



GUAM ENVIRONMENTAL PROTECTION AGENCY

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Wing Commander
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U.S. Air Force, Andersen Air Force Base, SIC Code 9711
36th Air Base Wing, Unit 14003
APO AP, Guam 96543

TITLE V PERMIT TO OPERATE

Permit Number: **FO-001**
Issue Date: **December 14, 2009**
Expiration Date: **December 15, 2014**

In accordance with the provisions of Title V of the Clean Air Act (CAA) and the Guam Air Pollution Control Standards and Regulations (GAPCSR), Public Law 24-322, and the Guam Air Pollution Control Act (GAPCA), Public Law 24-20, 10 Guam Code Annotated (GCA), Chapter 49,

United States Air Force
Andersen Air Force Base
Yigo, Guam

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this Permit. Terms and conditions not otherwise defined in this Permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the United States Environmental Protection Agency (USEPA), the Guam Environmental Protection Agency (GEPA), and citizens under the CAA. The issuance of this Permit is based on the plans, specifications, and additional information submitted as part of Amendment 5 to the Title V permit application dated July, 2007.

If all proposed control measures and/or equipment are not installed and properly operated and maintained, this will be considered a violation of the permit.

"ALL LIVING THINGS OF THE EARTH ARE ONE"

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Acceptance of this permit constitutes an agreement and acknowledgement that the holder will comply with all the rules and regulations of GEPA and these permit conditions.

This permit, (a) does not in any manner affect the title of the premises upon which the equipment is located, (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment, and (c) in no manner implies or suggests that GEPA, or its officers, agents, or employees assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

This permit is valid for a period of five (5) years and shall expire at midnight on the date specified above unless a timely and complete renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration. The permit number cited above should be referenced in future correspondence regarding this facility.

3/26/2010
Date



Lorilee T. Crisostomo
Administrator, Guam EPA

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Abbreviations and Acronyms

Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CFR	Code of Federal Regulations
CI	Compression ignition
FEMA	Federal Emergency Management Agency
GAPCSR	Guam Air Pollution Control Standards and Regulations
GCA	Guam Code Annotated
GEPA	Guam Environmental Protection Agency
HP	Horsepower
hr	hour
IC	Internal combustion
kW	kilowatt
lb	pound
MMBtu	Million British thermal units
NAAQS	National Ambient Air Quality Standard
PTE	Potential to emit
SIC	Standard Industrial Classification
SIP	State Implementation Plan
tpy	tons per year
USEPA	United States Environmental Protection Agency
yd	yard

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I. Source Identification

Facility Name: Andersen Air Force Base
City: Yigo
Territory: Guam
USEPA Region: 9
SIC Code: 9711

Responsible Official: Wing Commander
Phone Number: (671) 366-3600

Facility Manager/Contact: Russell Littlejohn
Phone Number: (671) 366-2556

Person Responsible for Recordkeeping: John Salas
Phone Number: (671) 366-5081

Description of Process:

Andersen Air Force Base provides a continuous bomber/tanker rotation and theater security presence. Additional aircraft maintenance hangars are planned for construction during the term of this permit. Activities that have the potential to cause significant emissions of air pollutants include burning of fossil fuel in boilers and emergency generators, and evaporation from fuel storage and handling facilities. Of the numerous identified sources of air pollutants at Andersen Air Force Base, six (6) external combustion units (e.g., boilers), 111 internal combustion units (e.g., emergency generators), 22 fuel storage tanks greater than 40,000 gallons, a concrete crusher, rock crusher, landfill vents, a planned wood waste air curtain incinerator, and a planned concrete batch plant were identified as significant.

II. Facility-wide and Unit Specific Permit Conditions

II.A. Equipment Description

II.A.1 This permit encompasses the following equipment and associated appurtenances that are considered significant sources of emissions. [GAPCSR, Section 1104.12(12)]

Emission Unit ID	Description	Manufacturer	Model ^a	Serial Number ^a
B-32a	1.255 million British thermal units per hour (MMBtu/hr) diesel-fired boiler	Cleaver-Brooks	CB 100-30	L 92698
B-32b	1.255 MMBtu/hr diesel-fired boiler	Cleaver-Brooks	CB 100-30	L 102097
B-18017	Six diesel-fueled wash rack water heaters (0.44 MMBtu/hr each)	Hydro Engineering	Hydroblaster	Not Available
B-25010a	2.51 MMBtu/hr diesel-fired boiler	Cleaver-Brooks	CBE 100-60	L 99494
B-25010b	2.51 MMBtu/hr diesel-fired boiler	Cleaver-Brooks	CBE 100-60	L 99495
B-26006	1.255 MMBtu/hr diesel-fired boiler	Cleaver-Brooks	CB 100-30-15	OL095188
EG-4-E-1	450 kilowatt (kW) portable diesel-fired emergency generator	Cummins	DFEC-3382891 ^b	K990026589 ^b
EG-10a	1,000 kW diesel-fired emergency generator	Caterpillar	3512 SR4	24Z00780
EG-10b	1,000 kW diesel-fired emergency generator	Caterpillar	3512 SR4B	24Z00781
EG-10c	1,000 kW diesel-fired emergency generator	Caterpillar	3512 SR4B	24Z02073
EG-36	50 kW diesel-fired emergency generator	Cummins	4BTA3.9-G5	46472432
EG-70-3	60 kW diesel-fired emergency generator	Cummins	4BTA3.9-G5 or equivalent	Planned
EG-74	50 kW diesel-fired emergency generator	Cummins	4BTA3.9-G5	46476022
EG-79	350 kW diesel-fired emergency generator	Caterpillar	3406	2WB15310
EG-79b	300 kW diesel-fired emergency generator	Kohler	6063GK35	
EG-87	100 kW diesel-fired emergency generator	Kohler John Deere	100REOZJ ^b	656234 ^b

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EG-683	200 kW diesel-fired emergency generator	Cummins	LTA-10G1	34825595
EG-998	300 kW diesel-fired emergency generator	Cummins	NTA-855-G2	30366187
EG-1091	200 kW diesel-fired emergency generator	Cummins	6CTAA8.3-G3	46369986
EG-1098	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79039177
EG-1294	125 kW diesel-fired emergency generator	Caterpillar	3208	5YF02299
EG-1599	50 kW diesel-fired emergency generator	Olympian	1796/1500	AH50798 U973551G
EG-1603	250 kW diesel-fired emergency generator	Caterpillar	3306	9NR04462
EG-1618	350 kW diesel-fired emergency generator	Cummins	NTA-855-G3	11904336
EG-1625	200 kW diesel-fired emergency generator	Cummins	6CTAA8.3-G3	46369984
EG-1722B	35 kW diesel-fired emergency generator	Cummins	4B3.9-G2	46370201
EG-1780	60 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	46365249
EG-1881	350 kW diesel-fired emergency generator	Cummins	QSX15-G9	79102364
EG-2403	35 kW diesel-fired emergency generator	Cummins	4B3.9-G2	Not seen
EG-2510	60 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	46365488
EG-2544	35 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-2589	550 kW JP-8 fuel-fired emergency generator	Caterpillar	3412	3FZ04775
EG-2594	550 kW JP-8 fuel-fired emergency generator	Caterpillar	3412	3FZ04778
EG-2647	400 kW diesel-fired emergency generator	Caterpillar	3406	1DZ07052
EG-2655	35 kW diesel-fired emergency generator	Cummins	4B3.9-G2	46377609
EG-2750	100 kW diesel-fired emergency generator	Cummins	6BT5.9-G6	45789910
EG-2800	60 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	45721379

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Emission Unit ID	Description	Manufacturer	Model ^a	Serial Number ^a
EG-8416	35 kW diesel-fired emergency generator	Cummins	Planned	Planned
EG-9003	60 kW diesel-fired emergency generator	Cummins	DGCB-5667354 ^b	C040611556 ^b
EG-14509	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79039182
EG-17000	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79035989
EG-17002	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79039916
EG-17016	650 kW diesel-fired emergency generator	Caterpillar	3412	1EZ04033
EG-18001	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79036758
EG-18002	100 kW diesel-fired emergency generator	Cummins	6BTA5.9-G4	46372998
EG-18010	750 kW diesel-fired emergency generator	Cummins	QST30-G1	37200152
EG-18011a	100 kW diesel-fired emergency generator	DMT	DMT-1000A ^b	870432 ^b
EG-18011b	250 kW diesel-fired emergency generator	Kohler	300ROZD ^b	0653666 ^b
EG-18013	125 kW diesel-fired emergency generator	Cummins	DGDK-5674883 ^b	F040660366 ^b
EG-18015	100 kW diesel-fired emergency generator	Cummins	6BTA5.9-G2	46373948
EG-18017	250 kW diesel-fired emergency generator	Cummins	QSM11-G1	35093725
EG-18020	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79039175
EG-18035	60 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	46376736
EG-18042	60 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	46375893
EG-19009	250 kW diesel-fired emergency generator	Cummins	QSM11-G1	35093228
EG-19010	40 kW diesel-fired emergency generator	Cummins	4B3.9-G	45452569
EG-19016	180 kW diesel-fired emergency generator	Kohler	Planned	Planned
EG-19025	550 kW JP-8 fuel-fired emergency generator	Caterpillar	3412	3FZ02974

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Emission Unit ID	Description	Manufacturer	Model ^a	Serial Number ^a
EG-19028	300 kW diesel-fired emergency generator	Caterpillar	3406	4ZR00449
EG-19030	35 kW diesel-fired emergency generator	Cummins	4B3.9-G2	46370280
EG-20010a	35 kW diesel-fired emergency generator	Nippon Sharyo	91-9 ^b	0220SAE ^b
EG-20010b	35 kW diesel-fired emergency generator	None Found	F4M1011F	00489573
EG-20011	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79039181
EG-20016	50 kW diesel-fired emergency generator	Cummins	4BT3.9-G4	46259962
EG-21000a	100 kW diesel-fired emergency generator	Cummins	68T5.9-G2	45280512
EG-21000b	50 kW diesel-fired emergency generator	Olympian	D50P3 ^b	AH51042 U617001L
EG-21001	350 kW diesel-fired emergency generator	Cummins	QSX15-G9 NR2	79037532
EG-21012	200 kW diesel-fired emergency generator	Katolite	D200FPJY ^b	WA500788J42972 ^b
EG-21018	350 kW diesel-fired emergency generator	Generac	3280860200 ^b	OA8829
EG-21020	250 kW diesel-fired emergency generator	Katolight	6125AF	RG6125A014611
EG-22002	300 kW diesel-fired emergency generator	Not yet installed	Not yet installed	Not yet installed
EG-22022	1,000 kW diesel-fired emergency generator	Cummins	KTA38-G4	33130019
EG-22026a	250 kW diesel-fired emergency generator	Cummins	LTA-10-G1	34985706
EG-22026b	500 kW diesel-fired emergency generator	Cummins	KTA19-G4	37190630
EG-23002	500 kW diesel-fired emergency generator	Cummins	KTA19-G4	37201666
EG-23008	200 kW diesel-fired emergency generator	Cummins	6CTAA8.3-G3	46370561
EG-23020	100 kW diesel-fired emergency generator	Cummins	6BTA5.9-G4	46357815
EG-23028	350 kW diesel-fired emergency generator	Cummins	NTA 855-G3	11904338
EG-25005	250 kW diesel-fired emergency generator	Cummins	LT810-G1	34985708

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EG-25008	150 kW diesel-fired emergency generator	Cummins	6CTA8.3-G2	45900854
EG-25010	200 kW diesel-fired emergency generator	Cummins	6CTAA8.3-G1	45735547
EG-25020	145 kW diesel-fired emergency generator	Kohler	BF6M 1013 EC	00668952
EG-25024	100 kW diesel-fired emergency generator	Cummins	Replacement Pending	Replacement Pending
EG-25024-2	300 kW diesel-fired emergency generator	Cummins	NTA855-G2	30370908
EG-25045	550 kW diesel-fired emergency generator	Caterpillar	3412 CDITA	3FZ07854
EG-26005	1,000 kW diesel-fired emergency generator	Caterpillar	3508	1FZ03255
EG-26006	350 kW diesel-fired emergency generator	Cummins	QXS15-G9	79034422
EG-26101	250 kW diesel-fired emergency generator	Cummins	LTA10-G1	35081323
EG-26201	550 kW JP-8 fuel-fired emergency generator	Caterpillar	3412	3FZ02304
EG-26202	35 kW diesel-fired emergency generator	Cummins	35DGBB ^b	G960610833 ^b
EG-26205	500 kW JP-8 fuel-fired emergency generator	Caterpillar	3412	3FZ02715
EG-27030	350 kW diesel-fired emergency generator	Cummins	NTA 855-G2	1195623
EG-51109	200 kW diesel-fired emergency generator	Cummins	DGFC-5659631 ^b	A040595943 ^b
EG-Corrosion	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-Dining	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-Fire	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-FuelCell	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-GenPur	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-Hawk	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-Missile	150 kW diesel-fired emergency generator	Planned	Planned	Planned

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Emission Unit ID	Description	Manufacturer	Model ^a	Serial Number ^a
EG-Munitions	150 kW diesel-fired emergency generator	Planned	Planned	Planned
EG-MEP-7a	100 kW portable diesel-fired emergency generator	Caterpillar	MEP 007B ^b	49S01835
EG-MEP-7b	100 kW portable diesel-fired emergency generator	Caterpillar	MEP 007B ^b	RZ01998 ^b (49S02208)
EG-MEP-7c	100 kW portable diesel-fired emergency generator	Caterpillar	MEP 007B ^b	RZ-1895 ^b (49S02058)
EG-MEP-7d	100 kW portable diesel-fired emergency generator	Libby	MEP 007B ^b	RZ01447 ^b (49S01979)
EG-MEP-806b	60 kW portable diesel-fired emergency generator	Unknown	MEP 806A ^b	T06059T546127
EG-MEP-806c	60 kW portable diesel-fired emergency generator	John Deere	MEP 806A ^b	T06059T549286
EG-MEP-9b	200 kW portable diesel-fired emergency generator	Cummins	NT 855 G3	RZ-0675 ^b (11633681)
EG-MEP-9c	200 kW portable diesel-fired emergency generator	Cummins	NT 855 G3-3	RZ-0200 ^b (18107570)
EG-MEP-9d	200 kW portable diesel-fired emergency generator	Cummins	NT 855 G3	11480783
EG-MEP-9e	200 kW portable diesel-fired emergency generator	Cummins	NT 855 G3	RZ-0779 ^b (11482132)
EG-MEP-9h	200 kW portable diesel-fired emergency generator	Cummins	NT 855 G3	11482128
Batch Plant IC	60 kW diesel-fired generator	Planned	Planned	Planned
Concrete Crusher IC	300 horsepower (HP) diesel engine	Detroit Diesel	ICH300D	WS5035N1455453
Rock Crusher IC	272 HP diesel engine	Cummins	M-11 ^b	Not Identified
Tub Grinder IC	760 HP diesel engine	Caterpillar	3412	BDT01612
Air Curtain Incin IC	83 HP diesel engine	Kubota	V3300-TE	Planned
TK-2587	420,000 gallon above ground storage tank			
TK-2588	420,000 gallon above ground storage tank			
TK-2592	420,000 gallon above ground storage tank			
TK-2593	420,000 gallon above ground storage tank			
TK-14501	5,000,000 gallon above ground storage tank			

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TK-14502	5,000,000 gallon above ground storage tank			
TK-14503	5,000,000 gallon above ground storage tank			
TK-14504	5,000,000 gallon above ground storage tank			
TK-14505	5,000,000 gallon above ground storage tank			
TK-14506	5,000,000 gallon above ground storage tank			
TK-14510	4,000,000 gallon above ground (half-buried) storage tank			
TK-14513	4,000,000 gallon above ground (half-buried) storage tank			
TK-14514	4,000,000 gallon above ground (half-buried) storage tank			
TK-14515	4,000,000 gallon above ground (half-buried) storage tank			
TK-14516	4,000,000 gallon above ground (half-buried) storage tank			
TK-14517	4,000,000 gallon above ground (half-buried) storage tank			
TK-19022	420,000 gallon above ground storage tank			
TK-19023	420,000 gallon above ground storage tank			
TK-26198	420,000 gallon above ground storage tank			
TK-26199	420,000 gallon above ground storage tank			
TK-26207	4,200,000 gallon above ground storage tank			
TK-26208	4,200,000 gallon above ground storage tank			
Fuel Loading	Fuel transfers to bulk trucks		N/A	N/A
Landfill Vents	Methane vents in active landfill		N/A	N/A
Batch Plant	Planned 200 yard (yd)/hr concrete batch plant	R&S Industries	Apache SQP	Planned

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Emission Unit ID	Description	Manufacturer	Model ^a	Serial Number ^a
Concrete Crusher ^c	100 ton/hr concrete crusher at landfill	Eagle	62D902	30082
Rock Crusher ^c	125 ton/hr rock crusher at NW Field	Eagle	1000-15 CC	Not Found
Air Curtain Incinerator	Planned 10 ton/hr wood waste incinerator at landfill	Air Burner	S-327	Planned

^a For IC engine powered equipment, the manufacturer, model, and serial number listed are from the engine, rather than from the equipment where possible.

^b Data from engine not found, powered equipment model and serial data presented here.

^c Type 1 insignificant activity subject to regulation as a fugitive dust source.

II.A.2 The permittee shall have installed an identification tag or nameplate on each piece of equipment that identifies the model number, serial number, and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location. [Section 49107(b) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]

II.B. Emission Limits

II.B.1 Fuel Burning Equipment

II.B.1.a For fuel burning equipment with a heat input greater than one (1) million Btu per hour (MMBtu/hr) but less than 1,000 MMBtu/hr, the particulate emissions shall not exceed the emission limits in the table below. [State Implementation Plan (SIP), Section 7.5]

Emission Unit ID	PM Limit (lb/MMBtu)
B-32a	0.97
B-32b	0.97
B-18017	0.82
B-25010a	0.82
B-25010b	0.82
B-26006	0.97
EG-4-E-1	1.1
EG-10a	0.95
EG-10b	0.95
EG-10c	0.95
EG-79	1.2
EG-79b	1.3

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Emission Unit ID	PM Limit (lb/MMBtu)
EG-683	1.4
EG-998	1.3
EG-1091	1.4
EG-1098	1.2
EG-1294	1.5
EG-1603	1.3
EG-1618	1.2
EG-1625	1.4
EG-1881	1.2
EG-2589	1.1
EG-2594	1.1
EG-2647	1.2
EG-14509	1.2
EG-17000	1.2
EG-17002	1.2
EG-17016	1.0
EG-18001	1.2
EG-18010	1.0
EG-18011b	1.3
EG-18013	1.5
EG-18017	1.3
EG-18020	1.2
EG-19009	1.3
EG-19016	1.4
EG-19025	1.1
EG-19028	1.3
EG-20011	1.2
EG-21001	1.2
EG-21012	1.4
EG-21018	1.2
EG-21020	1.3
EG-22002	1.3
EG-22022	0.95
EG-22026a	1.3
EG-22026b	1.1
EG-23002	1.1
EG-23008	1.4
EG-23028	1.2
EG-25005	1.3
EG-25008	1.5
EG-25010	1.4
EG-25020	1.5

Emission Unit ID	PM Limit (lb/MMBtu)
EG-25024-2	1.3
EG-25045	1.1
EG-26005	0.95
EG-26006	1.2
EG-26101	1.3
EG-26201	1.1
EG-26205	1.1
EG-27030	1.2
EG-51109	1.4
EG-Corrosion	1.5
EG-Dining	1.5
EG-Fire	1.5
EG-FuelCell	1.5
EG-GenPur	1.5
EG-Hawk	1.5
EG-Missile	1.5
EG-Munitions	1.5
EG-MEP-9b	1.4
EG-MEP-9c	1.4
EG-MEP-9d	1.4
EG-MEP-9e	1.4
EG-MEP-9h	1.4
Concrete Crusher IC	1.3
Rock Crusher IC	1.4
Tub Grinder IC	1.1

II.B.2 All Emissions Sources

II.B.2.a The permittee shall not cause or permit the continuous emission of visible air pollutants with a density equal to or darker than twenty (20) percent opacity from any emission unit nor the emission of visible air pollutants of a density darker than sixty (60) percent opacity for a period aggregating more than three (3) minutes in any sixty (60) minute period. [GAPCSR, Section 1103.3; SIP, Section 10.1]

II.B.3 Compression Ignition (CI) Engines Ordered or Modified after July 11, 2005 [GAPCSR, Section 1106.2 and 40 CFR 60.4215]

II.B.3.a The permittee shall confirm that new or modified CI engines are compliant with 40 CFR Part 60, Subpart IIII, as it applies to engines operated on Guam. If the engine nameplate does not confirm compliance with federal nonroad or stationary CI engine emission standards, the

permittee shall obtain certifications, representations, guidance, and documentation required to be provided under that subpart by the engine manufacturer.

II.B.4 Planned Air Curtain Incinerator

II.B.4.a The permittee shall not cause or permit the emissions of particulate matter in excess of 0.20 pounds per one hundred pounds (two grams per kilogram) of refuse charged from the air curtain incinerator. [GAPCSR, Section 1103.7(a)]

II.B.4.b Opacity shall not to exceed 10% as a six minute average. An opacity of 35% is allowed during startup periods that are within the first 30 minutes of operation. These requirements apply at all times, except during malfunctions. Each malfunction shall not exceed three hours. [40 CFR Part 60, Subpart CCCC, Section 60.2250]

II.C. Work Practice and Operational Requirements

II.C.1 All equipment, facilities, and systems installed or used to achieve compliance with terms and conditions of this permit shall at all times, including periods of startup, shutdown and malfunction, be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. In order to validate compliance with Condition II.B.1.a, fuel burning equipment shall be of design and manufactured so that, based on USEPA published emission factors or manufacturer specification, it may be reasonably expected to be compliant with that emission limit. The permittee shall conduct proper preventative maintenance procedures for the fuel burning equipment identified in Condition II.A.1 of this permit in accordance with the manufacturer's recommendations. [GAPCSR, Section 1104.12(12)]

II.C.2 For all boilers identified in Condition II.A.1 of this permit, the fuel oil used shall not exceed 2.0% sulfur content (maximum) by weight at any time. [GAPCSR, Section 1103.10]

II.C.3 The JP-8 fuel-fired emergency generators identified in Condition II.A.1 of this permit shall be fired only on JP-8 fuel and the fuel used shall not exceed 2.0% sulfur content (maximum) at any time. [GAPCSR, Section 1103.10]

II.C.4 The diesel-fired internal combustion engines identified in Condition II.A.1 of this permit shall be fired only on Diesel Fuel No. 2 and the fuel oil used shall not exceed 2.0% sulfur content (maximum) at any time. [GAPCSR, Section 1103.10]

II.C.5 The permittee shall not cause or permit visible fugitive dust to become airborne without taking reasonable precautions. Examples of reasonable precautions are [GAPCSR, Section 1103.4(a); SIP, Sections 8.1, 8.4, and 8.7]:

II.C.5.a Use of water or suitable chemicals for control of fugitive dust in the demolition of existing buildings or structures, construction and retrofitting operations, the grading of roads, or the clearing of land;

II.C.5.b Application of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may allow release of fugitive dust;

II.C.5.c Installation of appurtenances that provide an enclosure and ventilation for all crushing, aggregate screening, and conveying of material likely to become airborne;

II.C.5.d Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting, spray painting, or other similar operations;

II.C.5.e Covering all moving, open-bodied trucks transporting materials which may release fugitive dust;

II.C.5.f Conducting agricultural operations, such as tilling of land and the application of fertilizers, in such manner as to reasonably minimize fugitive dust;

II.C.5.g Maintenance and sealing of road-ways and parking lots so as to prevent the exposure of such surfaces to wind, water, or vehicular travel erosion; and

II.C.5.h Prompt removal of earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.

II.C.6 Except for persons engaged in agricultural operations or persons who can demonstrate to the Administrator that the best practical operation or treatment is being implemented, no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates. [GAPCSR, Section 1103.4(b); SIP, Section 8.2]

II.C.7 Engines subject to Subpart IIII will be maintained and operated according to manufacturer's specifications. [40 CFR Part 60, Subpart IIII]

II.C.8 Engines subject to Subpart IIII shall be equipped with non-resettable hour meters.
[40 CFR Part 60, Subpart IIII]

II.C.9 The Air Curtain Incinerator subject to the emission limits in Condition II.B.4 shall burn only the following materials:

II.C.9.a 100 percent wood waste;

II.C.9.b 100 percent clean lumber; or

II.C.9.c 100 percent mixture of only wood waste, clean lumber, and/or yard waste. [40 CFR 60.2245(b)]

II.C.10 Alternative Operating Scenario [GAPCSR, Section 1104.12(13)]

II.C.10.a The permittee may replace a permitted emission unit (i.e., generator, boiler, etc.) with a replacement unit if work reasonably warrants removal (i.e., equipment failure, unit overhaul, or any other major problems requiring replacement of the emission unit) provided that all of the following conditions are met:

1. Written notification must be submitted to and approval obtained from Guam EPA prior to exchanging the emission unit with another unit;
2. The replacement unit must be the same size or smaller than the primary emission unit and have equal or lower emissions; and
3. The replacement unit must comply with all applicable conditions required for the primary emission unit, including all operating restrictions and emissions limits.

II.D. Monitoring and Testing Requirements

II.D.1 The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the emission unit, and GEPA may monitor the tests. For performance test purposes, sampling ports, platforms and access shall be provided by the permittee on the exhaust systems in accordance with 40 Code of Federal Regulations (CFR) 60.8 (e). [GAPCSR, Section 1102.4; SIP, Sections 3.6(a), 3.9, and 4.1]

II.D.2 At least thirty (30) days prior to performance a test, the permittee shall submit a written performance test plan to GEPA that describes the test date(s), duration, locations, and methods, source operation and other parameters that may affect test results. Such a plan shall conform to USEPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the

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approval of GEPA shall be grounds to invalidate any test and require a retest. [GAPCSR, Section 1102.4]

II.D.3 Within sixty (60) days after completion of the performance test, the permittee shall submit to GEPA and USEPA Regional Administrator, the test report which shall include the operating conditions of the equipment at the time of the test, the analyses of the fuel, the summarized test results, comparative results with the permit emissions limits, and other pertinent field and laboratory data. [GAPCSR, Section 1102.4; SIP, Section 4.2]

II.D.4 Any deviations from these conditions, test methods, or procedures may be cause for rejections of the test results unless such deviations are approved by GEPA before the tests are conducted. [GAPCSR, Section 1102.4]

II.D.5 Upon written request and justification by the permittee, GEPA may waive the requirement for a specific annual source test. The waiver request is to be submitted at least sixty (60) days prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test. [GAPCSR, Section 1102.4]

II.D.6 In order to validate compliance with Condition II.B.2.a of this permit, the permittee shall conduct visible emissions monitoring as follows: [GAPCSR, Section 1104.12(7)]

II.D.6.a For combustion equipment, a quarterly emissions survey shall be performed during any quarter in which the equipment is operated. Information to be collected during these surveys must include the following:

- 1) The color of the emissions;
- 2) Whether the emissions were light or heavy;
- 3) The cause of any abnormal emissions;
- 4) Any corrective actions taken.

II.D.6.b GEPA may require that USEPA Method 9 opacity readings be recorded if quarterly emissions surveys or other credible evidence indicate possible opacity violations.

II.D.7 In order to validate compliance with Condition II.B.4, the permittee shall measure visible emissions from the air curtain incinerator via Method 9 tests. [40 CFR Part 60, Subpart CCCC]

II.D.7.a The initial Method 9 test shall be conducted within 60 days after the air curtain incinerator reaches the charge rate at which it will operate, but no later than 180 days after its initial startup. [40 CFR 60.2250 and 60.2255]

II.D.7.b Each subsequent Method 9 test shall be conducted no more than 12 months following the date of the previous test. [40 CFR 60.2255]

II.D.7.c All required emission tests shall be conducted at the maximum burning capacity of the incinerator or at other capacities, as approved by the administrator. The burning capacity of the incinerator shall be the manufacturer's or designer's guaranteed maximum rate or other such rate as may be determined by the Administrator. [GAPCSR, Sections 1103.7(b) and (c)]

II.E. Recordkeeping Requirements

II.E.1 All records, including support information, shall be maintained for at least five (5) years following the date of such records compiled in a permanent form suitable for inspection and made available to GEPA or their representative upon request. [GAPCSR, Section 1104.12(7)(H)]

II.E.2 The sulfur content of No. 2 fuel oil used in the boilers and emergency generators identified in Condition II.A.1 of this permit shall either be obtained from the fuel vendor or monitored pursuant to 40 CFR 60.334(b) using the method described in 40 CFR 60.335(d). [GAPCSR, Section 1103.10(a)]

II.E.3 The permittee shall maintain records of fuel deliveries identifying the delivery dates and the type and amount of fuel received and including copies of the supplier's bill of lading showing the sulfur content of the fuel delivered.

II.E.4 Fuel consumption records shall be maintained annually for the boilers and IC engines identified in Condition II.A.1 of this permit. Fuel use in IC engines may be computed based on annual hours of operation and average load. [GAPCSR, Sections 1102.4(c) and 1104.24(j)]

II.E.5 The permittee shall maintain records of the following for the boilers and IC engines identified in Condition II.A.1 of this permit, recorded in a permanent form suitable for inspection:

II.E.5.a All measurements, including operating load and annual hours of operation

II.E.5.b All monitoring device calibration checks

II.E.5.c Inspections, maintenance, adjustments, and any other repair work

II.E.5.d Performance test results

II.E.6 The records required in Condition II.E.5 of this permit shall be in a permanent form suitable for inspection and shall be retained for at least five years following the date of measurements, maintenance, reports, and records. At a minimum, these records shall include the date of the measurement or inspection, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired. [GAPCSR, Section 1104.12(7)]

II.E.7 The permittee shall maintain records of all inspections, maintenance, adjustments, and any other repair work conducted on the storage tanks identified in Condition II.A.1 of this permit. The records shall be in a permanent form suitable for inspection and shall be retained for at least five years following the date of maintenance. At a minimum, these records shall include the date of the measurement or inspection, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired. [GAPCSR, Section 1104.12(7)]

II.E.8 For all CI engines ordered or modified after July 11, 2005, the permittee shall keep records of documentation from the manufacturer that the engine is certified to meet the applicable emission standards. A legible manufacturer's engine nameplate that confirms this certification shall be deemed adequate documentation. [GAPCSR, Section 1106.2 and 40 CFR 60.4215]

II.E.9 For the air curtain incinerator, the permittee shall [40 CFR 60.2260]:

II.E.9.a Keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.

II.E.9.b Make all records available for submittal to the Administrator or for an inspector's onsite review.

II.E.9.c Keep a copy of the initial and annual reports onsite for a period of 5 years.

II.E.10 Contemporaneously with making a change from one operating scenario to another as allowed by Condition II.C.10 of this permit, the permittee shall record in a log at the facility the scenario under which it is operating. This log shall include a listing of the primary and replacement equipment involved and the reason why the use of replacement equipment was necessary. [GAPCSR, Section 1104.12(13)(A)]

II.F. Reporting Requirements

II.F.1 As required in Condition II.J of this permit, and in conjunction with the requirements of Condition II.K of this permit, the permittee shall report annually

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the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within sixty (60) days following the end of the each calendar year. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if GEPA determines that reasonable justification exists for the extension. [GAPCSR, Section 1104.24(c)]

II.F.2 The permittee shall report in writing within thirty (30) days the modification, relocation, discontinuance of operation, or dismantlement of the emission units identified in Condition II.A.1 of this permit. [GAPCSR, Section 1104.5]

II.F.3 The permittee shall notify the Agency immediately in the case of an emergency where petroleum products are discharged from the storage tanks identified in Condition II.A.1 of this permit into the environment. A follow-up report shall be submitted to the Agency within five (5) days describing the circumstances of the incident and the corrective/preventive measures to be undertaken to prevent future occurrences. [GAPCSR, Section 1104.12(9)(N)]

II.F.4 The permittee shall provide a report to GEPA of the results of all monitoring and recordkeeping required by this permit at least once every six (6) months. Reports shall be submitted for monitoring and recordkeeping performed between January 1st and June 30th and between July 1st and December 31st and shall be postmarked by the 30th day following the end of the reporting period. The first monitoring and recordkeeping report will cover the period from the date of issuance of this permit to June 30, 2009. [GAPCSR, Section 1104.12(7)(I)]

II.F.5 The permittee shall submit written reports to GEPA on an annual basis for all monitoring (including recordkeeping) requirements. The reports shall be submitted to GEPA no later than March 1st and shall be signed and dated by the responsible official. These reports shall include, but are not limited to, the following: [GAPCSR, Sections 1102.4 and 1104.12(7)]

II.F.5.a Fuel consumption and hours of operation for the boilers and emergency generators identified in Condition II.A.1 of this permit.

II.F.5.b Throughput, by type of fuel, for each storage tank identified in Condition II.A.1 of this permit.

II.F.5.c Those analyses of the sulfur contents in diesel fuel No. 2 and JP-8 fuel for which there are exceedances of the limits specified in Conditions II.C.2, II.C.3, and II.C.4 of this permit. If there were no exceedances, the permittee shall submit in writing a statement indicating that there were no exceedances for the recording period.

II.F.5.d A listing of all periods of operation under the Alternative Operating Scenario outlined in Condition II.C.10, including the primary and replacement equipment involved and the reason why the use of replacement equipment was necessary.

II.F.6 During times of island-wide emergency (e.g. storms and major fires) generators and fire pumps may be loaned to critical infrastructure facilities around the island to help the island to function and to recover from the emergency. Such events are alternative operating scenarios, triggered by requests from the Federal Emergency Management Agency (FEMA) or the Guam Government. The permittee will notify GEPA of such equipment deployments the first business day after the equipment is deployed. Usage of this equipment and associated emissions while not under the control of the permittee need not be tracked or reported by the permittee. [GAPSCR, Section 1104.12(13)]

II.F.7 For the air curtain incinerator [40 CFR 60.2260]:

II.F.7.a Prior to commencing construction on the air curtain incinerator, the permittee shall submit the following items to the Administrator:

- (1) Notification of the intent to construct the air curtain incinerators.
- (2) Planned initial startup date.
- (3) Types of materials planned to be burned in the air curtain incinerator.

II.F.7.b The permittee shall submit the results of the initial 6-minute average opacity tests no later than 60 days following the initial test. Annual opacity test results shall be submitted within 12 months following the previous report.

II.F.7.c Initial and annual opacity test reports shall be submitted as electronic or paper copy on or before the applicable submittal date.

II.G. Compliance Schedule

II.G.1 For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements. [GAPCSR, Section 1104.8(b)(2)(A)]

II.G.2 For applicable requirements which become applicable during the permit term, the source shall meet such applicable requirements on a timely basis. [GAPCSR, Section 1104.8(b)(2)(B)]

II.H. Compliance Certifications

- II.H.1 The compliance plan and compliance certification submittal requirements shall be in accordance with Sections 1104.8 and 1104.9 of the GAPCSR. The compliance certification shall be submitted to GEPA and the USEPA Regional Administrator once per year, or more frequently as set by any applicable requirement.
- II.H.2 The permittee shall submit at least annually to GEPA, a compliance certification pursuant to Section 1104.9 of the GAPCSR. This certification shall be postmarked by January 30th of each year, and shall cover the previous calendar year (January 1 through December 31). The first compliance certification will cover the period from the date of issuance of this permit to June 30, 2009. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. [GAPCSR, Section 1104.9]

II.I. General Air Quality Protections

- II.I.1 The permittee shall not dispose of combustible material by open burning, or cause, suffer, allow, or permit open burning of combustible material within Guam, except as provided in Sections 1103.11 (b) through (e) of the GAPCSR. [GAPCSR, Section 1103.11; SIP, Section 6.1]
- II.I.2 Control of Odors in Ambient Air
- II.I.2.a The permittee shall not discharge or cause to be discharged into the atmosphere from any source whatsoever, such quantities of odorous emissions which is injurious to health, or is indecent or offensive to the senses, which affects at the same time an entire community or neighborhood, or any considerable number of persons, so as to unduly interfere with the comfortable enjoyment of life or property of such community, neighborhood or persons. It is a creation of a condition which causes injury to the public welfare. [GAPCSR, Section 1103.12(a); SIP, Section 11.1]
- II.I.2.b An odor occurrence shall be deemed a violation when a complaint is received by the Administrator and the Administrator is able to detect the odor. This detection must be verified by the Department of Public Health, Environmental Health Section for a person to be found in violation of subsection (a) of this condition. [GAPCSR, Section 1103.12(b); SIP, Section 11.2]
- II.I.2.c The odor of growing vegetation, and chemical fertilizers and insecticides when used properly, or when persons can demonstrate to the Administrator that the best practical operation or treatment is being

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implemented, shall not be considered objectionable for the purposes of this requirement. [GAPCSR, Section 1103.12(c); SIP, Section 11.3]

II.I.3 The permittee shall comply with the asbestos requirements of 40 CFR 61, Subpart M (as amended and incorporated in Section 1103.13 of the GAPCSR), including requirements for demolition and renovation projects. [GAPCSR, Section 1103.13]

II.J. Annual Emissions Reporting Requirements

II.J.1 The reporting period for the annual emissions, including emissions from the emission units identified in Condition II.A.1 of this permit, shall be from January 1 to December 31 of each calendar year. All reports shall be submitted to GEPA along with the annual fee due. The report shall be mailed to [GAPCSR, Section 1104.24(c)]:

**Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921**

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

**Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105**

II.J.2 The permittee shall retain the information submitted, including all emissions calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to GEPA upon request. [GAPCSR, Section 1104.12(7)(H)]

II.J.3 Any information submitted to GEPA without a request for confidentiality shall be considered public record. [GAPCSR, Section 1102.7]

II.J.4 In accordance with GAPCSR, Section 1102.7(b), the permittee may request confidential treatment of specific information by submitting a written request to the Administrator identifying the specific information that is to be accorded confidential treatment. [GAPCSR, Section 1102.7(b)]

II.K. Fee Payment

- II.K.1 The permittee shall submit fees in accordance with GAPCSR, Sections 1104.21 through 1104.24. [GAPCSR, Section 1104.12(9)(K)]
- II.K.2 The permittee shall complete and submit the Annual Fee Calculation Worksheet, including all emissions calculations, with the required annual fee. The permittee shall make copies for future use. [GAPCSR, Section 1104.24(l)]
- II.K.3 Annual fees shall be paid in full: [GAPCSR, Section 1104.24 (a)]
- II.K.3.a Within sixty (60) days after the end of each calendar year;
- II.K.3.b Within thirty (30) days after permanent discontinuance of the air emission source.
- II.K.4 The permittee shall be assessed a Six Dollars (\$6.00) per ton per pollutant base rate of the total annual emission. However, the minimum annual fee due shall be Five Hundred Dollars (\$500.00) for federal oversight sources and One Hundred Dollars (\$100) for non-federal oversight sources for each valid permit held during the prior calendar year; or Forty-Two Dollars (\$42.00) per month for federal oversight sources and Eight Dollars (\$8) per month for non-federal oversight sources for any fraction of the year the permit is valid after the last calendar year for which annual fee was paid. [GAPCSR, Section 1104.24(g)]
- II.K.5 If any part of the annual fee is not paid within thirty (30) days after the due date, a late penalty of five percent (5%) of the amount due shall at once accrue and be added thereto. Thereafter, on the first day of each calendar month during which part of the annual fee or any prior accrued late payment penalty remains unpaid, an additional late payment penalty of five percent (5%) of the then unpaid balance shall accrue and be added thereto. [GAPCSR, Section 1104.25(b)]
- II.K.6 If any annual fee, including the late payment penalty required by the GAPCSR is not paid in full within thirty (30) days after the due date, the Administrator may terminate or suspend any or all of the owner or operator's air pollution control permit, after affording the opportunity for a hearing in accordance with Section 1104.19 or Section 1102.14 of the GAPCSR [GAPCSR, Section 1104.25(c)]
- II.K.7 The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by GEPA. [GAPCSR, Section 1104.24(c)]
- II.K.8 Check payments shall be made payable to the Treasurer of Guam along with a notation that the funds be deposited into GEPA's Air Pollution Control Special

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Fund. Payments may also be made by government credit card as determined to be acceptable to the Treasurer of Guam. [GAPCSR, Section 1104.21(d)]

II.K.9 The annual fees and emissions data shall be mailed to [GAPCSR, Section 1104.24]:

**Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921**

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

**Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105**

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III. Title V Administrative Requirements

III.A. Blanket Compliance Statement

The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of the GAPCSR and, for all federally enforceable terms and conditions, the CAA, and is grounds for enforcement action, permit termination, suspension, reopening, or amendment, or for denial of a permit renewal application. Permit noncompliance shall be subject to the penalties and remedies provided for in Section 49116 of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA. [GAPCSR, Section 1104.12(9)(A) and 1102.12; SIP, Section 4.4]

III.B. Duty to Provide and Supplement Information

The permittee shall furnish, in a timely manner, any information or record requested in writing by GEPA to determine whether cause exists for terminating, suspending, reopening, or amending the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to GEPA copies of records required to be kept by the permit. For information claimed confidential, the permittee shall furnish such records to GEPA with a claim of confidentiality. [GAPCSR, Section 1104.12(9)(H)]

III.C. Submissions

Any document (including reports, compliance plans and compliance certifications) required to be submitted by this permit shall be certified by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete in accordance with 1102.3 and shall be mailed or forwarded to the following address [GAPCSR, Sections 1102.3 and 1104.12(9)(L)]:

**Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921**

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

**Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105**

III.D. Severability Clause

If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and remain valid. [GAPCSR, Section 1104.12(9)(B)]

III.E. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate these regulations. This provision does not prohibit recycling, burning as fuel or otherwise further processing material which would violate an emission regulation if released to the atmosphere, so long as the facility in which that material is used does not violate applicable emission regulations. [SIP, Section 17.2]

III.F. Permit Actions

This permit will be revoked if the Agency finds willful or continued violations of the standards and regulations. [GAPCSR, Sections 1104.12(9)(A), 1104.18(a)(4), and 1104.18(b)(3); SIP, Section 3.7(c)]

III.G. Reopening for Cause

This permit may be terminated, suspended, reopened, or amended for cause pursuant to Section 1104.18 of the GAPCSR, after affording the permittee an opportunity for a hearing in accordance with Section 1102.14 or 10 GCA 49111. [GAPCSR, Section 1104.12(9)(D)]

III.H. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [GAPCSR, Section 1104.12(9)(E)]

III.I. Inspection and Entry

III.I.1 The permittee shall allow GEPA, the Regional Administrator for the USEPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

III.I.1.a To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit and inspect at reasonable times all facilities, equipment, practices, operations, or records covered under the terms and conditions of the permit and request copies of records or copy records required by the permit; and

III.I.1.b To sample or monitor at reasonable times substances or parameters to assure compliance with the permit or applicable requirements. [GAPCSR, Section 1104.12(9)(M)]

III.J. Emergency Provisions

III.J.1 In addition to any emergency or upset provision contained in any applicable requirement, the permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate to the Administrator the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

III.J.1.a An emergency occurred and the permittee can identify the cause(s) of the emergency;

III.J.1.b The permitted facility was at the time being properly operated;

III.J.1.c During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations or other requirements in this permit; and

III.J.1.d The permittee submitted notice of the emergency to the Administrator within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the prompt reporting of deviations pursuant to Section 1102.9 of the GAPCSR. [GAPCSR, Sections 1104.17(a) and 1104.1(c)]

III.J.1.e In any enforcement proceeding the permittee attempting to establish the occurrence of an emergency has the burden of proof. [GAPCSR, Section 1104.17(b)]

III.J.2 When a national security emergency occurs, the resulting surge conditions shall not be considered in determining compliance with permit terms. [GAPCSR, Section 1104.17]

III.J.2.a For purposes of this condition, a "national security emergency" means a situation where extremely quick action on the part of a Military Department or a department of Defense component is needed, and when timing of such action may make it impracticable to meet one or more requirements of an applicable permit. National security emergencies are actions necessary to support operation of the United States forces

introduced into hostilities or introduced into situations where involvement in hostilities is indicated or a possibility, peacekeeping operations, rendering emergency humanitarian relief, actions to extinguish wildfires, immediate responses to the release or discharge of oil or hazardous material in accordance with approved Spill Prevention and Response Plans and Spill Contingency Plans, and responses to natural disasters such as hurricanes, earthquakes, or civil disturbances.

III.J.2.b A "surge condition" occurs when the temporary response to the national security emergency requires an increase above and beyond the normal operating levels of the installation or activity and such increase cannot be accommodated within the terms of the applicable permit limitations.

III.J.2.c The commander, 36th Wing, shall determine when a national security emergency surge condition exists and shall provide notice of the surge condition to the Administrator of GEPA and to Region 9 of the U.S. EPA, and shall report such determination to their chain of command in writing, within five working days after the start of the surge conditions.

III.J.2.d The commander, 36th Wing, shall make a determination that a national security emergency surge condition exists only after making reasonable efforts to accommodate the increase within allowable requirements and permit limits.

III.J.2.e If the national security emergency surge condition extends beyond 30 calendar days from the date of the notice, the continued use of this national security emergency provision must be approved by the responsible Deputy Assistant Secretary of the Air Force for Energy, Environment, Safety and Occupational Health.

III.J.3 Within forty-five working days after the emergency surge condition has ended, the commander, 36th Wing, shall provide a written report to the Administrator of GEPA, to U.S. EPA Region 9, and to the Deputy Assistant Secretary of the Air Force for Energy, Environment, Safety and Occupational Health, describing the amount of increased pollutants caused by the surge condition.

III.K. Transfer of Ownership or Operation

III.K.1 This permit is not transferable, whether by operation of law or otherwise, either from one location to another or from one piece of equipment to another. [GAPCSR, Section 1104.4(c); SIP Section 3.8]

III.K.2 This permit shall not be transferable, whether by operation of law or otherwise, from person to person without the approval of the Administrator. [GAPCSR, Section 1104.4(d); SIP Section 3.8]

III.K.3 In the event of any changes in control or ownership of facilities to be operated or modified, the resulting modification of this permit shall be made as an administrative amendment pursuant to Section 1104.20 of the GAPCSR. [GAPCSR, Section 1104.20]

III.L. Permit Expiration and Renewal

III.L.1 This permit is issued for a fixed term of five years from the date of issuance. [GAPCSR, Section 1104.11; SIP Section 3.1(b)(4)]

III.L.2 Application for permit renewal shall be submitted no more than eighteen (18) months prior to the date of permit expiration. Application for permit renewal shall be submitted no later than six (6) months prior to the date of permit expiration. Late applications shall be subject to penalties pursuant to Section 1104.25 of the GAPCSR. [GAPCSR, Section 1104.6(d); SIP Section 3.1(b)(4)]

III.L.3 This permit shall remain valid past the expiration date and the air pollution emission source shall not be in violation for failing to have an air pollution control permit, until the Administrator has issued or denied the renewal of the air pollution control permit, provided [GAPCSR, Section 1104.2(d)]:

III.L.3.a A complete renewal application has been submitted and the owner or operator acts consistently with the permit previously granted, and the application on which it was based, and all plans, specifications, and other information submitted as part of the application; and

III.L.3.b The owner or operator has submitted to the Administrator within the specified deadlines, all requested additional information deemed necessary to evaluate or take final action on the renewal application as described in Section 1104.6 of the GAPCSR.

III.M. Permit Modifications

Applications for modification of this permit are subject to the same requirements as the initial application including all requirements pursuant to Section 1104.6 (c) of the GAPCSR. The permittee shall submit a description of the modification, identifying all proposed changes, including any changes to the source operations, work practices, equipment design, source emissions, or any monitoring, record keeping, and reporting procedures. Each change from the permit application for this permit shall be identified on the application for the permit modification. [GAPCSR, Section 1104.6(f)]

III.N. Malfunction

III.N.1 Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with Section 1104.17 of the GAPCSR, in the event any emission unit, air pollution control equipment, or related equipment breaks down in such a manner as to cause the emission of air pollutants in violation of GAPCSR, or this permit, the permittee shall immediately notify, within twenty-four (24) hours, GEPA of the failure or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the failure or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. The submittal of these notices shall not be a defense to an enforcement action. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

III.N.1.a Identification of emission points;

III.N.1.b Magnitude of the excess emissions;

III.N.1.c Time and duration of the excess emissions;

III.N.1.d Identity of the process or control equipment causing the excess emissions;

III.N.1.e Cause and nature of the excess emissions;

III.N.1.f Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the breakdown does not interfere with the attainment and maintenance of the NAAQS (National Ambient Air Quality Standards) and Guam ambient air quality standards;

III.N.1.g Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and

III.N.1.h A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance. [GAPCSR, Section 1102.9]

III.O. Agency Notifications

III.O.1 The permittee shall notify the Administrator in writing of the following dates:

III.O.1.a The anticipated date of initial start-up for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date.

III.O.1.b The actual date of construction commencement within fifteen (15) days after such date.

III.O.1.c The actual date of start-up within fifteen (15) days after such date. [GAPCSR, Section 1104.12(9)(G)]

III.O.2 The permittee shall notify GEPA in writing, of the intent to shut down air pollution control equipment for necessary scheduled maintenance at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

III.O.2.a Identification of the specific equipment to be taken out of service, as well as its location and permit number;

III.O.2.b The expected length of time that the air pollution control equipment will be out of service;

III.O.2.c The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;

III.O.2.d Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and

III.O.2.e The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period. [GAPCSR, Section 1102.8; SIP, Section 4.3]

III.O.3 A copy of applicable correspondence or records submitted to GEPA shall be provided to the USEPA pursuant to Section 1104.15 of the GAPCSR. [GAPCSR, Section 1104.12(9)(I)]

III.O.4 Within thirty (30) days of permanent discontinuance of the operation, modification, relocation, or construction of any of the above units, the responsible official shall report the discontinuance in writing to the Administrator. [GAPCSR, Section 1104.5(a)]

III.P. Miscellaneous Conditions

- III.P.1 Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement on which each term or condition is based. [Section 49107(7)(c)(2) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]
- III.P.2 This permit, or a copy thereof, shall be maintained at or near the source for which this permit was issued and shall be made available for inspection upon request. [GAPCSR, Section 1104.4(a); SIP, Section 3.12]
- III.P.3 This permit shall not be willfully defaced, altered, forged, counterfeited, or falsified. [GAPCSR, Section 1104.4(b); SIP, Section 3.13]
- III.P.4 The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for this permit. There shall be no deviation from this permit condition unless additional or revised plans are submitted to and approved by GEPA, and the permit is amended to allow for such deviation. [GAPCSR, Section 1104.12(12)]
- III.P.5 This permit (a) does not release the permittee from compliance with other applicable statutes of Guam, or with applicable local or federal laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the source. [GAPCSR, Sections 1104.2(e) and 1104.12(11)]
- III.P.6 The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit. [GAPCSR, Section 1104.12(9)(C)]
- III.P.7 The filing of a request by the permittee for a permit termination, suspension, reopening, or amendment, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [GAPCSR, Section 1104.12(9)(D)]
- III.P.8 This permit shall become invalid with respect to any authorized construction if construction is not commenced as follows:
- III.P.8.a Within thirty (30) days of permanent discontinuance of the construction, modification, relocation or operation of any permitted air pollution emission source, the responsible official shall report the discontinuance in writing to the Administrator.
- III.P.8.b For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved

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Expires: December 15, 2014

commencement dates in the permit. [GAPCSR, Sections 1104.5(b), 1104.5(c), and 1104.12(9)(F)]

III.P.9 GEPA may extend the time periods specified in Condition III.P.8 of this permit upon a satisfactory showing that an extension is justified. Request for an extension shall be submitted in writing to GEPA. [GAPCSR, Section 1104.5(d)]

III.P.10 The permittee may request confidential treatment of any records in accordance with Section 1102.7 of the GAPCSR. [GAPCSR, Section 1104.12(9)(J)]

III.P.11 The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable. [GAPCSR, Section 1104.14]

**GUAM EPA
TITLE V FEDERAL OPERATING PERMIT
STATEMENT OF BASIS**

U.S. Air Force
Andersen Air Force Base, SIC Code 9711

Permit No. FO-001

Facility ID:	FO-001
Facility Name:	U.S. Air Force, Andersen Air Force Base, SIC Code 9711
Mailing Address:	36 th Air Base Wing, Unit 14003 APO AP, Guam 96543
Responsible Official:	Wing Commander
Title:	Commander, 36 th Air Base Wing
Phone Number:	(671) 366-3600
Contact Name:	Russell LittleJohn
Title:	Chief, Environmental Flight
Phone Number:	(671) 366-2556
Person Responsible for Recordkeeping:	John Salas
Title:	Environmental Engineer
Phone Number:	(671) 366-5081

I. Purpose

The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and provide the legal and factual basis for proposed permit conditions.

II. Facility Location

Andersen Air Force Base is located in Yigo, Guam.

III. Description of Facility Operations

Andersen Air Force Base provides a continuous bomber/tanker rotation and theater security presence. Activities that have the potential to cause significant emissions of air pollutants include burning of fossil fuel in boilers and emergency generators and evaporation from fuel storage and handling facilities. Of the numerous identified sources of air pollutants at

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Andersen Air Force Base, five (6) boilers, 111 internal combustion engines, an air curtain incinerator, a concrete batch plant, landfill vents, a concrete crusher, a rock crusher, and 22 fuel storage tanks were identified as significant.

IV. Equipment Listing and Permitting History**IV.A. Significant Emission Units**

A listing of all permitted equipment at the facility is presented in the table below. This table also includes the Guam EPA (GEPA) permit number for those emission units with existing permits.

Emission Unit Number	Description	Associated Control Equipment	Guam EPA Permit Number
B-32a	1.255 million British thermal units per hour (MMBtu/hr) diesel-fired boiler	N/A	ABU-617
B-32b	1.255 MMBtu/hr diesel-fired boiler	N/A	ABU-617
B-18017	Six wash rack heaters (0.44 MMBtu/hr each)	N/A	N/A
B-25010a	2.51 MMBtu/hr diesel-fired boiler	N/A	ABU-574
B-25010b	2.51 MMBtu/hr diesel-fired boiler	N/A	ABU-575
B-26006	1.255 MMBtu/hr diesel-fired boiler	N/A	ABU-616
EG-4-E-1	450 kilowatt (kW) portable diesel-fired emergency generator	N/A	N/A
EG-10a	1,000 kW diesel-fired emergency generator	N/A	ASG-485
EG-10b	1,000 kW diesel-fired emergency generator	N/A	ASG-485
EG-10c	1,000 kW diesel-fired emergency generator	N/A	ASG-485
EG-36	50 kW diesel-fired emergency generator	N/A	N/A
EG-70-3	60 kW diesel-fired emergency generator	N/A	N/A
EG-74	50 kW diesel-fired emergency generator	N/A	N/A
EG-79	350 kW diesel-fired emergency generator	N/A	N/A
EG-79b	300 kW diesel-fired emergency generator	N/A	N/A
EG-87	100 kW diesel-fired emergency generator	N/A	N/A
EG-683	200 kW diesel-fired emergency generator	N/A	ASG-637
EG-998	300 kW diesel-fired emergency generator	N/A	ASG-491
EG-1091	200 kW diesel-fired emergency generator	N/A	N/A
EG-1098	350 kW diesel-fired emergency generator	N/A	ASG-488
EG-1294	125 kW diesel-fired emergency generator	N/A	ASG-635
EG-1599	50 kW diesel-fired emergency generator	N/A	N/A
EG-1603	250 kW diesel-fired emergency generator	N/A	N/A
EG-1618	350 kW diesel-fired emergency generator	N/A	ASG-489
EG-1625	200 kW diesel-fired emergency generator	N/A	N/A

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Emission Unit Number	Description	Associated Control Equipment	Guam EPA Permit Number
EG-1722B	35 kW diesel-fired emergency generator	N/A	N/A
EG-1780	60 kW diesel-fired emergency generator	N/A	N/A
EG-1881	350 kW diesel-fired emergency generator	N/A	ASG-490
EG-2403	35 kW diesel-fired emergency generator	N/A	N/A
EG-2510	60 kW diesel-fired emergency generator	N/A	N/A
EG-2544	35 kW diesel-fired emergency generator	N/A	N/A
EG-2589	550 kW JP-8 fuel-fired emergency generator	N/A	N/A
EG-2594	550 kW JP-8 fuel-fired emergency generator	N/A	N/A
EG-2647	400 kW diesel-fired emergency generator	N/A	ASG-632
EG-2655	35 kW diesel-fired emergency generator	N/A	N/A
EG-2750	100 kW diesel-fired emergency generator	N/A	N/A
EG-2800	60 kW diesel-fired emergency generator	N/A	ASG-507
EG-8416	35 kW diesel-fired emergency generator	N/A	N/A
EG-9003	60 kW diesel-fired emergency generator	N/A	ASG-629
EG-14509	350 kW diesel-fired emergency generator	N/A	ASG-494
EG-17000	350 kW diesel-fired emergency generator	N/A	N/A
EG-17002	350 kW diesel-fired emergency generator	N/A	ASG-511
EG-17106	650 kW diesel-fired emergency generator	N/A	N/A
EG-18001	350 kW diesel-fired emergency generator	N/A	ASG-505
EG-18002	100 kW diesel-fired emergency generator	N/A	N/A
EG-18010	750 kW diesel-fired emergency generator	N/A	ASG-502
EG-18011a	100 kW diesel-fired emergency generator	N/A	ASG-483
EG-18011b	250 kW diesel-fired emergency generator	N/A	ASG-483
EG-18013	125 kW diesel-fired emergency generator	N/A	N/A
EG-18015	100 kW diesel-fired emergency generator	N/A	N/A
EG-18017	250 kW diesel-fired emergency generator	N/A	ASG-496
EG-18020	350 kW diesel-fired emergency generator	N/A	N/A
EG-18035	60 kW diesel-fired emergency generator	N/A	N/A
EG-18042	60 kW diesel-fired emergency generator	N/A	N/A
EG-19009	250 kW diesel-fired emergency generator	N/A	N/A
EG-19010	40 kW diesel-fired emergency generator	N/A	ASG-501
EG-19016	180 kW diesel-fired emergency generator	N/A	N/A
EG-19025	550 kW JP-8 fuel-fired emergency generator	N/A	N/A
EG-19028	300 kW diesel-fired emergency generator	N/A	ASG-633
EG-19030	35 kW diesel-fired emergency generator	N/A	N/A
EG-20010a	35 kW diesel-fired emergency generator	N/A	N/A
EG-20010b	35 kW diesel-fired emergency generator	N/A	N/A
EG-20011	350 kW diesel-fired emergency generator	N/A	ASG-630

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Emission Unit Number	Description	Associated Control Equipment	Guam EPA Permit Number
EG-20016	50 kW diesel-fired emergency generator	N/A	N/A
EG-21000a	100 kW diesel-fired emergency generator	N/A	N/A
EG-21000b	50 kW diesel-fired emergency generator	N/A	N/A
EG-21001	350 kW diesel-fired emergency generator	N/A	N/A
EG-21012	200 kW diesel-fired emergency generator	N/A	N/A
EG-21018	350 kW diesel-fired emergency generator	N/A	N/A
EG-21020	250 kW diesel-fired emergency generator	N/A	N/A
EG-22002	300 kW diesel-fired emergency generator	N/A	N/A
EG-22022	1,000 kW diesel-fired emergency generator	N/A	ASG-631
EG-22026a	250 kW diesel-fired emergency generator	N/A	N/A
EG-22026b	500 kW diesel-fired emergency generator	N/A	N/A
EG-23002	500 kW diesel-fired emergency generator	N/A	ASG-486
EG-23008	200 kW diesel-fired emergency generator	N/A	N/A
EG-23020	100 kW diesel-fired emergency generator	N/A	N/A
EG-23028	350 kW diesel-fired emergency generator	N/A	ASG-636
EG-25005	250 kW diesel-fired emergency generator	N/A	N/A
EG-25008	150 kW diesel-fired emergency generator	N/A	ASG-503
EG-25010	200 kW diesel-fired emergency generator	N/A	N/A
EG-25020	145 kW diesel-fired emergency generator	N/A	N/A
EG-25024	100 kW diesel-fired emergency generator	N/A	N/A
EG-25024-2	300 kW diesel-fired emergency generator	N/A	N/A
EG-25045	550 kW diesel-fired emergency generator	N/A	N/A
EG-26005	1,000 kW diesel-fired emergency generator	N/A	N/A
EG-26006	350 kW diesel-fired emergency generator	N/A	N/A
EG-26101	250 kW diesel-fired emergency generator	N/A	N/A
EG-26201	550 kW JP-8 fuel-fired emergency generator	N/A	N/A
EG-26202	35 kW diesel-fired emergency generator	N/A	ASG-513
EG-26205	500 kW JP-8 fuel-fired emergency generator	N/A	N/A
EG-27030	350 kW diesel-fired emergency generator	N/A	N/A
EG-51109	200 kW diesel-fired emergency generator	N/A	N/A
EG-Corrosion	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-Dining	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-Fire	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-FuelCell	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-GenPur	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-Hawk	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-Missile	Planned Emergency generator, 150 kW rating	N/A	N/A
EG-Mun	Planned Emergency generator, 150 kW rating	N/A	N/A

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Emission Unit Number	Description	Associated Control Equipment	Guam EPA Permit Number
Tub Grinder IC	Diesel Engine, 760 HP rating	N/A	N/A
Concrete Crusher IC	Diesel Engine, 300 HP rating	N/A	N/A
Batch Plant IC	Planned Diesel Generator Set, 60 kW rating	N/A	N/A
Rock Crusher IC	Planned Diesel Engine, 272 HP rating	N/A	N/A
Air Curtain Incin IC	Planned Diesel Engine, 83 HP rating	N/A	N/A
EG-MEP-7a	100 kW portable diesel-fired emergency generator	N/A	N/A
EG-MEP-7b	100 kW portable diesel-fired emergency generator	N/A	N/A
EG-MEP-7c	100 kW portable diesel-fired emergency generator	N/A	N/A
EG-MEP-7d	100 kW portable diesel-fired emergency generator	N/A	N/A
EG-MEP-806b	60 kW portable diesel-fired emergency generator	N/A	ASG-506B
EG-MEP-806c	60 kW portable diesel-fired emergency generator	N/A	N/A
EG-MEP-9b	200 kW portable diesel-fired emergency generator	N/A	ASG-506A
EG-MEP-9c	200 kW portable diesel-fired emergency generator	N/A	ASG-506F
EG-MEP-9d	200 kW portable diesel-fired emergency generator	N/A	ASG-506D
EG-MEP-9e	200 kW portable diesel-fired emergency generator	N/A	ASG-506G
EG-MEP-9h	200 kW portable diesel-fired emergency generator	N/A	N/A
TK-2587	420,000 gallon above ground storage tank	N/A	N/A
TK-2588	420,000 gallon above ground storage tank	N/A	N/A
TK-2592	420,000 gallon above ground storage tank	N/A	N/A
TK-2593	420,000 gallon above ground storage tank	N/A	N/A
TK-14501	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14502	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14503	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14504	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14505	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14506	5,000,000 gallon above ground storage tank	N/A	AST-582
TK-14510	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A

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Emission Unit Number	Description	Associated Control Equipment	Guam EPA Permit Number
TK-14513	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A
TK-14514	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A
TK-14515	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A
TK-14516	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A
TK-14517	4,000,000 gallon above ground (half-buried) storage tank	N/A	N/A
TK-19022	420,000 gallon above ground storage tank	N/A	N/A
TK-19023	420,000 gallon above ground storage tank	N/A	N/A
TK-26198	420,000 gallon above ground storage tank	N/A	N/A
TK-26199	420,000 gallon above ground storage tank	N/A	N/A
TK-26207	4,200,000 gallon above ground storage tank	N/A	N/A
TK-26208	4,200,000 gallon above ground storage tank	N/A	N/A
Landfill Vents	Vents from existing landfill at Andersen AFB	N/A	N/A
Fuel Loading	Loading JP from hydrants and loading racks	N/A	N/A
Batch Plant	Proposed concrete batch plant, 200 yd/hr (theoretical)	N/A	N/A
Air Curtain Incinerator	Air curtain incinerator used to dispose of clean wood waste	N/A	N/A

IV.B. Insignificant Emission Units

The following list of insignificant activities provided by the applicant in the permit application for this facility has been approved by GEPA. This equipment is not exempt from facility-wide requirements.

Description of Activities or Emission Units
Four (4) abrasive blasting units with potential to emit (PTE) under 2 tons per year (tpy)
One hundred thirty-three (133) storage tanks with capacities less than 40,000 gallons storing volatile organic compounds
Eight (8) paint spray booths
Eleven (11) diesel-fired standby generators with heat input capacities not exceeding 350,000 Btu/hr
Eight (8) IC engines fueled by gasoline (barrier arresting gear) with PTE under 2 tpy
Seven (7) pieces of fuel burning equipment (boilers and furnaces) with heat input capacities of

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less than 1 MMBtu/hr
Three (3) fuel cell maintenance operations with PTE under 2 tpy
Fugitive emissions from valves/pumps/connectors with PTE under 2 tpy
One (1) rock quarry with PTE under 2 tpy
One (1) rock crusher with PTE under 2 tpy
One (1) concrete crusher with PTE under 2 tpy
One (1) gasoline dispensing station
Various non-point uses of paints, solvents, and adhesives with PTE under 2 tpy
One fire training facility fueled by propane and using approximately 1,800 gallons per day and 43,200 gallons per year based on 24 training days per year

V. Potential to Emit

The annual potential to emit for each significant emission unit is presented below.

Emission Unit	Potential to Emit (tons/year)						
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	HAP
B-32a	7.85E-01	1.33E-02	1.12E+01	4.24E-02	1.96E-01	4.91E-05	2.39E-03
B-32b	7.85E-01	1.33E-02	1.12E+01	4.24E-02	1.96E-01	4.91E-05	2.39E-03
B-18017	1.65E+00	2.81E-02	2.35E+01	8.92E-02	4.13E-01	1.03E-04	5.03E-03
B-25010a	1.57E+00	2.67E-02	2.23E+01	8.48E-02	3.93E-01	9.82E-05	4.78E-03
B-25010b	1.57E+00	2.67E-02	2.23E+01	8.48E-02	3.93E-01	9.82E-05	4.78E-03
B-26006	7.85E-01	1.33E-02	1.12E+01	4.24E-02	1.96E-01	4.91E-05	2.39E-03
EG-4-E-1	1.02E+01	2.60E-01	6.57E+00	1.82E-01	2.70E+00	-	4.86E-03
EG-10a	2.26E+01	5.78E-01	1.46E+01	4.04E-01	5.99E+00	-	1.08E-02
EG-10b	2.26E+01	5.78E-01	1.46E+01	4.04E-01	5.99E+00	-	1.08E-02
EG-10c	2.26E+01	5.78E-01	1.46E+01	4.04E-01	5.99E+00	-	1.08E-02
EG-36	1.55E+00	1.27E-01	7.30E-01	1.09E-01	3.35E-01	-	1.34E-03
EG-70-3	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-74	1.55E+00	1.27E-01	7.30E-01	1.09E-01	3.35E-01	-	1.34E-03
EG-79	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-79b	1.55E+01	1.27E+00	7.30E+00	1.09E+00	3.35E+00	-	1.34E-02
EG-87	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-683	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-998	9.33E+00	7.62E-01	4.38E+00	6.56E-01	2.01E+00	-	8.06E-03
EG-1091	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-1098	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-1294	3.89E+00	3.17E-01	1.82E+00	2.73E-01	8.37E-01	-	3.36E-03

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Emission Unit	Potential to Emit (tons/year)						
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	HAP
EG-1599	1.55E+00	1.27E-01	7.30E-01	1.09E-01	3.35E-01	-	1.34E-03
EG-1603	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-1618	1.09E+01	8.89E-01	5.11E+00	7.65E-01	2.34E+00	-	9.40E-03
EG-1625	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-1722B	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-1780	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-1881	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-2403	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-2510	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-2544	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-2589	1.24E+01	3.18E-01	8.03E+00	2.22E-01	3.30E+00	-	5.95E-03
EG-2594	1.24E+01	3.18E-01	8.03E+00	2.22E-01	3.30E+00	-	5.95E-03
EG-2647	1.24E+01	1.02E+00	5.84E+00	8.74E-01	2.68E+00	-	1.07E-02
EG-2655	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-2750	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-2800	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-8416	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-9003	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-14509	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-17000	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-17002	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-17016	1.47E+01	3.75E-01	9.49E+00	2.63E-01	3.90E+00	-	7.03E-03
EG-18001	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-18002	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-18010	1.69E+01	4.33E-01	1.09E+01	3.03E-01	4.50E+00	-	8.11E-03
EG-18011a	5.18E+00	4.23E-01	2.43E+00	3.64E-01	1.12E+00	-	4.48E-03
EG-18011b	1.30E+01	1.06E+00	6.08E+00	9.11E-01	2.79E+00	-	1.12E-02
EG-18013	3.89E+00	3.17E-01	1.82E+00	2.73E-01	8.37E-01	-	3.36E-03
EG-18015	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-18017	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-18020	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-18035	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-18042	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-19009	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-19010	1.24E+00	1.02E-01	5.84E-01	8.74E-02	2.68E-01	-	1.07E-03

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Emission Unit	Potential to Emit (tons/year)						
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	HAP
EG-19016	5.60E+00	4.57E-01	2.63E+00	3.93E-01	1.21E+00	-	4.83E-03
EG-19025	1.24E+01	3.18E-01	8.03E+00	2.22E-01	3.30E+00	-	5.95E-03
EG-19028	9.33E+00	7.62E-01	4.38E+00	6.56E-01	2.01E+00	-	8.06E-03
EG-19030	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-20010a	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-20010b	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-20011	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-20016	1.55E+00	1.27E-01	7.30E-01	1.09E-01	3.35E-01	-	1.34E-03
EG-21000a	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-21000b	1.55E+00	1.27E-01	7.30E-01	1.09E-01	3.35E-01	-	1.34E-03
EG-21001	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-21012	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-21018	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-21020	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-22002	9.33E+00	7.62E-01	4.38E+00	6.56E-01	2.01E+00	-	8.06E-03
EG-22022	2.26E+01	5.78E-01	1.46E+01	4.04E-01	5.99E+00	-	1.08E-02
EG-22026a	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-22026b	1.13E+01	2.89E-01	7.30E+00	2.02E-01	3.00E+00	-	5.41E-03
EG-23002	1.13E+01	2.89E-01	7.30E+00	2.02E-01	3.00E+00	-	5.41E-03
EG-23008	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-23020	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-23028	1.09E+01	8.89E-01	5.11E+00	7.65E-01	2.34E+00	-	9.40E-03
EG-25005	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-25008	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-25010	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-25020	4.51E+00	3.68E-01	2.12E+00	3.17E-01	9.71E-01	-	3.89E-03
EG-25024	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-25024-2	9.33E+00	7.62E-01	4.38E+00	6.56E-01	2.01E+00	-	8.06E-03
EG-25045	1.24E+01	3.18E-01	8.03E+00	2.22E-01	3.30E+00	-	5.95E-03
EG-26005	2.26E+01	5.78E-01	1.46E+01	4.04E-01	5.99E+00	-	1.08E-02
EG-26006	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-26101	7.77E+00	6.35E-01	3.65E+00	5.47E-01	1.67E+00	-	6.71E-03
EG-26201	1.24E+01	3.18E-01	8.03E+00	2.22E-01	3.30E+00	-	5.95E-03
EG-26202	1.09E+00	8.89E-02	5.11E-01	7.65E-02	2.34E-01	-	9.40E-04
EG-26205	1.13E+01	2.89E-01	7.30E+00	2.02E-01	3.00E+00	-	5.41E-03

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Emission Unit	Potential to Emit (tons/year)						
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	HAP
EG-27030	7.90E+00	2.02E-01	5.11E+00	1.41E-01	2.10E+00	-	3.78E-03
EG-51109	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-Corrosion	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-Dining	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-Fire	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-FuelCell	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-GenPur	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-Hawk	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-Missile	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
EG-Mun	4.66E+00	3.81E-01	2.19E+00	3.28E-01	1.00E+00	-	4.03E-03
Tub Grinder IC	2.13E+01	5.46E-01	1.38E+01	3.82E-01	5.66E+00	-	1.02E-02
Concrete Crusher IC	1.16E+01	9.47E-01	5.44E+00	8.15E-01	2.50E+00	-	1.00E-02
Batch Plant IC	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
Rock Crusher IC	3.89E+00	3.17E-01	1.82E+00	2.73E-01	8.37E-01	-	3.36E-03
Air Curtain Incin IC	2.25E+00	1.83E-01	1.05E+00	1.58E-01	4.84E-01	-	0.00E+00
EG-MEP-7a	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-MEP-7b	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-MEP-7c	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-MEP-7d	3.11E+00	2.54E-01	1.46E+00	2.19E-01	6.70E-01	-	2.69E-03
EG-MEP-806b	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-MEP-806c	1.87E+00	1.52E-01	8.76E-01	1.31E-01	4.02E-01	-	1.61E-03
EG-MEP-9b	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-MEP-9c	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-MEP-9d	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-MEP-9e	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
EG-MEP-9h	6.22E+00	5.08E-01	2.92E+00	4.37E-01	1.34E+00	-	5.37E-03
TK-2587	-	1.32E-02	-	-	-	-	5.61E-04
TK-2588	-	1.67E-02	-	-	-	-	7.08E-04
TK-2592	-	1.18E-02	-	-	-	-	5.00E-04
TK-2593	-	1.02E-02	-	-	-	-	4.35E-04
TK-14501	-	3.01E-02	-	-	-	-	1.28E-03
TK-14502	-	3.06E-02	-	-	-	-	1.30E-03
TK-14503	-	2.32E-02	-	-	-	-	9.85E-04

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Emission Unit	Potential to Emit (tons/year)						
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	HAP
TK-14504	-	2.44E-02	-	-	-	-	1.03E-03
TK-14505	-	2.33E-02	-	-	-	-	9.89E-04
TK-14506	-	2.56E-02	-	-	-	-	1.09E-03
TK-14510	-	2.39E-01	-	-	-	-	1.02E-02
TK-14513	-	2.46E-01	-	-	-	-	1.04E-02
TK-14514	-	3.22E-01	-	-	-	-	1.37E-02
TK-14515	-	5.07E-01	-	-	-	-	2.15E-02
TK-14516	-	2.78E-01	-	-	-	-	1.18E-02
TK-14517	-	3.79E-01	-	-	-	-	1.61E-02
TK-19022	-	6.36E-02	-	-	-	-	2.70E-03
TK-19023	-	5.85E-02	-	-	-	-	2.49E-03
TK-26198	-	7.75E-02	-	-	-	-	3.29E-03
TK-26199	-	5.39E-02	-	-	-	-	2.29E-03
TK-26207	-	2.72E-02	-	-	-	-	1.15E-03
TK-26208	-	2.81E-02	-	-	-	-	1.19E-03
Landfill Vents	-	2.21E+00	-	-	4.92E-02	-	2.80E-01
Fuel Loading	-	1.65E+00	-	-	-	-	7.06E-02
Batch Plant	-	-	-	1.41E+01	-	1.56E-04	5.67E-03
Concrete Crusher	-	-	-	8.29E-02	-	-	0.00E+00
Rock Crusher	-	-	-	1.06E-01	-	-	0.00E+00
Air Curtain Incinerator	3.50E+01	-	8.75E-01	1.14E+00	-	-	0.00E+00
TOTAL	8.01E+02	4.75E+01	5.25E+02	4.96E+01	1.84E+02	6.03E-04	9.93E-01

VI. Guam Requirements

The following table lists the applicable requirements from the Guam Air Pollution Control Standards and Regulations (GAPCSR) and from the approved Guam State Implementation Plan (SIP). For rules where an applicability determination was required, a discussion is included below.

Section 1103.2	Guam Ambient Air Quality Standards
Section 1103.3	Visible Emissions
Section 1103.4	Fugitive Dust
Section 1103.7	Incineration

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Section 1103.10	Sulfur Oxides from Fuel Combustion
Section 1103.11	Open Burning
Section 1103.12	Control of Odors in Ambient Air
Section 1103.13	Asbestos
Section 1104	Permit Program Regulations
SIP, Section 7.5	Particulate Emissions from Fuel Combustion

VI.A. Particulate Matter (PM) Limits for Fuel Burning Equipment

Section 7.5 of the GEPA SIP requires that for fuel burning equipment between 1 MMBtu/hr and 1,000 MMBtu/hr in size, the allowable particulate emissions shall be calculated using the following equation:

$$Y = 1.02 X^{-0.231}$$

Where:

Y = Allowable particulate emission rate (lb/MMBtu)

X = Operating rate (MMBtu/hr)

Boilers and IC engines at Andersen AFB are fueled by #2 diesel fuel. There are no coal or heavy oil combustion sources on Base. The USEPA AP-42 PM emission factor for the boilers used at Andersen AFB is 0.014 lb/MMBtu. The USEPA AP-42 PM emission factor for diesel IC engines up to 600 HP (approximately 4 MMBtu/hr), is 0.31 lb/MMBtu. The emission factor for larger diesel IC engines is 0.1 lb/MMBtu.

The SIP allowable emission rate gradually decreases from 1.02 lb/MMBtu at 1 MMBtu/hr to 0.83 lb/MMBtu at 2.5 MMBtu/hr (largest of boilers) to 0.6 lb/MMBtu at 10 MM Btu/hr (largest of IC engines). Because the estimated emission rates for all combustion sources at Andersen AFB are well below the SIP rule limit, compliance can be deemed to be demonstrated for these sources, so long as equipment is maintained according to manufacturer recommendations.

VII. Federal Requirements

The following table lists the applicable requirements from United States Environmental Protection Agency (USEPA) regulations. For rules where an applicability determination was required, a discussion is included below.

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40 CFR Part 60, Subpart A	NSPS General Provisions
40 CFR Part 60, Subpart CCCC	NSPS for Commercial and Industrial Solid Waste Incineration Units
40 CFR Part 60, Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines
40 CFR Part 61, Subpart M	Asbestos
40 CFR Part 69	Special Exemptions

Amendment 5 to the Andersen AFB Title V Permit Application includes calculations of HAP potential to emit from stationary significant and insignificant emission units (existing and planned), including paint booths and fuel dispensing stations. Those PTE estimates indicate that Andersen AFB is a true minor source of HAP emissions and is, therefore, not subject to the Major Source NESHAP regulations of 40 CFR Part 63.

VII.A. New Source Performance Standards (NSPS)

There is only one NSPS that applies to equipment currently installed at this facility, and another NSPS that will apply to the Air Curtain Incinerator if it is installed. 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, applies to new stationary diesel engines. 40 CFR Part 60, Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units, would apply to the proposed Air Curtain Incinerator.

VII.A.1 Stationary Compression Ignition Internal Combustion Engines

Stationary compression ignition (CI) internal combustion engines ordered or modified after July 11, 2005 are subject to this NSPS. According to Section 60.4215, engines used in Guam have different emission and fuel requirements than engines used elsewhere. Engines used in Guam and ordered after July 11, 2005, must comply with emission standards for new nonroad CI engines. Compliance with this requirement may be demonstrated through manufacturer representations on the engine nameplate or in literature supplied with the engine. Engines used in Guam are not required to meet the fuel requirement of Section 60.4207.

VII.A.2 Tanks

The applicability of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (40 CFR Part 60, Subpart Kb) was reviewed, and it was determined that this regulation does not apply to the tanks at this facility. NSPS Subpart Kb generally applies to liquid storage tanks with a capacity greater than or equal to 75 cubic meters (m³) (19,815

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gallons) that store volatile organic liquids, and for which construction, reconstruction, or modification was started after July 23, 1984. Twenty-one tanks at this facility (Units TK-14510, TK-14513 through TK-14517, TK-26196-S1, TK-26196-S4 through TK-26196-S7, TK-26198, TK-26199, TK-26207, TK-26208, TK-2587, TK-2588, TK-2592, TK-2593, TK-19002, and TK-19023) meet the size and construction date requirements. However, 40 CFR 110b(b) states that tanks are exempt from the NSPS if they satisfy either of the following criteria:

1. They have a capacity greater than or equal to 151 m³ and store a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa); or
2. They have a capacity greater than or equal to 75 m³ but less than 151 m³ and store a liquid with a maximum true vapor pressure less than 15.0 kPa.

The facility stores only JP-8 fuel and distillate fuel oil #2, which are listed on the Air Force's Clean Air Act Compliance Guidance websites¹ as having true vapor pressures of 0.051 kPa and 0.059 kPa, respectively. These values are well below the thresholds in the criteria listed above, so the storage tanks at this facility are not subject to NSPS Subpart Kb.

VII.A.3 Air Curtain Incinerator

Applicable federal requirements for the proposed Air Curtain Incinerator are found in 40 CFR Part 60, Subpart CCCC—Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001.

Air curtain incinerators that burn only wood waste, clean lumber, and yard waste up to 35 tons/day are regulated under the Other Solid Waste Incinerators rule in 40 CFR Part 60, Subpart EEEE (40 CFR 60.2970-2974). Because the air curtain incinerator at Andersen AFB would be capable of exceeding 35 tons of waste on a typical work day, Subpart EEEE would not be applicable.

40 CFR 60 Subpart Cb (Large Municipal Waste Combustion Units) and 40 CFR 60 Subpart AAAA (Small Municipal Waste Combustion Units) are not applicable because those rules exclude clean wood waste, though Subpart AAAA covers air curtain incinerators that burn only yard waste.

¹ www.afcee.brooks.af.mil/eq/air/caatoolbox/html/federal/emisest/fuel_loading.html and www.afcee.brooks.af.mil/eq/air/caatoolbox/html/federal/compdet/nsps_volstor_tbl3.html

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The opacity limit in Subpart CCCC is 10 percent (6 minute average). However, 35 percent opacity (6 minute average) is allowed during startup periods that are within the first 30 minutes of operation. Subpart CCCC allows opacity to exceed these limits during malfunctions, so long as malfunctions do not exceed 3 hours. Opacity is measured via Method 9 tests at the time of initial startup and annually thereafter. Air curtain incinerators burning only wood waste, clean lumber, and yard waste, must meet these opacity limits and certain monitoring, recordkeeping, and reporting requirements specified in Sections 60.2245 through 60.2260, and must apply for and obtain a Title V operating permit.

GAPCSR Section 1103.7 "Incineration" limits PM emissions from incinerators to 0.2 lb PM per 100 lbs of refuse combusted. It is not feasible to prove compliance with this rule directly, as it is not technically feasible to conduct a source test for PM on an air curtain incinerator. However, compliance is expected from this combustion technology because the PM emission factor for air curtain incinerators in AP-42 Section 2.1 is 0.13 lb/ton (0.007 lb/100 lbs). Compliance can therefore be deemed to be demonstrated so long as the unit is operated and maintained according to manufacturer recommendations.

VII.B. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements for large emission units that rely on pollution control device equipment to achieve compliance. The CAM regulations can be found in 40 CFR Part 64. CAM applicability is determined on a pollutant-specific basis. According to these regulations, an emission unit that meets all of the following criteria is subject to CAM:

1. The unit is located at major source required to obtain Part 70 or 71 permit;
2. The unit is subject to an emission limitation for the applicable pollutant;
3. The unit uses a control device (as defined by 40 CFR 64.1) to achieve compliance;
4. The potential precontrolled emissions of an applicable pollutant from the unit are equal to or greater than the major source threshold for that pollutant; and
5. The unit is not otherwise exempted by the CAM regulations.

Regarding the first requirement, the CAM rule (in 40 CFR 64.1) states that "*Part 70 or 71 permit* shall have the same meaning as provided under [40 CFR 70 or 71] provided that it shall also refer to a permit issued, renewed, amended, revised, or modified under any federal permit program promulgated under Title V [of the Clean Air] Act]."

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After receiving a special exemption from USEPA, GEPA has adopted an “alternate operating permit program” according to the requirements of 40 CFR 69.13. As a result, so it was not immediately clear whether this program satisfied the definition in the CAM rule. USEPA Region 9 was consulted on this matter, and made a determination that GEPA’s alternate operating permit program was promulgated under Title V of the Clean Air Act, so facilities located on Guam are potentially subject to CAM.

Emissions from the diesel-fired boilers, diesel-fired emergency generators, and storage tanks at the facility are not controlled and are less than all of the major source thresholds.

Conclusion: None of the emission units at the facility are subject to CAM.

VIII. Periodic Monitoring and Recordkeeping

Requirement	Requirement Condition #	Existing Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Added to Permit	Monitoring/ Recordkeeping Condition #
PM emission limit for fuel burning equipment	II.B.1.a	Quarterly combustion analysis for CO and O ₂ by Base HVAC staff	Maintenance recordkeeping	II.D.6
Opacity limits for diesel-fired engines	II.B.2.a	Monthly maintenance checks	Maintenance recordkeeping	II.D.6
Preventative maintenance for fuel burning equipment	II.C.1	None	Maintenance recordkeeping	II.E.4
Fuel sulfur content limit for boilers	II.C.2	None	Fuel sulfur content recordkeeping	II.E.2 and II.E.3
Fuel sulfur content limit for JP-8 fuel-fired emergency generators	II.C.3	None	Fuel sulfur content recordkeeping	II.E.2 and II.E.3

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Requirement	Requirement Condition #	Existing Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Added to Permit	Monitoring/ Recordkeeping Condition #
Fuel sulfur content limit for diesel-fired emergency generators	II.C.4	None	Fuel sulfur content recordkeeping	II.E.2 and II.E.3
Suitable precautions against fugitive dust as listed in 1103.4	II.C.5 and II.C.6	None	Quarterly visible emissions survey	II.D.6
NSPS Opacity Limits for Air Curtain Incinerator	II.B.4	Startup and Annual Method 9 opacity testing. Results reported to GEPA and maintained for five years.	N/A	II.D.7, II.E.9, and II.F.7

IX. Streamlining Applicable Requirements:

Consistent with USEPA policy, overlapping or redundant requirements may be streamlined when these are incorporated in a Title V permit. Streamlining allows the permit conditions to be listed in a clear and concise manner while ensuring compliance with all applicable requirements. The following section contains a description of streamlining that has been performed in this permit.

Condition II.C.2 – Fuel Oil Sulfur Content Limitations for Boilers

The existing GEPA permits for boilers B-25010a, B-25010b, B-26006, B-32a, and B-32b state that the fuel oil used in these units shall not exceed 1.0% sulfur content (maximum) by weight at any time and in no event shall the average over the immediate past twelve month period (including the last month reading) exceed 1.0% sulfur content by weight, however, a basis for this requirement could not be found in any current GEPA regulation. GAPCSR Section 1103.10 states that no person shall burn fossil fuel containing in excess of 2.0% sulfur by weight. Since there are no

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current GEPA regulations that are more stringent, the 2.0% sulfur limit was included in the permit.

Condition II.C.4 – Diesel Fuel Oil Sulfur Content Limitations for Emergency Generators

The existing GEPA permits for emergency generators EG-18015, EG-18011a, EG-18011b, EG-10a, EG-10b, EG-10c, EG-23002, EG-1098, EG-1618, EG-1881, EG-998, EG-14509, EG-19010, EG-18010, EG-25008, EG-18001, EG-MEP-9d, EG-MEP-9a, EG-MEP-9c, EG-2800, EG-17002, and EG-26202, state that the fuel oil used in these units shall not exceed 3.14% sulfur content (maximum) by weight at any time and in no event shall the average over the immediate past twelve month period (including the last month reading) exceed 2.84% sulfur content by weight. GAPCSR Section 1103.10 states that no person shall burn fossil fuel containing in excess of 2.0% sulfur by weight. Since the GAPCSR requirement is more stringent, the 2.0% sulfur limit was included in the permit.

The existing GEPA permits for emergency generators EG-9003, EG-20011, EG-22022, EG-2647, EG-19028, EG-26005, EG-1294, EG-23028, and EG-683 state that the fuel oil used in these units shall not exceed 1.0% sulfur content (maximum) by weight at any time and the average over the past twelve month period (including the last month reading) shall not exceed 1.0% sulfur content by weight, however, a basis for this requirement could not be found in any current GEPA regulation. GAPCSR Section 1103.10 states that no person shall burn fossil fuel containing in excess of 2.0% sulfur by weight. Since there are no current GEPA regulations that are more stringent, the 2.0% sulfur limit was included in the permit.

Condition II.F.3 – Petroleum Product Release Reporting Requirements

The existing GEPA permits for fuel storage tanks, TK-14501, TK-14502, TK-14503, TK-14504, TK-14505, and TK-14506 state that GEPA shall be notified immediately in case of an emergency where petroleum products are discharged into the environment and a follow-up report shall be submitted to GEPA within ten days describing the circumstances of the incident and corrective/preventive measure to be undertaken to prevent future occurrences. GAPCSR Section 1104.12(9)(N) requires a written report within five days. Since the GAPCSR standard is more stringent, the five day requirement was included in the permit.

GUAM ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTION CONTROL PERMIT



Permit No. FO-001

IS HERBY ISSUED TO

United States Air Force

LOCATED AT

U. S. Air Force, Andersen air Force Base
SIC Code 9711

in accordance with the Guam Air Pollution Control Standards and Regulations (GAPCSR),
Public Law 24-20, 10 Guam Code Annotated (GCA), Chapter 49.

This Permit is non-transferable and the permittee is subject to the requirements for holding and transfer of
permits in Section 1104.4 of the GAPCSR.

No person shall willfully deface, alter, forge, counterfeit, or falsify this Permit.

This Permit shall expire **12/15/2014**. The renewal application shall be submitted no later than **07/15/2014**.


LORILEE T. CRISOSTOMO
Administrator

Date: 3/26/2010