

Thursby, Kim

From: THOBEN, THOMAS H GS-12 USAF AFSPC 45 CES/CEIE <thomas.thoben@us.af.mil>
Sent: Friday, March 13, 2015 6:22 AM
To: Epost HWRS (Shared Mailbox)
Cc: THOBEN, THOMAS H GS-12 USAF AFSPC 45 CES/CEIE
Subject: RE: Cape Canaveral Air Force Station, FL2 800 016 121;Final Permit

Verify receipt of Cape Canaveral Air Force Station, FL2 800 016 121 Final Permit; Received 12 Mar 2015.

Thomas H. Thoben, CHMM
Lead, Environmental Sustainability
45 CES/CEIE - Patrick
Patrick AFB
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-----Original Message-----

From: Thursby, Kim [mailto:Kim.Thursby@dep.state.fl.us] On Behalf Of Epost HWRS (Shared Mailbox)
Sent: Thursday, March 12, 2015 2:59 PM
To: FAULKNER, JOHN F GS-14 USAF AFSPC 45 CES/CD
Cc: Bahr, Tim; Baker, Bryan; Armstrong, John (Waste Mgmt.); BARFUS, BRIAN L CTR USAF AFSPC 45 CES/ESC; 'bastek.brian@epa.gov'; DELROSE, JOSEPH T JR CTR USAF AFSPC 45 CES/ESC; Eckoff, Michael; GINIEWSKI, PATRICK S GS-14 USAF AFSPC 45 CES/CEI; THOBEN, THOMAS H GS-12 USAF AFSPC 45 CES/CEIE; White, John; Cook, Robert; Russell, Merlin; Tripp, Anthony; Kothur, Bheem
Subject: Cape Canaveral Air Force Station, FL2 800 016 121;Final Permit

In an effort to provide a more efficient service, the Florida Department of Environmental Protection's Hazardous Waste Program and Permitting section is forwarding the attached document to you by electronic correspondence "e-correspondence" in lieu of a hard copy through the normal postal service.

We ask that you verify receipt of this document by sending a "reply" message to epost_hwrs@dep.state.fl.us. (An automatic "reply message" is not sufficient to verify receipt). If your email address has changed or you anticipate that it will change in the future, please advise accordingly in your reply. You may also update this information by contacting Kim Thursby at (850) 245-8792.

The attached document is in "pdf" format and will require Adobe Reader 6 or higher to open properly. You may download a free copy of this software at www.adobe.com/products/acrobat/readstep2.html
<<http://www.adobe.com/products/acrobat/readstep2.htm>> .

Please note that our documents are sent virus free. However, if you use Norton Anti-virus software, a warning may appear when attempting to open the document. Please disregard this warning.

Your cooperation in helping us affect this process by replying as requested is greatly appreciated. If you should have any questions about the attached document(s), please direct your questions to the contact person listed in the correspondence.

Bryan Baker, P.G.

Program Administrator

Permitting & Compliance Assistance Program Department of Environmental Protection E-Mail Address:
epost_hwrs@dep.state.fl.us <mailto:epost_hwrs@dep.state.fl.us>

Dep Customer Survey <<http://survey.dep.state.fl.us/?refemail=Kim.Thursby@dep.state.fl.us>>



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

March 12, 2015

Sent Via E-mail

John.Faulkner@us.af.mil

Mr. John F. Faulkner
Range/Base Civil Engineer
45 CES/CD
1224 Jupiter Street
Patrick Air Force Base, Florida 32925

RE: Cape Canaveral Air Force Station, FL2 800 016 121
Operating/Corrective Action Permit 0070725-HO-006
Brevard County

Dear Mr. Faulkner:

Enclosed is Permit Number 0070725-HO-006 for the operation of hazardous waste container storage, operation of thermal treatment units, and corrective action requirements. This permit is being issued pursuant to Section 403.722, Florida Statutes (F.S.), and Chapters 62-4, 62-160, 62-730, and 62-780, Florida Administrative Code (F.A.C.).

This permit is final and effective ("issued") on the date filed with the Clerk of the Department. When the permit is final, any party to the permit has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice to Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal.

The Notice of Appeal must be filed within thirty (30) days from the date the final permit is issued. If you should have any questions, please contact Merlin D. Russell Jr. at (850)245-8796 or merlin.russell@dep.state.fl.us

Sincerely,

Bryan Baker
Program Administrator
Hazardous Waste Program and Permitting

Mr. John F. Faulkner
Page 2 of 2
March 12, 2015

BB/mdr

Enclosures

cc (with enclosure):

John Armstrong, DEP Tallahassee, John.Armstrong@dep.state.fl.us
Bryan L. Barfus, Patrick AFB, brian.barfus.ctr@us.af.mil
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**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

PERMITTEE:
Cape Canaveral Air Force Station
45 CES/CD
1224 Jupiter Street
Patrick AFB, Florida 32925-3343

I.D. NUMBER: FL2 800 016 121
PERMIT NUMBER: 0070725-HO-006
DATE OF ISSUE: MARCH 12, 2015
EXPIRATION DATE: March 3, 2020

ATTENTION:
Mr. John F. Faulkner

COUNTY: Brevard County
PROJECT: Operation of a Hazardous Waste
Storage Facilities, Miscellaneous Thermal Treatment
Unit and Continuation of Site Wide Corrective Action

Pursuant to authorization obtained by the Florida Department of Environmental Protection (FDEP) under the Resource Conservation and Recovery Act [42 United States Code (U.S.C.) 6901, *et seq.*, commonly known as RCRA] and the Hazardous and Solid Waste Amendments of 1984 (HSWA), this permit is issued under the provisions of Section 403.722 Florida Statutes (F.S.), and Chapters 62-4, 62-160, 62-730, 62-777 and 62-780, Florida Administrative Code (F.A.C.). This permit replaces expired permit 0070725-HO-005. The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application dated September 17, 2014, and revisions dated November 25, 2014 and December 11, 2014 that are incorporated herein and collectively referred to as the "permit application." The permit application also includes any approved drawing(s), plans, and other documents that are specifically identified and incorporated by reference. Solid waste management units (SWMUs) and areas of concern (AOCs) identified to date are listed in Appendix A. The RCRA-regulated units, permitted units or permitted activities are specifically described as follows.

Container Storage Units

Facility 44205 and Facility 44200 are Container Storage Units. Hazardous wastes are stored in DOT approved containers for short-term storage prior to manifesting off site for proper treatment and / or disposal or waste recovery. The hazardous wastes permitted for storage are generated from Department of Defense operations.

The waste allowed for storage in Facility 44205 is listed in Attachment B of this permit and will consist of ignitable waste, toxic waste, halogenated solvent waste and reactive waste. The maximum number of 55-gallon drums allowed for storage in Facility 44205 will not exceed 200 drums (11,000 gallons). The storage facility has a secondary containment capacity of 5,207 gallons.

The wastes that are permitted for storage in Facility 44200 are listed in Attachment B of this permit, and will consist of waste acids and bases. The maximum number of 55-gallon drums of hazardous waste allowed for storage in Facility 44200 will not exceed 64 drums

(3,520 gallons). Facility 44200 will also be used to store PCB waste, which is segregated from the permitted hazardous waste storage area.

Open Burn Unit

Low explosives are treated by burning in the Open Burn Unit. The Open Burn Unit consists of two steel burn boxes. The first burn box is 5' × 5' × 3'. The second burn-box is 6' × 12' × 2.5'. Both rest on 4" I-beams. Both burn boxes are fabricated from welded 0.5" ASTM 36 hot rolled steel plate. The burn-boxes rest on a 2.5" thick firebrick pad overlaid on a 6" reinforced 3,000 psi concrete slab. An asphalt pad with a 1% grade drains water away from the firebrick-concrete pad area. When not in use, removable locking aluminum covers prevent the infiltration of water into the burn box.

Open Detonation Unit

High explosives are detonated at the Open Detonation Unit. The Open Detonation Unit is used for fragment producing explosives and consists of a sandy area about 500 feet closer to the beach and east of the Open Burn Unit. Detonation occurs on the surface or in a pit or trench. The maximum range net explosive weight limit is 100 pounds per event of Class 1.1 non-fragment-producing material, or 25 pounds per event of Class 1.1 fragment-producing material.

Corrective Action Units

Solid waste management units (SWMUs) and areas of concern (AOCs) identified to date are listed in Appendix A.

The Permittee is required to investigate any releases of contaminants to the environment at the facility regardless of the time at which waste was placed in a unit and to take appropriate corrective action for any such releases. Pursuant to 40 Code of Federal Regulations (CFR) 260.10 [as adopted by reference in Subsection 62-730.020(1), F.A.C.], the corrective action requirements of this RCRA permit extend to all property under control of the Permittee (see Attachment A, a map of the property boundaries of the land under the Permittee's control) and to all contamination that originated from discharges at the property under control of the Permittee.

This permit is based on the premise that information and reports submitted by the Permittee prior to issuance of this permit are accurate. Any inaccuracies found in this information or information submitted as required by this permit may be grounds for termination or modification of this permit in accordance with Section 403.727(3)(a), F.S., and Rule 62-730.290, F.A.C., and potential enforcement action.

The facility is located at Cape Canaveral Air Force Station, Florida.

The following documents were used in the preparation of this permit.

1. *Resource Conservation and Recovery Act (RCRA) Operation Permit Renewal Application* (September 2014) transmitted September 17, 2014.
2. Response to the first Notice of deficiencies, *Resource Conservation and Recovery Act (RCRA) Operation Permit Renewal Application* (September 2014) transmitted November 25, 2014.
3. E-mail dated December 11, 2014 with revised permit application pages.
4. E-mail dated January 20, 2015 2:30:40 PM containing an updated Part I and new signature pages for new operator and facility owner.
5. E-mail dated January 20, 2015 2:56:12 PM containing an updated Part I.

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PART I - GENERAL AND STANDARD CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are “permit conditions” and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The Permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Sections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the Permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. This permit or a copy thereof shall be kept at the work site of the permitted activity. In the event that there is no building or reasonable repository for such a copy at the work site, an alternate location must be approved by the Department in writing.
8. The Permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted for the activities below. Reasonable time may depend on the nature of the concern being investigated.

- a. Have access to and copy any records that must be kept under conditions of the permit.
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit.
 - c. Sample or monitor any substances or parameters at any time or location reasonably necessary to assure compliance with this permit or Department rules.
9. The conditions in this permit shall take precedence over the permit application documents where there are differences between those documents and the permit conditions.
10. In accepting this permit, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of the permitted activity which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted activity arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
11. The Permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the Permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
12. The Permittee shall comply with the following notification and reporting requirements.
 - a. If for any reason the Permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the Permittee shall immediately provide the Department with the following information.
 - (1) A description of and cause of noncompliance.
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
 - b. The Permittee will report any event requiring emergency response or noncompliance that may endanger human health or the environment from fires and explosions or releases of hazardous waste that may endanger public drinking water supplies. The Permittee will report to the Department verbally within 24 hours, and provide a written report of the incident to the Hazardous Waste Regulation Section at the address in Part I.15 or by alternate means (*e.g.*, e-mail) as approved by the Department, within five calendar days. It is the responsibility of the Permittee to ensure receipt of the written report. The Department of Environmental Protection's 24-hour emergency telephone number is (850) 413-

9911 or (800) 320-0519. During normal business hours, the DEP District Office may be contacted at 407-897-4100.

- (1) The verbal report shall include the following information.
 - (a) The name, address, I.D. number, e-mail address, and telephone number of the facility and its owner or operator.
 - (b) The date, time, and type of incident.
 - (c) The identity and quantity of materials involved.
 - (d) The extent of any injuries.
 - (e) An assessment of actual or potential hazards.
 - (f) The estimated quantity and disposition of recovered materials.
 - (2) The written report shall include all of the information in the verbal report and the following information.
 - (a) A description and cause of the noncompliance.
 - (b) If not corrected, the expected time of correction, and the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.
- c. Within 15 calendar days of discovery per Part V.1.b, the Permittee shall notify the Department in writing of any newly discovered release(s) of contaminant(s) to the environment resulting in a De Minimis cleanup (Part V.4) or a suspected new AOC(s) and/or SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means.
- (1) The notification shall include, at a minimum, the location of the release, AOC or SWMU (hereinafter referred to collectively as “site”), and all relevant information (*e.g.*, location of site(s) on a map of appropriate scale; general dimensions of affected area; media affected; hazardous constituents released; and magnitude of release).
 - (2) The Department may conduct, or require that the Permittee conduct, confirmatory sampling in order to determine whether contamination is present (Part V.A.3). The Department will notify the Permittee in writing of the final determination as to the status of the newly discovered or suspected site.
 - (3) Depending upon the type of discovery, notification requirements of Part I.12.b may also be required.
- d. The Permittee shall comply with the “Notices” provisions of Rules 62-780.220, F.A.C., and 62-730.225, F.A.C.
- (1) Prior to performing field activities.
 - (2) When contamination beyond the facility boundary is confirmed by laboratory analysis.
 - (3) When a Temporary Point of Compliance (TPOC) is established beyond the boundary of the source property in conjunction with monitored natural attenuation or active remediation.
 - (4) When a fifth year update to the status of a TPOC is issued.

- (5) By placing warning signs at facilities where there may be a risk of exposure to the public of environmental media contaminated with hazardous waste.
- e. The Permittee shall give written notice to the Department at least 15 days prior to physical alterations or additions to the facility that could affect activities covered by this permit. The notice shall include a summary description of the project, an evaluation of the effect it will have on: the operation of a hazardous waste facility, postclosure care, the ability to investigate contamination at or from a contaminated site, and an evaluation of the effect it might have on the known or suspected contamination.
- f. Operating and Postclosure Permittees that generate hazardous waste, and all HSWA Corrective Action Permittees that are also a large quantity generator (LQG) of hazardous waste, shall submit a Biennial Report covering facility activities during the previous calendar year by March 1 of each even numbered year pursuant to Chapter 62-730, F.A.C.

13. The Permittee shall comply with the following recordkeeping requirements.

- a. Upon request, the Permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The Permittee shall hold all information required by the permit at the facility or other location designated by this permit. This includes records of all monitoring information (including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation); copies of all reports; records of all data used to complete the permit application; and all monitoring data required by 40 CFR Part 264 and Part IV, and when applicable, Part VI of this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Any Remedial Action Plan as applicable for each contaminated site and associated cost estimate(s) shall be held until a Site Rehabilitation Cleanup Order is issued.
- c. Records of monitoring information shall include all required items in Chapter 62-160, F.A.C., and the following information.
 - (1) The date, exact place, and time of sampling or measurements.
 - (2) The person responsible for performing the sampling or measurements.
 - (3) The dates that analyses were performed.
 - (4) The person responsible for performing the analyses.
 - (5) The analytical techniques or methods used.
 - (6) The results of such analyses.
- d. If the Permittee generates hazardous waste, the Permittee shall retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced to comply with land disposal restrictions (40 CFR Part 268 and Rule 62-730.183, F.A.C.) for at least three years from the date that the

waste which is the subject of such documentation was last sent to an on-property or off-property facility for treatment, storage, or disposal, or until remedial activity is completed, whichever date is later. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

14. Within the timeframe requested by the Department, the Permittee shall furnish any information required by law which is needed to determine compliance with the permit. If the Department's request does not include a timeframe, the time of response is 30 days. If the Permittee becomes aware that the relevant facts were not submitted or were incorrect in the permit application or any report submitted to the Department, such facts or information shall be corrected promptly.
15. Except as otherwise specifically provided in this permit, all submittals in response to permit conditions shall be provided as described below. Submittals may be directed to alternative addresses (*i.e.* electronic submittal) and will not require a permit modification. Technical submittals (*e.g.* workplans, reports) provided in digital format must be in optical media format (CD or DVD) or through a secured internet port (*i.e.* username/password encryption) when one is available.

Environmental Administrator
Hazardous Waste Program and Permitting, M.S. 4560
Department of Environmental Protection
2600 Blair Stone Road, Tallahassee, Florida 32399-2400

16. All documents submitted pursuant to the conditions of this permit shall be accompanied by a cover letter stating the name and date of the document submitted, the number(s) of the Part(s) and Condition(s) of the permit affected, the E.P.A. I.D. number, and the permit number and project name of the permit involved.
17. All documents proposing modifications to the approved permit and involving the practice of engineering must be submitted to the Department for review and be signed, sealed, and certified by a Professional Engineer, in accordance with Chapter 471, F.S. and Subsection 62-730.220(9), F.A.C., or by a Professional Engineer employed by the U.S. Government. All submittals incorporating interpretation of geological data shall be signed and sealed by a Professional Geologist in accordance with Chapter 492, F.S., and Subsection 62-730.220(10), F.A.C. or by a Professional Geologist employed by the U.S. Government.
18. All work plans, reports, schedules and other documents ("submittals") required by this permit are subject to approval by the Department prior to implementation. The Department will review the submittals and respond in writing. Upon written approval by the Department, the Permittee shall implement all work plans, reports and schedules as provided in the approved submittal. If the Department disapproves a submittal, the Department will do one of the following.
 - a. The Department will notify the Permittee in writing of the reason(s) why the submittal does not contain information adequate to support the conclusion, alternative, plan, proposal or recommendation, or why the conclusion, alternative,

- plan, proposal or recommendation is not supported by the applicable criteria. In this case, the Permittee shall submit a revised submittal within 60 days of receipt of the Department's disapproval unless an alternative deadline is approved in writing by the Department.
- b. The Department will revise the submittal, or approve the submittal with conditions, and notify the Permittee of the revisions or conditions. In the case of work plans, the Department may notify the Permittee of the start date of the schedule within the revised or conditionally approved work plan.
19. The Permittee shall revise "Part I – General" of the Application for a Hazardous Waste Facility Permit [DEP Form 62-730.900(2)(a)] and submit the revised form to the Department within 30 days of any changes in the Part I information. Changes in the Part I information may also require changes to the Department's 8700-12FL form.
20. The Permittee may claim that any information required to be submitted by this permit is confidential in accordance with Chapter 403.73, F.S.
21. This permit is transferable only upon written Department approval in accordance with Rule 62-4.120 and Subsection 62-730.290(6), F.A.C., as applicable. The Permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. Before transferring ownership or operation of this facility during the term of this permit, the Permittee must notify the new owner or operator in writing of the requirements of 40 CFR Part 264 and Chapter 62-730, F.A.C.
22. The following conditions apply to renewal, modification and revocation of this permit.
- a. The Permittee shall submit a complete application for the renewal of this permit a minimum of 180 calendar days before the expiration of the permit. The permit renewal application shall be submitted in accordance with Rules 62-4 and 62-730, F.A.C.
- b. The Department may modify, revoke, reissue, or terminate for cause this permit in accordance with Chapters 62-4 and 62-730, F.A.C.
- c. The Permittee may submit any permit modification to the Department for approval. The filing of a request for a permit modification, revocation, reissuance, termination, notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.
- d. The Permittee shall submit the application for a permit renewal or modification to the addresses in Part I.15.
- (1) The Permittee shall submit a fee with the permit renewal or modification application that meets the requirements of Rule 62-730.293, F.A.C. A Permittee choosing to pay the fee on an annual basis shall submit the annual fee payment no later than the anniversary date of permit issuance.
- (2) The Permittee shall submit a copy of the cover letter accompanying the permit renewal or modification application and the fee to the following address.

Florida Department of Environmental Protection

Hazardous Waste Program and Permitting
Post Office Box 3070, Tallahassee, Florida 32315-3070

- (3) The Permittee shall also submit notification of fee submittal, or notification of annual fee submittal, to the addresses in Part I.15.a., or by an alternate means (e.g., e-mail) as approved by the Department.
 - (4) The permit renewal or modification application fee may alternately be submitted electronically. If the Permittee intends to submit the application fee electronically, the Permittee shall obtain instructions from the Department on the proper procedures, and shall follow such instructions in making the electronic submittal. Notification per Part I.22.d.(3) is still required.
 - e. The timeframes for permit review begin on the date when the Department has received both the permit renewal or modification application and the application fee.
 - f. If the Permittee allows this permit to expire prior to Department acceptance of the certification of postclosure and termination of all corrective action, the Permittee must reapply for a permit in accordance with DEP Form 62-730.900(2), F.A.C.
 - g. Any request to modify a permit for the treatment, storage, or disposal of hazardous waste generated off-site shall include an evaluation of the applicability of, and Permittee's compliance with, the siting criteria of Section 403.7211, F.S., and Rule 62-730.182, F.A.C.
23. If and when the Permittee intends to transfer parcels to third parties, the Permittee may remove a parcel from the Facility covered by this permit, and the Department will approve the removal of the parcel so long as the parcel never contained a contaminated site, or so long as any contamination associated with the contaminated site has been addressed to the satisfaction of the Department. The Department will approve the transfer or removing of a parcel in writing.
- a. The satisfaction of the Department may be conditioned on a sale with certain legal restrictions on the future use and/or remedial activity requirements on the parcel being transferred.
 - b. Following the legal transfer of the property, a permit modification request to transfer the parcel from the permit must be made per Part I.22 within 30 days. A new facility map denoting the current property boundary and new property boundary legal description shall be submitted with the permit modification request.
 - c. Even though a parcel is no longer defined as part of the facility as a result of the permit modification (using the minor modification requirements of Subsection 62-730.290(4), F.A.C.), in the event that a previously unknown contaminated site is found on the parcel, and such contamination resulted from activities which occurred prior to the sale, the Permittee will be responsible for any corrective action along with any other persons who may have legal responsibility for the contamination (see Part V.1.b. regarding discovery of a new SWMU).
24. The following conditions apply to land disposal (placement) of hazardous wastes.

- a. 40 CFR Part 268 and Rule 62-730.183, F.A.C., identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage, or disposal unit. The Permittee shall maintain compliance with the requirements of 40 CFR Part 268. Where the Permittee has applied for an extension, waiver, or variance under 40 CFR Part 268, the Permittee shall comply with all restrictions on land disposal under this Part pending final written approval of such application.
 - b. Waste identified in 40 CFR Part 268 Subpart C may not be placed in a land disposal unit without treatment unless the requirements of 40 CFR Part 268 Subparts C and/or D are met.
 - c. The storage of hazardous wastes restricted from land disposal in 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268 Subpart E are met.
25. The Permittee is not relieved of responsibility to clean up a release that has migrated beyond the facility boundary where off-property access is denied or revoked.
- a. The Permittee shall use all reasonable efforts, including but not limited to correspondence, telephone calls, personal contacts, drafting and redrafting agreements, and payment of a fee, to obtain access to real property necessary for work to be performed in the implementation of this permit.
 - b. If necessary access cannot be obtained by the Permittee, or if obtained, is revoked by owners or entities controlling access to the properties to which access is necessary, the Permittee shall notify the Department within five business days of such refusal or revocation. The Department may at any time thereafter seek to obtain such access as is necessary to implement the terms of this permit.
 - c. The Permittee shall reimburse the Department for any expenses that the Department is ordered to pay, or that the Department incurs in connection with its efforts to obtain necessary access to said property. The Permittee shall pay these sums to the Department, or arrange a payment schedule with the Department, within 30 days of demand by the Department. Payments shall be performed in accordance to Part I.22.d.
26. Reserved.
27. Any dispute resolution will be conducted in accordance with Chapter 120, F.S. (Administrative Procedure Act), Chapter 28-106, F.A.C., and the Department's existing rules and procedures.

PART II-OPERATING CONDITIONS

Part II Subpart A - General Operating Conditions

1. The Permittee shall comply with those sections of 40 CFR Part 124 specified in Subsection 62-730.200(3), F.A.C., 40 CFR Parts 260 through 268, and 40 CFR Part 270 as adopted in Chapter 62-730, F.A.C., until all hazardous waste permitting operations

have ceased and the facility has been closed and released from postclosure care requirements and all facility-wide corrective action requirements.

2. The Permittee shall comply with the manifest requirements of 40 CFR 264.71 and 264.72. The Permittee must document the reconciliation of any manifest discrepancies.
3. The Permittee shall notify the Department in writing four weeks prior to receipt of hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source is not required.
4. The owner or operator of a facility that is authorized by the Department to receive hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping.
 - a. The Permittee that receives hazardous waste from an off-site source shall comply with the following notification and reporting requirements.
 - (1) Unmanifested Waste Report: The Permittee shall submit an Unmanifested Waste Report to the Department within 15 days of receipt of unmanifested waste.
 - (2) Manifest Discrepancy Report: If a significant discrepancy in a manifest is discovered, the Permittee shall attempt to rectify the discrepancy. If not resolved within 15 days after the waste is received, the Permittee shall immediately submit a letter report, including a copy of the manifest, to the Department.
5. Sampling and analysis of permitted and new hazardous wastes shall be conducted in accordance with the Waste Analysis Plan of the permit application.
 - a. The Permittee is liable for waste profiles supplied to generators.
 - b. Prior to acceptance of new waste codes, a permit modification per Condition I.22 is required. The need for a substantial modification should be evaluated using the criteria in Subsection 62-730.182(4), F.A.C.
6. With respect to ignitable and reactive wastes, the Permittee shall comply with 40 CFR 264.17, 264.176, and 264.198. With respect to incompatible wastes, the Permittee shall comply with 40 CFR 264.17, 264.177 and 264.199.
7. If this facility has suspected or confirmed environmental contamination where there may be a risk of exposure to the public, then upon direction from the Department the Permittee must comply with the warning sign requirements of Section 403.7255, F.S. and Rule 62-780.220, F.A.C. The Permittee is responsible for supplying, installing and maintaining the warning signs.
8. The Permittee shall comply with the security provisions of 40 CFR 264.14 and the facility security provisions of the permit application.

9. Facility personnel must successfully complete the approved training program indicated in the permit application, within six months of employment or assignment to a facility or to a new position at the facility. Verification of this training must be kept with the personnel training records and maintained at the facility. Personnel shall not work unsupervised until training has been completed. The training must be reviewed by facility personnel at least annually. The Permittee shall maintain an updated list of personnel handling hazardous waste and their respective job titles at the facility.
10. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
11. The Permittee shall comply with the following conditions concerning preparedness and prevention.
 - a. At a minimum, the Permittee shall have the equipment available at the facility which is described in the Prevention and Preparedness Plan (PPP) of the permit application. The Permittee shall visually inspect and maintain the facility emergency and safety equipment (40 CFR 264.32) listed in the PPP, in accordance with 40 CFR 264.15, 40 CFR 264.33 and the permit application, during permitted activities. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, in accordance with the requirements of 40 CFR 264.15(c). A schedule for the inspection of the facility emergency and safety equipment must be maintained as the operating record of the facility. Changes, additions, or deletions to the schedule must be approved in writing by the Department.
 - b. The Permittee shall maintain immediate access to an internal communications or alarm system, fire protection equipment, spill control equipment and decontamination equipment.
 - c. The Permittee shall maintain arrangements with State and local authorities as required by 40 CFR 264.37, and with local medical facilities and emergency response personnel. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record. Authorities/facilities include local fire and police departments, sheriff's office, state police, hospitals, ambulance services and emergency medical technicians, and state and local emergency response centers.
 - d. The Permittee shall maintain aisle space, as required pursuant to 40 CFR 264.35, to allow the unobstructed movement of personnel, fire protection, and emergency response equipment to any area of the facility.
12. The Permittee shall comply with the following conditions concerning the Contingency Plan (CP).
 - a. The Permittee shall immediately carry out the provisions of the permit application, and follow the emergency procedures described by 40 CFR 264.56,

- whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment. The Permittee shall give proper notification if an emergency situation arises and, within five calendar days, must submit to the Department a written report which includes all information required in Condition I.12.b.
- b. The Permittee shall comply with the requirements of 40 CFR 264.53. Electronic copies of the CP must be submitted to the authorities/facilities in Condition II.A.11.c., provided the entity has the capability to receive electronic submittals.
 - c. Within seven calendar days of meeting any criterion listed in 40 CFR 264.54(a), (b) or (c), the Permittee shall amend the plan and submit the amended plan for Department approval. Any other changes to the plan must be submitted to the Department within seven days of the change. Amendments to the plan must be approved in writing by the Department. All approved amendments or plans must be distributed to the State and local authorities in Condition II.A.11.c..
 - d. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.
 - e. The Permittee shall perform at a minimum, an annual review of the Contingency Plan to ensure that it is up to date and contains current information. The date of review should be noted in the written operating record at the facility.
13. The Permittee shall develop and maintain a Waste Minimization Program Plan. The Permittee shall maintain copies of the certification required by this Condition in the facility operating record for a minimum of three years. The Permittee must certify, no less often than annually, the following.
- a. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable.
 - b. The proposed method of treatment, storage or disposal is the most practicable method available to the Permittee, which minimizes the present and future threat to human health and the environment.
14. The Permittee shall keep a written operating record at the facility that includes the following.
- a. The results of any waste analysis.
 - b. Copies of hazardous waste manifests for three years.
 - c. The results of inspections.
 - d. The closure plan, postclosure plan, and remedial action (corrective measures) plans as applicable for each contaminated site, along with cost estimates for each plan.
 - e. Inspections of emergency and safety equipment.
 - f. Biennial reports.
 - g. Personnel training records.
 - h. The Waste Minimization Program Plan and annual certification of waste minimization.
 - i. The description and quantity of each hazardous waste received or generated.

- j. The location and quantity of each hazardous waste within the facility.
- k. Notices to generators as specified in 40 CFR 264.12(b).
- l. A log of dates of operations and unusual events.
- m. A summary report and details of incidents that require implementation of the contingency plan.
- n. The date of annual review of the Contingency Plan.
- o. Monitoring and test data for 40 CFR 264 Subparts AA, BB, and CC requirements.
- p. Documentation that local officials have refused to enter into preparedness prevention arrangements with the Permittee.

Part II Subpart B - Specific Operating Conditions - Container Storage Units, Facility 44205 and Facility 44200

1. The Permittee shall not store more than 200 55-gal. drums (11,000 gal.) in Facility 44205 at any one time. The Permittee shall not store more than 64 55-gal. drums (3,520 gal.) in Facility 44200 at any one time.
2. The Permittee shall only store the hazardous waste listed in Attachment B of this permit in the Container Storage Units designated as Facility 44205 and Facility 44200.
3. The Permittee shall maintain and operate the secondary containment structures, including maximum design capacity limits, in accordance with the permit application, and as required by 40 CFR 264.175.
4. No container of hazardous waste shall remain at the facility for a period longer than one year. It shall be a violation of this permit to put hazardous waste into a different container or to change the label on a container in order to avoid this time limit.
5. The Permittee shall notify the Department if the volume of material in the container storage areas exceeds the permitted capacity.
6. The Permittee shall not stack containers with capacity over 15 gallons. Containers shall be stored on spill pallets, with no more than four (4) 55-gal. containers per pallet. Containers smaller than 15 gallons may be stacked two high per pallet and the pallet may be stacked on a single layer of larger containers.
7. Containers shall be handled in a manner that will prevent container rupture or leakage. If a container holding hazardous waste is not in good condition, or begins to leak, the waste shall be transferred to another container in good condition.
8. The Permittee shall only use containers compatible with the hazardous waste contents. The Permittee shall not place waste in unwashed containers that have previously held incompatible waste.
9. The Permittee shall ensure that hazardous waste stored at Facility 44205 and Facility 44200 is compatible with the secondary containment systems and liners of the storage areas such that the requirements of 264.17(b) are met.

10. The Permittee shall inspect the integrity of the containment areas to ensure that they are free of cracks and gaps.
11. The Permittee shall contain and clean up spilled or leaked waste as soon as possible, but no later than 24 hours after the release.
12. The Permittee shall not place or store containers in a manner that obstructs inspection or prevents any emergency action.
13. The Permittee shall inspect the container loading/unloading area and the container storage areas at least once weekly looking for leaking containers and for deterioration of containers and containment systems caused by corrosion and other factors following procedures identified in the permit application.
14. The Permittee may store non-hazardous materials in Facility 44205 and Facility 44200 provided that the Permittee complies with the requirements of 40 CFR 264.175, and:
 - a. The volume of non-hazardous materials plus all other materials in the Container Storage Areas do not exceed the capacities specified in Conditions of Part 1;
 - b. The Permittee maintains the required aisle spacing in the storage area for both the permitted and non-hazardous materials;
 - c. The Permittee assures non-hazardous materials have labels specifying their contents; and
 - d. The Permittee maintains in the facility operating record a written log of any non-hazardous materials stored in the permitted storage areas. The log shall include:
 - (1) The type and the quantity of non-hazardous materials;
 - (2) Verification of adequate secondary containment;
 - (3) Confirmation of appropriate aisle spacing availability; and
 - (4) Documentation of compatibility of non-hazardous materials and other materials present in the regulated hazardous waste container storage areas.
 - e. The wastes are compatible.
15. The Permittee shall manage all hazardous waste containers stored at the facility in accordance with the applicable provisions of 40 CFR 264 subpart CC.
16. The Permittee shall ensure that all hazardous waste containers are kept closed with rings tightened and bungholes plugged except when adding or removing waste.

Part II Subpart C - Specific Operating Conditions - Open Burn and Open Detonation Units

1. Operation of the Open Burn Unit and Open Detonation Unit shall be conducted in accordance with the permit application.
2. The Permittee shall only thermally treat by open burning and open detonation the hazardous wastes generated from sources located within the facility boundaries demarcated in Attachment A of this permit or generated from launch operations conducted at Kennedy Space Center as detailed in the permit application.

3. The Permittee shall only treat the hazardous waste streams listed in Attachments C and D of this permit. Department approval shall be obtained prior to performing thermal treatment on new waste streams.
4. The Permittee shall treat no more than a Net Explosive Weight (NEW) of 100 pounds of non-fragment producing hazardous waste at any one time at the Open Burn and Open Detonation Units.
5. The thermal treatment activities may only be conducted by properly trained Explosive Ordnance Disposal (EOD) Personnel or civilian contractors specifically trained in accordance with explosive ordnance disposal procedures and under the following conditions:
 - a. Treatment shall only be conducted during daylight hours;
 - b. Wind speed must be less than or equal to 15 mph;
 - c. No electrical storms may be present within 3 miles of the Open Burn and Open Detonation Units;
 - d. No major storms may be forecast during the event; and
 - e. No inversion forecasts may be present.
6. The Permittee shall comply with the waste compatibility requirements of 40 CFR 264.17(b).
7. The Permittee shall follow the procedures described in the permit application. The Permittee shall repeat the waste analysis planning requirements specified in 40 CFR Part 264.13 as necessary to ensure the plan is accurate and up to date. The Permittee shall notify the Department within 30 days if it is determined necessary to make changes to the Waste Analysis Plan.
8. The Permittee shall provide adequate fire protection as specified in the permit application to make certain any fire resulting from the Open Burn Unit or Open Detonation Unit operations are confined and kept under control.
9. The Permittee shall maintain an operating record describing the Open Burn Unit and Open Detonation Unit treatment activities. The operating record shall include the following information:
 - a. A description and quantity of each hazardous waste received and treated at the unit;
 - b. Dates of waste treatment;
 - c. Summary reports and details of all incidents that require implementation of the contingency plan at the unit;
 - d. Weather conditions to include humidity, weather forecast, wind speed, and wind direction at each event;
 - e. Copies of manifests showing disposition of burn residues and / or the quantity of burn residues on site at the end of the reporting period; and
 - f. Details of any problems discovered during inspections and details of remedial actions taken.

10. The Permittee shall inspect the EOD facility in accordance with the schedule approved in the permit application. Any changes to the schedule must be approved in writing by the Department. The schedule shall be maintained as part of the operating record of the facility.
11. The Permittee shall remedy any deterioration or malfunction discovered during an inspection in accordance with the requirements of 40 CFR 264.15(c).
12. The Permittee shall maintain compliance with the environmental performance standards listed in 40 CFR 264.601 at all times.
13. The Permittee shall only conduct the Open Burn (OB) Unit treatment operation at the designated unit illustrated in Attachment E of this permit.
14. The Permittee shall inspect the structural integrity of the Open Burn (OD) Unit each year and submit a report to the Department detailing the finding.
15. The Permittee shall inspect Open Detonation Unit for remaining debris and dispose of discovered debris immediately upon completion of the Open Detonation Unit treatment operation.
16. The Permittee shall collect burn residues upon completion of the Open Burn Unit treatment operations and perform a hazardous waste characterization on a representative sample of the collected residues. The Permittee shall place the representative residue sample in a container labeled "Hazardous Waste Pending Analysis." The container shall also be marked with a log number that can be used to reference the date of the treatment operation.
17. The Permittee shall accumulate hazardous waste residue in a satellite accumulation container in the Satellite Waste Accumulation Area (Attachment F) for temporary storage prior to disposal.
18. The Permittee shall place a metal cover over the Open Burn Unit after the treatment operation is conducted to prevent infiltration of rainwater.
19. The Permittee shall only conduct the Open Detonation treatment operation at the Open Detonation Area illustrated in Attachment E of this permit.
20. The Permittee shall inspect Waste Management Area-2 for remaining debris, fragments and residues at the conclusion of each open detonation treatment operation. If the remaining materials are unsafe due to their energetic nature the Permittee shall immediately detonate the remaining materials in place. If the materials are not dangerous due to an energetic nature the Permittee shall collect and dispose of the remaining materials within two (2) weeks of the open detonation treatment operation.

Part II Subpart D - Closure Conditions

1. The Permittee shall close the Container Storage Units, Open Burn Unit and Open Detonation Unit in a manner that minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous waste constituents, hazardous waste decomposition products, contaminated leachate or run-off to the groundwater, surface waters, or to the atmosphere (40 CFR Part 264.111).
2. The Permittee shall have a written Closure Plan as required by 40 CFR 264.112(a). The Closure Plan and all revisions to the plan must be kept at the facility until closure is completed, certified in accordance with 40 CFR 264.115, and accepted by the Department.
3. Modifications to the approved Closure Plan shall be in accordance with the requirements of 40 CFR 264.112(c) and Rule 62-730.290, F.A.C.
4. The Permittee shall notify the Department within seven calendar days of any determination that actions undertaken as part of closure or associated monitoring programs no longer satisfy the requirements set forth in this permit. If the Department determines that a modification of the permit is required, the Permittee shall, within 60 calendar days of notice by the Department, submit an application for a permit modification in accordance with Part II.C.3.
5. Within 90 days after receiving the final volume of hazardous waste or upon notification by the Department that closure of a unit is required, the owner or operator must treat or remove from the unit all hazardous waste.
6. The Permittee shall complete closure activities within 180 days after notification to the Department of closure and in accordance with the closure schedule in the permit application. Any changes in the time allowed for closure activities or reporting requirements shall require prior written Department approval. At least 30 calendar days prior to initiating physical closure activities, the Permittee shall prepare and submit a Closure Activities Report.
 - a. The Closure Activities Report will be in columnar format (*i.e.* a table or spreadsheet) with columns for "closure activity," "schedule date," and "completed date."
 - b. The Closure Activities Report shall be maintained and updated by the Permittee throughout the closure period, with copies submitted monthly to the Department, unless an alternate submittal schedule is approved by the Department in writing. Each report must be submitted to the Department by the tenth day of each month for the preceding month until the acceptance of physical closure by the Department. These reports can be submitted electronically.
 - c. Any deviation from the schedule or described tasks shall be fully documented in the Closure Activities Report.

7. The Permittee shall notify the Department 45 days prior to the date on which the Permittee expects to begin partial or final closure of a unit(s).
8. The Permittee shall properly decontaminate or dispose of all equipment, structures, and residues used during or resulting from the closure activities.
9. The Permittee shall manage all hazardous wastes, residues, sludges, spilled or leaked waste, or contaminated liquids and soils removed during closure of the unit(s) in accordance with the applicable provisions of 40 CFR Parts 260 through 268, including the manifest requirements. A copy of each manifest required as a result of closure activities shall be submitted to the Department with the Closure Certification.
10. The Permittee shall provide opportunities for site inspections by the Department by informing the Department at least seven days in advance of any major physical closure activity (*e.g.*, unit decontamination or removal, cap installation, soil sampling, soil removal, etc.).
11. Within 30 days of determining that all contaminated soil cannot be practically removed or decontaminated, the Permittee shall notify the Department of such determination. Within 90 days of the determination the Permittee shall submit an application for permit modifications to close the facility as a landfill (land disposal unit) and perform postclosure care as required by 40 CFR 264.
12. Within 60 calendar days of the completion of closure, the Permittee shall submit to the Department, by certified mail or hand delivery, a Closure Certification Report signed by the Permittee and an independent Professional Engineer registered in the State of Florida, stating that the unit has been closed in compliance with the Closure Plan and the conditions of this permit. The Closure Certification must be based on the Professional Engineer's own observation and knowledge of the closure activities. The Closure Certification Report must include, but not be limited to the following.
 - a. Environmental sampling data to verify closure activities.
 - b. Decontamination data.
 - c. Copies of manifests or other appropriate shipping documents for removal of all hazardous wastes and all contaminated residues.
 - d. A description of final closure activities.
 - e. A final Closure Activities Report (Condition II.C.6 of this Subpart).
13. Within 30 calendar days of submitting a Closure Certification Report for a land disposal unit, including a land disposal unit identified under Part II.C.11, the Permittee shall submit to the Department and to the local zoning authority, or the authority with jurisdiction over local land use, a survey plat indicating the type, location, and quantity of hazardous wastes disposed of within the unit with respect to permanently surveyed benchmarks in accordance with 40 CFR 264.116. For hazardous wastes disposed of before January 12, 1981 the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of the Permittee's knowledge and in accordance with any existing records. This notice is in addition to the requirement to execute a formal land use control (*e.g.*, a restrictive covenant) in order to obtain a site

rehabilitation completion order based on restricted exposure risk assumptions under Chapter 62-780, F.A.C.

PART III - POSTCLOSURE CONDITIONS

Not applicable at this time.

PART IV - ENVIRONMENTAL MONITORING CONDITIONS

Part IV Subpart A-General Environmental Monitoring Requirements

1. Environmental monitoring is performed to conduct detection monitoring, ensure that the extent of contamination remains delineated, or to track the progress of corrective action. Monitoring is a dynamic activity and decisions on future actions are dependent upon prior results and site-specific conditions. The ability to alter a monitoring plan based on results and site-specific conditions is essential to a comprehensive and efficient monitoring program. Changes to the Environmental Monitoring Plan (EMP) conditions that follow can be made with written Department approval and will not require a permit modification. The Permittee is currently implementing an approved monitoring program.
2. Part IV.A.3 identifies the required elements of a comprehensive EMP. An EMP is comprised of both relatively static and more frequently changing components. EMP components that may frequently change are described in Part IV.A.11 and are to be reported in Environmental Monitoring Reports (EMRs); the most current EMR represents the most current EMP. The Permittee shall ensure that all remaining EMP components are included in the EMR or clearly identified and referenced in the EMR. Note that some items may be more dynamic in nature on a site specific basis, *e.g.*, some items in Part IV.A.3.e.
3. The EMP must address all environmental media as necessary, including groundwater, sediment, soil, and surface water. The EMP, including future revisions, must include the following elements at a minimum. Facilities with a monitoring program in place, but lacking a provision below, will submit identified provisions within 60 days of notification by the Department, or in the next Environmental Monitoring Report as directed.
 - a. The EMP shall include a map(s) showing all contaminated sites, any SWMUs and AOCs in detection monitoring, and associated monitoring wells and piezometers (including recovery or extraction, point of compliance, Temporary Point of Compliance, and background wells), surface water features pertinent to the contaminated site and surface water sampling locations, and any areas subject to soil or sediment sampling. Contaminated sites are the SWMUs and AOCs listed in Appendices A.2, A.3, and A.4.
 - b. A map(s) showing all SWMUs and AOCs shall be submitted to the Department and incorporated by reference into the EMP. The map shall be updated within 60 days of the discovery of a new SWMU (Part V.1.b.) or AOC.
 - c. Well construction information for each well and piezometer in the EMP shall be submitted to the Department and incorporated by reference into the EMP. Well

- construction information shall also be submitted in an electronic format (*e.g.*, spreadsheet) for inclusion in the Department's WACS database (or its successor). Location of each well or piezometer shall be provided in latitude and longitude. Information on new wells and piezometers shall be submitted within 30 days of installation.
- d. The EMP shall include a table or tables listing all wells and piezometers to be sampled (or potentially sampled based on results) or measured, surface water sampling locations, and soil or sediment sampling locations (or methods for choosing locations such as grid-based) and the following information for each.
 - (1) Well or piezometer depth, screened interval, surveyed ground surface elevation and surveyed top of casing elevation; surface water sampling depth(s), and soil and sediment sampling intervals.
 - (2) The regulatory status of each well or piezometer, such as assessment, extraction or recovery, point of compliance, Temporary Point of Compliance, or background well.
 - (3) The frequency of sampling for each location (in all media), such as annual, semiannual, bi-annual, not currently sampled.
 - (4) Wells where groundwater level elevations will be measured (but not sampled).
 - (5) Contaminants of concern to be sampled.
 - e. The EMP shall include the following information concerning quality assurance and the laboratory practices.
 - (1) A statement that all sampling and analysis activities will comply with Rule 62-160.110(5), F.A.C.
 - (2) A statement that all analyses will be conducted by a laboratory accredited by the National Environmental Laboratory Accreditation Program (NELAP) and certified by the Florida Department of Health.
 - (3) A table of proposed constituents, matrices, and analytical methods.
 - (4) A table of proposed purging and sampling methods.
 - (5) A statement that all records of monitoring information shall include all required items in Chapter 62-160, F.A.C., and Part I.13.c.
 - (6) A statement that all laboratory data will be submitted using the ADaPT quality assurance software.
 - (7) A statement that the sampling crew will follow the Department's most recent Standard Operating Procedures (SOPs) or other sampling program approved pursuant to Chapter 62-160, F.A.C.
 - f. The EMP must describe how investigation derived wastes will be managed.
 - g. The EMP shall include provisions for maintaining well integrity (well repair and redevelopment) and well security including locks for each well. The Permittee may demonstrate that facility security provisions negate the need for locks at a well(s), subject to Department written approval. All wells beyond the facility property boundary must be kept secure and locked when unattended.
 - h. The EMP shall include a schedule for periodic submission of Environmental Monitoring Reports.

4. Wells used as part of an approved EMP may be abandoned with Department approval. The Permittee shall abandon wells in accordance with the requirements of Subsection 62-532.500(4), F.A.C.
5. The Permittee shall measure groundwater elevations every time any well is sampled as part of the approved EMP. All groundwater elevations must be measured within the same 24-hour period and prior to the sampling event. These data shall be used to determine the horizontal and vertical groundwater flow direction and flow rate for each monitoring period.
6. Total depths of all sampled wells must be determined by physical measurement to the closest 0.01 foot increment in November of each year to determine if siltation has occurred in any well. Wells are to be redeveloped as necessary.
7. The Permittee shall provide the Department with opportunities to observe groundwater sampling and split samples by providing notification either by telephone, letter, or electronically at least seven calendar days prior to each sampling event.
8. In the event a well is damaged and requires repair (not maintenance), the well shall be repaired or replaced within 30 days, or before the next sampling event, whichever occurs first.
9. All groundwater analyses shall be performed on unfiltered groundwater samples. Analyses on filtered samples may be performed by the facility, but only for its own use, unless shown to be more representative of groundwater conditions [Subsection 62-520.310(5), F.A.C.].
10. All laboratory data will be submitted using the ADaPT quality assurance software. All laboratory datasheets shall be submitted only in electronic format. ADaPT files shall accompany the electronic copy of the EMP, and shall be included in a separate folder labeled ADaPT files. The folder will contain a single Laboratory electronic data deliverable (EDD), a Field EDD, and a copy of the error log that contains all data covered by the Report. Additional information on ADaPT is available at the Department's website: <http://www.dep.state.fl.us>.
11. The Permittee shall submit Environmental Monitoring Reports (EMR) in accordance with the schedule in the approved EMP. This report can be submitted in a combined document with any Remedial Action Status Report required in Part VI of this permit. The EMR should contain the following elements.
 - a. A map showing all contaminated sites and associated monitoring wells and piezometers (including recovery or extraction, point of compliance, Temporary Point of Compliance, and background wells), surface water features pertinent to the contaminated site and surface water sampling locations, and any areas subject to soil or sediment sampling (*i.e.*, Part IV.A.3.a.).
 - b. Reports of any necessary repairs or redevelopment of the wells since the last report.

- c. Maps of groundwater flow direction(s) and plume delineation(s) (if any) and a table of groundwater elevation data.
- d. An analysis and evaluation of the current analytical results, including maps, figures, graphs and tables.
- e. Field sampling logs.
- f. Laboratory analytical data sheets for the sampling event(s) (electronic copy only).
- g. An analysis and evaluation of the comprehensive effectiveness of the environmental monitoring program including recommendations to enhance and refine the EMP (*e.g.*, the addition or deletion of wells from the plan, changes in sampling frequency at a well, or changes in contaminants of concern).
- h. An updated table(s) containing the information in Part IV.A.3.d. The table shall also indicate the recommendations made in Part IV.A.11.g.
- i. ADaPT quality assurance electronic files per Part IV.A.10.

Part IV Subpart B - Specific Monitoring Conditions for the Open Burn and Open Detonation Units

1. The facility shall continue the detection monitoring program in accordance with 40 CFR 264.98.
2. The Permittee shall implement a groundwater monitoring program by sampling the wells most representative of the groundwater quality at the Waste Management Areas encompassing the Open Burn and Open Detonation Units, as approved by the Department based on the groundwater monitoring requirements pursuant to this Subpart.
3. The Waste Management Areas shall be designated by imaginary lines circumscribing the Open Burn and Open Detonation Units shown on Attachment F of this permit.
4. The Point-of-Compliance (POC) as defined under 40 CFR 264.95(a) shall be an imaginary vertical surface at the down gradient boundary of the Waste Management Areas and shall extend down into the uppermost aquifer.
5. The POC wells and background wells shown in Attachment F of this permit are specified as follows:
 - a. MW-3, MW-4, MW-5, and MW-6 are POC wells.
 - b. MW-1 and MW-2 are background wells.
6. The Permittee shall sample each POC Well and Background Well listed in Condition 5 of this part during the months of May and November of each year for the constituents listed in Part IV Subpart D Condition 1.
7. The Permittee shall submit an Environmental Monitoring Report for the May groundwater sampling event no later than the last day of July. The Environmental Monitoring Report for the November sampling event shall be submitted no later than the last day of January.
8. The Environmental Monitoring Report shall contain the following elements:

- a. A map showing location of monitoring wells, piezometers, solid waste management units, and waste management areas;
 - b. Reports of any necessary repairs or redevelopment of the wells since the last report;
 - c. The Permittee's analysis and evaluation of the current data and comprehensive effectiveness of the monitoring program;
 - d. Maps of groundwater flow direction(s) and plume delineation(s) (if any) and a table of groundwater elevation data;
 - e. Field logs;
 - f. Current laboratory analytical data sheets; and
 - g. An updated monitoring well table and accompanying text detailing recommendations, if necessary, based on the evaluation of the monitoring programs effectiveness, for modifications to the monitoring program, including the Sampling and Analysis Plan. Modifications may include the addition of new wells, abandonment of existing wells, changes in sampling frequency, or changes in contaminants of concern. All recommendations must be approved by the Department in writing.
9. If groundwater elevation monitoring indicates a change in groundwater flow direction, recommendations for the installation of additional monitoring wells and any other necessary revisions to the Groundwater Monitoring Plan should be submitted with the Environmental Monitoring Report.
10. The Permittee shall utilize the statistical analysis outlined in the EPA guidance document entitled Statistical Analysis of Ground-water Monitoring Data at RCRA Facilities, Unified Guidance dated March 2009, or other pre-approved methodology, to compare the POC Wells with either their respective cleanup target levels or background concentrations to make a determination that evidence of contamination exists for any constituent detected during the sampling required by this Subpart.
11. All POC wells and background wells shall be sampled until the Department accepts the Certification of Closure.

Part IV Subpart C - Specific Soil Monitoring Requirements for the Open Burn and Open Detonation Units

1. The Permittee shall implement a soil monitoring program and sample the soil locations most representative of the soil quality at the Waste Management Areas encompassing the Open Burn and Open Detonation Units, as approved by the Department based on the soil monitoring requirements of this subpart.
2. The soil sampling locations shall be a depth of six inches below ground surface at the Open Detonation Unit as shown in Attachment H of this permit.
3. The Permittee shall sample the soil sampling points specified in Condition 2 of this subpart once each year during the month of May for each constituent specified in Part IV Subpart D Condition 2.
4. The Permittee shall submit a Soil Monitoring Report for the May soil sampling event no later than the last day of July.

Part IV Subpart D - Soil and Groundwater Cleanup Target Levels

1. The Groundwater Cleanup Target Levels (GCTLs) for the contaminants of concern sampled at the Waste Management Areas specified in Part IV Subpart B are listed in the following Table:

<u>Analyte</u>	<u>Units</u>	<u>GCTL</u>
HMX (Octahydro-1,3,5,7-tetra-nitro-1,3,5,7-tetrazocine)	µg/L	350
RDX (hexahydro-1,3,5-tri-nitro-1,3,5-triazine)	µg/L	0.3
1,3,5-trinitrobenzene (1,3,5-TNB)	µg/L	210
methyl-2,4,6-trinitrophenylnitramine	µg/L	70
1,3-dinitrobenzene (1,3-DNB)	µg/L	0.7
nitrobenzene	µg/L	3.5
2,4,6-trinitrotoluene (2,4,6-TNT)	µg/L	1.2
4-amino-2,6-dinitrotoluene (4-Am-DNT)	µg/L	PQL
2-amino-4,6-dinitrotoluene (2-Am-DNT)	µg/L	PQL
2,4-dinitrotoluene (2,4-DNT)	µg/L	0.05
2,6-dinitrotoluene (2,6-DNT)	µg/L	0.05
2-nitrotoluene(2-NT)	µg/L	70
3-nitrotoluene (3-NT)	µg/L	140
4-nitrotoluene(4-NT)	µg/L	70
nitroglycerin	µg/L	PQL
PETN (pentaerythritol tetranitrate)	µg/L	PQL
nitrate	mg/L	10
nitrite	mg/L	1
sulfate	mg/L	250
diethyl phthalate	µg/L	5600
arsenic	mg/L	0.010
lead	mg/L	0.015
selenium	mg/L	0.05
potassium	mg/L	NL
titanium	mg/L	16.8
magnesium	mg/L	NL
barium	mg/L	2
vanadium	mg/L	0.049
chromium	mg/L	0.1
cadmium	mg/L	0.005
copper	mg/L	1
aluminum	mg/L	0.2
perchlorate	µg/L	4.0

µg/L = microgram per liter

mg/L = milligrams per liter

PQL = Practical Quantitation Limit: The PQL is the lowest level that can be reliably measured during routine laboratory operating conditions within specified limits of precision and accuracy.

NL = Not Listed

2. The Soil Cleanup Target Levels (SCTLs) for the contaminants of concern sampled at the Waste Management Areas specified in Part IV Subpart C are listed in the following Table:

<u>Analyte</u>	<u>Units</u>	<u>SCTL</u>	
		Residential	Commercial/Industrial
Nitrate as N	mg/kg	140,000	NL
Nitrite as N	mg/kg	8,700	220,000
Sulfate	mg/kg	NL	NL
Aluminum	mg/kg	80,000	NL
Arsenic	mg/kg	2.1	12
Barium	mg/kg	120	130,000
Cadmium	mg/kg	82	1,700
Chromium (Total)	mg/kg	210	470
Copper	mg/kg	150	89,000
Lead	mg/kg	400	1,400
Magnesium	mg/kg	NL	NL
Potassium	mg/kg	NL	NL
Selenium	mg/kg	440	11,000
Titanium	mg/kg	NL	NL
Vanadium	mg/kg	67	10,000
1,3-Dinitrobenzene	mg/kg	5.8	64
2,4-Dinitrotoluene	mg/kg	1.2	4.3
2,6-Dinitrotoluene	mg/kg	1.2	3.8
Nitrobenzene	mg/kg	18	140
Nitroglycerin	mg/kg	27	54
1,3,5-Trinitrobenzene	mg/kg	2,000	26,000
2,4,6-Trinitrotoluene	mg/kg	28	97
HMX	mg/kg	NL	NL
RDX	mg/kg	7.7	28
Tetryl	mg/kg	NL	NL
2-Nitrotoluene	mg/kg	400	3,300
3-Nitrotoluene	mg/kg	640	4,700
4-Nitrotoluene	mg/kg	750	12,000
4-Amino-2,6-dinitrotoluene	mg/kg	NL	NL
2-Amino-4,6-dinitrotoluene	mg/kg	NL	NL
PETN	mg/kg	NL	NL
Diethyl phthalate	mg/kg	61000	NL

mg/kg = milligrams per kilogram

NL = Not Listed

3. The Department may modify this permit to reflect changes in Groundwater Cleanup Target Levels or Soil Cleanup Target Levels based on most current information, unless a remedy is designed and approved.

PART V - CORRECTIVE (REMEDIAL) ACTION CONDITIONS

Subpart A - General Corrective Action Conditions

1. The Conditions of this Part apply to the following.
 - a. The SWMUs and AOCs identified in Appendix A.
 - b. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other mean. As used in this Part, the terms “discover”, “discovery”, or “discovered” refer to the following.
 - (1) The date the Permittee visually observes evidence of a new SWMU or AOC.
 - (2) The date the Permittee visually observes evidence of a previously unidentified release of contaminant(s) to the environment.
 - (3) The date the Permittee receives information from a credible source of the presence of a new release of contaminant(s) to the environment.
 - c. Contamination that has migrated beyond the facility boundary, if applicable.
2. The Permittee shall comply with the notification requirements for the discovery of a new SWMU in Part I.12.c.
3. Upon notification by the Department, the Permittee shall prepare and submit a Confirmatory Sampling (CS) Work Plan for known, suspected, or newly discovered sites. The Work Plan shall be submitted within 60 calendar days of notification by the Department unless the notification letter establishes a different time frame.
 - a. The CS Work Plan shall include schedules for implementation and completion of specific actions necessary to determine whether or not contamination has occurred in any potentially affected media. In order to partly or wholly satisfy the CS requirement, previously existing data may be submitted with the work plan for the Department’s consideration.
 - b. In accordance with the schedule in the approved CS Work Plan, or no later than 60 calendar days after Department’s written approval of a CS Work Plan, the Permittee shall submit a Confirmatory Sampling Report identifying those sites that are contaminated and those sites that are not contaminated. The CS Report shall include an analysis of the analytical data to support all determinations. Based on the results of the CS Report, the Department will determine the need for further investigation at sites covered in the CS Report and notify the Permittee in writing.
4. De Minimis discharge is a release of a contaminant(s) that is removed from the soil, sediment, surface water, and groundwater to cleanup target levels or background concentrations within 30 days of discovery of the release. If the Permittee intends to treat a discharge under the De Minimis discharge provision of Rule 62-780.550 or Rule 62-780.560 F.A.C., the Permittee must meet the notification requirements of Part I.12.c, and inform the Department that a De Minimis action is underway. A De Minimis Remediation Report must be submitted to the Department within 90 days of discovery of

the release. The report must include a description of all actions taken in response to the discharge and the information required by the Interim Source Removal Report pursuant to Subsection 62-780.500(7)(a), F.A.C.

5. If contamination is confirmed by the Confirmatory Sampling Report, the Department will notify the Permittee to commence site rehabilitation in accordance with Rule 62-730.225 and Chapter 62-780, F.A.C., for all SWMUs and/or AOCs (“contaminated sites”) identified in the notification. The Permittee shall commence and complete site assessment in the manner and within the time limits set forth in Rule 62-780.600, F.A.C., unless the notification letter specifically establishes a different time frame to commence or complete site assessment. An alternative schedule can be implemented with written Department approval.
6. The Permittee shall conduct Emergency Response Actions in accordance with Subsections 62-730.225 and 62-780.500, F.A.C. The Permittee may, or upon notification by the Department, shall conduct an Interim Source Removal action in accordance with Subsections 62-730.225 and 62-780.500 F.A.C. for any release, SWMUs, or AOCs determined necessary to minimize or prevent further migration of contaminants or to limit human or environmental exposure to contaminants.
7. If the Department or the Permittee at any time determines that any approved work plan no longer satisfies the requirements of Rule 62-730.225 or Chapter 62-780, F.A.C. or this permit for prior or continuing releases of contaminant(s) to the environment, the Permittee shall submit an amended work plan to the Department within 60 calendar days of such determination.

PART VI -REMEDY SELECTION AND IMPLEMENTATION

Part VI Subpart A - General Remedy Selection and Implementation Conditions

1. Within 90 calendar days of Department approval of a Site Assessment Report or Site Assessment Report Addendum the Permittee shall submit a Remedial Action Plan developed in accordance with Chapters 62-780 and 62-730, F.A.C. Remedial Action Plans may be performance based, including remediation options to be implemented based on changing conditions at the site.
2. The Permittee shall apply for a permit modification in accordance with Part I.22. of this permit within 30 days of a Department approved final remedy unless an alternative permit modification schedule has been approved by the Department. Final approval of remedial action which is achieved through interim measures shall be in accordance with this condition.
3. The Remedial Action Plan shall include a provision for the Permittee to submit periodic Remedial Action Status Reports in accordance with Subsection 62-780.700(12), F.A.C. The intent to implement a different approved remedy in a performance based Remedial Action Plan can be provided in the Remedial Action Status Report. Proposals to modify a previously approved remedy in a performance based Remedial Action Plan can be provided in the Remedial Action Status Report and implemented with written

Department approval. The Remedial Action Status Reports may be combined with any Environmental Monitoring Report required by Part IV.

4. When site rehabilitation (remedial action) is complete, the Permittee shall submit to the Department a Site Rehabilitation Completion Report in accordance with Subsection 62-780.750(6), F.A.C. Site Rehabilitation Completion Reports can be part of a combined document with the Remedial Action Status Report.
5. For site rehabilitation involving the cleanup of groundwater contaminated by a release from a designated regulated unit, the Permittee must demonstrate that the concentration of constituents of concern remain below cleanup goals for three consecutive years after active remediation has ceased as per 40 CFR 264.100.(f).
6. When appropriate, the Department will approve completion of site rehabilitation by inclusion in a permit renewal, permit modification, or separate Site Rehabilitation Completion Order.

Part VI Subpart B-Selected Remedies

1. The selected remedies for SWMU/AOC are:

List of SWMUs Requiring Monitored Natural Attenuation with Institutional Controls Prohibiting Groundwater Access		
SWMU Number	SWMU Name	Basis for Determination
SWMU C032	Fire Training Area 1	Statement of Basis, Aug 2002
SWMU C037	Space Launch Complex 12	Statement of Basis, Aug 2002
SWMU C200	Lighthouse Area	Statement of Basis, July 2013
List of SWMUs Requiring Institutional Controls Restricting Access to Soils		
SWMU Number	SWMU Name	Basis for Determination
SWMU C043	Space Launch Complex 20	Statement of Basis, Aug 2002
SWMU C047	Space Launch Complex 41	Statement of Basis, Aug 2002
SWMU C049	Heavy Equipment Shop	Statement of Basis, Aug 2002

List of SWMUs Requiring Institutional Controls Restricting Access to Soils (Groundwater being Managed Under Hangar K [SWMU C022] Plume)		
SWMU Number	SWMU Name	Basis for Determination
SWMU C006	Facility 1798	Statement of Basis, Aug 2002
SWMU C048	Hangar U	Statement of Basis, Aug 2002
SWMU C076	Hangar M	Statement of Basis, Aug 2002
SWMU C149	Facility 1738	Statement of Basis, Jul 2006
List of SWMUs Requiring Institutional Controls Restricting Access to Soils (Groundwater being Managed Under Facility 60600 [SWMU C148] Plume)		
SWMU Number	SWMU Name	Basis for Determination
SWMU C028	Waste Etchant Underground Tank	Statement of Basis, Aug 2002
List of SWMUs Requiring Institutional Controls Restricting Access to Soils and Groundwater with Monitored Natural Attenuation of Groundwater		
SWMU C020	NOTU Support, Acid Neutralization Pit	Statement of Basis, Aug 2002
SWMU C025	Landfill 1	Statement of Basis, Aug 2002
SWMU C036	Space Launch Complex 1	Statement of Basis, Aug 2002
SWMU C042	Space Launch Complex 19	Statement of Basis, Aug 2002
SWMU C050	Space Launch Complex 36	Statement of Basis, Aug 2002
SWMU C057	Fuel Storage Area #1	Statement of Basis, Feb 2006
SWMU C088	Former Fire Fighting Station	Statement of Basis, Aug 2002 –FDEP letter (04 Jan 2012) concurred with Annual Report recommending NFA for GW and SW; remaining concerns limited to soil
SWMU C153	Explosive Safe Area (ESA) 60	Statement of Basis, Apr 2007
SWMU C154	Hangar C	Statement of Basis, Jul 2006

List of SWMUs with Active Remedies		
SWMU Number	SWMU Name	Remedy Description and Basis for Determination
SWMU C021	Facility 1381, Acid Neutralization Pit	Statement of Basis, Apr 2005 – Steam and iron enhanced soil mixing (completed) followed by Monitored Natural Attenuation; Operation of plume control system; Land Use Controls
SWMU C022	Hangar K Area	Statement of Basis, Jun 2010 – Enhanced bioremediation, initially including emulsified zero-valent iron and emulsified vegetable oil injection (completed); followed by Monitored Natural Attenuation, Operation of plume control system; Land Use Controls
SWMU C030	Space Launch Complex 15	Statement of Basis, Aug 2002 – Steam and iron enhanced soil mixing (completed) followed by Monitored Natural Attenuation; Land Use Controls
SWMU C033	Fire Training Area #2	Statement of Basis, Aug 2006 – Monitored Natural Attenuation; Operation of plume control system; Land Use Controls
SWMU C038	Space Launch Complex 13	Statement of Basis, Apr 2005 – Demolition and disposal in C&D landfill of PCB-paint-laden launch structures (completed); soil excavation and removal (completed); chemical oxidation with ozone (completed) followed by Monitored Natural Attenuation; Land Use Controls
SWMU C046	Space Launch Complex 40	Statement of Basis, Jun 2006 – Soil removal (completed); Land Use Controls
SWMU C055	Space Launch Complex 17	Statement of Basis, Apr 2005 – Monitored Natural Attenuation remedy while complex still active; following deactivation in 2011 emulsified vegetable oil injection performed (completed); soil removal (completed); continued Monitored Natural Attenuation; Land Use Controls
SWMU C056	Space Launch Complex 37	Statement of Basis, Apr 2005 – Ozone injection (completed) followed by Monitored Natural Attenuation; soil removal (completed) Land Use Controls
SWMU C091	Security Police Confidence Course	Statement of Basis, Apr 2005 – Steam and iron enhanced soil mixing (completed) followed by Monitored Natural Attenuation; Land Use Controls
SWMU C148	Facility 60600 Area	Statement of Basis, Apr 2005 – Biostimulation within 4,000 µg/L DCE contour (completed) followed by Monitored Natural Attenuation; Treatment of Canoe Launch Rd Canal discharges to Banana River Lagoon until flow re-routed to industrial area storm water system (completed); Land Use Controls

SWMU C150	Facility 38320 Area	Statement of Basis, Aug 2009 – Enhanced Monitored Natural Attenuation; Land Use Controls
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2. The Permittee may modify the approved remedy with written Department approval. Designs for modification must be signed and sealed by a Professional Engineer and submitted to the Department at least 60 days prior to proposed implementation.
3. A Corrective Action Management Plan (CAMP), encompassing a two-year “rolling” window specifies due dates for plans and reports (draft and final) required to plan and document the corrective action process for each SWMU.
 - a. The CAMP is updated at least annually. With adequate justification, additional modifications may be negotiated with the FDEP Remedial Project Manager on a case-by-case basis.
 - b. Site-specific schedules documented in the CAMP take precedence over general schedules specified in Parts V and VI of this permit.

APPENDIX A-SUMMARY OF FACILITY SITES - SOLID WASTE MANAGEMENT UNITS (SWMUS) AND AREAS OF CONCERN (AOCs)

A.1 List of SWMUs / AOCs requiring Confirmatory Sampling				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
C041	SLC-18 (Ref Fac: 24401)	MOD for NFA (Apr 2003); Re-opened to address paint-related contamination	1950 - 1967	SO
C045	SLC-31/32 (Ref Fac: 17700)	MOD for NFA (Apr 2003); Re-opened to address paint-related contamination	1955 - 1970	SO
C053	SLC-5/6 (Ref Fac: 01207)	NFA per CS (May 1998); Re-opened to address paint-	1953 - 1963	SO

		related contamination		
C127	Command Control (Ref Fac: 81585, 81550)	SI Report and NFRAP DD (Sep 1994); Re-opened to address paint-related contamination	1959-present	SO
C227	Greenhouse Area at Port (Ref Fac: 1064, 88900, 88965)	Concentrations exceed CCTLs per Supplemental Sampling (Dec 2012)	1963-present	SO, GW
C237	Microwave Tower (Ref Fac: 34515)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1964 - present	SO
C238	SLC-40 Camera Tower, South (Ref Fac: 33011)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1967 - present	SO
C239	SLC-40 Camera Tower, North (Ref Fac: 47144)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1967 - present	SO
C240	Former Paint Crew Trailer (incl Haz Waste Staging Area) (Ref Fac: 70664/69)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1990 - 2007	SO
C241	Electrical Switch (Ref Fac: 56615)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1960 - 1990s	SO, GW
C242	Transformer Vault (Ref Fac: 210)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1952 - present	SO

		2013)		
C243	Electric Substation (Ref Fac: 1305PP)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1960 - 1970s	SO
C244	Electrical Switch (Ref Fac: 11610)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1966 - 2003	SO
C245	Transformer at North Corner of Hangar U (Ref Fac: 49510)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1957 - present	SO
C246	POL Building (Ref Fac: 70018)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1993 - present	SO
C247	Transformer at Mark IV Checkout Building (Ref Fac: 67213)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1962 - present	SO
C248	SLC-41 Camera Tower, South (Ref Fac: 29166)	Concentrations exceed CCTLs per CS Report (Mar 2013)	1963-present	SO
C249	SLC-41 Camera Tower, North (Ref Fac: 29167)	Concentrations exceed CCTLs per CS Report (Mar 2013)	1963-present	SO
C250	Transformer at SLC-25/29 (Ref Fac: 52004)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1960 - Present	SO, GW
C251	Transformer at SLC-1/2/3/4 (Ref Fac: 02810)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1955 - Present	SO
C252	Transformer at	Concentrations	1958 - Present	SO

	SLC-21/22 (Ref Fac: 5953)	exceed CCTLs per Compliance CS Report (Sep 2013)		
C253	Transformer at SLC-30 (Ref Fac: 56920)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1960 - Present	SO, GW
C254	Transformer at SLC-30 (Ref Fac: 56922)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1960 - Present	SO
C255	Transformers in Hangar Y Area (Ref Fac: 62704-5)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1968 - Present	SO
C256	Transformer in Hangar Y Area (Ref Fac: 62625)	Concentrations exceed CCTLs per Compliance CS Report (Sep 2013)	1968 - Present	SO

A.2 List of SWMUs / AOCs requiring a Site Assessment (a/k/a RCRA Facility Investigation [RFI]) or a Risk Assessment				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
C201*	Fuel Storage Area #2 - UST (Ref Fac: 80505)	Site qualifies for FAC 62-780, Petroleum Program; Assessment on-going	1964-2007	GW
C214*	Former 6,000-Gallon ASTs at Heating Plant (Ref Fac: 01715A, 01715B)	Site qualifies for FAC 62-780, Petroleum Program; Assessment on-going	1956-1970s	GW

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A.3 List of SWMUs / AOCs requiring a Remedial Action Plan or Natural Attenuation with Monitoring Plan (a/k/a RCRA Corrective Measures Study [CMS])				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
C040	SLC-16 (Ref Fac: 13112)	Original Statement of Basis (Aug 2002); Site re-opened due to newly-identified contamination	1959 - 1964	SO, GW, SW
C054	SLC-34 (Ref Fac: 21934)	Note: Site added to Kennedy Space Center HSWA Permit; NASA is responsible for investigation/cleanup	1959-1968	SO, GW

A.4 List of SWMUs / AOCs implementing a Remedial Action Plan or Natural Attenuation Monitoring Plan (a/k/a Corrective Measures Implementation [CMI])				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
C006	Cape Main STP Area (Ref Fac: 01798)	Statement of Basis (Aug 2002)	1955 - present	SO
C020	NOTU Support, Acid Neutralization Pit (Ref Fac: 84920)	Statement of Basis (Aug 2002)	1963 - 1972	GW, SO
C021	Acid Neutralization Pit (Ref Fac: 01381)	Statement of Basis (Apr 2005)	1968 - 1977	GW
C022	Hangar K Area-- Metal Cleaning Shop (Ref Fac: 60425)	Statement of Basis (Jun 2010)	1957 - present	GW, SO, SW

C025	Landfill #1	Statement of Basis (Aug 2002)	1950 - 1968	GW, SO
C028	Waste Etchant UST (Ref Fac: 01708)	Statement of Basis (Aug 2002)	1961 - 1973	SO
C030	SLC-15-- Bilge Water Treatment (Ref Fac: 10830)	Statement of Basis (Aug 2002)	1957 - 1988	GW, SO
C033	Fire Training Area #2 (Ref Fac: 54500)	Statement of Basis (Aug 2006)	1965 - 1980	GW, SW
C035*	Fuel Spill (Ref Fac: 44501)	Site qualifies for FAC 62-780, Petroleum Program. Monitoring on-going (Natural attenuation approval order dated 23 Feb 2001)	1959 - present	GW
C036	SLC-11 (Ref Fac: 01567)	Statement of Basis (Aug 2002)	1957 - 1967	GW, SO
C037	SLC-12 (Ref Fac: 01676)	Statement of Basis (Aug 2002)	1957 - 1967	GW, SW
C038	SLC-13 (Ref Fac: 08808)	Statement of Basis (Apr 2005)	1956 - 1978	GW, SO
C042	SLC-19 (Ref Fac: 15730)	Statement of Basis (Aug 2002)	1950-Present	GW, SO
C043	SLC-20 (Ref Fac: 18800)	Statement of Basis (Aug 2002)	1950s-1966	SO
C046	SLC-40 (Ref Fac: 47105)	Statement of Basis, Jun 2006	1964 - present	SO
C047	SLC-41 (Ref Fac: 29102)	Statement of Basis (Aug 2002)	1964 - present	SO
C048	Hangar U (Auto Shop) (Ref Fac: 01744)	Statement of Basis (Aug 2002)	1957 - present	SO
C049	Heavy	Statement of Basis	1950s - present	SO

	Equipment Shop (Ref Fac: 49835)	(Aug 2002)		
C050	SLC-36 (Ref Fac: 5501)	Statement of Basis (Aug 2002)	1961 - present	GW, SO
C055	SLC-17 (Ref Fac: 28401)	Statement of Basis (Apr 2005)	1957 - present	GW, SO
C056	SLC-37 (Ref Fac: 33000)	Statement of Basis (Apr 2005)	1961 - 1971	GW, SO
C057	Fuel Storage Area #1 (Ref Fac: 01047)	Statement of Basis, Feb 2006	1950s - present	GW, SO
C076	Hangar M Area (Ref Fac: 01731)	Statement of Basis (Aug 2002)	1957 - present	SO
C088	Fire Station (Ref Fac: 01608)	Statement of Basis (Aug 2002); FDEP letter (04 Jan 2012) concurred with Annual Report recommending NFA for GW and SW	1968 - present	SO
C091	Security Police Confidence Course (Ref Fac: 18003)	Statement of Basis (Apr 2005)	1955 - present	GW
C131*	Auxiliary Power (Ref Fac: 01740)	Site qualifies for FAC 62-780, Petroleum Program; Long Term Monitoring on-going	1953-present	GW
C134*	Base Cafeteria (Ref Fac: 01748)	Site qualifies for FAC 62-780, Petroleum Program; Long Term Monitoring on-going	1958-present	GW
C135*	Diesel UST Location (Ref Fac: 29155)	Site qualifies for FAC 62-780, Petroleum Program; Long Term Monitoring on-going	1966-present	GW

C143*	Fuel Storage Area #1--RP/JP	Site qualifies for FAC 62-780, Petroleum Program - Site added to Kennedy Space Center HSWA Permit; NASA is responsible for investigation/cleanup	1955-present	GW
C157*	Trident Pre-Treatment Facility (Ref Fac: 62720)	Site qualifies for FAC 62-780, Petroleum Program; Long Term Monitoring on-going	1995 - present	GW
C148	Civil Engineer Administration Building (Ref Fac: 60600)	Statement of Basis (Apr 2005)	1958 - present	GW, SO, SW
C149	Storage, Facility 1738 (Ref Fac: 01738)	Statement of Basis (Jul 2006)	1955-2005	SO
C150	Facility 38320 Area (Ref Fac: 38320)	Statement of Basis (Jul 2009)	1962-present	GW
C153	Substation Transformer, Facility 59921, ESA-60 Area (Ref Fac: 59921)	Statement of Basis (Apr 2007)	1964-2005	GW
C154	Hangar C and Substation Transformer at Facility 7802 (Ref Fac: 07802)	Statement of Basis (Jul 2006)	1953-present	GW
C160*	Former Diesel USTs at Tech Support Facility (Ref Fac: 34706)	Site qualifies for FAC 62-780, Petroleum Program; Long Term Monitoring on-going	1957-1992	GW
C200	Lighthouse Area	Statement of Basis (Jul 2013)	1893-present	GW

	(Ref Fac: 07700)			
C233*	Hangar AH - Transformer (Ref Fac: 63000)	Site qualifies for FAC 62-780, Petroleum Program; Assessment on- going	1968 - present	GW

A.5 List of SWMUs / AOCs at which Site Rehabilitation Completion Determinations With Controls have been made			
SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA	Dates of Operation
There are no units identified at this time at which Site Rehabilitation Completion Determinations with controls have been made.			

A.6 List of SWMUs / AOCs at which Site Rehabilitation Completion Determinations Without Controls have been made			
SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA	Dates of Operation
C001	Beach Disposal, Pump Station North of SLC-46 (Ref Fac: 01515)	SI and NFRAP DD (Sep 1997)	1951 - early 1960s
C002	Acid Neutralization Pit (Ref Fac: 80500)	As determined by the USEPA RFA (Jun 1989)	mid 1960's - 1980
C003	Alkaline Detergent Discharge (Ref Fac: 01744)	As determined by the USEPA RFA (Jun 1989)	1954 - 1970
C004	Spray Irrigation Field (Ref Fac: 66250)	Operation under FDEP Wastewater Permit# IO05-95313. NFA As determined by the USEPA RFA (Jun 1989)	1981 - present
C005	Trident STP (Ref Fac: 62879)	MOD/IMs Report (Mar 1999)	1962 - present
C007	Sludge Incinerator	Operations under FDEP Permit # A005-76479.	1978-1986

		NFA As determined by the USEPA RFA (Jun 1989)	
C008	CCAFAFS Boiler (Ref Fac: 55055)	As determined by the USEPA RFA (Jun 1989). Later Petroleum investigations closed out with 17 Mar 2000 SRCO	1972 - 1977
C009	Used Oil Storage Areas	As determined by the USEPA RFA (Jun 1989)	unknown
C010	Oil/Water Separators (Ref Fac: Various)	As determined by the USEPA RFA (Jun 1989)	unknown
C011	Hypergolic Propellants Incinerator (Ref Fac: 80700)	Operations under FDEP Permit # A005-223629. NFA As determined by the USEPA RFA (Jun 1989)	1962-present
C012	Hangar U-- Drum Storage Area, (Ref Fac: 54810)	Operations under FDEP Permit # HO05-185569. NFA As determined by the USEPA RFA (Jun 1989)	1984 - 1995
C013	Drum Storage Area, Sandblast/Paint shop (Ref Fac: 44632)	Operations under FDEP Permit # HO05-185569. NFA As determined by the USEPA RFA (Jun 1989)	1984 - 1995
C014	Hangar D-- Drum Storage Area (Ref Fac: 55123)	Operations under FDEP Permit # HO05-185569. NFA As determined by the USEPA RFA (Jun 1989)	1984 - 1995
C015	Former Hazardous Waste Storage Area North of Trident Pier (Ref Fac: 01110)	PA #2 (Aug 1992)	1980 - 1983
C016	Generator Shop (Ref Fac: 44625)	As determined by the USEPA RFA (Jun 1989). Subsequently assessed under petroleum program, but closed out under SRCO	1958 - present

		(27 Aug 1997)	
C017	90-Day Accumulation Areas (Ref Fac: Various)	Operations under FDEP Permit # HO05-185569. NFA as determined by the USEPA RFA (Jun 1989)	unknown
C018	Satellite Accumulation Areas (Ref Fac: Various)	Operations under FDEP Permit # HO05-185569. NFA as determined by the USEPA RFA (Jun 1989)	unknown
C023	Sandblasting Area (Ref Fac: 44631)	SI Report and NFA Planned DD (Mar 1996)	1953 - present
C024	Launch Complex 34-- Waste Oil Recovery Unit (Ref Fac: 18410)	Site qualifies for FAC 62-780, Petroleum Program. Overall investigations for entire launch complex carried out under SWMU C054 (by NASA)	1971 - present
C029	UST and Soakage Pit (Ref Fac: 55005)	Remedial Investigation/Feasibility Study, Vol 7, Rev. 1 (Mar 1997); MOD for NFA (Apr 2003)	1962 - 1982
C031	Fuel Spill (Ref Fac: 01723)	Site closed under SRCO (25 Mar 1996)	1957
C032	Fire Training Area #1 (Ref Fac: SLC-46)	Site closed under SRCO (23 May 2012)	1954 - 1965
C034	Bulk POL Storage Area (Ref Fac: 01743)	Site closed under SRCO (14 Jul 1999)	1955 - 1995
C039	SLC-14 (Ref Fac: 01684)	MOD Report, Rev. 2, Jun 2003; MOD for NFA (Aug 2003)	1956 - 1979
C044	SLC-25/29 (Ref Fac: 52001)	MOD for NFA (Aug 2003)	1958 - 1986
C051	Non-Destruct Test Lab (Ref Fac: 77375)	MOD Report and No Further Remedial Action Planned DD (Feb 1998); MOD for NFA (Apr 2003)	1961 - present
C052	Area 55 (Ref Fac: 01305)	Site closed under SRCO (28 Jun 2012)	1956 - present
C058	Hangar AF Area	MOD Report (Oct	1957 - present

	(Ref Fac: 66250)	2002); MOD for NFA, Apr 2003 (Groundwater issues deferred to the source of contamination - SWMU C148)	
C059	Hangar S & SCAPE Suit Maintenance Building (Ref Fac: 66220)	CS Report, Dec 2001 (Groundwater issues deferred to the source of contamination - SWMU C022)	1960s - present
C060	SLC-1/2/3/4 (Ref Fac: 04100)	SI Report and NFRAP DD (Jul 2000)	1950 - 1960
C061	SLC-21/22 (Ref Fac: 5951)	SI Report and NFRAP DD (Oct 1996)	1958 - 1963
C062	NRC Storage Building (Ref Fac: 06011)	SI Report and NFRAP DD, Vol 5, Rev.1 (Mar 1996)	1953 - present
C063	POL Area, ITL (Ref Fac: 70528)	SI Report and NFRAP DD, Vol 9, Rev.1 (Mar 1996)	1969 - present
C064	Transformer Maintenance Building (Ref Fac: 55118)	SI Report and NFRAP DD, Vol 6, Rev.1 (Mar 1996)	1951 - present
C065	Trident Wharf (Ref Fac: 79100)	MOD, Rev. 2, Apr 2003; MOD for NFA (Apr 2003)	1976 - present
C066	Flammable Liquid Storage Site (Ref Fac: 92017)	MOD – Phase 2 (Oct 2000)	1981 - present
C067	Former LOX Plant Area (Ref Fac: 85200)	MOD, Rev 1 (Aug 2003); MOD for NFA (Jun 2005)	1958 - present
C068	Hangar I (Ref Fac: 01711)	MOD and NFA Recommendation (May 1996). Petroleum issues investigated as SWMU C092	1955 - present
C069	Hazardous Waste and Materials Storage Area (Ref Fac: 91903)	CS Report, Vol 23, Rev. 1 (Jan 1998)	1960 - present
C070	Creosote Treated Pole Storage Yard	SI Report and NFRAP DD, Vol 26, Rev.1 (Sep 1997)	mid 1950s - present
C071	Hangar H Area (Ref Fac: 01604)	CMS Report, Addendum 1 (Feb 2003); MOD for NFA	1956 - present

		(Jun 2005) (groundwater incorporated into SWMU C148 monitoring program)	
C072	Field Near Facility 44200 (Ref Fac: 44200)	MOD Report (Apr 2002); MOD for NFA (Apr 2003)	pre-1965 - 1970
C073	Disposal Pit East of SLC-11	SI Report and NFRAP DD, Rev.0A (Aug 1997)	1954
C074	Aniline Area East of the NRC Building	PA #2 (Aug 1992); White Paper supporting NFA (Aug 1996)	1950s
C075	Hangar N Area (Ref Fac: 01728)	CS Report (May 1998) - basis for RCRA NFA; Site Assessment Report (Feb 2002) - basis for 28 Jan 2003 SRCO under petroleum program	1957 - present
C077	Former Pump Station West of SLC-1/2/3/4 (Ref Fac: 01542)	SI Report and NFRAP DD, Vol 20, Rev.1 (Sep 1997)	1951 - early 1960s
C078	Heating Plant Area (Ref Fac: 01723)	SI Report, Vol. 8, Rev. 0, Dec 1994 (Petroleum contamination addressed under separate SWMU – SWMU C031)	1967 - present
C079	Hangar E Area (Ref Fac: 01612)	SI Report and NFRAP DD, Vol 35, Rev.1 (Mar 1996)	1956 - present
C080	Concrete Dump East of SLC-16	PA #2, Aug 1992; NFRAP DD (Apr 1994)	early 1980s - 1985
C081	Firehouse/Lighthouse Area (Ref Fac: 01360)	SI Report and NFRAP DD, Vol 18, Rev.1 (Mar 1996); originally “Firehouse/ Lighthouse Area” - Lighthouse Area subsequently separated into SWMU C200	1952 - present
C082	Former Pump Station at	PA #2 (Aug 1992);	1970s - early

	the Air Force Wharf (Ref Fac: 92050)	NFRAP DD (Apr 1994)	1980s
C083	Krypton Gas Storage Facility (Ref Fac: 49904A)	PA #2 (Aug 1992); NFRAP DD (Apr 1994)	1964 - present
C084	Pit Near Fueling Station #1	SI Report and NFRAP DD, Vol 12, Rev.1 (Mar 1996)	early 1950s
C085	Ordnance EMT (Ref Fac: 01058)	PA #2 (Aug 1992)	1959-1992
C086	Former Missile Storage Area (Missile Boneyard)	PA #2 (Aug 1992); NFRAP DD (Apr 1994)	1960s
C087	Former Gas Station North of Facility 62615 (Ref Fac: 62615)	SI Report and NFRAP DD, Vol 41, Rev.1 (Mar 1996)	pre 1950 - 1958
C089	Skid Strip Road Parking Pad	CS Report, Volume 26, Rev.1 (Jan 1998)	1960s - 1970s
C090	SLC-46 (Ref Fac: 03100)	CS Report and NFRAP DD (Jan 1996)	1985 - present
C092	Hangar I (Ref Fac: 01711)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (26 Jun 1997)	1955 - present
C093	SLC-5/6 Spin Test Area (Ref Fac: 41301)	CS Report and NFRAP DD (Feb 1998)	1954 - present
C094	Observation Road Waste Dump Area	CS Report and NFRAP DD (Feb 1998)	1956 - unknown
C095	VIB Area (Ref Fac: 70500)	MOD Report, Apr 1999; MOD for NFA (Apr 2003)	1964 - present
C096	Locomotive Refurbishment Shop (Ref Fac: 70650)	CS Report and NFRAP DD (May 1996)	1964 - present
C097	Transporter Refurbishing Area & Paint Shop (Ref Fac: 70655)	CS Report and NFRAP DD (May 1996)	1964 - present
C098	Former Pond East of SMARF	CS Report and NFRAP DD (Feb 1998)	1964 - 1991
C099	Azusa Antenna Field (Ref Fac: 19500)	CS Report and NFRAP DD (Feb 1998)	1954 - 1983
C100	Former Storage & Concrete Plant near 44200 (Ref Fac: 44200)	PA #3 (May 1997)	1950s - 1960s
C101	Water Pump Station #1	CS Report, Vol 23,	1958 - present

	(Ref Fac: 40906)	Rev.1 (Jan 1998)	
C102	Portable Generator Shop (Ref Fac: 07800)	CS Report and NFRAP DD (Feb 1998)	1957 - present
C103	Diesel UST Location (Ref Fac: 01635)	Site qualifies for FAC 62-780, Petroleum Program. Closed out per Contamination Assessment Report (Feb 1993) and Addendums (Mar 1994, Jun 1998)	1954 - 1992
C104	Interim Explosives Disposal Area (Ref Fac: 43520)	CS Report and NFRAP DD (Feb 1998)	1960s - early 1980s
C105	Jupiter Missile Crash Site	CS Report and NFRAP DD (Feb 1998)	1959 or 1960
C106	Former Pesticide Shop (Ref Fac: 01635)	CS Report and NFRAP DD (May 1996)	1954 - 1993
C107	TV Skyscreen Building (Ref Fac: 42911)	CS Report and NFRAP DD (Feb 1998)	1964 - 1980
C108	Patrol Road Chemical Waste Dumping Area	SI Report and NFRAP DD, Vol 25, Rev.1 (Feb 1996)	unknown
C109	Cleared Area South of Paint Storage Facility 1778 (Ref Fac: 01778)	PA #3 (May 1997); No identified industrial use or impacts	NA
C111	Blue Scout STP (Ref Fac: 50701)	Operated under FDEP Permit # DO05-189680	1963 - 1996/97
C112	SLC-17 STP (Ref Fac: 36007)	Operated under FDEP Permit # DO05-189680	1970 - 1996/97
C113	SLC-36 STP (Ref Fac: 5516)	Operated under FDEP Permit # DO05-201663	1976 - 1996/97
C114	SLC-40 STP (Ref Fac: 47125)	Operated under FDEP Permit # DO05-197243	1964 - 1996/97
C115	SLC-41 STP (Ref Fac: 29133)	Operated under FDEP Permit # DO05-197241	1965 - 1996/97
C116	MAB STP (Ref Fac: 55860)	Operated under FDEP Permit # DO05-195237	1961 - 1996/97
C117	MIS STP (Ref Fac: 75252)	Operated under FDEP Permit # DO05-195238	1965 - 1996/97
C118	Missile Prop. STP (Ref Fac: 84915)	Operated under FDEP Permit # DO05-197242	1963 - 1996/97
C119	RIS STP (Ref Fac: 70582)	Operated under FDEP Permit	1965 - 1996/97

C120	ROCC STP (Ref Fac: 81800)	Operated under FDEP Permit # DO05-214341	1990 - 1996/97
C121	SMAB STP (Ref Fac: 70001)	Operated under FDEP Permit # DO05-201055	1965 - 1996/97
C122	SMARF STP (Ref Fac: 69802)	Operated under FDEP Permit # DO05-217785	1991 - 1996/97
C123	VIB STP (Ref Fac: 70455)	Operated under FDEP Permit # DO05-206195	1965 - 1996/97
C124	SLC-26 (Ref Fac: 41110)	SI Report and NFRAP DD, Vol 12, Rev.1 (Jul 2000)	1958-TBD
C125	SLC-30 (Ref Fac: 56942)	SI Report and NFRAP DD (Sep 1997)	1960s-1970s
C126	XY Building (Ref Fac: 01641)	Under RCRA: SI Report and NFRAP DD, Vol 4, Rev.0 (Nov 1994). Under Petroleum Program: SRCO issued (06 Feb 1995)	1957-present
C128	Hangar Y (Ref Fac: 01115)	SI Report and NFRAP DD (Sep 1997)	1958-present
C129	Area 59/GPS (Ref Fac: 55840)	CS Report, Vol 39, Rev 1 (Jan 1998)	1960-present
C130	Physical Standards Lab (Ref Fac: 01724)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (26 Jun 1997)	1957-present
C132	Fuel Storage Area #4 (Ref Fac: 85110)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (07 Aug 1996)	1964-present
C133	UST Location (Ref Fac: 01743)	Site qualifies for FAC 62-780, Petroleum Program. (Addressed as part of C034)	1969-1995
C136	Paint Storage UST Location (Ref Fac: 44603)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (11 May 1993)	1960-1992
C137	Standby Power Plant UST (Ref Fac: 49641)	Site qualifies for FAC 62-780, Petroleum Program; Site closed	1968-2006

		under SRCO (27 Apr 2012)	
C138	Navstar Processing Facility UST (Ref Fac: 55810)	Site qualifies for FAC 62-780, Petroleum Program. No contamination identified per Unregulated Storage Tank Removal Report (Apr 2000)	1963-2000
C139	NOTU Fueling Station (Ref Fac: 62708)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (07 Oct 2008)	1985-present
C140	Mark VI Checkout Building UST (Ref Fac: 67210)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (01 Oct 1998)	1962-1992
C141	PSF UST (Ref Fac: 55840)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (16 Mar 1995)	1960-1995
C142	Heavy Equipment Shop (Ref Fac: 49835)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (01 Aug 2000)	1950s-present
C144	SLC-25/29 (Ref Fac: 52001)	NFA approved on 28 Jan 1999 Letter based on Preliminary Contamination Assessment data (03 Nov 1998)	1958 - 1986
C145	SLC-31/32 (Ref Fac: 17700)	NFA approved on 05 Mar 1999 Letter based on Preliminary Contamination Assessment data (01 Mar 1999)	1955 - 1970
C146	Small Arms Range (Ref Fac: 18008)	CS Report and NFRAP DD (Feb 1998)	1982-present
C147	Former Pistol Range	CS Report and NFRAP	1961-1983

	(Ref Fac: 01987)	DD (Feb 1998)	
C151	Substation Transformer (Ref Fac: 44425)	CS Report (Nov 2003); MOD for NFA (Jun 2005)	1965-present
C152	Hangar F and Substation Transformer at Facility 50005 (Ref Fac: 50005)	CS Report (Apr 2004); MOD for NFA (Jun 2005)	1956-present
C155	Storage, Facility 44603 (Ref Fac: 44603)	CS Report, Rev. 1 (Feb 2005); MOD for NFA (Jun 2005)	1960-present
C156	Hangar L and Substation Transformer at Facility 54920 (Ref Fac: 54920)	CS Report, Rev. 1 (Oct 2004); MOD for NFA (Jun 2005)	1957-present
C158	Navy Port (Ref Fac: 01063)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (17 Jul 2002)	Unknown - 2000
C159	E&A Building (Ref Fac: 01733)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (28 Sep 1999)	1959-1996
C162	Sewage Lift Station (Ref Fac: 44407)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (28 Jan 2003)	1960-present
C163	Gen Shop Adm (Ref Fac: 44635)	Site qualifies for FAC 62-780, Petroleum Program; Site closed under SRCO (28 Jan 2003)	1995-present
C164	Abandoned Electrical Equipment Site (Ref Fac: 04125)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1953-unknown
C165	Pad Mounted Transformer (Ref Fac: 27204, 27222)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Jun 2005)	1966-present
C166	Substation Transformer (Ref Fac: 44522)	Final IM Report for Various Electrical	1970-present

		Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	
C167	Pad Mounted Transformer (Ref Fac: 44812)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1959-present
C168	Unknown Electrical Equipment Site (Ref Fac: 49622)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1965-present
C169	Standby Power Plan (Ref Fac: 49641)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1968-present
C170	Pole Mounted Transformer (Ref Fac: 49906)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jan 2005)	1958-present
C171	Substation Transformer and Switch (Ref Fac: 55023, 55024)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1958-present
C172	Power Station (Ref Fac: 60302)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Dec 2007)	1962-present
C173	Substation Transformer (Ref Fac: 60531)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1964-present
C174	Substation Transformer (Ref Fac: 60551)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Nov 2005)	1963-present
C175	Substation Transformer (Ref Fac: 60681)	Final IM Report for Various Electrical	1963-present

		Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	
C176	Substation Transformer (Ref Fac: 70008)	Final IM Report (Aug 2006); MOD for NFA (Sep 2006).	Unknown-present
C177	Substation Transformer (Ref Fac: 70511)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1964-present
C178	Substation Transformer (Ref Fac: 80506)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1964-present
C179	Optical Switch Site (Ref Fac: 81725)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1965-present
C180	Power Station (Ref Fac: 85300)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1953-present
C181	Substation Transformer (Ref Fac: 88905)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1958-present
C182	Pole Mounted Transformer (Ref Fac: 90505)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1958-present
C183	Substation Transformer (Ref Fac: 90515)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1958-present
C184	Substation Transformer (Ref Fac: 60652)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for	1961-present

		NFA (Jun 2005)	
C185	Substation Transformer (Ref Fac: 01709)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1957-present
C186	Substation Transformer/Oil Switch (Ref Fac: 55006)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1963-present
C187	Substation Transformer (Ref Fac: 29152)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1964-present
C188	Pad Mounted Transformer (Ref Fac: 42947)	Final IM Report for Various Electrical Equipment Sites Grp 2 (Dec 2005); MOD for NFA (Jan 2005)	1965-present
C189	Substation Transformer (Ref Fac: 44424)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1965-present
C190	Pole Mounted Transformer (Ref Fac: 44601)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Dec 2007)	1960-present
C191	Substation Transformer (Ref Fac: 49719)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1950s-present
C192	Electrical Switch (Ref Fac: 54830)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1958-present
C193	Substation Transformer (Ref Fac: 56025)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for	1963-present

		NFA (Oct 2005)	
C194	Substation Transformer (Ref Fac: 60610)	Under RCRA: Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005); Under Petroleum: SRCO (27 Apr 2012)	1956-2008
C195	Abandoned Electrical Equipment Site (Ref Fac: 61525)	Final IM Report for Various Electrical Equipment Sites Grp 2 (Dec 2005); MOD for NFA (Jan 2005)	1957-present
C196	Power Station (Ref Fac: 63805)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Dec 2005)	1964-present
C197	Substation Transformer (Ref Fac: 67904)	Final IM Report for Various Electrical Equipment Sites, Grp 1 (Oct 2005); MOD for NFA (Jun 2005)	1965-present
C198	Pad Mounted Transformer (Ref Fac: 70581)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Dec 2005)	1964-present
C199	Oil Switch (Ref Fac: 78160)	Final IM Report for Various Electrical Equipment Sites, Grp 2 (Dec 2005); MOD for NFA (Oct 2005)	1963-present
C202	Former Pump Station #4 - AST (Ref Fac: 01660C)	SI Report (Oct 2011)	1957-2007
C203	UHF Timing Distribution Tower/Van Pad (Ref Fac: 54714)	MOD for NFA (Aug 2012); SRCO (29 Apr 2013)	1964-present
C204	Former Microwave Tower at Facility 1734 (Ref Fac: 01734A)	MOD for NFA (Aug 2012); SRCO (29 Apr 2013)	1958-1974
C205	Former Wooden Antenna Tower South of Hangar AE (Ref Fac: 60690,	MOD for NFA (Aug 2012); SRCO (30 Apr 2013)	1961-1970s

	60691, 60698)		
C206	Former Incinerator at Central Security Control (Ref Fac: 01700)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1961-1969
C207	Former Industrial Area Water Tower - North (Ref Fac: 01713)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1955-present
C208	Industrial Area Water Tower - South (Ref Fac: 55124)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1958-present
C209	Former UPS Generator Building at RCC (Ref Fac: 44426)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1966-present
C210	Former 100,000-Gallon Water Storage Tank (Ref Fac: 01718)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1955-2000
C211	Paint Storage Building at Hangar J (Ref Fac: 01720)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1957-present
C212	Electric Substation at Physical Standards Lab (Ref Fac: 49740)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1957-present
C213	POL Storage Building (Former Heating Plant) (Ref Fac: 01715)	MOD for NFA (Aug 2012); SRCO (11 Jul 2014)	1956-2004
C215	Former Water Storage Tank (Ref Fac: 44545)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1956-2001
C216	Vehicle Dispatch Office (Ref Fac: 44500)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1959-present
C217	Boresight Tower (Ref Fac: 55384)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1958-present
C219	Former Antenna Building at TEL2 (Ref Fac: 01764)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1957-1996
C220	Trident Rail Unloading Ramp (Ref Fac: 69609)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1975-present
C221	Former Paint Storage Building (Ref Fac: 01778)	MOD for NFA (Jul 2012); SRCO (16 May 2013)	1957-1996
C223	Former Water Tanks at Former Pump Station #4	MOD for NFA (Aug 2012); SRCO	1957-2007

	(Ref Fac: 16300, 16301, 16302)	(11 Jul 2014)	
C224	Former Standby Equipment Storage at Radar Facility (Ref Fac: 01305BB)	MOD for NFA (Aug 2012); SRCO (01 May 2014)	1960-1981
C225	Hangar O Area (Ref Fac: 01366)	MOD for NFA (Aug 2012); SRCO (02 May 2014)	1953-present
C226	Paint Storage Facility in Port Area (Ref Fac: 90525)	MOD for NFA (Aug 2012); SRCO (02 May 2014)	1964-present
C228	DASO Support Building at Port (Ref Fac: 90518)	MOD for NFA (Aug 2012); SRCO (14 May 2014)	1964-present
C229	Army EOD Office (Ref Fac: 01622)	MOD for NFA (Jul 2012); SRCO (20 May 2013)	1955-present
C231	Maintenance Shop (Ref Fac: 01618)	MOD for NFA (Aug 2012); SRCO (15 May 2014)	1958-1997
C234	Generator Shelter (Ref Fac: 60683)	MOD for NFA (Jul 2012); SRCO (20 May 2013)	1968-present

A.7 List of SWMUs / AOCs where No Further Action Determinations have been made based on no suspected or confirmed contamination (i.e. not ‘contaminated sites’ as defined by 62-780 F.A.C.)

SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA	Dates of Operation
C019**	Landfill #2	Active landfill. Includes C&D landfill, asbestos monofill, and closed garbage cell under FDEP Permit # SO05-0026050-011, SO05-0026050-010, SF05-0026050-008.	1969 - present
C026**	Inactive EOD (Ref Fac: 15304)	Incorporated into SWMU# 27	mid-1950s - 1962
C027**	Active EOD Unit	Operations under	1962 - present

	(Ref Fac: 15304)	FDEP Permit # 0070725-HO-005	
C110**	Hazardous Waste Storage Unit (Ref Fac: 44200)	Operating under FDEP Permit # 0070725-HO-005	1995 – present
C236**	Hazardous Waste Storage Unit (Ref Fac: 44205)	Operating under FDEP Permit # 0070725-HO-005	1995-present
The complete list of SWMUs/AOCs is located in the facility’s permit application renewal.			

*Site deferred to FDEP Petroleum Program for investigation, remediation, and management

**Active unit being regulated under a current permit (as noted in “Comments”)

AST-Aboveground Storage Tank
 CAR-Contamination Assessment Report
 CCTLs-Contaminant Cleanup Target Levels
 CS-Confirmation Sampling
 DD-Decision Document
 Fac-Facility
 FS-Feasibility Study
 GW-Groundwater
 IM-Interim Measure
 LTM-Long Term Monitoring
 MOD-Memorandum of Decision
 NASA-National Aeronautics and Space Administration
 NFA-No Further Action
 NFRAP-No Further Response Action Planned

PA-Preliminary Assessment
 PCB-polychlorinated biphenyl
 POL-petroleum, oil, and lubricants
 Ref Fac-Reference Facility
 RFA-RCRA Facility Assessment
 RFI-RCRA Facility Investigation
 SAR-Site Assessment Report
 SI-Site Investigation
 SLC-Space Launch Complex
 SO-Soil
 SRCO-Site Rehabilitation Completion Order
 STP-Sewage Treatment Plant
 SW-Surface Water
 UST-Underground Storage Tank

Issued March 12, 2015

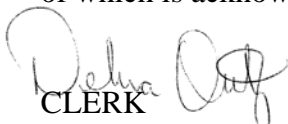
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



**TIM J. BAHR, PROGRAM ADMINISTRATOR
 PERMITTING AND COMPLIANCE ASSISTANCE PROGRAM**

Filing and Acknowledgment

Filed on this date, pursuant to Section 120.52 Florida Statutes, with the designated Clerk, receipt of which is acknowledged.



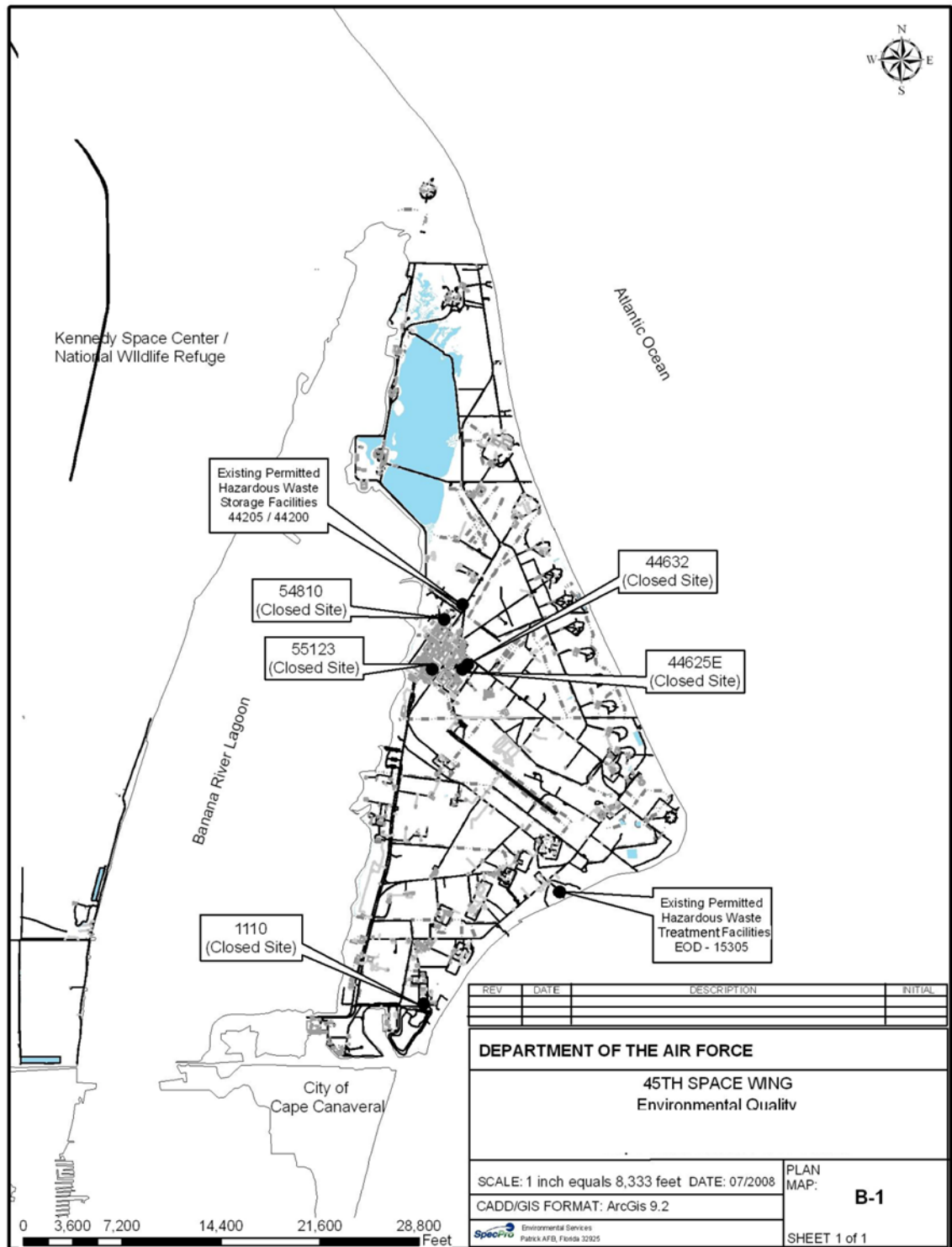
CLERK

March 12, 2015
 DATE

PERMITTEE: Cape Canaveral Air Force Station
I.D.NUMBER: FL2 800 016 121

PERMIT NUMBER: 0070725-HO-006
EXPIRATION DATE: March 3, 2020

ATTACHMENT A-FACILITY MAP



REV	DATE	DESCRIPTION	INITIAL

DEPARTMENT OF THE AIR FORCE
45TH SPACE WING
 Environmental Quality

SCALE: 1 inch equals 8,333 feet DATE: 07/2008
 CADD/GIS FORMAT: ArcGis 9.2

PLAN MAP:
B-1



Environmental Services
 Patrick AFB, Florida 32925
 SHEET 1 of 1

ATTACHMENT B-PERMITTED WASTE CODES FOR CONTAINER STORAGE 44205

Process Code	Process Design Capacity and Units of Measure	Hazardous Waste Codes	Estimated Annual Quantities (Gals)
S01	11,000 G Total		
		FOO1	2,000
		F002	4,300
		F003	520
		F004	1,000
		F005	TBD
		F006	TBD
		D001	TBD
		D002	TBD
		D003	TBD
		D004	TBD
		D005	TBD
		D006	TBD
		D007	TBD
		D008	TBD
		D009	TBD
		D010	TBD
		D011	TBD
		D016	TBD
		D018	TBD
		D019	TBD
		D021	TBD
		D022	TBD
		D023	TBD
		D024	TBD
		D025	TBD
		D026	TBD
		D027	TBD
		D028	TBD
		D029	TBD
		D030	TBD
		D032	TBD
		D033	TBD
		D034	TBD
		D035	TBD
		D036	TBD
		D037	TBD
		D038	TBD
		D039	TBD
		D040	TBD
		D043	TBD
		U002	TBD
		U003	TBD
		U080	TBD
		U098	TBD
		U133	1,000 lbs (solids only)
		U134	TBD
		U151	TBD
		U154	TBD
		U159	TBD
		U161	TBD
		U188	TBD
		U196	TBD
		U210	TBD
		U220	TBD
		U223	TBD
		U226	TBD
		U228	TBD
		U239	TBD

PERMITTEE: Cape Canaveral Air Force Station
 I.D.NUMBER: FL2 800 016 121

PERMIT NUMBER: 0070725-HO-006
 EXPIRATION DATE: March 3, 2020

Process Code	Process Design Capacity and Units of Measure	Hazardous Waste Codes	Estimated Annual Quantities (Gals)
		P068	1,000 lbs (solids only)
		P078	1,000 lbs (solids only)

ATTACHMENT B (CONT.)-PERMITTED WASTE CODES FOR CONTAINER STORAGE 44200

Process Code	Process Design Capacity and Units of Measure	Hazardous Waste Codes	Estimated Annual Quantities (Gals)
S01	3,520 G Total		
		D002	5,000
		D004	50
		D005	50
		D006	50
		D007	50
		D008	50
		D009	50
		D010	50
		D011	50

ATTACHMENT C-TYPICAL REACTIVE COMPONENTS OF ORDNANCE

Ractive Item	*NEW (lbs)	Filler	Chemical Compound	Nomenclature
.050 Cal	0.342	Smokeless Powder	Salt Peter, Charcoal, Sulfur	Cartridges, Small Arms
2.75 Motor, MK40, MOD3	8.0	Ballistite	NG 42.9, NC 51.4, Et Cetr 1.0; Potassium Sulfate 1.25, Diethylphthalate 3.23, Candellia Wax .02, Carbon 2	Rocket Motor
PWN 10	37.7	Polysulfide Fuel	Ammonium NH ₄ ClO ₄	Rocket Motor
MK 25	2.0	Red Phosphorous	P ₄	Signal, Distress
MK 6	4.0	Red Phosphorous	P ₄	Signal, Smoke
Range Safety, Linear Shape Charge	18.27 Per Shuttle	HMX	C ₄ H ₈ N ₈ O ₈	Charges, Shape Commercial
Flex Transfer Line (CDF)	0.57	PETN	C(CH ₂ ONO ₂) ₄	Charges, Explosive Commercial
Bulkhead Initiator	0.00163	PETN	Titanium, Cupric Oxide, Ti, C(CH ₂ ONO ₂) ₄	Cartridges, Power Devices
NASA Standard Initiator (NSI) (Shuttle CAD Item)	1.6	RDX Lead Acid	C ₃ H ₆ N ₆ O ₆ , Pb(N ₃) ₂	Cartridges, Power Devices
LUU 2	22	Pyrotechnic Mixture	Polymeric Binder, Sodium Nitrate, Powdered Magnesium	Flares, Aerial
M781, 40 mm Cartridge	.0022	Smokeless Powder	Salt Peter, Charcoal, Sulfur	Grenades
CCU 44	.010	Propellant	Low Explosive, Class C	Cartridges, Power Devices
MK47 Impulse Cartridge	.044	Propellant	Low Explosive, Class C	Cartridges, Power Devices
CAD	.044	Propellant	Low Explosive, Class C	Cartridges, Power Devices
BSM	1	Propellant	Ammonium Perchlorates Aluminum, HTPB Binder	Rocket Motor

Note: PWN-10, MK 25, MK 6, LUU 2, M 781, CCU 44 and MK 47 are not abbreviations but are names of reactive item

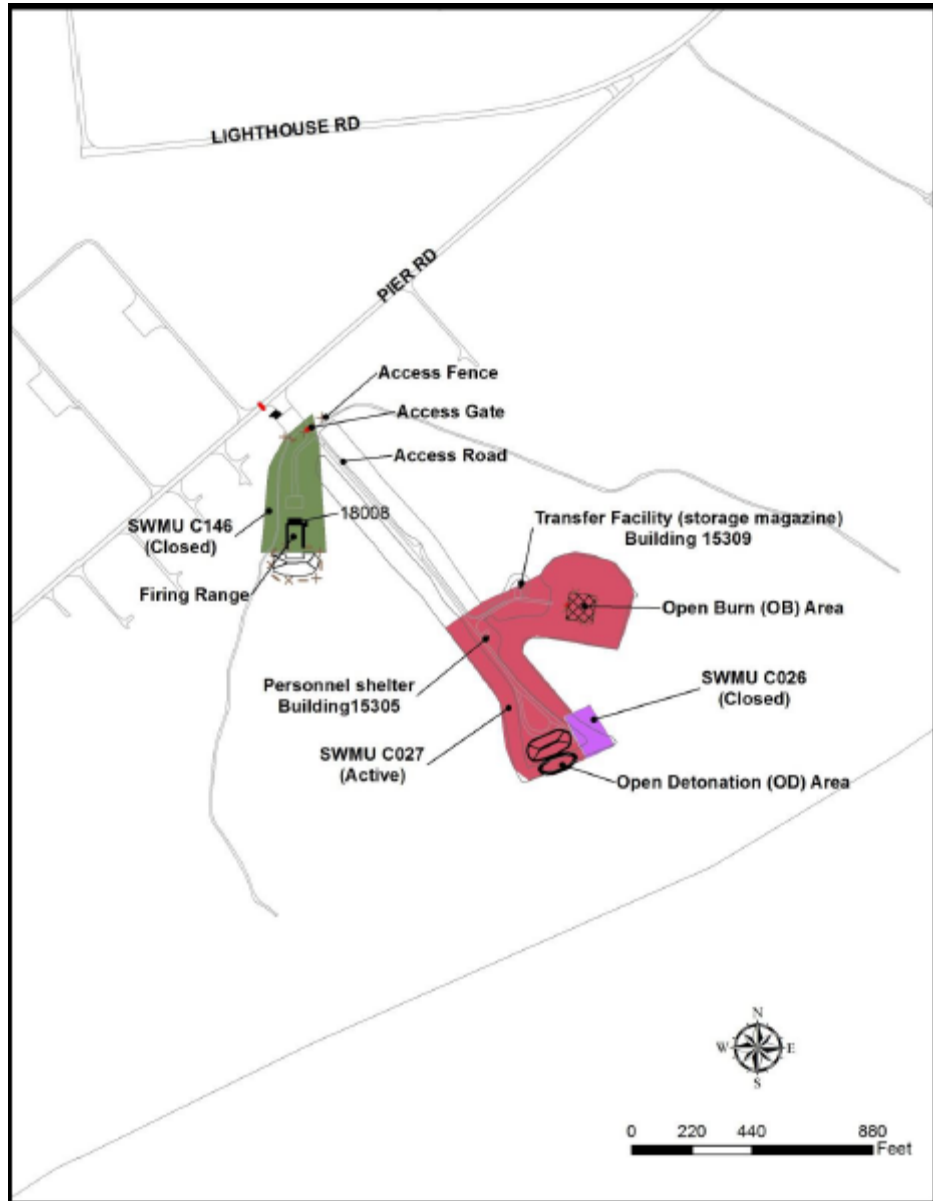
- *NEW Net Explosive Weight
- CAD Cartridge Activated Device
- BSM Booster Separation Motor
- CDF Confined Detonating Fuse
- HMX High Melting Explosive
- RDX Research Department Explosive
- PETN Pentaerythriol Tetranitrate
- HTPB Hydroxyl-Terminate Polybutadiene

ATTACHMENT D-VOLUME OF REACTIVE MATERIALS TREATED AT EOD RANGE

Nomenclature	Class	Quantity	*NEW (lbs)	Treatment/Family	Casing Composition
Ammunition, Smoke	1.4G	70	51	BURN/4	Aluminum
Charges, Explosive Commercial	1.1D	6	3	DET/2	No Metal Casing
Charges, Shape, Commercial	1.1D	168	168	DET/2	Lead, Copper
Cartridges, Power Device	1.4C	856	12	BURN/1	Aluminum, Steel
Cartridges, Power Device	1.4S	34	<1	BURN/1	Aluminum, Steel
Cartridges, Signals	1.4G	3	1	BURN/1	Aluminum, Steel
Cartridges, Small Arms	1.4S	12,104	51	BURN/1	Brass, Lead, Copper
Cartridges, Small Arms	1.4C	2,845	149	BURN/1	Brass, Lead, Copper
Cutter, Cable, Explosive	1.4S	198	<1	BURN/2	Steel, Aluminum
Detonators, Electric	1.1B	169	2	DET/2	Aluminum
Detonators, Non-Electric	1.1B	25	<1	DET/2	Aluminum
Explosive, Blast, Type A	1.3D	1,311	84	DET/2	No Metal Casing
Fireworks	1.3G	10	5	DET/3	No Metal Casing
Flares, Aerial	1.3G	254	6	BURN/3	Aluminum, Magnesium
Fuzes, Detonating	1.2D	93	21	DET/2	Steel, Aluminum
Grenades	1.1D	4	<1	DET/2	Steel, Aluminum
Igniter	1.4S	248	<1	BURN/2	Aluminum, Steel
Mines	1.1D	2	3	DET/2	Steel, Copper
Propellants, Explosive, Solid	1.3C	270	288	BURN/5	No Metal Casing
Rocket Motor	1.3C	93	381	BURN/5	Aluminum, Steel
Signal Device, Hand	1.4G	404	85	BURN/3	Aluminum, Steel
Signal, Distress	1.3G	997	252	BURN/3	Aluminum, Steel
Signal, Distress	1.3G	760	37	DET/3	Aluminum, Steel
Signal, Smoke	1.4G	16	263	BURN/4	Aluminum, Steel
Trinitrotoluene	1.1D	1	1	DET/2	No Metal Casing
Miscellaneous		215	226	BURN	No Metal Casing
Miscellaneous		23	97	DET	No Metal Casing

*NEW - Net Explosive Weight

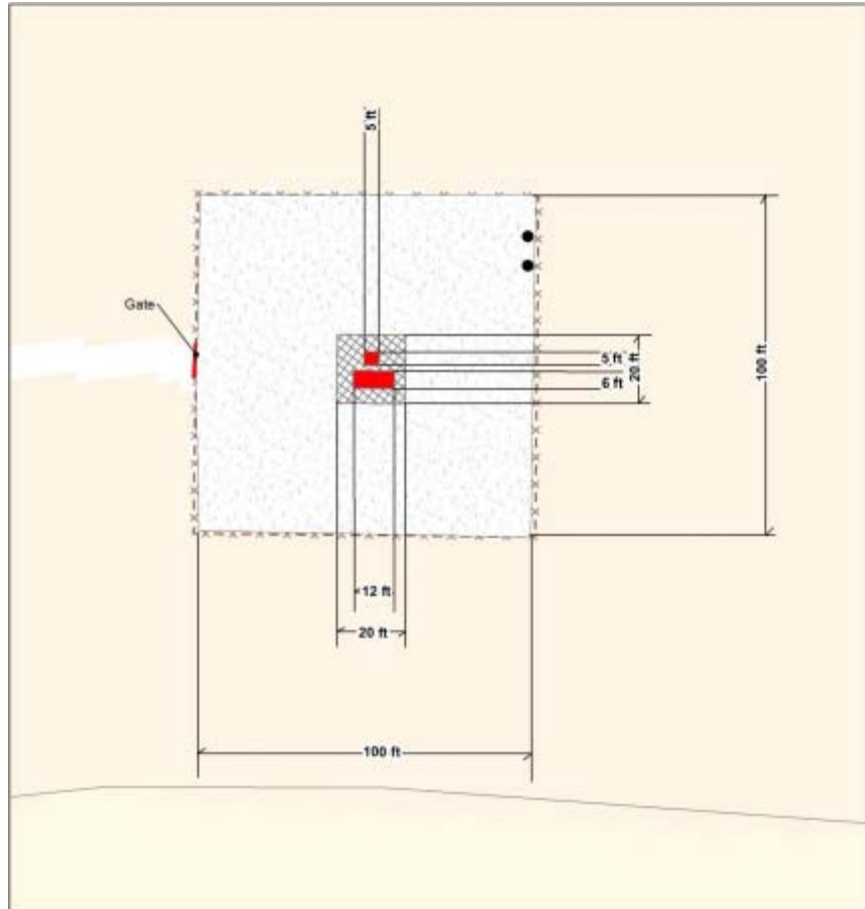
ATTACHMENT E-OPEN BURN UNIT AND OPEN DETONATION UNIT WASTE MANAGEMENT AREAS



**ATTACHMENT F-OPEN BURN UNIT AND OPEN DETONATION UNIT WASTE MANAGEMENT
AREAS & GROUNDWATER MONITORING WELLS**



ATTACHMENT G-OPEN BURN UNIT



Legend

- Satellite Waste Accumulation Area
- Thermal Treatment Unit (TTU)
- ▨ Thermal Treatment Unit Fire Brick Area
- Thermal Treatment Unit Asphalt Area



ATTACHMENT H-OPEN DETONATION UNIT SOIL SAMPLING LOCATIONS



EOD Soil Sampling Locations



Legend

- Soil Sample Locations
- Open Detonation Area

June 2013