2530, *Alarm System Test Record*. Maintain the test record in Resources Protection Folder.

Chapter 6

RESERVED

Chapter 7

USE OF EOD TOOLS AT OFF-RANGE LOCATIONS

7.1. Personnel limits. The explosive safety concept of minimum personnel on-site will be adhered to at all times. Only two qualified EOD personnel will be present during capping-in procedures.

7.1.1. A minimum of two qualified EOD members are required to perform explosive operations. At least one member will possess a minimum 7-skill level.

7.1.2. The senior qualified EOD Craftsman/Supervisor/Officer will serve as the Range Safety Officer (RSO).

7.1.3. Casuals. Casuals are persons not normally part of an explosives operation but have duties that require their presence, such as quality assurance, medical, safety or inspection personnel. **Note:** When conducting live explosive operations, (e.g., EOD operations, range clearance, or other demolition and munitions destruction) emergency medical support must be available within 30 minutes while the operations are being performed. The medical support must be analogous to the expected trauma resulting from an accident.

7.1.4. Visitors. Visitors are non-essential personnel with limited access. Stop operations when visitors are present. Operations will not continue until all visitors are off the EOD range and outside the fragmenting AE hazard area of K328 minimum distance.

7.1.5. Visitors will be determined by the Team Leader/RSO.

7.2. Explosive Limits. EOD personnel may use the explosive items listed below for off-range training, inspection and evaluation operations. Quantities shown are the maximums authorized for each inspection or evaluation scenario.

7.2.1. Two .50 caliber impulse cartridges.

7.2.2. Two .50 caliber ball, M2 cartridges (projectile extracted).

7.2.3. Two electric or non-electric blasting caps.

7.2.4. Twenty feet of standard detonating cord (DODIC M456).

7.2.5. Thirteen feet of safety fuse.

7.2.6. Three M60 fuse lighters.

7.2.7. Three AN-M14 thermite grenades.

7.2.8. Five Percussion Actuated Neutralizer (PAN) cartridges.

7.2.9. Shock tube as required.

7.2.10. Igniters (Shock Tube Initiators, DODIC YY35), as required.

7.3. Authorized Tools. EOD personnel may use the tools listed below for off-range training, inspection and evaluation operations.

7.3.1. Mk 1 Remote Wrench.

7.3.2. Mk 2 .50 Caliber Dearmer.

7.3.3. Improvised Dearmer.

7.3.4. Robotic Platforms.

7.3.5. Percussion Actuated Neutralizer (PAN).

7.3.6. Explosively propelled water charges (commercially produced or improvised).

7.4. Location. Off-range training procedures utilizing live explosives may be conducted at any location on the installation so long as it is outside of any explosive prohibited zone and in a location free of fire hazards. Take positive measures to prevent collateral damage when operating tools inside a building.

7.5. Procedures.

7.5.1. Agencies listed in Attachment 3 will be notified prior to commencing the operation.

7.5.2. The Team Leader for the operation will ensure a pre-task safety briefing is delivered to all personnel present utilizing Attachment 2 and any item specific publications. Step-by-step procedures for completing the operation will be briefed by the Team Leader.

7.5.3. Place a minimum of three filled sand bags in front and behind tools that project slugs, fluids or shot to limit directional force. When utilizing a robotic platform, the requirement for three sandbags behind tools is eliminated.

7.5.4. Use only slugs that will disintegrate on impact.

7.5.5. Ensure the safety procedures and emergency procedures in Chapter 2 are adhered to.

7.5.6. Do not initiate explosive tools during exercises until authorized by the EOD evaluator.

7.5.7. Use only inert training ordnance or IED concealment devices.

7.5.8. Evacuate personnel to the applicable withdrawal distances required for an actual situation.

7.5.9. Maintain radio contact with the EOD Operations Section during the entire operation.

7.5.10. Ensure all the applicable tech data is on site prior to and during all explosive operations.

7.5.11. Ensure a suitable first aid kit and all safety equipment is on site prior to and during all explosive operations.

7.5.12. Control, or delegate control, of all firing devices during explosive operations.

7.5.13. Ensure all personnel are located in the safe area prior to initiation of tools or explosives.

Chapter 8

EGLIN AFB EOD PROFICIENCY RANGE

8.1. Personnel limits. Refer to paragraph 7.1.

8.2. Explosive Limits. A maximum of 2.5 lbs. net explosive weight for quantity-distance (NEWQD) IAW DDESB-approved site plan. Detonations in the scope of this chapter are only authorized in the predesignated destruction point within the six foot high barricade. Holding areas approved for 10lbs NEW each. Chapter 7 applies for operations conducted outside of the barricade.

8.3. Location. The Eglin AFB EOD Proficiency Range is located at approximately crash grid 6.5, F.5 in the area commonly referred to as Base Tango, or the former Ground Combat Training Squadron Exercise Site. MGRS coordinates are 16REU 43357116.

8.4. Required Equipment. The following minimum equipment is required during all range operations.

8.4.1. EOD Range Book.

8.4.2. Two (2) each portable radios with spare batteries.

8.4.3. First aid kit.

8.4.4. Demolition gear/kit.

8.4.5. Two (2) each fire extinguishers rated 2A:10BC.

8.5. Procedures.

8.5.1. Complete notifications as prescribed in Attachment 3 prior to conducting operations.

8.5.2. Firefighting equipment will be available on the range.

8.5.3. The Team Leader for the operation will ensure a pre-task safety briefing is delivered to all personnel present utilizing Attachment 2 and any item specific publications. Step-by-step procedures for completing the operation will be briefed by the Team Leader.

8.5.4. Munitions will be maintained in the designated holding areas until ready for use.

8.5.5. Ensure the range flag is flown for the duration of the operation.

8.5.6. Maintain radio contact with the EOD Operations Section during the entire operation.

8.5.7. Ensure the safety procedures and emergency procedures in Chapter 2 are adhered to.

8.5.8. Compensatory measures.

8.5.8.1. Ensure all entrances to the EOD range are closed or blocked prior to detonation.

8.5.8.2. Notify AAFES Shoppette, 850-651-6741 and Eglin Elementary School, 850-833-4320.

8.5.8.3. Post personnel along the running path at north end of training area and main vehicle entrance along Shoppette exit road to alert others of explosive operation and potential for loud noise.

8.5.8.4. Request that the Command Post sends out a base-wide notification.

8.5.9. Evacuate personnel to the applicable withdrawal distances required for explosives or tools used.

8.5.10. Do not initiate explosives or tools during exercises until authorized by the EOD evaluator.

8.5.11. Ensure all the applicable tech data is on site prior to and during all explosive operations.

8.5.12. Control, or delegate control, of all firing devices during explosive operations.

8.5.13. Ensure all personnel are located in the safe area prior to initiation of tools or explosives.

8.5.14. Ensure munitions expenditures are promptly reported to the EOD Logistics Element.

Chapter 9

EGLIN TEST AND TRAINING COMPLEX RANGE OPERATIONS

9.1. Personnel limits. The explosive safety concept of minimum personnel on-site will be adhered to at all times when operating on the ETTC Range. Allow only essential personnel down range during munitions preparation operations. Only two qualified EOD personnel will be present during capping-in procedures. Only one EOD Technician will check the detonation location following a shot.

9.1.1. Test Support and Open Burn/Open Detonation (OB/OD). A minimum of two EOD technicians (one 7-skill level and one 5-skill level) will support scheduled tests. A 5-skill level SSgt may be used as a team leader if all 7-skill level requirements have been met with the exception of 7-skill level school and the individual is task qualified. Any 3-skill level, qualified on tasks pertaining to the mission, may be used in place of 5-skill levels, as long as a 7-skill level acts as Team Leader for the operation. For operations performed on static fire ranges, one EOD technician will act as the safety backup. During periods of low manning, two qualified 5-skill levels may support missions when approved by flight management.

9.1.2. Range Clearance, Demolition and Recovery. EOD requirements are the same as listed in 9.1.1.

9.1.2.1. Limit maximum participants to a number consistent with a safe and efficient operation.

9.1.2.2. Minimum EOD technician to non-EOD technician (workers/test support personnel) ratio during range clearance operations is 1/5.

9.1.3. Escort Missions. A minimum of two EOD technicians (one 7-skill level and one 5-skill level or one 3-skill level qualified on tasks pertaining to mission) will support scheduled missions. Qualified 5-skill levels may Team Leader missions if approved through flight supervision. **Note:** For escort missions not involving demolition operations, a 5-skill level qualified on tasks pertaining to mission may serve as Team Leader without explicit flight supervision approval.

9.1.4. Operations Section. The EOD Operations Sections will be monitored at all times when an EOD team is operating on the ETTC Range. Deviations for special circumstance will only be approved by flight management.

9.1.5. The senior qualified EOD Craftsman will serve as the Range Safety Officer (RSO).

9.1.6. Visitors/casuals will be determined by the Team Chief/RSO.

9.2. Explosive Limits. A maximum of 3,000 lbs net explosive weight (NEW) of class/division 1.1 and 1.2. Notify Site C-6 anytime a controlled detonation on the Eastern Complex exceeds 1,000 lbs NEW during the months of November through March. Do not exceed 2,000 lbs NEW during low cloud cover or other unfavorable weather conditions.

9.3. Location. The ETTC Range land area is 724 square mile area in Northwest Florida.

9.3.1. General. The specific location and or target will be specified by range scheduling and through the daily operations order in the EOD Operations Section.

9.3.2. OB/OD. Conduct open detonations within the marked areas on ranges C-52N and C-62 only. Conduct open burns in the Transportable Burn Kettle Processor (TBKP) on range C-62 only.

9.4. Procedures.

9.4.1. A copy of the test directive and associated publications will be carried on all test support missions. Consult with the project officer and the EOD Operations Section to ensure mission requirements have not changed at least 24 hours prior to assigned mission.

9.4.2. The Team Leader for the operation will ensure a pre-task safety briefing is delivered to all personnel present utilizing Attachment 2 and any item specific publications. Step-by-step procedures for completing the operation will be briefed by the Team Leader.

9.4.3. Check in with range controller upon arrival.

9.4.4. Inform the range controller and the EOD Operations Section when complete. Upon return to the shop, fill out the TD history and mission slip. Return the TD to file, mission slip to operations, and brief operations on any unusual incidents. If the same project is scheduled for the next day, contact the appropriate team and brief on planned activities

9.4.5. Explosive operations will not commence until 1/2 hour after sunrise. Explosive operations will cease 1/2 hour prior to official sunset. **Exception:** coordinate with 96 TW/SEW for any necessary explosive operations during darkness.

9.4.6. Obtain clearance from the Joint Test and Training Operations Control Center (JTTOC) prior to initiating any shot. JTTOC can be reached via radio call sign "Wolfcall" or via the range controller. If range controller is unavailable, request a clearance directly from JTTOC or via EOD Operations. For unscheduled missions, request "Z" clearance. Notify JTTOC upon entering and exiting designated clearance area.

9.4.7. Observe withdrawal distances IAW Attachment 7, or approved SHRP.

9.5. Static Fire Range Procedures. These procedures apply to exploding bridge wire (EBW) firing systems including, but not limited to, High Voltage Firing Sets (FS).

9.5.1. Safety Precautions.

9.5.1.1. Wait 30 minutes for EBW system misfires. After applicable wait time, one EOD technician, with a second technician acting as a safety backup, will approach the test munition(s) to determine what caused the misfire.

9.5.1.2. Prior to returning the arm/safe key(s) to the designated fire control system operator, ensure all personnel have returned to the range firing bunker or safe area and the range controller can account for everyone involved with the mission.

9.5.1.3. In the event of an aborted firing attempt, if system has been charged, wait 5 minutes prior to handling. Do not reinsert shorting plug if it is removed prior to wait time as the circuit may fire.

9.5.1.4. If initiating devices were installed and can be removed, do so prior to connecting test item to firing line. If they cannot be removed, the EOD Team Leader can elect to have a lead wire installed onto the EBW to allow personnel to utilize protective cover before final hookup to the firing system.

9.5.1.5. All systems must have the capability to monitor voltage on the capacitor discharge unit.

9.5.2. Procedures.

9.5.2.1. Review hookup/arming procedures with electronic technicians who set up firing system prior to hooking up live components.

9.5.2.2. Ensure firing system is/has been tested.

9.5.2.3. Ensure range console arm/safe switch or control box is in the "SAFE" position

9.5.2.4. Obtain firing system and/or x-ray key(s). Maintain control of key(s) until ready to fire shot.

9.5.2.5. Ensure shorts, shunts, or physical disconnects are in place. 9.5.2.6. Clear unnecessary personnel from the test site and verify clearance has been obtained from the range controller.

9.5.2.7. Perform continuity check of initiation device(s).

9.5.2.8. Connect initiating device(s) to main firing line. Install the initiating device(s) into the munition(s).

9.5.2.9. Remove shorts, shunts, or physical disconnects in the order indicated during the walk through.

9.5.2.10. Return to the main firing bunker and report to the range controller/designated firing system operator. After accounting for all personnel, return the console key(s) and shorts, shunts or physical disconnects, if applicable, to the fire system operator.

9.5.2.11. After the shot, obtain console firing keys and x-ray system key, if applicable. Clear down range area of explosive hazards before allowing project/range personnel to enter area.

9.5.2.12. When second event systems are integrated into the firing circuit, they must be disconnected prior to final hookup. This isolation must be at sufficient distance from the shot so personnel reconnecting the second event system will be protected if the shot inadvertently fires.

9.5.3. Misfire Procedures.

9.5.3.1. Obtain the short to discharge plug(s)/key(s) from the range controller.

9.5.3.2. Ensure firing line is disconnected/shorted in control, if applicable.

9.5.3.3. Observe voltage monitor to ensure voltage drops off of the system.

9.5.3.4. Observe a 30 minute wait period.

9.5.3.5. Proceed down range. Insert the shorts, shunts, or physical disconnects, if applicable.

9.5.3.6. Remove the EBW detonator from the main charge/test item or disconnect EBW detonator from firing circuit if EBW cannot be removed from item.

9.5.3.7. Investigate reason for misfire before proceeding with any other shots.

9.5.3.8. Refer to Chapter 2, as needed.

9.5.4. Emergency Procedures.

9.5.4.1. Perform immediate care procedures for injured personnel. First Aid kits are located in each of the EOD truck tool kits.

9.5.4.2. Check for other hazards in the area and evacuate to safe location, if necessary.

9.5.4.3. Notify supporting agencies, including the EOD Operations Section on the Primary EOD net, Range Control (call-sign Wolfcall) on the WOLFCALL net or the appropriate range controller (e.g., 72 Control) on the frequency in use at the location of the emergency.

9.5.4.4. Secure the site and unused explosives for later investigation or storage.

9.5.4.5. If appropriate, coordinate Life Flight or ambulance evacuation of injured personnel through Range Control or EOD Operations. EOD Operations maintains locations on the Eglin Range complex capable of handling helicopter extraction.

9.6. Disposal of Unexploded Munitions.

9.6.1. Make positive identification before moving any munitions item by hand.

9.6.2. Dispose of in place or clearly mark for later disposal dud munitions that cannot be safely moved.

9.6.3. Expose the munition fill at nose and tail of all inert bombs prior to removal from range or transportation to scrap yards. **Exception:** Not required for BDU-50s.

9.6.4. Probe BDU-33 and MK-106 practice bombs IAW TO. Segregate and detonate bombs containing live spotting charges prior to removal from range.

9.7. Priming Operations.

9.7.1. Maintain a minimum distance of 100 feet between sites used to prepare charges and the closest known dud.

9.7.2. Do not exceed a maximum of 25 individual shots per operation.

9.7.3. The maximum number of shots to be placed by any one individual is five.

9.7.4. Do not use trucks to transport primed charges.

9.8. Recovery of Munitions from Ranges.

9.8.1. Recovery.

9.8.1.1. Coordinate the use of heavy equipment for excavation on any Eglin testing area with 96 TW/SE. Do not attempt recovery of ordnance from below the surface in areas where live ordnance may exist except as specifically approved.

9.8.1.2. Subsurface Recovery.

9.8.1.2.1. If using heavy equipment (manually operated) to gain access to inert munitions suspected of containing live fuzing, dig to within 2 feet (no closer) of buried munitions.

9.8.1.2.2. The excavation should be 4 feet in diameter for every 1 foot of depth and be of a sufficient size to permit easy access by EOD personnel. Accomplish final

excavation manually, conduct additional probing as required. **Note:** If in the opinion of the senior EOD technician present, hazards exist such that safe access to the munition/fuze cannot be performed, the item will not be recovered.

9.8.1.2.3. Perform recovery of inert munitions (identified by known mission or test with which the item is associated) with inert fuzing by manual or mechanical means.

9.8.1.2.4. Perform recovery and fuze removal of inert munitions with live fuzes and inert boosters (known by the mission) by manual means only if the fuze is hand-safe. Remotely perform recovery and fuze removal of inert munitions with live fuzes and inert boosters (not hand-safe) or with live fuzes and live boosters unless otherwise stated in TDs or approved by 96 TW/SEW.

9.8.1.2.5. Do not manually recover live bombs or other live munitions suspected of containing live fuzes and live boosters, especially fuzes containing delayed action or cocked striker. Accomplish recovery of such items with special equipment so EOD procedures can be completed remotely.

9.8.2. Assumption of liability for damages and replacement costs for robotics systems should be addressed at test planning meetings or Safety Review Boards prior to the commencing of operations. If assumption of liability has not been confirmed, ensure the project officer is aware that future support could be impeded in the event of robotics system damage.

9.8.3. Demilitarization. Accomplish demilitarization of munitions items that could possibly contain or disclose classified components or information.

9.9. Range 74. Operations typically consist of recovery of fuzes, disposal of explosives residue and disposal of dud fired rocket motors. After check-in with the range and receiving mission support requirements from the range controller or test officer, stand by until assistance is requested. Contractor personnel are responsible for preparation, final hook-up and misfires of test items on the sled track.

9.10. Open Burn/Open Detonation. This paragraph outlines and establishes procedures for Open Burn/Open Detonation (OB/OD) operations on the ETTC Range. These procedures are formulated to provide a safe and efficient method for conducting explosive disposal operations on Eglin Test and Training Complex ranges.

9.10.1. Munitions disposal operations are normally conducted for units assigned to Eglin AFB on a quarterly basis.

9.10.2. Special disposal operations may be scheduled to meet the needs of Eglin AFB generators. Any military organization outside Eglin AFB that wishes to use the Eglin munitions disposal facility must have a current support agreement. Special disposals will not be arranged for these outside agencies, but they will be given the opportunity to participate in disposals for Eglin AFB units. The term Ammunition Disposal Request (ADR) hereafter is synonymous with OB/OD operations.

9.10.3. Responsibilities.

9.10.3.1. EOD Management. With the guidance of the base environmental office, ensure that an authorized disposal facility is available for use on Eglin AFB. Also ensure that personnel are sufficiently trained to conduct safe and legitimate disposal operations.

9.10.3.2. EOD Operations Section. Serve as focal point for all disposal operations. Coordinate and schedule with required outside agencies. Act as the focal point for all questions regarding which items may or may not be destroyed in accordance with the range permit.

9.10.3.3. EOD Flight Environmental Coordinator (FEC). Arrange for recovery and analysis of residue when necessary. Residue from the Transportable Burn Kettle Processor (TBKP) will be placed in a 55-gallon drum and base environmental will be notified. This will normally be required for open burn operations only. Provide an initial (within six months of employment) and annual briefing to all EOD Flight personnel on local procedures for conducting ADRs on Eglin Air Force Base and serve as the training focal point for all personnel requiring ADR Team Leader Certification.

9.10.3.4. EOD Team Leader for the ADR. Ensure that all safety and documentation requirements are met. Inventory all munitions designated for disposal by the generators.

9.10.3.5. Munitions Generators. Ensure that all required documentation is completed correctly prior to transporting munitions to the range for disposal. Transport or arrange for transport munitions to the disposal facility.

9.10.4. Documentation. The documents listed in paragraphs 9.10.4.1. through 9.10.4.4. are the generator's responsibility. If not properly prepared, the associated munitions will not be destroyed.

9.10.4.1. AF Form 191, *Ammunition Disposition Request* and DD Form 1348-1, *DoD Single Line Item Release/Receipt Document*. Military munitions items marked for disposal must have required supply documentation (AF Form 191 and DD Form 1348-1 or service equivalent).

9.10.4.2. High Explosive Research Development (HERD) Explosive Waste Manifest. Test munitions items from the Energetic Materials Branch of Wright Laboratory are normally listed on the High Explosive Research Development (HERD) Explosive Waste Manifest with no accompanying supply documentation.

9.10.4.3. Environmental Protection Agency (EPA) Form 8700-22, *Uniform Hazardous Waste Manifest* and DRMS Form 1851, *Restricted Waste Notification*. If the waste explosive material is not a specific munitions item and use of DoD shipping controls is not appropriate, the required documentation is Environmental Protection Agency Form 8700-22 and DRMS Form 1851.

9.10.4.4. Other acceptable and commonly used form are the DD Form 1907, *Signature and Tally Record*, SF 1103, *U.S. Government Bill of Lading*, and SF 1109, *U.S. Government Bill of Lading – Continuation Sheet*.

9.10.4.5. Explosive Ordnance Disposal Incident Management System (EODIMS) Report. Complete an EOD Report using the Explosive Ordnance Disposal Incident Management System (EODIMS) database, for each disposal operation. Include an accurate list of items destroyed and a brief narrative describing the operation. Prepare and submit two copies of each of the following forms for base environmental and the FEC. Attach the forms electronically to the EODIMS report.

9.10.4.5.1. Cover sheet listing quantity treated provided by the FEC.

9.10.4.5.2. EPA Form(s) 8700-22.

9.10.4.5.3. DRMS Form(s) 1851.

9.10.4.5.4. AF IMT 3803, *Surface Weather Observations.*

9.10.4.5.5. Site Inspection Record (Attachment 5).

9.10.5. Sequence of Events. See Attachment 6.

9.11. Emergency Procedures. Refer to Chapter 2.

9.11.1. Perform immediate care procedures for injured personnel. First Aid kits are located in each of the EOD truck tool kits.

9.11.2. Check for other hazards in the area and evacuate to safe location, if necessary.

9.11.3. Notify supporting agencies, including the EOD Operations Section on the Primary EOD net, Range Control (call-sign Wolfcall) on the WOLFCALL net or the appropriate range controller (e.g., 72 Control) on the frequency in use at the location of the emergency.

9.11.4. Secure the site and unused explosives for later investigation or storage.

9.11.5. If appropriate, coordinate Life Flight or ambulance evacuation of injured personnel through Range Control or EOD Operations. EOD Operations maintains locations on the Eglin Range complex capable of handling helicopter extraction.

9.12. Guidance and Publications. The following publications and guidance provide details on EOD support to the ETTC RANGE. All assigned personnel will become familiar with the contents. They can be located at S:\Files\Operations\Pub & Guide Library\Range Documentation

9.12.1. AFI 13-212 V1, *Range Planning and Operations*.

9.12.2. EGLINAFBI 13-204, *Eglin Range Mission Scheduling and Control.*

9.12.3. EGLINAFBI 13-212, *Range Planning and Operations.*

9.12.4. Eglin Comprehensive Range Plan (CRP).

Chapter 10

ROBOTICS

10.1. General. The Robotics section is responsible for all remote recovery and remote disassembly operations developed and employed. The operation of DoD unique, locally developed, large platform robotics requires additional guidance to be set forth in this FOI. Safety standards have been created to address new hazards, and directives have been created to address new robotic capabilities. This chapter will be utilized in conjunction with applicable technical manuals and publications.

10.2. Responsibilities.

10.2.1. Flight Management. Reviews and approves training standards for unique robotic platforms and tools.

10.2.2. Robotics Section. Perform all robotic platform remote recoveries and/or disassembly of test munition ordnance items to include pre- and post-operational checks of robotic platforms and oversee the outsourcing of required maintenance and/or repairs as required.

10.2.3. Electronics Technicians. Execute design, procurement, construction, maintenance, and troubleshooting of electronics packages and modifications. Manage Precision Measurement Equipment Laboratory (PMEL) account, bench stock, HAZMAT, and Radio Frequency Authorization (RFA) accounts.

10.3. General Procedures.

10.3.1. Prior to commencing robotic operations the Team Leader will conduct a risk management (RM) assessment utilizing, SHRPs, JEOD 60-series T.O.s, commercial off- the-shelf (COTS) publications, Team Leader guides and locally developed procedures

10.3.2. Applicable T.O.s and locally developed checklists will be on-site and utilized when performing any operations, including maintenance and training.

10.3.3. All procedures will be observed to the fullest extent possible. Only the most senior ranking individual may authorize deviations and must perform applicable RM.

10.3.4. Ensure the area surrounding the robotic platforms is clear prior to commencing operations. A 20 foot clear zone will be maintained around the All-Purpose Remote Transport System (ARTS) and a 40 foot clear zone will be maintained around the excavator.

10.3.5. Store platforms in climate controlled/environmentally protected spaces, to the maximum extent possible.

10.3.6. Use only one spotter. If hand signals are not understood the operator and spotter will seek clarification prior to continuing the operation. Cease all vehicle movement if anyone besides the spotter or operator is within the safety zone of the vehicle. The spotter will remain clear of the platform while it is in operation and avoid any position between the vehicle and another obstacle. The operator will remain in the vehicle to maintain control while it is running unless manual controls/levers are disabled (via ignition or hydraulic disconnect).

10.3.7. If the spotter or a worker is required to move within the safe distance to communicate or alter something, the operator will disengage the hydraulics and remove his hands from the controls and show safe by keeping his/her hands in view of the spotter to show safe. The only exception to "showing safe" is when the operator must maintain control of the equipment to combat drift. Movement into the safety zone in those circumstances will be kept to the bare minimum to meet mission needs if a suitable work around cannot be found.

10.4. All-Purpose Remote Transport System (ARTS).

10.4.1. **ARTS Safety Precautions**.

10.4.1.1. A minimum of two people required when attaching and detaching the platform accessories. Personnel are permitted to mount and manually operate the ARTS only to conduct limited movement of the unit for transportation loading/unloading, EOD attachment mounting/dismounting, or maintenance operations such as refueling.

10.4.1.2. Prior to approach the vehicle during a remote or tether operation, the operator must turn the IOCS or Tether's actuator switch to Off and give a verbal confirmation (in person or via voice radio) prior to approach. Upon approach, the actuator switch on the Platform Mode Control Station must be switched to the Off position. The operator is not to touch any other control until the down range team gives a verbal confirmation that it is safe to do so. The operator must still watch the video feed and sensor readings (if available) during this time and use the emergency stop if a dangerous condition arises.

10.4.2. **Predator Arms Safety Precautions**.

10.4.2.1. Maintain a 10ft, 270 degree clear area around arms chassis when hydraulic motor is powered. Arms move with enough force to cause serious injury.

10.4.2.2. Attach mounting braces prior to transit, and remove before operation. Do not stand in front of the arms when removing braces as they may fall.

10.4.2.3. Be sure to properly connect hydraulic feed and return lines when attaching arms chassis to ARTS. Improperly connecting lines can cause serious damage to hydraulic motor and manipulator arms.

10.4.2.4. Do not over-tighten mounting braces. Tightening the braces beyond the arm's shoulder maximum will cause severe damage to internal components.

10.4.3. Predator Arms Procedures.

10.4.3.1. When connecting and disconnecting the arms inside of a Bldg or structure the spotter will gain as much safe distance as possible without compromising his responsibility to the manual operator of the platform.

10.4.3.2. The operator will maintain control of the vehicle and remain seated. The operator will NOT exit the vehicle to assist with attaching/detaching the accessory. The operator will not make any movement with the vehicle that the spotter did not command. The spotter will remain cognizant of crush or pinch hazards.

10.5. Excavator.

10.5.1. **Safety Precautions**.

10.5.1.1. An active spotter is required to be in view of the operator for transporting, loading/unloading, and any movement with an obstacle within 40ft other than manual digging operations

10.5.1.2. Avoid contact with power lines and other overhead obstacles. Death or serious injury could result.

10.5.1.3. Make sure the work site has sufficient strength to support the weight of the machine. Do not dig under the machine.

10.5.1.4. When working close to an excavation site, position the machine with the propel motors in the rear.

10.5.1.5. When operating on a slope, keep the bucket low to the ground and close to the machine. The tracks should also be pointed uphill.

10.5.1.6. When climbing or descending a hill keep the bucket on the uphill side. If the machine begins to slip or becomes unstable, lower the bucket.

10.5.1.7. Do not drive the vehicle with any hydraulic cylinder fully collapsed or extended. Sudden physical shock to the vehicle could cause mechanical damage.

10.5.2. Procedures.

10.5.2.1. Prior to approaching the vehicle during a remote operation, the up range operator must completely release the joysticks, put the foot pedal direction slider in parked, and give a verbal confirmation (in person or via voice radio) prior to approach. The operator must watch the video feed and sensor readings (if available) during this time and use the emergency stop/ignition switch if a dangerous condition arises. The operator is not to touch any other control until the team leader gives a verbal “all clear”. Prior to performing the actions required, only one person will approach the platform within the safety zone and their first action will be to disengage the remote switch located in the cab.

10.6. Remote Bandsaw.

10.6.1. **Safety Precautions**.

10.6.1.1. Disconnect bandsaw from power source prior to servicing, to include blade changes.

10.6.1.2. Do not force the band saw to close; allow the bandsaw to drop utilizing the pneumatic feed rate mechanism.

10.6.1.3. Do not use blades that are dull, cracked, badly worn or have missing teeth.

10.6.1.4. Remain clear of the blade and motor mechanism, to include clothing and personal items, when starting.

10.6.1.5. Gloves and safety glasses are required when replacing the blade. Carefully un-coil replacement blades as they may spring away from your grip. Ensure teeth face towards the object to be cut and the blade is installed in the correct cutting direction.

10.6.1.6. Secure item to be cut utilizing available clamps or other improvised means.

10.6.1.7. Loose or unsupported items may jeopardize machine stability, eject as a projectile, or cause machine to resonate, tip, or fall.

10.6.1.8. Only use water for lubrication. Oil or other lubricants will cause the bandsaw's internal mechanics to fail and can also ignite the lubricant from friction.

10.6.2. Procedures.

10.6.2.1. Withdrawal distances will be based on the ordnance or fuze encountered using a K-factor of 328 (K328) if the TD does not specify, while still utilizing adequate frontal and overhead cover.

10.6.2.2. Calculate the fall rate prior to securing ordnance in the bandsaw to ensure you can attain safe separation prior to the blade cutting into the ordnance once secured (it should be barely visible). Too fast of a fall rate can also cause the bandsaw to resonate/bounce violently on the item.

10.6.2.3. For operation, maintenance, storage, operation and transportation refer to the appropriate owner's manual and locally developed guide.

10.7. Transportation.

10.7.1. Members must be currently licensed on the respective vehicle and trailer prior to operation.

10.7.2. The ARTS should only be manually operated to perform transportation loading/unloading, attachment mounting/dismounting, or maintenance operations.

10.7.3. The excavator must be operated manually by trained individuals during loading/unloading required for transportation. Contracted personnel retained to transport the excavator for operational or maintenance purposes may not have proper qualifications for operating but can be used for spotting.

10.7.4. When transporting the Predator arms, ensure the manipulator arms are stowed and secured with the mounting equipment (turnbuckles or straps may be used in an emergency, but do not over-tighten). Failure to do so may cause the arms to drift, collide with other objects, or swing outside the trailer. Using improper mounting equipment or techniques can damage the arms or its internal components.

Chapter 11

RADIATION AND LASER SAFETY

11.1. General. This chapter provides guidance on the minimum requirements for ensuring radiation and laser safety. This chapter also establishes procedures for meeting the supervisor and employee responsibilities IAW AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health program,* AFI 48-139, *Laser and Optical Radiation Protection Program,* AFI 48-148, *Ionizing Radiation Protection,* and applicable Eglin AFB supplements. **Note**: EGLINAFBI 48-102, *Non-Ionizing Radiation Control Program*, and EGLINAFBI 48-103, *Ionizing Radiation Control Program* were rescinded in August 2016. Both will be replaced by AFI48-109_EAFBSUPP and AFI48-139_EAFBSUPP but as of the drafting of this OI, both are in draft form in the review process.

11.2. Responsibilities.

11.2.1. Unit Radiation Safety Officer (RSO) and Laser Safety Officer (LSO).

11.2.1.1. The RSO and LSO will be appointed in writing by the unit commander. A copy of the appointment letter will be maintained in the Radiation Safety Program binder. 11.2.1.2. Receive and document training from the Bioenvironmental Engineering (BEE) Radiation Protection Element.

11.2.1.3. Review the contents of this chapter on an annual basis and update as operations change. Any and all changes must be forwarded to BEE.

11.2.1.4. Perform unit initial and annual training specific to the radiation, laser, and radiofrequency radiation (RFR) hazards that apply to the workers. Ensure training is documented in each individual's AF Form 55.

11.2.1.4. Inform BEE prior to using any new system or employing changes in existing operations. This includes, but is not limited to, changes in Bldg layouts, exposure times, operating parameters, or any other requirements change that could alter the accuracy of hazard surveys.

11.2.1.5. Report any suspected or actual over-exposure to BEE immediately.

11.2.2. Supervisors.

11.2.2.1. Ensure all workers have been trained prior to authorizing them to use systems.

11.2.2.2. Inform unit RSO/LSO and BEE prior to operating a new system to ensure a risk assessment is completed.

11.2.2.3. Mark all radiation hazard areas adequately. Ensure hazards are clearly stated, and positive control is maintained over the hazard area at all times.

11.2.3. Workers.

11.2.3.1. Follow all established procedures, manufacturer data, technical orders, and applicable regulatory standards.

11.2.3.2. Ensure all safety precautions and required hazard areas are marked as required prior to operating systems. Never operate a system without prior training on operating procedures and hazards.

11.2.3.3. Report any hazardous conditions, suspected or actual over-exposures to supervisors, unit RSO/LSO and BEE immediately.

11.3. Procedures. The sources used by EOD personnel are used during emergency response, training for emergency response, and maintenance and calibration of response equipment activities. The following minimum procedures apply.

11.3.1. Personnel use robots to X-ray unidentified packages to determine if there are explosives present. A spotter and warning signs are placed around the area to ensure hazard area is secure. Additionally, the robot communicates through RFR emitters. These emitters are placed on a vehicle that is 15 feet high, and the RFR hazards have been determined by BEE to be minimal. If the package is suspected of containing a radioactive source, the ADM-300 or IdentiFINDER can be utilized as well.

11.3.2. Source Specifics:

11.3.2.1. XRS-3, X-Ray Source. The XRS-3 is a small, lightweight, pulsed x-ray generator that operates using a removable battery. It creates pulses of very short duration (50 nanoseconds) at a relatively low dose rate with up to 270 KVP of energy

11.3.2.1.1. It is unlawful to use this equipment to intentionally expose humans or to use it for medical radiography.

11.3.2.1.2. Untrained and unauthorized personnel must not have access to this device.

11.3.2.2. The IdentiFINDER. The IdentiFINDER is a hand held gamma spectrometer used to locate, identify, measure dose/dose rate and verify neutron presence. It contains a Cs-137 cesium source and uses Ba-133 barium, Cd-109 cadmium, Co-57 & 60 cobalt, Eu-152 Europium, Mn-54 manganese, and Na-22 sodium for calibration.

11.3.2.3. ADM-300, Radiac Set. The ADM-300 is a hand held radiation detection and dose/dose rate measurement device for alpha, beta, gamma, and x-ray. The ADM-300 uses Cs-137 cesium and Th-232 thorium for calibration.

11.4. Precautions.

11.4.1. These sources must always be stored securely in a previously identified and approved area.

11.4.2. Use sources only as directed for calibration, and always return them to the storage area.

11.4.3. Ensure nitrile rubber gloves are used if handling of button sources is required, and immediately wash hands after use.

TYRONE C. MANEGDEG, Maj, USAF
Commander

Attachment 1

GLOSSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoDM 5200.01, Vol 1, *DoD Information Security Program: Overview, Classification, and Declassification,* 24 February 2012

DoDM 5200.01, Vol 2, *DoD Information Security Program: Marking of Classified Information,* 24 February 2012

AFPD 32-30, *Explosive Ordnance Disposal*, 21 Jun 2013

AFJI 32-3002, *Interservice Responsibility for Explosive Ordnance Disposal*, 14 February 1992

AFI 10-210, *Prime Base Engineer Emergency Force (Beef) Program*, 21 January 2015

AFI 13-212 V1, *Range Planning and Operations,* 23 April 2015

AFI 16-1404, *Air Force Information Security Program,* 29 May 2015

AFI 32-3001, *Explosive Ordnance Disposal Program*, 20 November 2014

AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health program*, 1 August 2014

AFI 48-139, *Laser and Optical Radiation Protection Program*, 30 September 2014

AFI 48-148, *Ionizing Radiation Protection*, 20 November 2014

AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures,* 29 June 2016

AFMAN 17-1201, *User Responsibilities and Guidance for Information Systems*, 1 June 2012

AFMAN 33-283, *Communications Security (COMSEC) Operations*, 3 September 2014

AFMAN 33-363, *Management of Records,* 1 March 2008

AFMAN 91-201, *Explosive Safety Standards,* 12 January 2011

EGLINAFBI 13-204, *Eglin Range Mission Scheduling and Control,* 14 January 2014

EGLINAFBI 13-212, *Range Planning and Operations,* 30 April 2015

EGLINAFBI 48-102, *Non-Ionizing Radiation Control Program,* 30 June 2011

EGLINAFBI 48-103, *Ionizing Radiation Control Program,* 17 February 2011

TO 00-5-1, *Air Force Technical Order System,* 1 October 2014

Eglin Comprehensive Range Plan (CRP), 28 Oct 2014

Prescribed Forms

None

Adopted Forms

DD Form 626, *Motor Vehicle Inspection*

DD Form 836, *Dangerous Goods Shipping Paper and Emergency Response Information*
DD Form 1348-1, *DoD Single Line Item Release/Receipt Document*
DD Form 1907, *Signature and Tally Record*
AF IMT 68, *Munitions Authorization Record*
AF Form 191, *Ammunition Disposition Request*
AF Form 439, *Robbery Checklist*
AF Form 440, *Bomb Threat Aid Card*
AF Form 614, *Charge Out Record*
AF IMT 623a, *On-The-Job Training Record Continuation Sheet*
AF Form 847, *Recommendation for Change of Publication*
AF Form 978, *Supervisor's Mishap Report*
AF Form 1109, *Visitor Register Log*
AF IMT 1297, *Temporary Issue Receipt*
AF IMT 1473, *Gun Equipment Room Inventory*
AF Form 1800, *Operator's Inspection Guide and Trouble Report*
AF Form 2419, *Routing and Review of Quality Control Reports*
AF Form 2432, *Key Issue Log*
AF IMT 2530, *Alarm System Test Record*
AF IMT 3803, *Surface Weather Observations*
AF Form 4168, *COMSEC Responsible Officer and User Training Checklist*
AFCOMSEC Form 16, *COMSEC Physical Inventory*
SF 153, *COMSEC Material Report*
SF 701, *Activity Security Checklist*
SF 702, *Security Container Check Sheets*
SF 1103, *U.S. Government Bill of Lading*
SF 1109, *U.S. Government Bill of Lading – Continuation Sheet*
DRMS Form 1851, *Restricted Waste Notification*
EPA Form 8700-22, *Uniform Hazardous Waste Manifest*

Abbreviations and Acronyms

AAFES—Army Air Force Exchange Service
ADR—Ammunition Disposal Request
AFI—Air Force Instruction
AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AGL—Above Ground Level

ARTS—All Purpose Remote Transport System

BDOC—Base Defense Operations Center

BEE—Bioenvironmental Engineering

BSERV—Bomb Squad Emergency Response Vehicle

CAM—COMSEC Account Manager

CAP—Cryptographic Access Program

CCI—Controlled Cryptographic Items

CDU—capacitor discharge unit

CES—Civil Engineer Squadron

CLS—Combat Life Saver

COMSEC—Communications Security

COT—Commercial Off-the-Shelf

CRO—COMSEC Responsible Officer

CRP—Comprehensive Range Plan

CSSO—Computer System Security Officer

DAA—Designated Approving Authority

DODIC—DoD Identification Code

EAL—Entry Authorization List

EAP—Emergency Action Plan

EBW—Exploding Bridge Wire

ECC—Emergency Communications Center

ECC—Enhanced Cryptographic Cards

EED—Electro Explosive Device

EMSEC—Emission Security

EOD—Explosive Ordnance Disposal

EODIMS—EOD Information Management System

ETTC—Eglin Test and Training Complex

FDSER—Fuse Disassembly System, EOD, Remote

FEC—Flight Environmental Coordinator

FPCON—Force Protection Condition

GSA—General Services Agency

HAZMAT—Hazardous Materials

HCD—Hazard Class Division

HERD—High Explosive Research Facility

IDS—Intrusion Detection System

IED—Improvised Explosive Device

IR—Infrared

JON—Job Order Number

JTTOC—Joint Test and Training Operations Control Center

LSO—Laser Safety Officer

MSA—Munitions Storage Area

NEW—Net Explosive Weight

OB/OD—Open Burn/Open Detonation

OPR—Office of Primary Responsibility

PAN—Percussion Actuated Neutralizer

PMEL—Precision Measurement Equipment Laboratory

PT—Physical Training

RDS—Records Disposition Schedule

RF—Radio Frequency

RFA—Radio Frequency Authorization

RFR—radiofrequency radiation

RM—Risk Management

RSO—Range Safety Officer

RSO—Radiation Safety Officer

SHRP—Safe Handling and Recovery Procedures

SRB—Safety Review Board

STE—Secure Terminal Equipment

SVRO—Secure Voice Responsible Officer

TBKP—Transportable Burn Kettle Processor

TD—Test Directive

TL—Team Leader

TO—Technical Order

USR—Unit Safety Representative

Terms

EOD Flight Management—Normally the Flight Chief and or Flight Commander; Flight SNCOs are included.

Attachment 2

STANDARD PRE-OPERATION SAFETY BRIEFING

NOTE

This pre-operation sheet will be filled out and briefed before conducting any planned explosive operation on the ETTC. The purpose of the checklist is to maximize safety during operations by ensuring personnel are aware of all explosive hazards involved and the appropriate actions to take in the event of an emergency.

A2.1. Explosive and Personnel Limits.

A2.1.1. Operation to be performed: _____

A2.1.1.1. Munitions involved: _____ _____

A2.1.1.2. Number and NEWQD (TNT Equivalent) of Detonations: _____

A2.1.1.3. Maximum Fragmentation distance for each Detonation:

A2.1.1.3.1. Maximum Frag Range (MFR): _____

A2.1.1.3.2. Maximum Fragmentation Range – Horizontal (MFR-H):_____

A2.1.1.3.3. Maximum Fragmentation Range – Vertical (MFR-V):_____

A2.1.1.4. Explosive Hazards _____

_____

A2.1.1.5. Special Ordnance Considerations (orientation, heavy casing, etc.):_____

_____

A2.1.2. Location where operation is to be performed (detonation site): _____

A2.1.3. Operating Location for Essential Personnel: _____

A2.1.3.1. Distance from detonation site: _____

A2.1.3.1.1. If distance from detonation is less than MFR:

A2.1.3.1.1.1. Protective measures taken *(AFMAN 91-201 para 12.74.4 and 12.74.8)*:

_____

A2.1.3.1.1.2. Note all risk management (RM) assessments: _____

A2.1.3.1.1.3. Commander approving RM assessment based on being inside the maximum case fragment distance (if applicable): _____

A2.1.4. Evacuation Assembly Point / Non-Essential Personnel area: _____

A2.1.5. Explosive Limits: _____

A2.1.6. Personnel Limit for the range is: _____

A2.1.6.1. A minimum of three EOD personnel, one who is a PAFSC 3E871 or higher, will be present during planned explosive operations. This does not apply to emergency operations during stand-by functions.

A2.1.6.2. The parameter in A2.1.6.1. may be adjusted to a minimum of two EOD-qualified personnel one of which is an E-5 that has been awarded a 5-skill level, when approved through Commander RM determination during periods of critical manning or other unique circumstances to meet mission requirements. Eglin AFB EOD FOI 32-3001 serves as the commander RM data.

A2.1.7. Personnel/Duty assignments (name/rank):

A2.1.7.1. Range Safety Officer (RSO): _____

A2.1.7.2. EOD Team Leader (TL): _____

A2.1.7.3. EOD Team Members (TM): _____

_____

A2.1.7.4. Support Team / Medical: _____

A2.1.7.5. Non-Essentials (Stop all ops when non-essentials are present: _____

A2.1.7.6. Non Essential Escort: _____

A2.1.8. Conduct briefing to ensure personnel are familiar with all the hazards involved prior to commencing.

A2.2. Equipment Requirements.

A2.2.1. General Safety Equipment Requirements:

____ Water ____ Portable radios

____ Gloves ____ First Aid Kit

____ Sun-screen (as needed) ____ Fire Extinguishers

____ Safety glasses (explosive ops)

A2.2.2. Special personnel protective equipment (e.g., laser goggles, helmet, body armor):

_____ _____

_____ _____

A2.2.3. Special operational equipment (e.g., Mk-series tools, robotics, etc):

_____ _____

_____ _____

A2.3. Pre-operational Safety Assessment.

A2.3.1. EOD operations will be conducted under the supervision and control of the EOD TL.

A2.3.2. The RSO, normally the senior (rank/skill) locally-assigned EOD technician present, is responsible for ensuring all safety aspects of the operation are properly applied in support of the TL. The RSO will not participate as a worker during the explosive operation.

A2.3.2.1. The TL will conduct a briefing to cover tasks to be performed, safety precautions and emergency procedures.

A2.3.2.2. The duties of the RSO and TL will not be performed by the same person.

WARNING

Ground yourself prior to handling initiating explosives; work on grounded surfaces if possible. Personnel handling electrically initiated explosive devices will avoid wearing clothes made of material, which have high static generating characteristics. Use available frontal/overhead protection during detonation – do not stand in view of the munitions to be detonated.

CAUTION

Remember Cardinal Principal of Explosive Safety: "Expose the minimum amount of people to the minimum amount of explosives for the minimum amount of time."

A2.3.2.3. The TL will brief visiting personnel on type of ordnance and associated hazards.

Provide specific instructions on where to drive, park, and walk; and not to touch items they may encounter (*"if you didn't drop it, don't pick it up"*). Show specific frontal/overhead protected area in which to take cover.

A2.3.3. Non-Essential Personnel Escort. If visitors are on range, assign an escort to ensure safety rules are followed. Escort to visitor ratio will not exceed 1:5. The RSO may be the Escort.

NOTE

All personnel wanting to proceed down range after commencement of the operation will do so only after obtaining approval from the TL and RSO. Personnel will then be briefed on all hazards present. Any unsafe actions observed by EOD personnel will be immediately brought to the attention of the RSO. The RSO will cease operations until unsafe condition is corrected. If unable to resume safe operations, withdraw to a safe distance and inform EOD Operations [and appropriate Range Control Office] that the EOD operation is terminated.

A2.3.4. The TL will ensure two-way radio (or phone) communication is operational and available (for both TL and RSO) during all explosive operations. Both a primary and a secondary means communication are preferred.

WARNING

Do not conduct hand-held radio transmissions within 50 feet (100 feet when using vehicle radios) of electro-explosive devices (EEDs). Modern Mobile Emitters (MME) such as key fobs and cellular phones will not be operated within 10 feet of EEDs.

A2.3.5. Remove rings and watches prior to starting any explosive operation.

A2.3.6. Do not handle munitions roughly (e.g., rolled, tumbled, dropped, dragged or thrown).

A2.3.7. If an abnormal condition occurs, stop the operation until the condition is corrected.

A2.3.8. Do not begin explosive operations on ranges until 1/2 hour after sunrise; cease operations 1/2 hour prior to official sunset.

A2.3.9. Observe wait times of **30 minutes** for electrically primed misfires and **1 hour** for non-electrically primed misfires.

A2.3.10. **Local Lightning Watch, Warning and Advisories.** When operating on the ETTC, lightning monitoring and notification is primarily the responsibility of the Test Area Range Controller. When operating at other locations, on or off the ETTC, the EOD Team Leader is responsible for consulting the supporting weather unit and monitoring for advisories, watches, and warnings. The EOD Operations Section and or the Joint Test and Training Operations Control Center (JTTOC) monitor and notify personnel of hazardous weather conditions. The 96 OSS Weather Flight or the 26th Operational Weather Squadron may be contacted for weather information. Refer to Atch 3. Refer to AFMAN 91-201, *Explosive Safety Standards,* Section 7H – *Procedures in the Event of Electrical Storms,* for further information.

A2.3.10.1. Weather Advisory. A weather advisory is a special notice to notify operational users of environmental conditions impacting operations. Team leaders will evaluate individual advisories and determine the potential impact on planned operations and whether to proceed, delay, or cancel those operations.

A2.3.10.2. Lightning Watch. A lightning watch will be in effect 30 minutes prior to thunderstorms being within 5 nautical miles (5.75 land miles) of the affected area. If a lightning watch is issued, the team leader and or range safety officer will initiate an orderly termination of all explosive operations.

A2.3.10.3. Lightning Warning. A lightning warning will be issued when lightning is within 5 nautical miles of the affected area. This may be observed by roughly a 28 second count of the observed lightning flash. Personnel will seek protective shelter immediately. An acceptable distance is equivalent to K24 and is calculated as 24 times the cube root of the NEW (24 x NEW ^1/3).

A2.3.10.4. Areas not served by lightning warnings and watches. When operating in an area not served by the Air Force-approved local lightning warning system, explosives operations must be terminated before a thunderstorm is within 10 miles.

A2.3.11. **Only one EOD technician** will check the detonation point after a planned detonation with a second person acting as a safety backup. This rule also applies when checking items kicked out by a detonation. Deviation for the sake of training is not authorized.

A2.3.12. Do not proceed directly down range if the detonation results in a range fire. If it can be ascertained that the fire can be contained, immediately respond and try to control the fire while the FD is responding (AFMAN 91-201, para 10.9.4). If the decision is made not to fight the fire, the area should be evacuated and remain so until it has cooled for at least 24 hours. Inform the range controller or other local authorities as to the extent of the fire so appropriate notifications can be made. Follow the safety measures outlined in AFTO 60A-1-1-31 prior to returning to the detonation site.

A2.3.12.1. Wait at least 24 hours after the fire has been extinguished to check the detonation point.

A2.3.12.2. Do not approach a pyrotechnic or incendiary ordnance burn area for 24 hours after the cessation of burning.

A2.3.13. Make positive identification before taking any action on a munitions item.

A2.3.14. Destroy in place or clearly mark for later destruction any dud munitions that cannot be safely moved.

A2.3.15. Identify all guests and casuals.

A2.3.16. Required Technical Orders and publications are on hand and will be used.

A2.3.17. Electric caps will be connected to the firing wire before being placed in the charge; secure the firing wire near the explosive charge or tool.

A2.3.18. Secure the time fuse to ensure it does not coil.

A2.3.19. No smoking within 50 feet of explosive; TL or RSO will designate a smoking area.

A2.4. Emergency Procedures.

A2.4.1. In the event of an accident or fire, _____ (normally the RSO) will notify the appropriate agency (e.g. fire department, ambulance, range controller or EOD Operations).

A2.4.1.1. Evacuate all nonessential personnel _____ feet as required.

A2.4.1.2. The Evacuation Assembly Point is _____

A2.4.2. Fire extinguishers/equipment are located _____

A2.4.3. First Aid Kit is located _____

A2.4.4. _____ and _____ will fight the fire and note the time if any munitions become engulfed in flames.

WARNING

Do not fight fires involving 1.1 munitions engulfed in flames unless attempting a rescue.

A2.4.5. _____ will sound the alarm and go to the Evacuation Assembly Point and direct emergency responding personnel to the scene.

A2.4.6. _____ and _____ will secure the site of unused explosives for storage or later disposition.

A2.4.7. When evacuation is accomplished, RSO will account for everyone involved in the operation.

Attachment 3

EXPLOSIVE OPERATIONS NOTIFICATION CHECKLIST

A3.1. The below information will be utilized when making explosive use notifications IAW Chapters 7 and 8 of this instruction. Refer to Attachment 6 for Chapter 9 notifications.

A3.1.1. NAME OF PERSON MAKING RANGE CALLS: _____

A3.1.2. OPERATION START TIME: _____

A3.1.3. OPERATION END TIME: _____

A3.1.4. LOCATION OF OPERATION: _____

A3.1.5. # OF DETONATIONS: _____

A3.1.6. N.E.W.:_____

A3.1.7. TIME NOTIFICATIONS COMPLETE: _____

A3.2. Agencies listed below will be notified telephonically prior to conducting operations utilizing live explosives. **Note:** When conducting operations IAW Chapter 7, *Use of EOD Tools at Off-Range Locations*, only notify agencies listed in A3.2.1. through A3.2.3.

Agency	**Phone Number**	**Contacted Initials**
A3.2.1. BDOC	882-2502	_____
A3.2.2. Command Post	883-4020	_____
A3.2.3. Weapon Safety	882-8234/2540 x3	_____
A3.2.4. Fire Department	882-5856	_____
A3.2.5. Base Operations	882-2614	_____
A3.2.6. Hospital	883-8227	_____
A3.2.7. Weather	882-4800/5449	_____
A3.2.8. Public Affairs	882-3933	_____
A3.2.9. West Gate Shoppette	850-651-6741	_____
A3.2.10. Eglin Elementary School	850-833-4320	_____

A3.3. Additional weather information may be obtained from 26th Operational Weather Squadron (OWS), Barksdale Air Force Base, Louisiana. They may be contacted as follows:

A3.3.1. 26 OWS (DSN)	(312) 331-2651/2652	_____
A3.3.2. 26 OWS (Comm)	(318) 529-2651/2652	_____

Attachment 4

EXPLOSIVE CONTROL LOG

	Date:

Explosive Control Log			
Team Leader:		Can #:	
Mission #:	Issued	Returned	Used
C-4			
Lot #: Location:			
M7 Non-Electric Caps			
Lot #: Location:			
M60 Igniters			
Lot #: Location:			
M700 Time Fuse			
Lot #: Location:			
Det Cord			
Lot #: Location:			
.50 Cal Electric M174			
Lot #: Location:			
Item:			
Lot #: Location:			
Item:			
Lot #: Location:			

OUT/1022	LOGGED	IN/1022
	MSI DATE	

Attachment 5

OPEN BURN/OPEN DETONATION SITE INSPECTION LOG

AREA/LOCATION	**DATE/TIME**				**INSPECTOR NAME AND SIGNATURE**	**EOD NCOIC SIGNATURE**
SECURITY DEVICES (before/after each use)	**SAT**	**UNSAT**	**N/A**	**NOT INSP**	**PROBLEMS OBSERVED**	**DATE CORRECTIVE ACTION TAKEN/ DESCRIPTION OF ACTION**
Security of Gates						
Warning Signs						
Evidence of Tampering						
Evidence of Damage						
Other						
COMMUNICATION EQUIPMENT (as used)						
Radios						
Other						
SAFETY/EMERGENCY EQUIPMENT (before/after use)						
Fire Extinguishers						
Absorbents/Spill Kits						
First Aid Equipment/Supplies						
Portable Eye Wash Station						
Leather Gloves, Boots, Face Shields, Protective Glasses						

Vehicles and Other Mobile Equipment (Before Use)	**SAT**	**UNSAT**	**N/A**	**NOT INSP**	**PROBLEMS OBSERVED**	**DATE CORRECTIVE ACTION TAKEN/ DESCRIPTION OF ACTION**
Routine Maintenance						
Brakes						
Tires						
Hydraulics						
Emergency Lights						
Horns/Sirens						
On-Board Emergency Equipment						
Other						
OB/OD AREAS (before/after each use)						
TBKP for obvious damage						
Detonation Pits						
Deterioration of Roadway						
Gate Areas/Boundary markers						
Other						

I certify that all items were completed as per checklist.

Name (print) _____ Signature _____

Date _____

Attachment 6

OPEN DETONATION FLOW OF EVENTS CHECKLIST

A6.1. Note: Munitions items designated in T.O. 11A-1-42 as disposal by burning will not be disposed of by detonation. These items must be disposed of by burning only. Any deviation from this requirement must be coordinated in advance with base environmental. Deviations may be approved for such issues where the overall disposal operation would take in excess of 10 total man-days.

A6.2. NLT 21 Days Out.

A6.2.1._____ Contact range scheduling at 882-2991 to schedule range time. **Note:** A minimum of two days will be scheduled for detonation and three days for the Thermal Treatment Processor, one of which will be a post-operation cleanup day.

A6.2.2._____ Ensure range control schedules support from Jackson Guard, medical, weather, and heavy equipment (fork lift and a 40-foot tractor-trailer to move TBKP), as needed.

A6.2.3._____ Advise the EOD Resources Section what explosives will be required and initiate a request for issue, as needed.

A6.2.5._____ Check the amount of diesel fuel in the TBKP. If more is needed, schedule to have filled. Do not forget the unit's Bulk Fuel Issue Card before going to the range.

A6.2.5._____ Check the amount of propane in the TBKP. If more is needed, notify the EOD Resources Section to have the bottles filled.

A6.2.6._____ Notify other generators and request list of pending ADR items. Be sure to separate detonable items from items that must be burned in the TBKP. The generators must include explosive class/division and NEW on their list.

GENERATORS	PHONE #	PERSON NOTIFIED
96 MXS/WMA	882-3979	_____
919 MXS/LGMVW	883-6321	_____
AFRL/MMNE	882-2079/5969	_____
1 SOMXG/MXMW	884- 6706	_____
780 TS/OGMTG/TAMS A-24	882-2086	_____
AFRL/MNMW	882-5705/8410	_____
Duke Field Ammo	883-7895	_____

A6.2.6._____ Notify the appropriate agencies.

AGENCY	PHONE #	PERSON NOTIFIED
96 CEG/CEV	2-7667/2-7668/ 699-9936/855-0869	_____
96 TW/SEW	882-8234/2540x3	_____

A6.3. 5 Days Out. Notify the following if fuels are required in the TBKP.

AGENCY	PHONE #	PERSON NOTIFIED
96 LRS/LGR	882-2159	_____

A6.4. 2 - 3 Days Out.

A6.4.1._____ Ensure all parties are aware of date, time and place of operation. It is recommended that all participants meet at the incoming explosive cargo pad near the MSA before convoying to the range.

A6.4.2._____ Confirm with EOD Resources Section on the type and amount of explosives required.

A6.4.3._____ Confirm with the EOD Operations Section to ensure that all required support has been scheduled in CSE.

A6.4.4._____ If conducting burn operations, have the FEC arrange for recovery drums and coordinate residue analysis with Bio-Environmental Engineering.

A6.4.5._____ Notify the appropriate agencies.

AGENCY	PHONE #	PERSON NOTIFIED
96 TW/PA	882-3931	_____
96 SFS/SFO/Range Patrol	882-2502/2000	_____
Range Complex C-6	883-7867/4786	_____
Jackson Guard	882-6233	_____

A6.5. Range Day.

A6.5.1._____ Load/Inspect all necessary equipment and explosives.

A6.5.2._____ At predetermined meeting place, verify that required documentation has been completed by all generators.

A6.5.3._____ Convoy to range using proper explosive movement routes.

A6.5.4._____ Establish contact with the appropriate range control. Ensure they have a radio with the EOD net and verify that access to the range has been restricted.

A6.5.5._____ Obtain initial weather report. Ensure weather parameters are within the EPA permit requirements: No forecast of major storms and no lightning within 5 nautical miles. Obtain a copy of the report for the EOD FEC.

A6.5.6._____ Give safety briefing to all personnel on site.

A6.5.7._____ Fill out OB/OD Site Inspection Log (Attachment 5). Return to EOD FEC.

A6.5.8._____ Unpack and sort munitions for disposal. **Note:** Munitions personnel may be used during unloading/inventory operations if properly briefed and supervised. All empty containers and packing material will be removed from the range by munitions personnel/generators.

A6.5.9._____ Check container quantities with documentation. If quantities do not match, do not accept them for disposal.

A6.5.10._____ Prepare munitions for disposal IAW TO 60A-1-1-31 or specific item T.O. **Note:** A maximum of three detonation points may be set up at one time. Ensure each detonation will not disrupt subsequent detonations. Position munitions so the major fragment hazard is pointing hazard is pointing away from the safe area.

Attachment 7

SAFETY DISTANCES FOR PERSONNEL AND AIRCRAFT

A7.1. To establish a safe horizontal withdrawal distance for personnel and vertical danger areas for aircraft, EOD personnel will ensure the following distances are used as a guide when obtaining clearance for disposal operations on all Eglin ranges. It is the responsibility of the JTTOC to clear the airspace above the detonation point and the responsibility of EOD and the range chief to ensure ground space is clear before shots are fired. The following distances have been approved by 96 TW/SEW and are used as a guide when destroying ordnance in support of test missions.

A7.2. All EOD personnel essential to an operation should be at the greater of the "Maximum Horizontal" fragmentation distance or K328 w/200 ft minimum blast distance, identified by the EOD Tactical Decision Aid (TDA) or be provided overhead and frontal protection. Non-essential personnel will be located at the minimum distances IAW AFMAN 91-201, paragraph 12.74.3. Protect the equipment/vehicles from any possible range fire.

TYPE ITEM	SAFETY DISTANCE
Test Items	See Test Directive / Safety Annex
Any non-frag producing shot minimum distance	1,250 ft
Any frag producing shot minimum distance	2,500 ft
Dispensers / Submunitions	
Full Dispenser	7,500 ft
Armor Defeating CBU dispenser items	See Test Directive / Safety Annex
Submunitions	2,500 ft
Projectiles	
Ammunition up to 40mm	2,500 ft
Projectile larger than 40mm to 5"	4,000 ft
Rockets	
2.75" Rockets warheads and equivalent items	2,500 ft
Rocket warheads up to 5"	4,000 ft
Missiles	
AIM –7 Sparrow	4,000 ft
AIM – 9 Sidewinder	4,000 ft
AIM – 120 AMRAAM	4,000 ft
AGM-65 Maverick (blast warhead)	5,000 ft
Bombs	
750 lb Demo bomb w/ spotting charge	3,500 ft
Bombs & Projectiles up to 5"	4,000 ft
MK series bombs up to MK 83	7,500 ft
MK 84 / BLU-109	10,000 ft

Attachment 8

PHYSICAL FITNESS PROGRAM

A8.1. The below physical fitness program guidelines will be utilized in part or total during flight physical fitness training.
A8.2. The list below has been approved IAW AFI 32-3001.

EXERCISE	REPS/TIME	REMARKS
DYNAMIC WARM-UP		**PREP FOR HIGHER INTENSITY EXERCISE IN A SAFE AND PROGRESSIVE MANNER**
SHOULDER ROLLS	15 SECS/SIDE	ROLL SHOULDER FORWARD AND BACKWARD IN A CIRCULAR MOTION
ARM CIRCLES	60 SECS/PER	EXTEND ARMS TO SIDE; ROTATE ARMS IN SMALL CIRCLES FORWARD THEN BACKWARD
HIGH KNEE LIFTS / HEEL KICKS	≈1/4 MILE	LIFT KNEES TOWARD CHEST OR KICK HEELS TO BUTT TO INCREASE BLOOD FLOW BUT NOT CAUSE SHORTNESS OF BREATH
CALISTHENICS		
SQUATS	25	STAND WITH FEET SHOULDER WIDTH APART; LOWER TORSO BY BENDING KNEES THEN STAND UPRIGHT; DO NOT LET KNEES EXTEND IN FRONT OF TOES
JUMPING JACKS	25 (4 CNT)	
PUSH-UPS (REG)	20 (4 CNT)	
SIT-UPS (REG)	25 (4 CNT)	LAY ON BACK WITH LEGS IN THE AIR, BENT AT THE KNEES, ARMS CROSSED ACROSS CHEST; BRING ELBOWS TO THE KNEES
PUSH-UPS (TRI)	20	PUSH-UPS WITH INDEX FINGERS AND THUMBS FORMING A TRINAGLE OR DIAMOND
SIT-UPS (SIDE)	20 (4 CNT / SIDE)	LAY ON SIDE; SIT UPWARDS TOWARD TOP KNEE
PLANK	60 SECS	WEIGHT PLACED ON TOES AND FOREARMS; HOLD ABDOMINALS TIGHT KEEPING BACK STRAIGHT
PUSH-UPS (WIDE)	20	PUSH-UPS WITH HANDS PLACED BEYOND SHOULDER WIDTH
LUNGES	20	WHILE STANDING, STEP FORWARD AND LOWER BODY UNTIL THE REAR KNEE IS ALMOST TOUCHING THE GROUND THEN RETURN TO STANDING; DO NOT LET KNEE OF LEADING LEG EXTEND IN FRONT OF TOES
WALKING LUNGES	20	SAME AS ABOVE WHILE MOVING FORWARD
STRETCHING		
ARM / SHOULDER	15 SECS/ARM	GRAB OPPOSITEELBOW WITH HAND AND PULL ACROSS BODY; ALTERNATE
CHEST	15 SECS/ARM	PLACE HAND ON WALL ABOUT SHOULDER HEIGHT; TURN AWAY FROM WALL IN OPPOSITE DIRECTION; ALTERNATE
LOWER BACK	30 SECS	LAY ON BACK AND BRING KNEE TO CHEST; HEAD TOWARDS KNEE; ALTERNATE
GROIN	30 SECS	SIT WITH SOLES OF FEET TOUCHING; GRAB ANKLES AND PUSH DOWN ON KNEES
ITB	15 SECS/LEG	SIT WITH LEGS EXTENDED; PULL LEG UP WITH OPPOSITE ARM; ALTERNATE
THIGHS	15 SECS/LEG	LAY ON SIDE; GRAB ANKLE BEHIND BODY AND PULL TO BUTT; ALTERNATE
HAMSTRING	15 SECS/LEG	SIT WITH LEGS EXTENDED; BEND KNEE AND PLACE SOLE OF FOOT TO INSIDE OF OPPOSITE KNEE; ALTERNATE
TOES	30 SECS	STANDING OR SITTING WITH FEET TOGETHER; BEND AT WAIST AND GRAB BACK OF CALVES WITH BOTH HANDS
CALVES	30 SECS/LEG	STANDING ≈4 FEET FROM WALL; PLACE BULK OF WEIGHT ON ONE LEG AND LEAN TO WALL; ALTERNATE
CALVES	30 SECS/LEG	SAME AS ABOVE BUT BEND BACK KNEE SLIGHTLY; ALTERNATE
ABS	30 SECS	LAY ON STOMACH WITH ELBOW UNDER CHEST; SLOWLY LIFT HEAD AND SHOULDER UP
CARDIO		**STAMINA**
RUN / RUCK	3 - 4 MILE	RECOMMEND THREE TIMES PER WEEK
STRENGTH		**WEIGHT RESISTANCE**
WEIGHTS	30 - 40 MINS	RECOMMEND TWICE PER WEEK