



**Texas Commission on
Environmental Quality
Austin, Texas**

Permit for Industrial Solid Waste
Management Site issued under provisions of
Texas Health and Safety Code ANN. Chapter
361 and Chapter 26 of the Texas Water Code

Hazardous Waste Permit No. 50284
EPA ID No. TX4890110527
ISWR No. 30459
Original Date of Issuance: April 25, 1991
Renewal Date(s):
October 21, 2003
May 30, 2014

Name of Permittee: United States Department of Energy - Pantex Plant
Co-operator: Consolidated Nuclear Security LLC
P.O. Box 30030 Amarillo, TX 79120

Site Owner: United States Department of Energy
P.O. Box 30030
Amarillo, TX 79120

Classification of Site:

Waste Classification:	Site Type:	Permit Type:
Hazardous	On-site	Storage
Nonhazardous	Off-site	Processing
Industrial Class 1 waste	Noncommercial	Compliance Plan

All provisions in this permit stem from State and/or Federal authority. Those provisions marked with an asterisk (*) stem from Federal authority and will implement the applicable requirements of Hazardous and Solid Waste Amendments of 1984 (HSWA) for which the Texas Commission on Environmental Quality (TCEQ) has not been authorized. Those provisions marked with a double asterisk (**) stem from federal authority only.

This permit is granted subject to the terms and conditions of the permit, rules of the commission and other Orders of the commission, and laws of the State of Texas. This permit does not exempt the permittee from compliance with the Texas Clean Air Act. This permit will be valid until canceled, amended, modified, or revoked by the commission, except that the authorization under the permit shall expire midnight, ten (10) years after the date of permit approval.

Issued Date: April 9, 2026



For the Commission

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Permit/Compliance Plan Acronyms

ACL – Alternate Concentration Limit
ALR – Action Leakage Rate
AMP – Attenuation Monitoring Point
AOC – Area(s) of Concern
APA – Affected Property Assessment
APAR – Affected Property Assessment Report
APOE – Alternate Point of Exposure
Appendix VIII – 40 CFR 261, Appendix VIII (Identification and Listing of Hazardous Waste - Hazardous Constituents)
ASTM – American Society for Testing and Materials
BGS – Below Ground Surface
BLRA – Baseline Risk Assessment
CAO – Corrective Action Observation
CAS – Corrective Action System
CCC – Coastal Coordination Council
CEMS – Continuous Emissions Monitoring System
CFR – Code of Federal Regulations
CMI – Corrective Measures Implementation
CMP – Texas Coastal Management Program
CMS – Corrective Measures Study
COC – Constituent(s) of Concern
EPA – United States Environmental Protection Agency
EPA SW-846 – Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, Third Edition, November 1986
GWPS – Groundwater Protection Standard
HSWA – Hazardous and Solid Waste Amendments of 1984
ICM – Interim Corrective Measures
LDR – Land Disposal Restrictions
MDL – Method Detection Limit
MQL – Method Quantitation Limit
MSL – Mean Sea Level
NAPL – Non-Aqueous Phase Liquid
NOR – Notice of Registration
PCB – Polychlorinated Biphenyl
PCL – Protective Concentration Level
PMZ – Plume Management Zone
POC – Point of Compliance
POE – Point of Exposure
ppm – Parts Per Million
ppmv – Parts Per Million by Volume
PQL – Practical Quantitation Limit
Psi – Pounds Per Square Inch
QA/QC – Quality Assurance/Quality Control
RACR – Response Action Completion Report
RAER – Response Action Effectiveness Report
RAP – Response Action Plan (for Action Leakage Rate in landfills)
RAP – Remedial Action Plan
RCRA – Resource Conservation and Recovery Act
RFA – RCRA Facility Assessment

RFI – RCRA Facility Investigation

RRR – TCEQ Risk Reduction Rules

RSA –Remedy Standard A

RSB –Remedy Standard B

SR/WM – Source Reduction and Waste Minimization

SSI – Statistically Significant Increase

SWDA – Solid Waste Disposal Act

SWMU – Solid Waste Management Unit(s)

TAC – Texas Administrative Code

TCEQ – Texas Commission on Environmental Quality

TCEQ QAPP – “Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act and Underground Injection Control”

THC – Total Hydrocarbons

TRRP – Texas Risk Reduction Program

I. Facility Description

A. Size and Location of Site

A permit is issued to United States Department of Energy and Consolidated Nuclear Security LLC, Pantex Plant (hereafter called the permittee), to manage a hazardous waste facility located at 955 Farm to Market Road 2373, Panhandle, in Carson County, Texas, and within the drainage area of Segment No. 0224 in the North Fork of the Red River Basin (North Latitude 35°19'11 ", West Longitude 101°35'07"). The legal description of the facility submitted in Permit No. 50284 application dated November 16, 2023, is hereby made a part of this permit as "Attachment A". The hazardous waste management facility as delineated by the permittee's application map is hereby made a part of this permit as "Attachment B".

B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial & Hazardous Waste Application submittals, and subsequent revisions to the permit and permit application that are listed in "Attachment C", and the Application Elements listed in "Attachment D", which are hereby approved subject to the terms of this permit and any other orders of the TCEQ.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the commission.

II. General Facility Standards

A. Standard Permit Conditions

The permittee has a duty to comply with the Standard Permit Conditions under 30 Texas Administrative Code (TAC) Section 305.125. Moreover, the permittee has a duty to comply with the following permit conditions:

1. Modification of Permitted Facilities

The facility units and operational methods authorized are limited to those described herein and by the application submittals identified in Section I.B. All facility units and operational methods are subject to the terms and conditions of this permit and TCEQ rules. Prior to constructing or operating any facility units in a manner which differs from either the related plans and specifications contained in the permit application or the limitations, terms or conditions of this permit, the permittee must comply with the TCEQ permit amendment/modification rules as provided in 30 TAC Sections 305.62 and 305.69.

[II.A.]

2. Duty to Comply

The permittee must comply with all the conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency order issued by the Commission. Any permit noncompliance, other than noncompliance authorized by an emergency order, constitutes a violation of the Resource Conservation and Recovery Act (RCRA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [30 TAC Section 305.142]

3. Severability

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected.

4. Definitions

For purposes of this permit, terms used herein shall have the same meaning as those in 30 TAC Chapters 305, 335, and 350 unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

Application data - data used to complete the final application and any supplemental information.

Open Burn/Open Detonation (OB/OD) Units – Units designed for the treatment of energetics. These units have no secondary containment. The OB/OD units are unit numbers 21, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 43.

RCRA Burning Ground Area – The area encompassing RCRA units numbers: 21, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 43.

5. Permit Expiration

In order to continue a permitted activity after the expiration date of the permit the permittee shall submit a new permit application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the Executive Director. Authorization to continue such activity will terminate upon the effective denial of said application.

6. Certification Requirements

For a new facility unit, the permittee may not commence storage, processing, or disposal of solid waste; and for a facility unit being modified, the permittee may not process, store or dispose of solid waste in the modified portion of the facility unit, except as provided in 30 TAC Section 305.69 (relating to Solid Waste Permit Modification at the Request of the Permittee) or 30 TAC Section 335.2(d), until the

following has been accomplished [30 TAC Section 305.144]:

- a. The permittee has submitted to the Executive Director and the local Regional Office of the TCEQ, by certified mail or hand delivery, a letter signed by the permittee, and signed and sealed by a Texas Professional Engineer stating that the facility unit has been constructed or modified in compliance with the permit. If the certification is being provided to document proper closure of a permitted unit, or to certify installation or repair of a tank system, then the certification must be signed and sealed by an independent Texas licensed Professional Engineer. Required certification shall be in the following form:

“This is to certify that the following activity (specify activity, e.g., construction, installation, closure, etc., of an item) relating to the following item (specify the item, e.g., the particular facility, facility unit, unit component, subcomponent part, or ancillary component), authorized or required by TCEQ Permit No. 50284 has been completed, and that construction of said facility component has been performed in accordance with and in compliance with good engineering practices and the design and construction specifications of Permit No. 50284.”

- b. A certification report has been submitted, with the certification described in Provision II.A.6.a., which is logically organized and describes in detail the tests, inspections, and measurements performed, their results, and all other bases for the conclusion that the facility unit, unit component, and/or closure have been constructed, installed and/or performed in conformance with the design and construction specifications of this permit and in compliance with this permit. The report shall describe each activity as it relates to each facility unit or component being certified including reference to all applicable permit provisions. The report shall contain the following items, at a minimum:
 - (1) Scaled, as-built plan-view and cross-sectional drawings which accurately depict the facility unit and all unit components and subcomponents and which demonstrate compliance with the design and construction specifications approved and detailed in the terms of this permit;
 - (2) All necessary references to dimensions, elevations, slopes, construction materials, thickness and equipment; and
 - (3) For all drawings and specifications, the date, signature, and seal of a Professional Engineer who is licensed in the State of Texas.
- c. The Executive Director has inspected the modified or newly constructed facility unit and finds it is in compliance with the conditions of the permit; or if within fifteen (15) days of submission of the letter required by paragraph (a) of this section, the permittee has not received notice from the Executive Director of the intent to inspect, prior inspection is waived and the permittee may commence processing, storage, or disposal of solid waste.

* 7. Land Disposal Restrictions

The permittee shall comply with the land disposal restrictions as found in 40 Code of Federal Regulations (CFR) Part 268 and any subsequent applicable requirements

promulgated through the Federal Register. Requirements include modifying/amending the permittee's waste analysis plan to include analyses to determine compliance with applicable treatment standards or prohibition levels, pursuant to 40 CFR 268.7(c) and 264.13(a).

8. Dust Suppression

Pursuant to 40 CFR 266.23(b)/30 TAC Section 335.214(b), the permittee shall not use waste, used oil, or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability) for dust suppression or road treatment.

9. Permit Reopener

This permit shall be subject to review by the Executive Director five (5) years from the date of permit issuance or reissuance and shall be modified as necessary to assure that the facility continues to comply with currently applicable requirements of the Solid Waste Disposal Act (SWDA) and the rules and regulations of the Commission. The permittee shall submit any information as may be reasonably required by the Executive Director to ascertain whether the facility continues to comply with currently applicable requirements of the SWDA and the rules and regulations of the commission.

10. Texas Coastal Management Program

The TCEQ has reviewed the permit application for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the Coastal Coordination Council (CCC) and has determined that the permit is consistent with the applicable CMP goals and policies. [30 TAC Section 281.43(a)(1)]

11. Monitoring of Commercial Hazardous Waste Management Facility Operations (Reserved)

12. Failure to Submit Relevant Facts in Permit Application

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Executive Director, the permittee shall promptly submit the correct information or facts to the Executive Director. [30 TAC Section 305.125(19)]

13. Hazardous Waste Combustion Facility Provision (Reserved)

14. Waste Management Fee Assessment, Fee Payment, and Records and Reporting

a. If applicable, the permittee is subject to the assessment of fees for hazardous wastes which are stored, processed, disposed, or otherwise managed and for Class 1 industrial wastes which are disposed at a commercial facility. [30 TAC Section 335.325]

b. As applicable and except as provided in Provision II.A.14.c., the permittee shall

pay waste management fees monthly. Monthly fee payments shall be due by the 25th day following the end of the month for which payment is due. [30 TAC Section 335.328(b)]

- c. If required, the permittee owes waste management fees in an amount less than \$500 for a calendar month or less than \$1,500 for a calendar quarter, the permittee may file a quarterly report and pay a quarterly fee. [30 TAC Section 335.328(c)]
- d. If required, the permittee shall document the basis for the assessment of any applicable waste management fees, including any adjustment to or exemption from assessment. [30 TAC Section 335.329(b)(4)]
- e. If required, the permittee shall submit a monthly report of on-site waste management activities subject to the assessment of waste management fees on forms furnished or approved by the Executive Director. This report shall be due by the 25th day following the end of the month (or quarter) for which a report is made. Monthly (or quarterly) reports shall be submitted, regardless of whether any storage, processing, or disposal was made during a particular month (or quarter), by preparing and submitting a summary indicating that no waste was managed during that month (or quarter). [30 TAC Section 335.329(b)(5)]
- f. As applicable, the permittee shall maintain the required records and reports in accordance with 30 TAC Sections 335.329(c) and (d).

15. Transfer of Ownership and/or Operational Control

The transfer of ownership and/or operational control of this permit is subject to the transfer requirements of 30 TAC Section 305.64 and permit modification requirements of 30 TAC Section 305.69. The new owner and/or operator seeking a transfer of ownership and/or operational control of this permit shall submit a Class 1 permit modification (with prior written approval by the Executive Director) at least 90 days prior to the scheduled transfer in accordance with 30 TAC Section 305.69(b)(2). Prior to the Executive Director issuing the permit modification transferring the permit, the new owner or operator shall provide a fully executed financial assurance mechanism satisfactory to the TCEQ Executive Director, for all existing units which have received waste and any corrective action required under this permit, in compliance with 30 TAC Chapter 37, Subchapter P. [30 TAC Section 305.64(g)]

B. Recordkeeping and Reporting Requirements

1. Monitoring and Records

- a. All data submitted to the TCEQ shall be in a manner consistent with the latest version of the "Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act and Underground Injection Control" (TCEQ QAPP).
- b. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity. The method used to obtain a

representative sample of the material to be analyzed shall be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved in writing prior to use by the Executive Director of the TCEQ. Laboratory methods shall be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, 1987 (EPA SW-846), as revised; Standard Methods for the Examination of Water and Wastewater, Eighteenth Edition, 1992, and 18th Edition supplement, 1994, or current adopted edition; RCRA Groundwater Monitoring: Draft Technical Guidance, 1992, OSWER Directive 9950.1, or an equivalent method; as specified in the Waste Analysis Plan, Section IV of the Part B Application, and approved in writing prior to use by the Executive Director. [30 TAC Section 305.125(11)(A)]

- c. The permittee shall retain in an organized fashion and furnish to the Executive Director, upon request, records of all monitoring information, copies of all reports and records required by this permit, and the certification required by 40 CFR 264.73(b)(9), for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application. [30 TAC Section 305.125(11)(B)]
- d. Records of monitoring shall include the following [30 TAC Section 305.125(11)(C)]:
 - (1) The date, time, and place of sample or measurement;
 - (2) The identity of individual who collected the sample or measurement;
 - (3) The dates analyses were performed;
 - (4) The identity of individual and laboratory who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses or measurements.

2. Operating Record

In addition to the recordkeeping and reporting requirements specified elsewhere in this permit, the permittee shall maintain a written operating record at the facility, in accordance with 40 CFR 264.73. These records will be made available to representatives of the TCEQ upon request.

3. Retention of Application Data

Throughout the terms of the permit, the permittee shall keep records of data used to complete the final application and any supplemental information. All copies of renewals, amendments, revisions and modifications must also be kept at the facility such that the most current documents are available for inspection at all times. All materials, including any related information, submitted to complete the application shall be retained, not just those materials which have been incorporated into the permit. [30 TAC Section 305.47]

4. Reporting of Noncompliance

The permittee shall report to the Executive Director of the TCEQ information regarding any noncompliance which may endanger human health or the environment. [30 TAC Section 305.125(9)]

- a. Report of such information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the noncompliance.
- b. A written submission of such information shall also be provided within five (5) working days of the time the permittee becomes aware of the noncompliance. The written submission shall contain the following:
 - (1) a description of the noncompliance and its cause;
 - (2) the potential danger to human health or safety, or the environment;
 - (3) the period of noncompliance, including exact dates and times;
 - (4) if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (5) steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance, and to mitigate its adverse effects.

5. Twenty-Four Hour Reporting

The following shall be included as information which must be reported orally within twenty-four (24) hours pursuant to 30 TAC Section 305.125(9) [30 TAC Section 305.145]:

- a. Information concerning release of any solid waste that may cause an endangerment to public drinking water supplies; and
- b. Any information of a release or discharge of solid waste, or of a fire or explosion which could threaten the environment or human health or safety, outside the facility. The description of the occurrence and its cause shall include:
 - (1) name, address, and telephone number of the owner or operator;
 - (2) name, address, and telephone number of the facility;
 - (3) date, time, and type of incident;
 - (4) name and quantity of material(s) involved;
 - (5) the extent of injuries, if any;
 - (6) an assessment of actual or potential hazards to the environment and human health or safety outside the facility, where this is applicable; and
 - (7) estimated quantity and disposition of recovered material that resulted from

the incident.

6. Notice Waiver

The Executive Director may waive the five (5) day written notice requirement specified in Provision II.B.4.b. in favor of a written report submitted to the Commission within fifteen (15) days of the time the permittee becomes aware of the noncompliance or condition. [30 TAC Section 305.145(b)]

7. Biennial Report

The permittee shall prepare and submit to the Executive Director all information and records required by 40 CFR 264.75. By March 1st of each even-numbered year for the preceding odd-numbered year's activities the permittee shall submit either a Biennial Report or letter certifying submission of the above. One copy of the report/letter shall be submitted to the TCEQ Industrial & Hazardous Waste Permits Section and an additional copy shall be submitted to the appropriate TCEQ Regional Office.

8. Pollution Prevention

Facilities subject to 30 TAC Chapter 335, Subchapter Q - Pollution Prevention: Source Reduction and Waste Minimization must prepare a five (5) year Source Reduction and Waste Minimization Plan and submit a Source Reduction and Waste Minimization (SR/WM) Annual Report to the TCEQ Small Business and Environmental Assistance Division. This report must be submitted annually on the dates specified in the rule.

9. Annual Monitoring Report

The permittee shall submit an Annual Monitoring Report as required by Section VI of this permit by April 15th of each year.

10. Manifest Discrepancy Report

If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the permittee must submit a report, describing the incident, to the Executive Director, as per the requirements of 30 TAC Section 335.12. A copy of the manifest must be included in the report.

11. Unmanifested Waste Report

A report must be submitted to the Executive Director within fifteen (15) days of receipt of unmanifested waste, as per the requirements of 30 TAC Section 335.15(3).

12. Monthly Summary

The permittee shall prepare a monthly report, of all manifests received during the month, summarizing the quantity, character, transporter identity, and the method of storage, processing and disposal of each hazardous waste or Class 1 waste shipment

received, itemized by manifest document number. This monthly summary report shall be submitted to the TCEQ Registration and Reporting Section on or before the 25th day of each month for waste received during the previous month. [30 TAC Section 335.15(2)]

C. Incorporated Regulatory Requirements

1. State Regulations

The following TCEQ regulations are hereby made provisions and conditions of the permit to the extent applicable to the activities authorized by this permit.

- a. 30 TAC Chapter 305, Subchapter A: General Provisions;
- b. 30 TAC Chapter 305, Subchapter C: Application for Permit;
- c. 30 TAC Chapter 305, Subchapter D: Regarding amendments, renewals, transfers, corrections, revocation and suspension of permits (except 30 TAC 305.70 -305.71);
- d. 30 TAC Chapter 305, Subchapter F: Regarding permit characteristics and conditions (except 30 TAC 305.126);
- e. 30 TAC Chapter 305, Subchapter G: Additional Conditions for Hazardous and Industrial Solid Waste Storage, Processing and Disposal Permits;
- f. 30 TAC Chapter 305, Subchapter I: Hazardous Waste Incinerator Permits;
- g. 30 TAC Chapter 335, Subchapter A, Industrial Solid Waste and Municipal Hazardous Waste in General;
- h. 30 TAC Chapter 335, Subchapter B, Hazardous Waste Management General Provisions;
- i. 30 TAC Section 335.152, Standards;
- j. 30 TAC Sections 335.153 - 335.155 (regarding reporting of emergency situations and additional reports required);
- k. 30 TAC Sections 335.156 - 335.167 (regarding applicability of groundwater monitoring programs and corrective action requirements);
- l. 30 TAC Sections 335.175 - 335.176 (regarding special requirements for containers and bulk and containerized waste);
- m. 30 TAC Sections 335.177 - 335.179 (regarding general performance standard, cost estimate for closure, and financial assurance);
- n. 30 TAC Sections 335.325, 335.328 and 335.329 (regarding waste management fee assessment, fee payment, and records and reports);
- o. 30 TAC Chapter 335, Subchapter Q, Pollution Prevention: Source Reduction

and Waste Minimization;

- p. 30 TAC Chapter 335, Subchapter S, Risk Reduction Standards
- q. 30 TAC Chapter 350, Texas Risk Reduction Program.

Issuance of this permit with incorporated rules in no way exempts the permittee from compliance with any other applicable state statute and/or Commission Rule.

2. Federal Regulations

To the extent applicable to the activities authorized by this permit, the following provisions of 40 CFR Parts 264, and Part 268, adopted by reference by 30 TAC Section 335.152 and 335 Subchapter O are hereby made provisions and conditions of this permit, to the extent consistent with the Texas Solid Waste Disposal Act, Texas Health and Safety Code Ann., Chapter 361 (Vernon), and the rules of the TCEQ:

- a. Subpart B -- General Facility Standards;
- b. Subpart C -- Preparedness and Prevention;
- c. Subpart D -- Contingency Plan and Emergency Procedures;
- d. Subpart E -- Manifest System, Recordkeeping, and Reporting;
- e. Subpart G -- Closure and Post-Closure;
- f. Subpart I -- Use and Management of Containers;
- g. Subpart X -- Miscellaneous Units;
- h. Subpart AA -- Air Emission Standards for Process Vents;
- i. Subpart BB -- Air Emission Standards for Equipment Leaks;
- j. Subpart CC -- Air Emission Standards for Tanks, Surface Impoundments, and Containers;
- k. Subpart EE -- Hazardous Waste Munitions and Explosives Storage;
- l. 40 CFR Part 268 -- Land Disposal Restrictions (LDR).

III. Facility Management

A. Operation of Facility

The permittee shall construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by 40 CFR 264.31. All equipment and structures

used to manage hazardous waste at the facility shall be maintained in proper operating condition.

B. Personnel Training

The permittee shall ensure that all facility personnel involved with hazardous waste management successfully complete a training program as required by 40 CFR 264.16. The permittee shall maintain training documents and records, as required by 40 CFR 264.16(d) and (e).

C. Security

1. The permittee shall provide a twenty-four (24) hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; and
2. The permittee shall post warning signs at all points of access to the active waste management portion(s) of the facility and along the natural and/or artificial barriers in sufficient numbers to be seen from any approach to that (those) portion(s) of the facility. The signs shall be printed so that they may be clearly read from a distance of at least twenty-five (25) feet and shall state "Danger - Unauthorized Personnel Keep Out" in English and in an alternate language per 40 CFR 264.14(c), as applicable.

D. General Inspection Requirements

The permittee shall follow the inspection schedule contained in the permit application submittals identified in Section I.B. of this permit and as set out in Table III.D. - Inspection Schedule. The permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR 264.15(c). Records of inspection shall be kept, as required by 40 CFR 264.15(d). Any remedial actions taken in response to facility inspections and the date of the remediation shall be included in the inspection records.

E. Contingency Plan

1. The permittee shall follow the Contingency Plan, developed in accordance with 40 CFR Part 264 Subpart D, and contained in the permit application submittals identified in Section I.B. of this permit. Copies of this plan shall be available to all employees involved in waste management at the facility.
2. The permittee shall immediately initiate clean-up procedures for removal of any spilled hazardous or industrial nonhazardous wastes and waste residues and shall take all steps necessary to prevent surface water or groundwater contamination as a result of any spills.
3. Collected hazardous or industrial nonhazardous wastes, spills, leaks, clean-up residues, and contaminated rainfall runoff, including contaminated stormwater from the drainage control system(s) associated with the permitted units, shall be removed promptly after the spillage and/or rainfall event in as timely a manner as is necessary to prevent overflow of the system by the following method(s):
 - a. Removal to an on-site authorized facility unit;

- b. Removal to an authorized industrial solid waste management facility or authorized off-site facility; or
 - c. Discharge in accordance with a wastewater discharge permit.
- 4. The permittee shall ensure that any equipment or vehicles which have come in contact with waste in the loading/unloading, storage, processing, and/or disposal areas have been decontaminated prior to their movement into designated uncontaminated areas of the site property. At a minimum, all contaminated equipment shall be externally decontaminated and contaminated vehicles shall have their undercarriages and tires or tracks decontaminated to remove all waste residues and to prevent contamination of uncontaminated areas. All wash water generated shall be collected and disposed of in accordance with Provision III.E.3.
- 5. Preparedness and Prevention
 - a. At a minimum, the permittee shall equip the facility as set forth in Table III.E.3. - Emergency Equipment contained in the permit application identified in Section I.B. of this permit, as required by 40 CFR 264.32.
 - b. All sumps, pumps, fire- and spill-control equipment, decontamination equipment, and all other equipment and structures authorized or required through the Contingency Plan shall be tested and maintained, as necessary, to assure its proper operation in time of emergency, as required by 40 CFR 264.33.
 - c. The permittee shall maintain access to the communications or alarm system, as required by 40 CFR 264.34.
 - d. A trained emergency coordinator shall be available at all times in case of an emergency and will have the responsibility for coordinating all emergency response measures as required by 40 CFR 264.55 and 264.56. Emergency number(s) shall be posted in all waste management portions of the facility and all employees in those areas shall be trained in the location of those postings.

F. Special Permit Conditions

1. Evaluation of Alternative Technologies to Open Burning/Open Detonation (OB/OD)

Within one year of permit issuance, the permittee will prepare and submit a report that provides the results of an evaluation of alternative technologies to OB/OD for the treatment of waste containing energetics in the units defined in Provision II.A.4. Based on the results of the evaluation, the permittee will provide a recommendation for approval by the executive director for changes, should the evaluation support one or more alternative technologies that are determined by the permittee to be safe, available, reasonable, and consistent with the permittee's national security mandate.

2. Within 90 days of executive director approval of alternative technology or technologies proposed by the permittee, the permittee will submit a Class 1-1 permit modification to incorporate a schedule for implementation of the identified alternative technology or technologies. The schedule will include all significant

milestones including:

- a. Federal funding request and projected date of funding allocation;
- b. Vendor procurement;
- c. Submittal of a permit modification application in accordance with 30 TAC 305.69 to add the alternative technology unit(s);
- d. Submittal of a permit application or permit amendment application in accordance with 30 TAC 116 for air emission authorization;
- e. Construction start and completion dates, if applicable;
- f. Testing plan and results of testing of the alternative technology; and
- g. Operation of the alternative technology.

IV. Wastes and Waste Analysis

A. Waste Analysis Plan

The permittee shall follow the Waste Analysis Plan, developed in accordance with 40 CFR 264.13 and the permit application identified in Section I.B. of this permit.

B. Authorized Wastes

1. The permittee is authorized to manage hazardous wastes listed in Table IV.B. - Wastes Managed in Permitted Units, subject to the limitations provided herein. Nonhazardous industrial solid waste may be managed in any of the permitted units provided the total capacity of the unit is not exceeded.

Wastes authorized for storage and processing include those generated from facility sources.

2. Hazardous and Non-hazardous Waste Received From Off-Site Sources

The permittee may receive hazardous or non-hazardous waste which conforms to the waste authorized under the permit from the following off-site facilities:

- a. Wastes or waste residues and associated support material wastes generated off-site from the receipt, management, treatment, storage, packaging and/or processing of any waste generated at this facility. This includes the return of any unprocessed or untreated wastes and any additional ancillary packaging and support materials generated during the management of the original waste by a receiving facility. Wastes, including support material wastes, generated off-site from sanitization of materials derived from operations conducted at this facility.
- b. Wastes returned to this facility that are generated at off-site medical/emergency response facilities as a result of decontamination and medical treatment of

personnel in response to emergency incidents that occur at this facility.

- c. Wastes generated off-site during implementation of corrective actions associated with the Corrective Action Program at this facility.
 - d. Wastes resulting from response actions taken due to off-site transportation incidents involving wastes and materials shipped from this facility.
 - e. Wastes that are generated off-site during the testing of Joint Test Assemblies (JTAs), or equivalent, that were produced at this facility.
 - f. Wastes that are generated from office building located adjacent and contiguous to Pantex Plant.
3. The wastes authorized in Table IV.B. shall not contain any of the following:
- a. PCB waste, as defined by the Environmental Protection Agency (EPA) in regulations issued pursuant to the Toxic Substances Control Act under 40 CFR Part 761, unless the permittee is compliant with the federal requirements for PCB storage as specified in 40 CFR Part 761;
 - b. Radioactive materials/wastes unless the permittee is authorized to store and process these wastes in compliance with the Atomic Energy Act of 1954 (as amended) or the permittee is authorized to store and process these wastes in compliance with specific licensing and permitting requirements under Chapter 401 of the Texas Health and Safety Code;
 - c. Dioxin-containing wastes, identified by EPA as F020, F021, F022, F023, F026, and F027 wastes in 40 CFR 261.31;
 - d. Garbage as defined in 30 TAC Section 330.3(56);
 - e. Municipal Solid Waste as defined in 30 TAC Section 330.3(88);
 - f. Special Waste from Health-Care Related Facilities subject to 25 TAC Part 1 or 30 TAC Chapter 330.
4. Prior to accepting any additional wastes not authorized in Table IV.B., the permittee shall follow the permit amendment or modification requirements listed in 30 TAC Sections 305.62 and 305.69.
5. The permittee may store wastes restricted under 40 CFR Part 268 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of 40 CFR 268.50(a)(2) including, but not limited to the following:
- a. Clearly marking each container to identify its contents and the date each period of accumulation begins;
 - b. Clearly marking each tank with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating

record at that facility.

C. Sampling and Analytical Methods

1. Table IV.C. - Sampling and Analytical Methods, shall be used in conjunction with the Waste Analysis Plan referenced in Section IV.A. of this permit, in performing all waste analyses.
2. The permittee shall ensure that all waste analyses utilized for waste identification or verification have been performed in accordance with methods specified in the current editions of EPA SW-846, American Society for Testing and Materials (ASTM) or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control (QA/QC) program that is consistent with EPA SW-846 and the TCEQ QAPP.

V. Authorized Units and Operations

A. Authorized Units

1. The permittee is authorized to operate the facility units listed in "Attachment D" for storage and processing subject to the limitations herein. All waste management activities not otherwise exempted from permitting under 30 TAC Section 335.2 shall be confined to the authorized facility units listed in "Attachment D". References hereinafter in this permit to "TCEQ Permit Unit No. ___" shall be to the facility units listed in "Attachment E". All authorized units must be clearly identified as numbered in "Attachment E". These units must have signs indicating "TCEQ Permit Unit No. ___".
2. The permittee shall comply with 40 CFR 264.17, relating to general requirements for ignitable, reactive, or incompatible wastes.
3. The permittee shall prevent inundation of any permitted units and prevent any discharges of any waste or runoff of waste contaminated stormwater from permitted units. Additionally, each loading or unloading area, associated with a permitted hazardous or nonhazardous waste management unit, shall be provided with a drainage control system which will collect spills and precipitation in such a manner as to satisfy the following:
 - a. Preclude the release from the system of any collected spills, leaks or precipitation;
 - b. Minimize the amount of rainfall that is collected by the system; and
 - c. Prevent run-on into the system from other portions of the facility.

B. Container Storage Areas

1. Container storage areas are shown in Table V.B. - Container Storage Areas. The permittee is authorized to operate the facility container storage areas for storage subject to the limitations contained herein.

2. Containers holding hazardous waste shall be managed in accordance with 40 CFR 264.171, Condition of containers; 40 CFR 264.172, Compatibility of waste with containers; and 40 CFR 264.173, Management of containers.
3. The permittee shall construct and maintain the containment systems for the container storage areas in accordance with the drawings and details included in the Part B Application identified in Section I.B. At a minimum, the containment system must meet the requirements of 40 CFR 264.175.

A minimum of 24 inches of aisle space shall be maintained between double rows of 55 gallon drums or between all other storage containers. Storage containers shall be stacked no more than three high or to a height that would cause instability of the stack.

C. Tanks and Tank Systems (Reserved)

D. Surface Impoundments (Reserved)

E. Waste Piles (Reserved)

F. Land Treatment Units (Reserved)

G. Landfills (Reserved)

H. Incinerators (Reserved)

I. Boilers/Industrial Furnaces (Reserved).

J. Drip Pads (Reserved)

K. Miscellaneous Units

1. Miscellaneous units and their approved waste types are shown in Table V.K - Miscellaneous Units. The permittee is authorized to operate the miscellaneous units for processing subject to the limitations contained herein.
2. The units processing hazardous waste shall be managed in accordance with 40 CFR 264.601, Environmental performance standards; 40 CFR 264.602, Monitoring, analysis, inspection, response, reporting, and corrective action; as applicable 40 CFR 264.603, Post-closure care; and 40 CFR 265.382, Open burning, waste explosives.
3. The permittee shall construct and maintain the containment systems for the miscellaneous units in accordance with the drawings and details included in the Part B Application in Section V.K. At a minimum, the containment system must meet the requirements of 40 CFR 264.601.
4. No hazardous wastes, except those with the potential to detonate as described in 40 CFR §265.382, may be processed in the OB/OD units. Materials to be thermally treated consist of high explosives which include insensitive high explosives, plastic bounded explosives, explosive components, pyrotechnic materials, and devices and

other materials contaminated with high explosives. Materials that may also be treated are explosives contaminated by or encased in materials such as foams, plastic, and metals.

5. The following wastes may not be processed in the OB/OD units.
 - a. The dioxin-containing wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, F027, and F028;
 - b. Polychlorinated biphenyls (PCBs) in concentration subject to the EPA regulation under its Subpart D regulations issued pursuant to the Toxic Substance Control Act (TSCA).
6. As soon as possible after a batch is processed, and when the unit may be safely approached, the Permittee shall collect all waste fragments which have been ejected during the OB/OD event. Said waste fragments shall be deposited in an authorized waste management unit.
7. The permittee shall operate the units in compliance with all requirements relating to air quality in the Resource Conservation and Recovery Act (RCRA) and the rules promulgated thereunder and in 30 TAC 335, Subchapter F (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, and Disposal Facilities), promulgated by the TCEQ pursuant to the Solid Waste Disposal Act, Chapter 361 of the Texas Health and Safety Code, (Vernon 1990).

L. Containment Buildings (Reserved)

VI. Monitoring

A. Soil/Sediment Monitoring Program

The permittee shall design and maintain a soil and sediment monitoring program to monitor area soil and sediment throughout the active life of the facility and any applicable post-closure care period. Soil and sediment monitoring at the facility shall at a minimum consist of sample collection, sample analysis, sample results evaluation, and reporting of sample results for soil and sediment in the area of the Burning Ground. The Soil and Sediment Monitoring Program shall yield soil and sediment samples from an interval of zero to two inches below the surface that represent the quality of soil and sediment in the area surrounding the RCRA Burning Ground Area.

1. Identification of Soil and Sediment Monitoring Program Area

The program is specific to the RCRA Burning Ground Area as provided in Provision VI.A.3 and as authorized by Provision V.K for which soil and sediment monitoring requirements apply pursuant to 30 TAC 335.152(a)(16).

2. Capabilities of the Soil and Sediment Monitoring Program

The program shall yield soil and sediment samples from an interval of zero to two inches below the surface that represent the quality of soil and sediment at the required sampling locations. This program shall be capable of detecting a release

from the permitted units at the Burning Ground to the soil and sediment.

3. Soil and Sediment Monitoring Program

- a. The permittee is required to implement a program subject to the limitations contained herein. The program shall, at a minimum, consist of three categories of locations, Upland Disturbed Soil, Landfill Covers, and Sediment, which will be used to establish soil quality for the RCRA Burning Ground Area. The permittee shall collect 25 randomly selected samples from the three locations as follows:

- (1) Upland Disturbed Soil: 25 randomly selected samples per grid shown on Attachment F – Map Indicating Soil and Sediment Monitoring Locations.
- (2) Landfill Covers: 25 randomly selected samples per grid shown on Attachment F – Map Indicating Soil and Sediment Monitoring Locations.
- (3) Sediment: 25 randomly selected samples from the playa lake sediment areas shown on Attachment F – Map Indicating Soil and Sediment Monitoring Locations.

The permittee will be allowed to combine the 25 randomly selected samples from the same grid/playa lake location into a single composite sample to be tested provided that the samples from each grid/playa lake location are maintained as a separate set from the other grids/playa lake locations, and that the samples are distributed fairly evenly across the grid/playa lake location.

- b. The permittee shall determine soil and sediment quality from an interval zero to two inches below the surface throughout the active life of the facility and any applicable post-closure care period in accordance with the parameter list and sampling schedule specified in Provisions VI.B.2 and VI.C.2, respectively.
- c. The design and operation of the authorized components of the Monitoring Program must be in accordance with this permit.

B. Monitoring Program: Operation

1. Area Monitored by the Monitoring Program

The Monitoring Program shall be designed to monitor the soil and sediment in the RCRA Burning Ground Area and in the area surrounding the RCRA Burning Ground Area. The soil, as referenced in this section, refers to the native soil in the area of the Burning Ground and landfill covers. The sediment, as referenced in this section, refers to the sediment which lines Playa 3.

2. Monitoring Parameters and Compliance

- a. The permittee shall monitor soil and sediment in the Burning Ground Area as identified in Provision VI.A.3 and as shown on Attachment G. The composite samples will be evaluated based on the parameters listed in Table VI.D.2.b – Soil and Sediment Monitoring Parameters. Sampling and analysis for the

Monitoring Parameters of Table VI.D.2.b shall be conducted in accordance with the current version of analytical methods listed in the United States Environmental Protection Agency publication SW-846 Test Methods for Evaluating Solid Waste, Third Edition, November 1986, (U.S.EPA SW-846) and as listed in the July 8, 1987, edition of the Federal Register and later editions.

- b. Background soil and sediment quality for a monitoring parameter or constituent shall be based on a sequence of at least three sampling events, taken during three consecutive calendar quarters to assure, to the greatest extent technically feasible, that an independent sample is obtained. Each sampling event shall be conducted per grid/playa lake location in each of the three Categories of Location identified in Provision VI.A.3. Each sampling event will consist of a minimum of 30 randomly selected subsamples per grid/playa lake location. The permittee may be allowed to combine the 30 randomly selected samples from the same grid/playa lake location into a single composite soil sample to be tested, provided that the samples from each grid/playa lake location are maintained as a separate set from the other grid/playa lake locations, and that the samples are distributed fairly evenly across the grid/playa lake location. The term background that is used for this monitoring program applies only to this monitoring program and does not affect any previously established background levels with regards to Compliance Plan No. CP-50284. The permittee shall determine the concentrations of the monitoring parameters listed in Table VI.D.2.b for each composite sample.
- c. Compliance with the Monitoring Parameters listed in Table VI.D.2.b is defined by the results of the data evaluation of Provision VI.C.4, wherein the monitoring data for each grid/playa lake location does not exhibit evidence of contamination over background values.

If any composite sample location from a grid/playa lake location is determined to be noncompliant with Table VI.D.2.b at any time during the Monitoring Program, the permittee shall respond and report according to Provision VI.D.1.

3. Post-Closure Care Period (Reserved)
4. Waste Management of Recovered Environmental Media

Recovered environmental media from a monitoring location shall be managed in accordance with applicable requirements of 30 TAC 335.

C. Sampling and Analysis

1. Sampling and Analysis

The permittee shall follow the methods set out in TCEQ's Surface Water Quality Monitoring Procedures Manual (August 2012, RG-415), EPA's Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies (July 1992) or an alternate method approved in writing by the Executive Director to collect and preserve samples. The collected samples shall be managed (i.e., Chain of Custody and handling procedure), analyzed, and statistically evaluated (i.e., Quality Assurance/Quality Control [QA/QC]) in accordance with the current edition of U.S.

EPA Publication SW-846, Test Methods for Evaluating Solid Waste and American Society for Testing and Materials (ASTM) Standard Test Methods or other equivalent methods accepted by the Executive Director.

- a. All environmental media analyses required by this permit shall be performed using a QA/QC program where all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. All QA/QC program details shall be put in writing and assignments made to qualified personnel. At a minimum, laboratory methods shall conform to the QA/QC program details described in the current edition of U.S. EPA Publication SW-846, Test Methods for Evaluating Solid Waste and American Society for Testing and Materials (ASTM) Standard Test Methods or other equivalent methods accepted by the Executive Director.
- b. Environmental Media analyses required by this permit shall utilize laboratory methods which are capable of measuring concentrations equal to or less than established background values. Explosives shall be analyzed by the latest version of SW-846 Method 8330A, SW-864 Method 8321B, or other equivalent methods accepted by the Executive Director. Metals shall be analyzed by the latest version of SW-846 Method 6010/6020 (mercury may be analyzed by the latest version of SW-846 Method 7471B or 7470A whichever is appropriate) or other equivalent methods accepted by the Executive Director.

2. Sampling and Analysis Frequencies and Parameters

Frequencies of sampling shall be monthly, quarterly, semiannually or yearly, depending on the sampling objective. These periods of time are defined below:

(1) "Month" shall be a calendar month;

(2) "Quarter" shall be based on divisions of the calendar year (i.e., January through March, April through June, July through September, and October through December);

(3) "Semiannual" shall be based on divisions of the calendar year (i.e., January through June, July through December) and consist of two consecutive quarters.

(4) "Annual", "Year" or "Calendar year" shall be based on divisions of the calendar (i.e. January through December). [Note: Background soil and sediment values have previously been established (Calendar Year 2006)]

- c. The grid/playa lake sampling locations shall be sampled and the composite samples analyzed according to the schedule listed in Table VI.D.2.b.

3. Statistical Procedures for Data Evaluation

- a. For each composite sample from the grid/playa lake locations sampled during each sampling event, the permittee shall determine whether there is evidence of a Statistically Significant Increase (SSI) in the concentrations of each Monitoring Parameter of Table VI.D.2.b., when compared to the background quality data. In determining whether or not an SSI has occurred for a Monitoring Parameter

of Table VI.D.2.b, the permittee shall establish if the background values have been exceeded by utilizing the statistical procedures and data evaluation described in Attachment G - Burning Ground Monitoring Statistical Procedure for Data Evaluation.

4. Data Evaluation

- a. Data evaluations shall be completed within a time frame necessary to include all data required by Provision VI.F of this Section unless QA/QC procedures show that data is unacceptable and re-analysis or re-sampling must be performed. In such cases, the executive director will be notified as soon as it becomes apparent that the time limit to conduct data evaluation cannot be met.
- b. Data evaluation shall determine whether there is evidence of an SSI for Monitoring Parameters listed in Table VI.D.2.b each time environmental media quality is determined at on-site sampling locations.

D. Response Requirements for SSI

1. If the permittee has determined an SSI over background values for any of the Monitoring Parameters identified in Table VI.D.2.b, in accordance with statistical procedures authorized by Provision VI.C.3 and specified by the permittee, the permittee shall perform the following actions:
 - a. Notify the Executive Director in writing, within seven (7) days, if an SSI is confirmed. The notification must indicate which soil and sediment monitoring parameter of Table VI.D.2.b- Soil and Sediment Monitoring Parameters has exhibited an SSI.
 - b. The permittee may resample for the monitoring parameter that exhibited a concentration above background in the initial sample analysis. If the result of the resampling does not confirm a concentration above background, then the first sample result will not be considered an SSI. Re-sampling should be conducted within 30 days of the validation and verification of the initial sampling. Data evaluation, which includes validation, verification and compliance with objectives of the program, shall be performed within ninety (90) days of sample collection.
 - c. Upon determination of an SSI for a monitored parameter, the permittee shall evaluate the cause for the SSI and report the results to the Executive Director in the next report required by this Section. The permittee may demonstrate a source other than the RCRA-permitted unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. If the SSI is determined not to be the result of operation of the active RCRA-permitted units, no additional sampling pursuant to this section is required. The report shall include the information required by Provision VI.F. The cause analysis will determine any changes in operation that are necessary or if a permit amendment or modification are necessary.
 - d. If the permittee or the Executive Director determines that active engagement of the units caused one or more SSIs requiring action under Provision VI.D.2,

submit to the Executive Director, a plan to make changes in operation or an application for a permit or compliance plan amendment or modification to make any appropriate changes at the facility. The applications shall be submitted in accordance with Provision II.A.1.

- e. Continue to monitor in accordance with the Monitoring Program at the facility.
- 2. If the confirmed results indicate that the SSI is above levels identified in Provision VI.F.2, the results shall form the basis for any corrective action in accordance with Section XI.

E. Revised Monitoring Program

If the permittee or the Executive Director determines that the Monitoring Program no longer satisfies the requirements of 30 TAC 335.152(a)(16), the permittee must, within ninety (90) days of either the permittee's determination or Executive Director's notification, submit a permit amendment or modification request to make any appropriate changes to the Monitoring Program which will satisfy the regulations.

F. Monitoring Reporting Requirements

The Annual Monitoring Report shall be due to the TCEQ on April 15th of the following year (i.e. a report for the monitoring conducted in the year 2013 is due on April 15, 2014, etc.)

If the permittee will not be able to have the report ready by the deadline due to additional data or information needed because of a possible SSI, the permittee shall notify the Executive Director in writing as soon as possible but before the deadline and give the reason for the delay and when the report will be ready. If the Executive Director determines an extension is needed, the Executive Director may grant an extension for the report.

The monitoring reports shall include the following information determined since the previously submitted report:

1. A statement whether an SSI has occurred over background values at any location during the previous reporting period and the status of any SSI events.
2. SSI parameter concentrations will be compared to risk based standards established by the Pantex Corrective Action Program pursuant to Section XI for soil and sediment. This comparison will provide a determination whether corrective measures at the Burning Ground, in addition to those ongoing or planned under the Pantex Corrective Action Program, are necessary.
3. The permittee shall include the results of all monitoring, testing, and analytical work obtained or prepared pursuant to the requirements of this section. The summary shall include a sample monitoring analyses (i.e. numeric results of sample analyses), and as applicable, statistical calculations, graphs and drawings.
4. A map which at a minimum will include all sampling locations, a scale, and the permitted Burning Ground units.

5. Recommendation for any changes.
6. Any other items requested by the Executive Director.

G. Recordkeeping Requirements

1. The permittee shall enter all monitoring, testing, analytical, statistical test computation data in evaluating monitoring data, and inspection data obtained or prepared pursuant to the requirements of this permit, including graphs and drawings, in the operating record at the facility.
2. The operating record at the facility shall be made available for review by the staff of the Commission upon request.

VII. Closure and Post-Closure Requirements

A. Facility Closure

1. The permittee shall follow the Closure Plan, developed in accordance with 40 CFR Part 264 Subpart G, and contained in the permit application submittals identified in Permit Section I.B. of this permit.

In addition, facility closure shall commence:

- a. Upon direction of the TCEQ for violation of the permit, TCEQ rules, or state statutes; or
 - b. Upon suspension, cancellation, or revocation of the terms and conditions of this permit concerning the authorization to receive, store, process, or dispose of waste materials; or
 - c. Upon abandonment of the site.
2. Request for Permit Modification or Amendment

The permittee shall submit a written request for a permit modification or amendment to authorize a change in the approved Closure Plan(s), in accordance with 40 CFR 264.112(c). The written request shall include a copy of the amended Closure Plan(s) for approval by the Executive Director.

3. Time Frames for Modification/Amendment Request Submittal

The permittee shall submit a written request for a permit modification or amendment in accordance with the time frames in 40 CFR 264.112(c)(3).

4. Closure Notice and Certification Requirements

- a. The permittee shall notify the Executive Director, in writing, at least sixty (60) days prior to the date on which he expects to begin partial or final closure of a surface impoundment, or landfill unit, or final closure of a facility with such a unit; or at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a facility with processing or storage tanks, container

storage, or incinerator units; or at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier. A copy of the notice shall be submitted to the TCEQ Regional Office.

- b. The permittee shall notify the TCEQ Regional Office at least ten (10) days prior to any closure sampling activity required by the permit in order to afford regional personnel the opportunity to observe these events and collect samples.
5. Unless the Executive Director approves an extension to the closure period, as per the requirements of 40 CFR 264.113(b), the permittee must complete partial and final closure activities within 180 days after receiving the final known volume of hazardous wastes at the hazardous waste management unit or facility.
6. As per the requirements of 40 CFR 264.115, within sixty (60) days of completion of closure of each permitted hazardous waste surface impoundment, or landfill unit, and within sixty (60) days of the completion of final closure, the permittee shall submit to the Executive Director, by registered mail, with a copy to the TCEQ Regional Office, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved Closure Plan and this permit. The certification, which shall be signed by the permittee and by a Professional Engineer licensed in Texas, must be in the form described in Provision II.A.6. A closure certification report shall be submitted with the required certifications which includes a summary of the activities conducted during closure and the results of all analyses performed. The certification report shall contain the information required by Provision II.A.6 and as applicable 30 TAC Section 350.32 (Texas Risk Reduction Program (TRRP) Remedy Standard A) and 30 TAC Section 350.33 (TRRP, Remedy Standard B) and 30 TAC Section 350.95 (Response Action Completion Report (RACR)), or 30 TAC 335, Subchapter S. After May 1, 2005, 30 TAC 335, Subchapter S may not be used except for the remaining closure activities associated with Permit Unit No. 1, 11-7N Pad. Documentation supporting the licensed Professional Engineer's certification shall be furnished to the Executive Director upon request.
7. Final closure is considered complete when all hazardous waste management units at the facility have been closed in accordance with all applicable closure requirements so that hazardous waste management activities under 40 CFR Parts 264 and 265 are no longer conducted at the facility unless subject to the provisions in 40 CFR 262.34.
8. All units, sumps, pumps, piping and any other equipment or ancillary components which have come in contact with hazardous wastes shall either be decontaminated by removing all waste, waste residues, and sludges or be disposed of at an authorized off-site facility.
9. All contaminated equipment/structures and liners (i.e., debris) intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous debris contained in 40 CFR 268.45 or removed and managed at an authorized industrial solid waste management facility. All contaminated dikes and soils intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous soils contained in 40

CFR 268.49 or removed and managed at an authorized industrial solid waste management facility.

10. All hard-surfaced areas within the hazardous waste management unit areas shall be decontaminated and the wash water and/or waste generated treated and/or disposed of at an authorized off-site facility.
11. Verification of decontamination shall be performed by analyzing wash water, swipe samples, and as necessary, soil samples for the hazardous constituents which have been in contact with the particular item being decontaminated. In addition, the permittee shall perform visual inspections of the equipment/structures for visible evidence of contamination.
12. Unless it can be demonstrated that soil contamination has not occurred or unless soils are already part of a SWMU listed in Section XI., soils shall be sampled and analyzed. Sufficiently detailed analyses of samples representative of soils remaining in non-hard-surfaced areas of the storage and processing facility area shall be performed to verify removal or decontamination of all waste and waste residues.
13. Applicable confirmation samples shall be analyzed using laboratory methods specified in Provision II.B.1.b. Equivalent or modified methods must be specified in the Closure Plan and have written approval of the Executive Director prior to use. All data submitted to the TCEQ shall be in a manner consistent with the latest version of the TCEQ QAPP.
14. Decontamination shall be deemed complete when no visible evidence of contamination is observed and when the results from verification sampling and analyses indicate applicable confirmation samples concentrations are below the applicable critical PCL for Remedy Standard A. If the underlying soils are decontaminated or removed to the PCL for Remedy Standard A, Commercial/Industrial Land use, the permittee shall comply with the institutional controls requirements of 30 TAC Section 350.111 as required or 30 TAC 335, Subchapter S as applicable.

B. Financial Assurance for Closure (Reserved)

C. Storage Unit Closure Requirements

The permittee shall close the storage unit(s) identified as TCEQ Permit Unit Nos. 03, 12, 53, 55, and 56 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (container storage) and the Texas Risk Reduction Program of 30 TAC Chapter 350.

D. Miscellaneous Unit Closure Requirements

The permittee shall close the miscellaneous units identified as TCEQ Permit Unit Nos. 21, 24-32, 43, and 57 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.601 and 264.603 (miscellaneous units), the Texas Risk Reduction Program of 30 TAC Chapter 350, and the following requirement.

Upon Closure of the OB/OD units, any and all contamination in the soil and

groundwater will be managed according to the requirements in Section XI.

- E. Surface Impoundment Closure Requirements (Reserved)
- F. Landfill Closure and Certification Requirements (Reserved)
- G. Containment Buildings Closure Requirements (Reserved)

VIII. Liability Requirements

- A. Sudden and Nonsudden Accidental Occurrences (Reserved)
- B. Incapacity of Owners or Operators, Guarantors, or Financial Institutions (Reserved)

IX. Corrective Action for Solid Waste Management Units

- A. Notification of Release from Solid Waste Management Unit (Reserved)
- B. Corrective Action Obligations (Reserved)
- C. Units Requiring Investigation (Reserved)
- D. Variance from Investigation (Reserved)
- E. RCRA Facility Investigation (RFI)/Affected Property Assessment (APA) (Reserved)
- F. Remedy Selection (Reserved)
- G. Compliance Plan

The permittee shall follow Permit Section XI, Compliance Plan, developed in accordance with 30 TAC Sections 335.156 - 335.167. Any and all revisions to the Compliance Plan shall become provisions and conditions of this permit upon the date of approval by the Commission.

X. Air Emission Standards

A. General Conditions

1. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in Section 382.003 of the Texas Health and Safety Code Ann. or violate Section 382.085 of the Texas Health and Safety Code Ann. If the Executive Director of the TCEQ determines that such a condition or violation occurs, the permittee shall implement additional abatement measures as necessary to control or prevent the condition or violation.

The permittee shall include in the Biennial Report, required in Provision II.B.7., a statement that hazardous waste management units or associated ancillary equipment at this facility are not subject to any of the requirements in Provision X.B. and X.C., if these requirements are not applicable to any hazardous waste management units or associated ancillary equipment at this facility. If at any time any hazardous waste management units or associated ancillary equipment become

subject to the requirements in Provision X.B. and X.C., the permittee must immediately comply with these requirements.

B. Process Vents

The permittee must comply with the requirements of 30 TAC Section 335.152(a)(17)/40 CFR Part 264 Subpart AA, as applicable.

C. Equipment Leaks

The permittee must comply with the requirements of 30 TAC Section 335.152(a)(18)/40 CFR Part 264, Subpart BB, as applicable.

D. Tanks, Surface Impoundments and Containers

The permittee must comply with the requirements of 40 CFR Part 264, Subpart CC, as applicable.

XI. Compliance Plan

A. General Information (and Applicability)

1. The term "Uppermost Aquifer" as referenced in this Compliance Plan refers to the description as defined in CP Table IX. Language for both the Corrective Action Program (30 TAC Section 335.166) and the Compliance Monitoring Program (30 TAC Section 335.165) is included in this Compliance Plan for reference and as contingency for future changes in accordance with Provision XI.D.6. Applicability of specific Corrective Action Program or Compliance Monitoring Program requirements depends on the status of the units, as defined in Provisions XI.A.2. through A.4. and CP Table I.
2. The Compliance Plan is specific to the waste management units listed in CP Table I (Items A and B) and depicted in CP Attachment A, for which the groundwater Corrective Action Program and Compliance Monitoring Program apply, pursuant to 30 TAC Sections 335.166 and 335.165, for releases from RCRA-regulated units.
3. The Compliance Plan is specific to the waste management units listed in CP Table I (Item D) and depicted in CP Attachment A, for which alternative requirements for the groundwater Corrective Action Program apply, pursuant to 30 TAC Sections 335.151, 335.156 and Chapter 350, for commingled releases from RCRA-regulated units and one or more SWMUs and/or AOC.
4. The Compliance Plan is specific to the SWMU and/or AOC and the Facility Operations Area (FOA) listed in CP Table I (Items C and E) and depicted in Attachment A, for which the Corrective Action Program applies pursuant to 30 TAC Section 335.167 and Chapter 350 for releases from the SWMUs.
5. The Compliance Plan is specific to the SWMU and/or AOC listed in CP Table II for which investigation and necessary corrective action applies pursuant to 30 TAC Section 335.167 and Chapter 350 and Permit Section XI.H.
6. The Compliance Plan applies to any SWMU and/or AOC discovered subsequent to issuance of this Compliance Plan. The permittee shall notify the executive director

within fifteen (15) days of such a discovery. Within ninety (90) days of discovering a SWMU or AOC, the permittee shall complete the following:

Submit a RCRA Facility Assessment (RFA) report for that SWMU and/or AOC which shall be based on EPA RCRA Facility Assessment Guidance, October 1986, NTIS PB 87-107769 or subsequent revisions. The purpose of the RFA is to identify releases or potential releases of hazardous waste, hazardous constituents or other constituents of concern from SWMU and/or AOC that may require corrective action. If the RFA indicates there is no release, the permittee shall submit the RFA report to document results and the requirements of 30 TAC Chapter 350 shall not apply. However, if the RFA indicates that there is a release or a potential for release that warrants further investigation, the permittee shall conduct an investigation and necessary corrective action based on 30 TAC Chapter 350 requirements, applicable guidance, and the approved schedules in accordance with Permit Section XI.H. Upon written approval of the RFA, the permittee shall include the newly discovered SWMU and/or AOC with each groundwater report in accordance with CP Table VII, and include the new SWMU and/or AOC on CP Tables I or II as appropriate, with the next Permit/ Compliance Plan modification, amendment or renewal; or

If a FOA is authorized in CP Table 1, Item E and if the permittee discovers a SWMU and/or AOC outside a FOA boundary, the permittee shall submit an RFA for that SWMU and/or AOC based on Provision XI.A.6. If the permittee discovers a SWMU and/or AOC inside a FOA boundary that has not been remediated, then an assessment should be conducted to indicate whether changes to the FOA Corrective Action Program are required. Upon written approval of the assessment, the permittee shall include the newly discovered SWMU and/or AOC with each groundwater report in accordance with Provision XI.G.3. and CP Table VII, and include the new SWMU and/or AOC on CP Tables I or II as appropriate, with the next Compliance Plan modification, amendment or renewal.

B. Authorized Components and Functions of Corrective Action and Compliance Monitoring Systems

Corrective Action Systems are required for units specified in CP Table I, Items A, C, D and E. The permittee is authorized to install and operate the Corrective Action System components specified in Provisions XI.B.1 through XI.B.10, subject to the limitations contained herein. Compliance Monitoring System components for units listed in CP Table I, Item B are specified below in Provision XI.B.11. If applicable and if listed in CP Table I, Item E, this Compliance Plan authorizes the establishment of a FOA, according to the requirements of 30 TAC Section 350.131 - Section 350.135, to address corrective action for releases from multiple sources within the FOA boundaries as specified in CP Table I, Item E. At the termination of the FOA (30 TAC Section 350.133), due to a substantial change in circumstance (30 TAC Section 350.35) or failure to maintain compliance with the qualifying criteria, the permittee shall comply fully with the remaining Compliance Plan Provisions. If a FOA is authorized under this permit in CP Table I, Item E, once the FOA Authorization has been terminated or suspended, the permittee shall modify or amend the Compliance Plan to reassign the units and/or areas in CP Table I, Item E to CP Table I, Items A, B, C or D, as appropriate. The permittee may be required to fulfill final corrective actions and/or establish compliance monitoring to achieve the requirements of this Compliance Plan upon termination or suspension of the FOA Authorization.

Corrective Action Systems:

1. Groundwater monitoring system may at a minimum consist of the following categories of wells listed in CP Table V, to monitor groundwater quality. An application to modify or amend the Compliance Plan is required to change the category or wells listed in CP Table V.
 - a. Background Well(s) unaffected by the operation of the facility.
 - b. POC Wells to demonstrate compliance with the GWPS.
 - c. If applicable, FOA Boundary of Compliance (FBOC) Wells to demonstrate compliance with the GWPS.
 - d. If applicable, Point of Exposure (POE) Wells, to demonstrate compliance with the GWPS and evaluate the effectiveness of the remediation program.
 - e. If applicable, Alternate Point of Exposure (APOE) Wells to demonstrate compliance with the GWPS at a location other than the prescribed POE; and in maintaining a Plume Management Zone (PMZ) in accordance with 30 TAC Section 350.33.
2. As applicable, the permittee is authorized to install and operate the following additional corrective action system wells to monitor groundwater quality and hydrogeological conditions of the aquifer as designated in CP Attachment A. The permittee may propose changes to the following corrective action system wells as part of the reporting requirements in CP Table VII (Item 12) and shall become part of the Compliance Plan upon approval by the executive director. The purpose is to provide the permittee with the flexibility to alter the groundwater monitoring system and Corrective Action System designs, as necessary, to proactively address changing environmental conditions without modification or amendment to the Compliance Plan.
 - a. Corrective Action Observation (CAO) Wells to evaluate the lateral and vertical extent of groundwater contamination in the Uppermost Aquifer and evaluate the effectiveness of the remediation program.
 - b. Corrective Action System (CAS) Wells to remediate and/or contain contaminated groundwater.
 - c. If applicable, Attenuation Monitoring Point (AMP) Wells, located within the migration pathway of a chemical of concern, which demonstrates that Attenuation Action Levels (AALs) representing critical Protective Concentration Levels (PCLs) established as the GWPS will not be exceeded at the applicable point of exposure.
 - d. If applicable, FOA Piezometer and/or Supplemental Wells to gauge hydrogeologic conditions of the aquifer.
3. Groundwater Corrective Action System to effect withdrawal, treatment, and/or containment of contaminated groundwater and non-aqueous phase liquids (NAPLs) by means of recovery wells, interceptor trenches, bioremediation, air sparging and/or another alternate Corrective Action System design. Any alternate Corrective Action System designs proposed by the permittee subsequent to issuance of this Compliance Plan that are equivalent to or exceed the performance of the Corrective Action Systems approved herein shall become part of the Compliance Plan upon approval by the

executive director. The type of Corrective Action System in operation at the facility and an evaluation of system performance shall be reported in accordance with CP Table VII.

4. Collection and conveyance system to store recovered groundwater and NAPLs, if found, prior to disposal at authorized facilities. If the recovered groundwater is characteristically hazardous and/or is contaminated with listed hazardous waste and the collection system does not meet the wastewater treatment unit exemption under 30 TAC Sections 335.2(f) and 335.41(d), the collection system shall comply with the following regulations: 1) If the contaminated groundwater is stored for less than ninety (90) days without a permit or interim status, then the container and tank collection systems shall comply with provisions of 30 TAC Section 335.69(a)(1) / 40 CFR Part 265 Subparts I and J; 2) If the contaminated groundwater is stored for more than ninety (90) days, then the container and tank collection system shall comply with the provisions of 30 TAC Section 335.152(a)(7) and (8) / 40 CFR Part 264 Subparts I and J. The collection and conveyance system shall consist of the following components.
 - a. A groundwater CAS.
 - b. A groundwater storage system.
 - c. Appurtenances for the collection and conveyance of recovered contaminated groundwater and NAPLs, if applicable.
5. Treatment system to reduce the concentration of hazardous constituents in contaminated groundwater to the GWPS specified in CP Table III by means of biological, physical, and chemical treatment processes.
6. Groundwater containment system to inhibit contaminated groundwater above CP Table III GWPS from migrating beyond the influence of the CAS.
7. ReInjection of fresh or recovered groundwater, after treatment, into the contaminated aquifer in accordance with 30 TAC Sections 331.9 and 331.10.
8. The following handling methods are authorized for recovered groundwater having concentrations of hazardous constituents exceeding the GWPS:
 - a. Treatment through an on-site wastewater treatment system and discharge via a permitted outfall in compliance with a current industrial wastewater discharge permit.
 - b. Treatment of recovered groundwater by means of air stripping and carbon adsorption. The air stripper shall be maintained in compliance with applicable air quality regulations.
 - c. Disposal at permitted deep injection well facility.
 - d. Disposal at other authorized on-site facility or permitted off-site facility.
 - e. Any other treatment methods approved by the executive director.
 - f. The method(s) utilized for handling, disposing and recording volumes of all recovered/purged contaminated groundwater shall be reported in accordance with CP Table VII.

9. Recovered NAPLs, if found, shall be managed (treated, stored, and disposed), or recycled in an authorized on-site unit(s) or an off-site facility.
10. The Corrective Action Program shall consist of the system components listed in Provisions XI.B.1. through XI.B.9., to be operated according to the plans and specifications as approved in Provision XI.C.1. and the specifications of this Compliance Plan.
 - a. If groundwater recovery wells are utilized in the Corrective Action System, the flow rate at each recovery well shall be set and recorded once a week. This weekly flow rate data shall be used to calculate a monthly and annual total flow which shall be reported in accordance with CP Table VII of this Compliance Plan.
 - b. All Corrective Action System components shall be maintained in a functional and leak-free condition. All above ground collection system pipes shall be inspected weekly. In addition, the area surrounding the wells shall be inspected weekly for visible signs indicating leaks in buried sections of the collection system. If a release of reportable quantity is detected in any part of the collection system, it must be reported within twenty-four (24) hours to the local TCEQ Region Office, and immediate action must be taken to stop the release and resolve the problem.
 - c. The permittee shall notify the executive director of any scheduled or non-scheduled periods of Corrective Action System shutdown, Corrective Action System malfunction, or treatment system shutdown for maintenance lasting more than thirty (30) days. The permittee shall notify the executive director in writing no later than seven (7) days following the date the permittee determines that the shutdown will last more than thirty (30) days. All shutdowns and malfunctions, irrespective of duration, shall be recorded in the facility's inspection log, and shall be reported in accordance with CP Table VII.
11. Compliance Monitoring Systems: Groundwater monitoring system may at a minimum consist of the following categories of wells listed in CP Table V, to monitor groundwater quality. An application to modify or amend the Compliance Plan is required to change the category or the wells listed in CP Table V.
 - a. Background well(s) that is unaffected by the operation of the facility.
 - b. POC wells to demonstrate compliance with the GWPS.
 - c. POE wells to demonstrate compliance with the GWPS.
 - d. APOE wells to demonstrate compliance with the GWPS at a location other than the prescribed POE.

C. General Design and Construction Requirements

1. All plans submitted with the Compliance Plan Application referenced in Provision I.B., concerning the design, construction, and operation of the applicable authorized components of the FOA, Corrective Action and Groundwater Monitoring Programs and/or groundwater Compliance Monitoring Program, are approved subject to the terms established by this Compliance Plan. All plans must comply with this Compliance Plan and TCEQ Rules. Any alternate Corrective Action System design

proposed by the permittee subsequent to issuance of this Compliance Plan that are equivalent to or exceed the performance of the Corrective Action Systems approved herein shall become part of the Compliance Plan upon approval by the executive director.

2. Well Design, Construction, Installation, Certification, Plugging and Abandonment Procedures and Specifications

For all wells to be constructed after issuance of this Compliance Plan that do not meet the well construction specifications identified in CP Attachment C of this permit, the permittee shall submit to the executive director the proposed well location and construction diagram for approval at least sixty (60) days in advance of the anticipated date of installation or in accordance with an approved schedule for installation. These requirements may be met through submittal of a work plan by the permittee and subsequent approval by the executive director. Well installation shall commence upon written approval of the executive director. Wells constructed prior to issuance of this Compliance Plan may be utilized as groundwater monitoring wells if they meet the standards of CP Attachment C or are otherwise authorized by issuance of the Compliance Plan.

Unless the permittee proposes an alternate well design that will result in wells of equivalent performance, each well installed after issuance of this Compliance Plan shall follow the design specifications contained in Attachment CP Attachment C of this permit. The permittee shall follow the certification and reporting requirements for installation of new, plugging/ abandonment and replacement of existing wells as specified in CP Attachment C of this permit and CP Table VII.

3. The permittee shall not install or maintain any drinking water or supply wells that are screened within plumes of groundwater contamination at the facility.

D. Corrective Action and Compliance Monitoring Objectives and the Groundwater Protection Standard

Corrective Action and Compliance Monitoring Objectives for Units Specified in CP Table I.

1. The GWPS defines the concentration limits of hazardous constituents, with respect to groundwater quality restoration in the Uppermost Aquifer and any lower interconnected aquifers, which are to be achieved at the POC, (and FBOC, POE, and APOE, if applicable) and beyond in accordance with Provision XI.E.1. by operation of the Corrective Action Program and/or Compliance Monitoring Program at this facility.
2. POC wells are designated in CP Attachment A and further defined for purposes of this Compliance Plan by CP Table V, which also identifies FBOC (POE and APOE, if any) wells for which groundwater monitoring procedures will apply (Permit Section XI.F.).
3. For Corrective Action, the hazardous constituents detected in groundwater are specified in Column A of CP Table III and IIIA. For Compliance Monitoring, hazardous constituents that are reasonably expected to be in or derived from waste placed in the units and that are to be monitored annually at the POC are listed in Column A of CP Table IV. The hazardous constituents detected in the groundwater are specified in Column A of CP Table IVA. Additional constituents shall be added

to CP Tables IIIA (Corrective Action) and IVA (Compliance Monitoring) through a Compliance Plan modification or amendment in accordance with Provision XI.J.4. Groundwater analysis for each hazardous constituent shall utilize an analytical method, listed in the EPA SW-846 and as listed in the July 8, 1987 edition of the Federal Register and later editions, which is capable of measuring the concentration of the hazardous constituent at a level equal to or less than the corresponding value specified in CP Tables III, IIIA and equal to the quantitation level specified in CP Table IV except when matrix interference prevents achievement of that level.

4. The GWPS are specified in Column B (and if applicable, in Column C) of CP Tables III, IIIA (Corrective Action) or IVA (Compliance Monitoring). The GWPS shall be the values for statistical comparisons unless CP Tables III, IIIA or IVA are amended in accordance with current guidance and regulations, or if any other accepted levels are promulgated by the TCEQ or the EPA. The values in CP Tables III, IIIA or IVA will change as updates to 30 TAC Section 335.160 and Chapter 350 are promulgated. The executive director or the permittee may request to replace concentration limits through a modification or amendment to this Compliance Plan in accordance with 30 TAC Chapter 305 Subchapter D.
5. Compliance Period for each unit is specified in CP Table VI.
6. The GWPS Achieved for Corrective Action Program.
 - a. Achievement of the GWPS, in accordance with Provision XI.E.1., is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents have been reduced by the Corrective Action Program (Permit Section XI.E.) to concentrations of hazardous constituents that do not exhibit a statistically significant increase or exceed the concentration limits when directly compared to the GWPS of CP Table III.
 - b. If the GWPS is achieved at the RCRA-regulated units or waste management areas, in accordance with Provision XI.E.1., during the Compliance Period, the permittee may apply to modify or amend this Compliance Plan to revise the Corrective Action Program to the extent necessary to demonstrate by means of the Groundwater Monitoring Program that the GWPS will not be exceeded during the remainder of the Compliance Period.
 - c. If the GWPS is not achieved at the RCRA-regulated units or waste management areas, in accordance with Provision XI.E.1., during the Compliance Period, the Corrective Action Program must continue until the GWPS has not been exceeded in all wells for that corrective action area for three (3) consecutive years.
 - d. If the GWPS established in this Compliance Plan for the RCRA-regulated unit or waste management area have not been exceeded for three (3) consecutive years at the end of the Compliance Period, then the permittee must, within ninety (90) days, submit an application for a Compliance Plan/Permit modification or amendment to establish a Compliance Monitoring Program or a Detection Monitoring Program for the aquifer(s) during the remaining portion of the thirty (30) year post-closure care period in accordance with 40 CFR Part 264.117. If the thirty (30) year post-closure care period has expired, the permittee may request groundwater monitoring for that RCRA-regulated unit or waste management area be discontinued. Until approval of the request, the permittee shall continue groundwater monitoring under current Compliance Plan provisions for each RCRA-regulated unit or waste management area.

- e. If the GWPS established in this Compliance Plan for SWMUs and/or AOCs listed in CP Table I, Item C have not been exceeded for three (3) consecutive years in all wells for that unit, then the permittee may apply for a modification or amendment to the Compliance Plan to terminate the Corrective Action Program for that unit.
 - f. If the GWPS established by this Compliance Plan for those units/areas listed in CP Table I, Item D (regarding alternative corrective action requirements for commingled plumes) have not been exceeded for three (3) consecutive years for all wells for those units/areas, and the performance standards of 30 TAC Sections 335.8 and 335.167 are met, then the permittee may apply for a modification or amendment to the Compliance Plan to terminate the Corrective Action Program for those units/areas.
7. Compliance Monitoring Program: Compliance with the GWPS for each well is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents do not exhibit a statistically significant increase (SSI) or exceed the concentration limits when directly compared to the concentration limits of CP Table IVA. If any POC (and/or POE, if any) well of CP Table V is non-compliant with the GWPS at any time during the Compliance Monitoring Program, the permittee shall respond and report according to CP Table VII. The groundwater Compliance Monitoring Program established by this Compliance Plan shall extend until expiration of the Compliance Period specified in CP Table VI. At the end of the Compliance Period, the permittee shall either:
- a. Submit a permit modification or amendment request to re-establish a Detection Monitoring Program under 30 TAC Section 335.164 for the remaining portion of the thirty (30) year post-closure care period in accordance with 40 CFR Part 264.117 if none of the hazardous constituents are detected at concentrations equal to or greater than the values listed in CP Table IV. Until approval of the request, the permittee shall continue groundwater monitoring under current Compliance Plan provisions;
 - b. Continue monitoring under the Compliance Monitoring Program if any hazardous constituent continues to be detected at concentrations equal to or greater than the value listed in CP Table IV and the GWPS in CP Table IVA is not exceeded during remaining portion of the thirty (30) year post-closure care period; or
 - c. If the thirty (30) year post-closure care period has expired and hazardous constituents continue to be detected in groundwater by Compliance Monitoring Program, then the permittee may request groundwater monitoring be discontinued if the GWPS of CP Table IVA are not exceeded at the end of the Compliance Period. Until approval, the permittee shall continue groundwater monitoring under current Compliance Plan provisions.

E. Corrective Action Program

The Corrective Action Program applies to units specified in CP Table I, Items A, C and D and E. The Corrective Action Program shall remediate, recover, and/or contain contaminated groundwater from the Uppermost Aquifer and any interconnected lower aquifers, if applicable. The Corrective Action Program shall consist of the system components of Permit Section XI.B., to be operated according to the specifications of this Compliance Plan. The permittee shall conduct the Corrective Action Program until

the performance standards of Provision XI.E.1. are met. The permittee shall initiate the Corrective Action Program immediately upon issuance of this Compliance Plan, except where other specific TCEQ response deadlines may apply.

1. Performance Standard

The permittee shall conduct the Corrective Action Program to remedy the quality of groundwater by removing or treating in place the hazardous constituents so as to achieve the concentration limits specified in the GWPS of Section XI.D. of this Compliance Plan in accordance with the following:

- a. At the POC (FBOC, POE, and APOE, if any) and between the POC (FBOC, POE, and APOE, if any) and the downgradient facility property line;
- b. Beyond the facility boundary where necessary to protect human health and the environment, unless the permittee demonstrates to the satisfaction of the executive director that, despite the permittee's best efforts, the necessary permission from the property owner(s) was not received to undertake such action. The permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off- site access is denied;
- c. Operate the Corrective Action System so as to intercept, contain and/or treat the contamination in the Uppermost Aquifer unless the system is under repair or maintenance;
- d. Recommend changes to the configuration of the Corrective Action System at any time that it is determined that the contamination present in the Uppermost Aquifer, deeper zone, or any interconnected lower aquifers is not being effectively contained and/or remediated; and
- e. The permittee is required to actively remove NAPLs from the Uppermost Aquifer and any interconnected aquifers wherever found, to the extent technically practicable.

If a FOA is authorized, the permittee is required to actively remove NAPLs found outside the FOA boundaries from the Uppermost Aquifer and any interconnected aquifers whenever found, to comply with TRRP RSA or RSB. Inside the FOA boundaries, the permittee is required to address NAPL occurrences consistent with the requirements of 30 TAC Section 350.135(a) (9).

F. Groundwater Monitoring Program Requirements

The permittee shall install, operate and maintain the Groundwater Monitoring System to evaluate the compliance status of the waste management units under the Compliance Monitoring Program, or to evaluate the effectiveness of the Corrective Action Program for those units undergoing remediation, as applicable. The Groundwater Monitoring System, shall be composed of wells specified in CP Table V, and shall include at a minimum Background, POC, and other wells as necessary which have been approved by the executive director (e.g., FBOC, POE, etc.).

1. Waste Management Area Specific Background Groundwater Quality

The permittee may submit to the executive director for review and approval a plan to determine site-specific background values of the naturally occurring hazardous

constituents of CP Table III, IIIA (for Corrective Action) or CP Table IVA (for Compliance Monitoring) in lieu of the concentration limits given in these Tables. The plan shall include appropriate background well locations and screened intervals, well sampling schedules, and methodology for determining and expressing background values in a form appropriate for the statistical evaluation of the monitoring results. Once background values have been established, the permittee shall submit a modification or amendment, in accordance with Provision XI.J.4., to add background values.

2. Sampling and Analysis Plan

- a. Wells shall be sampled according to the Sampling and Analysis Plan referenced in Provision I.B. The Sampling and Analysis Plan is hereby incorporated into the Compliance Plan by reference as if set out fully herein. The permittee or the executive director shall propose modifications to the plan, as necessary to reflect current methods in EPA SW-846 and ASTM Standard Test Methods or other methods accepted by the TCEQ. The laboratory methods utilized for groundwater analysis shall be capable of measuring concentration of each hazardous constituent equal to or less than the values in Tables CP III, IIIA or IVA. Any and all revisions to the plan shall become conditions of this Compliance Plan at the beginning of the first quarter following approval by the executive director.
- b. An up-to-date and approved Sampling and Analysis Plan shall be maintained at the facility and made available for inspection upon request.

3. Sampling and Analysis Frequencies and Parameters

- a. Frequencies of sampling are defined below:
 - (1) "Week" and "month" shall be based upon a calendar week and month;
 - (2) "Quarter" shall be based on divisions of the calendar year (i.e., January through March, April through June, July through September, October through December);
 - (3) "Semiannual" shall be based on divisions of the calendar year (i.e., January through June and July through December) and consist of two consecutive quarters;
 - (4) "Annual" or "Year" shall be four consecutive quarters, beginning with the first quarter. Years shall be designated consecutively, beginning with the "first year", "second year", etc.; and
 - (5) "Calendar year" shall be based on divisions of the calendar (i.e. January through December).
- b. Sampling of wells shall commence during the first complete quarter after issuance of this Compliance Plan. Thereafter, samples shall be collected on a frequency as specified in CP Table VIII. Data evaluations shall be completed within ninety (90) days of collection of the last sample unless QA/QC procedures show that data is unacceptable and re-analyses or re-sampling must be performed. In such cases, the executive director will be notified as soon as it becomes apparent that the ninety (90) day time limit will not be met.

- c. In the first and subsequent years of groundwater monitoring, the wells shall be sampled and analyzed according to the following schedules:

(1) Corrective Action Monitoring for units specified in CP Table I, Items A, C and D and E.

- a) Each Background, POC, FOA, FBOC, POE, APOE well listed in CP Table V; and AMP well (if applicable), CAO well, and CAS well depicted in Attachment A shall be sampled and analyzed on a frequency as specified in CP Table VIII for the constituents of CP Table IIIA until the achievement of the GWPS in accordance with Provision XI.D.6.
- b) Each CAO well, AMP well (if applicable) and CAS well shall continue to be sampled, according to Section XI.D., until any changes to these groups of wells are approved by the executive director pursuant to Provision XI.B.3.
- c) Each well of CP Table V shall be sampled for the constituents of CP Table IIIA, according to Provision XI.D.3., until analytical results satisfy the GWPS of CP Table IIIA for all wells of CP Table V of that unit or area for two consecutive sampling events. All wells listed in CP Table V shall then be sampled and analyzed on a frequency specified in CP Table VIII for the constituents of CP Table III until all constituents of CP Table III are below the GWPS for all CP Table V wells of that unit or area in accordance with Provision XI.D.6.
- d) If the GWPS is achieved in all wells (Background, POC, FBOC, POE, APOE, AMP, CAO and CAS), in accordance with Provision XI.D.6.a., then the permittee may apply to modify or amend the Compliance Plan according to Provisions XI.D.6.b., XI.D.6.d., XI.D.6.e., or XI.D.6.f.
- e) Any well with NAPLs detected in the wellbore shall be considered as non-compliant with the GWPS and is not required to be analyzed for the constituents of CP Table III or IIIA.

(2) Compliance Monitoring for units specified in CP Table I, Item B.

- a) If data evaluation is performed in accordance with Provision XI.F.4.a., one sample from each well of CP Table V shall be taken and analyzed semiannually for the constituents of CP Table IVA. If data evaluation is performed in accordance with Provision XI.F.4.b., a sequence of at least four independent samples from each well of CP Table V shall be taken and analyzed on a frequency as specified in CP Table VIII for the constituents of CP Table IVA; and
- b) One sample from each well of CP Table V shall be taken and analyzed annually for constituents in CP Table IV during the first quarter of each year. Analysis for the hazardous constituents of CP Table IV and CP Table IVA may be accomplished with the same sample when sampling events coincide.

d. Field Determination Requirements - All Wells Specified in CP Table VII (Item 12).

- (1) Water level measurements relative to Mean Sea Level shall be measured to

within 0.01 ft. and shall be performed during each sampling event effective immediately with issuance of this Compliance Plan. Measurements shall be taken in all monitor wells specified in this Compliance Plan.

- (2) Field determinations of pH, temperature and Specific Conductivity are required for all wells of CP Table V and as depicted in CP Attachment A excluding wells containing NAPLs. Turbidity in nephelometric turbidity units is required if micro-purging techniques are utilized during sample collection.
- (3) Field observations including descriptions of appearance (clarity, color, etc.) shall be recorded on a frequency as specified in CP Table VIII for all wells of CP Table V and wells depicted in CP Attachment A, excluding wells containing NAPL.
- (4) The total depth of each well which is not equipped with a dedicated pump shall be measured during each sampling event. Total depth of each well which is equipped with a dedicated pump shall be measured when: 1) pumps are removed for maintenance; or 2) the groundwater production rate of the dedicated pump decreases by 25% from the initial production rate when the pump was installed; or 3) at least every five (5) years for monitoring and recovery wells. The measured total depth shall be compared to the total depth recorded on the well construction log. Should a comparison of the measured and the recorded total depth reveal that greater than 20% of the well screen has been silted in, the permittee shall perform such actions necessary (redevelopment, replacement, etc.) to enable the well to function properly.
- (5) All wells specified in CP Table VII (Item 12) shall be inspected during each sampling event in accordance with specifications in the Sampling and Analysis Plan. Repairs or a proposal for replacement for any affected well shall be performed within ninety (90) days of the routine sampling event inspection which identified the problem well. In such cases, the Executive Director will be notified as soon as it becomes apparent that the 90-day time limit will not be met. Complex repairs shall be conducted based upon a schedule approved by the Executive Director.

4. Data Evaluation Procedures

Data evaluation in accordance with this provision shall be performed for all wells within ninety (90) days of collection of the last sample for the duration of the Corrective Action Monitoring and Compliance Monitoring programs. When evaluating the monitoring results of each well, pursuant to Section XI.F., for the constituents of CP Tables III or IIIA for corrective action monitoring, or CP Tables IV or IVA for compliance monitoring, the permittee shall either:

- a. Corrective Action Monitoring: Directly compare the value of each constituent to the respective concentration limit of CP Table III or IIIA and determine if it is less than, equal to, or greater than the concentration limits. If the values for all the constituents are less than or equal to the respective concentration limits, then the well shall be considered compliant with the GWPS for the sampling event. If one or more constituent value is greater than the respective concentration limit, then the well shall be considered non-compliant with the GWPS for the sampling event; or

Compliance Monitoring: Directly compare the value of each constituent to the respective concentration limit of CP Table IV or IVA and determine if it is less than, equal to, or greater than the listed value. For constituents listed in CP Table IV that are not also listed in CP Table IVA, if constituents are detected at concentrations equal to or greater than the value listed in CP Table IV, then the procedures of Provision XI.G.2.b. apply. For constituents listed in CP Table IVA, if the values for all the constituents are less than or equal to the respective concentration limits of CP Table IVA, then the well shall be considered compliant with the GWPS for the sampling event. If one or more constituent value is greater than the respective concentration limit, then the well shall be considered non-compliant with the GWPS for the sampling event and the procedures of Provision XI.G.2.a. apply; or

- b. Compare the value of each constituent to its respective concentration limit of CP Table III or IIIA for corrective action monitoring, or CP Table IV or IVA for compliance monitoring, using one of the following procedures:
 - (1) The Confidence Interval Procedure for the mean concentration based on a normal, log-normal, or non-parametric distribution. The 95 percent confidence coefficient of the t-distribution will be used in constructing the confidence interval (Chapter 21 of Statistical Analysis of Groundwater Data at RCRA Facilities-Unified Guidance, U.S. EPA, March 2009), and subsequent updates acceptable to the executive director. The confidence interval upper limit for each constituent shall be compared with the corresponding concentration limit in CP Table III or IIIA for corrective action monitoring, or CP Table IV or IVA for compliance monitoring. To be considered in compliance, the confidence interval upper limit for a well in question must not exceed the tabled concentration limit. A confidence interval upper limit above the tabled concentration limit shall be considered as evidence of statistically significant contamination; or
 - (2) An alternative statistical method proposed by the permittee and approved by the TCEQ. Any proposed alternative method must be appropriate with respect to distributional assumptions and must provide reasonable control of both false positive and false negative error rates.
- c. Within thirty (30) days of an initial data evaluation that determines concentration limits have been exceeded in a well, pursuant to Provisions XI.F.4.a or XI.F.4.b, the permittee may resample and repeat the analysis to verify concentration limits have been exceeded. If the second analysis indicates that the sample does not exceed the concentration limits, then the well shall be considered compliant with the concentration limits for the sampling event.

G. Response and Reporting

1. Corrective Action Monitoring for units specified in CP Table I, Items A, C, or D (if alternative corrective action requirements apply), or E (if FOA is authorized).
 - a. If the permittee or the Executive Director determines that the Corrective Action Program required by this Compliance Plan no longer satisfies the requirements of 30 TAC Section 335.166 or Section 335.167, the permittee must, within ninety (90) days of either the permittee's determination or executive director's notification, submit an application for a Compliance Plan modification or amendment to make any appropriate changes to the Corrective Action Program

which will satisfy the regulations.

- b. If the executive director determines that the lateral or vertical extent of groundwater contamination is not delineated and/or is not delineated outside the FOA boundary, the permittee must, in accordance with an approved schedule specified in the approved Pantex Plant Ogallala and Perched Groundwater Contingency Plan dated September 2019 (Contingency Plan), or most recent approved version, initiate an investigation to determine the extent of the contamination based on the Practical Quantitation Limit (PQL), Method Quantitation Limit (MQL), or other applicable standard as required or approved by the executive director.
- c. This section applies only if POEs are defined in CP Table V and a GWPS is assigned at the POE; and attenuation action level (if applicable) is assigned to its respective attenuation monitoring point. If during two (2) consecutive sampling events the GWPS is exceeded at the POE, or the attenuation action level (if applicable) is exceeded at its respective attenuation monitoring point, then within ninety (90) days of completing the data evaluation of the second sampling event, the permittee must:
 - (1) Install groundwater recovery wells or alternate Corrective Action System design to mitigate the downgradient migration of the contaminant plume; and/or
 - (2) Reevaluate the criteria originally used to establish the GWPS, in accordance with Provision XI.D.4., and submit an application to modify or amend the Compliance Plan to address the GWPS exceedance; and/or reevaluate the criteria originally used to establish the attenuation action level and submit an analysis to the executive director for approval to request changes to the attenuation action level.

2. Compliance Monitoring for units specified in CP Table I, Item B

- a. Compliance with the GWPS for each POC (POE and APOE, if applicable) well of CP Table V is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents do not exhibit a statistically significant increase or exceed the concentration limits when directly compared to the concentration limits of CP Table IVA. If the permittee determines that any concentration limit of CP Table IVA is being exceeded pursuant to the procedures used in Provision XI.F.4 at any POC (POE, and APOE, if applicable) well of CP Table V, then the permittee must notify the executive director of this finding in writing within seven (7) days. The notification must identify what concentration limits have been exceeded and indicate that the permittee will either:
 - (1) Submit a Compliance Plan modification or amendment to the executive director to establish a Corrective Action Program meeting the requirements of 30 TAC Section 335.166 within 180 days of such determination in accordance with 30 TAC Section 335.165(11)(b);
 - (2) Demonstrate that a source other than the regulated unit caused the exceedance of the concentration limits of CP Table IVA or that the concentration is an artifact caused by errors in sampling, analysis, or statistical evaluation or natural variation in the groundwater within ninety

(90) days in accordance with 30 TAC Section 335.165(12); or

- (3) Re-evaluate the criteria originally used to establish the concentration limits of the GWPS to determine if a Corrective Action Program is necessary. If it is determined that revised concentration limits will result in a GWPS that is protective of human health and the environment, then the permittee may request to replace the concentration limits of the GWPS through a modification or amendment to this Compliance Plan in accordance with Provision XI.D.6. Such a request must be submitted within ninety (90) days and may require a proposal for additional groundwater monitoring wells to verify attenuation of the contaminant plume to levels that are protective of human health and the environment.
 - b. If the permittee detects CP Table IV constituents at concentration levels equal to or greater than the listed Quantitation Limit and which exceed background groundwater quality in groundwater samples from POC (POE, APOE, if any) wells of CP Table V that are not already identified in CP Table IVA as monitoring constituents, then the permittee must either:
 - (1) Report the concentration of the newly detected constituents to the executive director within seven (7) days after the completion of the analysis. Within ninety (90) days after the completion of the analysis, the permittee shall submit a modification or amendment application, in accordance with Provision XI.J.4., requesting that the constituent be added to the CP Table IVA. The request shall propose a concentration limit for the GWPS based on 30 TAC Section 335.160 for each constituent; or
 - (2) Resample within thirty (30) days of the initial findings and repeat the CP Table IV analysis. If the second analysis does not confirm the presence of the newly detected constituents, then the permittee shall continue monitoring under the current Compliance Plan provisions. If the second analysis confirms the presence of the newly detected constituents, then the permittee shall report the concentration of these additional constituents to the executive director within seven (7) days after the completion of the second analysis. Within ninety (90) days after completion of the second analysis, the permittee shall submit a modification or amendment application, in accordance with Provision XI.J.4, requesting that the confirmed constituents be added to the CP Table IVA. The request shall propose a concentration limit for the GWPS based on 30 TAC Section 335.160 for each constituent.
 - c. If the permittee or the executive director determines that the Compliance Monitoring Program required by this Compliance Plan no longer satisfies the requirements of 30 TAC Section 335.165, the permittee must, within ninety (90) days of either the permittee's determination or executive director's notification, submit a Compliance Plan application, in accordance with Provision XI.J.4, to make changes to the Compliance Monitoring Program which will satisfy the regulations.
3. For Corrective Action and Compliance Monitoring Programs, the permittee shall submit a groundwater monitoring report(s) in accordance with the frequency specified in Column B, CP Table VII, and contain the information listed in CP Table VII required for the specific program(s) that are applicable.

H. Corrective Action and Interim Corrective Measures (ICMs) for Solid Waste Management Units

1. Corrective Action Obligations

The permittee shall conduct corrective action as necessary to protect human health and the environment for all releases of hazardous waste, hazardous constituents listed in Appendix VIII and/or 40 CFR Part 264, Appendix IX and/or other COCs from any SWMU and/or AOC according to 30 TAC Section 335.167. Corrective action shall consist of an Affected Property Assessment (APA), determination of protective concentration levels, selection of a remedy standard (if necessary), development and implementation of a response action (if necessary), and submittal of required reports according to 30 TAC Chapter 350.

In the case of SWMUs and/or AOCs that have been grandfathered under 30 TAC Chapter 335, Subchapters A and S, Risk Reduction Standards (RRS), corrective action shall consist of the RCRA Facility Investigation (RFI) and if necessary, Interim Corrective Measures (ICM), Baseline Risk Assessment (BLRA), Corrective Measures Study (CMS) and Corrective Measures Implementation (CMI). For grandfathered SWMUs and/or AOCs, the permittee may continue to complete the corrective action requirements under 30 TAC Chapter 335, Subchapters A and S, provided the permittee complies with the notification and schedule requirements pursuant to 30 TAC Sections 335.8 and 350.2(m). If on the basis of the APA /RFI, it is determined that COC have been or are being released into the environment, the permittee may be required to conduct necessary ICMs and/ or corrective actions.

Upon executive director's review of corrective action obligations, the permittee may be required to perform any or all of the following:

- a. Conduct investigation(s);
- b. Provide additional information;
- c. Investigate additional SWMU(s) and/or AOC(s); and/or
- d. Submit an application for a modification/amendment to a Compliance Plan to implement corrective action.

Any additional requirements must be completed within the time frame(s) specified by the executive director.

2. The permittee shall conduct an RFI/APA for the SWMUs and/or AOC listed in CP Table II, in accordance with Provision XI.A.5, and for any new SWMUs and/or AOC discovered after the issuance of this Compliance Plan in accordance with Provision XI.A.6.

3. Variance From Investigation

The permittee may elect to certify that no COCs are currently or never have been present or managed in a SWMU and/or AOC referenced in Provision XI.H.2 in lieu of performing the investigation required in Provisions XI.H.1 and XI.H.4, provided that confirming data is submitted for the current and past waste(s) managed in the respective unit or area. The permittee shall submit such information and certification(s) on a unit-by-unit basis in the time frame required in Provision XI.H.4

for review and approval by the executive director of the TCEQ. Should the permittee fail to demonstrate and certify that COCs are not or were not present in a particular unit, the investigation required in Provisions XI.H.1 and XI.H.4 shall be performed for the SWMU and/or AOC.

4. RCRA Facility Investigation (RFI)/Affected Property Assessment (APA)

Within one hundred twenty (120) days from the date of issuance of this Compliance Plan and/or approval of the RFA Report of Provision XI.A.5., the permittee shall submit a schedule for completion of the RFI(s)/APA to the executive director for review and approval. The permittee shall initiate the investigations in accordance with the approved schedule and guidance contained in the EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 and in accordance with state regulations referenced in Provision XI.H.1.

The results of the RFI/APA must be appropriately documented in a report and submitted to the executive director for approval within the time frame established in the approved schedule. The Report shall be considered complete when the full nature and extent of the contamination, the QA/QC procedures and the Data Quality Objectives are documented to the satisfaction of the executive director. The permittee shall propose or conduct ICMs, as necessary, to protect human health and the environment.

5. Remedy Selection

Upon approval of RFI Report/APA Report (APAR), if it is determined that there has been a release of COCs into the environment, which poses a potential risk to human health and the environment, then the permittee shall propose a remedy in accordance with the 30 TAC Chapter 335, Subchapters A and S, Risk Reduction Standards (if applicable), the TRRP rules, or as otherwise authorized by the executive director. This may require a BLRA and/or CMS Report to be submitted for review and approval within the time frame(s) specified by the executive director. For facilities that are grandfathered under 30 TAC Chapter 335, Subchapter S, this report shall address RRS requirements, and the applicable items contained in the EPA publications referenced in Provision XI.H.4 or other guidance acceptable to the executive director. For projects conducted under TRRP, the risk assessment process shall be addressed in the APAR and the evaluation of corrective measures shall be conducted as part of the remedy standard selection process.

6. Corrective Measures Implementation (CMI)/Remedial Action Plan (RAP)

If on the basis of the RFI and/or BLRA and/or CMS or APA, it is determined that there is a risk to the human health and environment, then the permittee shall submit for approval a CMI Work Plan(s) or propose a response action (TRRP) within 180 days of receipt of approval of the RFI and/or BLRA/CMS Report or APAR unless otherwise extended by the executive director. The CMI Workplan shall address all of the applicable items contained in the EPA publications referenced in Provision XI.H.4 or other guidance acceptable to the executive director. Response actions, including TRRP Remedy Standard A or Risk Reduction Standard (RRS) No. 2, cannot be self-implemented as normally allowed by TRRP or RRS because under Hazardous Solid Waste Amendments (HSWA) corrective action and permit provisions requires the CMI workplan to be reviewed prior to approval and public participation (see also Provision XI.H.7).

For TRRP response actions, the permittee shall submit a RAP in accordance with schedules and requirements of 30 TAC Chapter 350. The CMI Workplan or RAP shall contain detailed final proposed engineering design, monitoring plans and schedule to implement the selected remedy and assurances of financial responsibility for completing the corrective action. Upon completion of the response action, the permittee shall submit a CMI Report or Response Action Completion Report (RACR) to the TCEQ for review and approval. The CMI Report shall address all the applicable items in the EPA publications EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 or other guidance acceptable to the executive director. The RACR shall address all the applicable items in Title 30 TAC Chapter 350 and applicable guidance.

If the response action does not propose a permanent remedy (e.g., RRS No. 3 or Remedy Standard B), or the response action requires long-term groundwater monitoring in order to demonstrate attainment of a permanent remedy (e.g., monitored natural attenuation to demonstrate Remedy Standard A), the permittee must submit a CMI Workplan or RAP as part of a Compliance Plan application and/or modification/amendment in accordance with Provision XI.J.4 to establish corrective action and provide financial assurance to satisfy the requirements of 30 TAC Section 335.167. The Compliance Plan application and/or modification/amendment must be submitted within 180 days of approval of the CMS/BLRA or APAR. The permittee may propose an alternative schedule to be approved by the executive director to incorporate several approved CMI Workplans or RAPs into a single Compliance Plan modification/or amendment when CMI Workplans or RAP schedules coincide. Implementation of the corrective measure(s) shall be addressed through issuance of a new or modified/amended Compliance Plan.

To report the progress of the corrective measures, the permittee shall submit to the TCEQ CMI Progress Reports or RAERs (TRRP) as a section of the Compliance Plan groundwater report required by CP Table VII of this Compliance Plan, or as otherwise directed.

If deed recordation and necessary institutional controls are required as part of the final corrective action, the permittee shall within ninety (90) days of approval for the final corrective action submit to the executive director for review and approval the required proof of deed notice in accordance with Provision XI.J.1.

7. Public Notice

a. The permittee shall conduct public notice when:

- (1) CMI Work Plan or RAP is submitted to the executive director, in accordance with Provision XI.H.6., which contains the proposed final corrective measure for SWMU(s) and/or AOC(s) from which a release has occurred, and with proposed institutional control (as applicable). This process occurs through Compliance Plan renewal, or modification/ amendment; or
- (2) If on the basis of the RFI/BLRA or APAR required by Provisions XI.H.4. and XI.H.5., it is determined the release from SWMU(s) and/or AOC(s) meets the performance standards under RRR or TRRP such that no remedy is needed, there is no risk to the human health and environment, and the permittee seeks approval of no further action determination by the executive director. This process occurs through corrective action process.

- b. No public notice is required when it is determined based on the results of the RFA required by Provision XI.A.6, or the RFI or APAR required by Provision XI.H.4, that no release occurred from a SWMU and/or AOC.

The purpose of the public notice is to give the members of the public the opportunity to submit written comments on the proposed corrective measure(s) or proposed no further action determination. Refer to Attachment B of this Compliance Plan for further guidance on public notice participation in HSWA corrective action.

8. Interim Corrective Measures (ICM)

- a. The ICM apply to waste management units or AOC under investigation for which a final Corrective Action Program has not been authorized by the Compliance Plan. ICM also apply to units/AOC that are discovered after issuance of this Compliance Plan.
- b. The objectives of the ICM are to remove, decontaminate, and/or stabilize the source (i.e., waste and waste residues) and contaminated media to protect human health and the environment. The permittee shall modify the ICM, as necessary, to achieve these objectives.
- c. The permittee is authorized to design, construct, operate and maintain ICM for waste management units/AOC as necessary to protect human health and the environment. The ICM shall be operated until final corrective measures established, in accordance with Provision XI.H.6, are authorized in the Compliance Plan. At a minimum, the ICM shall consist of the following:
 - (1) Specific performance goals to protect human health and the environment;
 - (2) A monitoring system to evaluate the ICM and determine if the objectives outlined in Provision XI.H.8.b are being met. All ICM wells must comply with the requirements of Provision XI.C.2 and CP Attachment C, Well Design and Construction Specifications, of this permit;
 - (3) An implementation schedule to initiate ICMs;
 - (4) Submittal of a report specifying the design of the ICM upon installation. During implementation of the ICM, periodic ICM Status Reports shall be submitted in accordance with CP Table VII (Item 25) to document the objectives of Provision XI.H.8.b are being achieved; and
 - (5) A procedure to modify the design, as necessary, to achieve the objectives outlined in Provision XI.H.8.b.

I. Financial Assurance (Reserved)

J. General Provisions

1. Deed Recordation Requirements

For waste and contaminated media approved to remain in place above background or health-based concentration levels after completion of the corrective action and/or groundwater monitoring programs, the permittee shall record an instrument

in the county deed records for the facility to specifically identify the areas of contamination exceeding background or health-based values. The deed certification shall follow the requirements of 30 TAC Sections 335.560 and 335.569 or 30 TAC Section 350.111, where applicable.

2. Notification Requirements

The permittee shall notify the local TCEQ region office at least ten (10) days prior to any well installation or sampling activity required by the Compliance Plan in order to afford Region personnel the opportunity to observe these events and collect samples. This notification requirement will not apply to the routine semiannual or annual groundwater sampling events specified in this Compliance Plan.

3. Distribution of Copies

The permittee shall submit all schedules, plans, and reports required by this Compliance Plan according to the following distribution list:

- a. An original paper copy and one electronic copy (on USB or disc) to the Corrective Action Section, Mail Code MC-127, Remediation Division, Texas Commission on Environmental Quality in Austin, Texas; and
- b. One electronic copy to the Waste Program, Texas Commission on Environmental Quality local Region Office.

4. Compliance Plan Modification or Amendment

Any application to modify or amend the Compliance Plan shall be accomplished in accordance with the provisions of 30 TAC Chapter 305 Subchapter D and submitted in accordance with the Compliance Plan Application's general instructions.

5. Any changes to the Corrective Action or Groundwater Monitoring Systems are subject to executive director's approval.
6. The permittee shall maintain all reports, monitoring, testing, analytical, and inspection data obtained or prepared pursuant to the requirements of this Compliance Plan, including graphs and drawings, in the operating record at the facility. The operating record at the facility shall be made available for review by the staff of the TCEQ upon request.
7. The permittee shall submit a compliance schedule in accordance with CP Table VIII.

K. Force Majeure

The permittee's non-compliance with one or more of the provisions of this Compliance Plan may be justified only to the extent and for the duration that non-compliance is caused by a "Force Majeure" event. For purposes of this Compliance Plan, "Force Majeure" is defined as an event that is caused by an Act of God, labor strike, or work stoppage, or other circumstance beyond the permittee's control that could not have been prevented by due diligence, and that makes substantial compliance with the applicable provision or provisions of this Compliance Plan impossible.

The occurrence of a "Force Majeure" event that justifies the missing of one deadline shall not automatically justify the missing of later deadlines unless there is a

cumulative effect due to such an event. The permittee shall keep a record of any delaying events.

If the permittee anticipates or experiences an inability to comply with any of the provisions of this Compliance Plan due to a "Force Majeure" event, the permittee shall notify the executive director of the TCEQ within twenty-four (24) hours. A written notice must be submitted to the TCEQ within ten (10) days, which describes the nature, cause, and anticipated length of the delay and all steps which the permittee has taken and will take, with a schedule for their implementation, to avoid or minimize the delay. In the event that performance of any of the activities required by this Compliance Plan is affected by a "Force Majeure" event, then the permittee shall propose a plan for approval by the executive director of the TCEQ, for achieving the objectives of the Compliance Plan by alternative means in the most timely manner.

Table III.D- Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Permitted Unit No. 03, Building 4-50	Attached Permitted Storage Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 53, Building 4-72	Attached Permitted Storage Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 12, Building 16-16	Attached Permitted Storage Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 55, Building T9-121	Attached Permitted Storage Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 56, Building T9-122	Attached Permitted Storage Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 57, Building 16-18	Attached Permitted Treatment and Processing Facility inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
Permitted Unit No. 21, 24-32, and 43 Burning Ground	Attached Burning Ground Area inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly
General Plant Equipment	Attached Emergency Equipment inspection checklist, or equivalent forms, will be used to meet inspection requirements.	Weekly

Permittee: United States Department of Energy and Consolidated Nuclear Security LLC

Table III.E.3 – Emergency Equipment

Equipment	Location	Physical Description	Capability
Absorbent Pillows	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Multi-use - min 10	Contaminant Control
Absorbent Pads	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Multi-use - min 10	Contaminant Control
Absorbent Towels (box or roll)	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Generic - min 1	Contaminant Control/ Decontamination
Safety Glasses	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Plastic - min 4	Personal Protection
Disposable Bags	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Plastic - min 10	Contaminant Control
Tape	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Roll (e.g. duct tape, plastic tape, etc.) - min 1	Contaminant Control
Broom	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Minimum 1	Contaminant Control/ Decontamination
Shovel	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72) No. 57 (Bldg. 16-18)	Minimum 1	Contaminant Control

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Equipment	Location	Physical Description	Capability
Protective Suit Coveralls	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Tyvek or equivalent - min of 4	Personal Protection
Protective Booties	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Tyvek or equivalent - min of 8 (pair)	Personal Protection
Protective Gloves	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Various composition (rubber, cloth, nitrile, etc. - min of 8 (pair)	Personal Protection
Decontamination Sprayer (e.g. sprayer, bottle, etc.)	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	Plastic or steel - min of 1	Contaminant Control/ Decontamination
Telephone	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	1	Communication
Fire Extinguisher	Permitted Unit: No. 03 (Bldg. 4-50), No. 12 (Bldg. 16-16 ¹) No. 53 (Bldg. 4-72), No. 57 (Bldg. 16-18)	1	Extinguish localized fire
Shovel	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	1	Contaminant Control
Plastic Sheeting	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	Visqueen or similar min of 1 roll	Contaminant Control

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Equipment	Location	Physical Description	Capability
Protective Gloves	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	Various composition (rubber, cloth, nitrile, etc. - min of 8 (pair)	Personal Protection
Protective Booties	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	Tyvek or equivalent - min of 8 (pair)	Personal Protection
Telephone	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	1	Communication
Fire Extinguisher	Permitted Unit No. 21,24,25,26,27,28,29,30,31,32 and 43 (Burning Ground Units)	1	Extinguish Local Fire
Decontamination Pool	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support
Drum Lifter	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support
Drum Transfer Pump	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support
Drum Repair Kit	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Floodlight	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support
Generator	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support

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Equipment	Location	Physical Description	Capability
Mercury Spill Kit	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Over-pack Containers	General Plant Equipment Buildings 12-130 or 16-8	95 or 110 gallon, polyethylene or equivalent - min of 1	Spill Containment/Remediation
Tarp, Decontamination	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Operational Support
Various Containers	General Plant Equipment Buildings 12-130 or 16-8 or 16-33	Various Sizes and numbers of metal/plastic type	Spill Containment/Remediation
Air Hose	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Discharge Hose	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Pump	General Plant Equipment Buildings 12-130 or 16-8	Pneumatic drum vacuum with connectors, hoses, and tools - min of 1	Spill Containment/Remediation
Suction Hose	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Trash Pump	General Plant Equipment Buildings 12-130 or 16-8	Minimum of 1	Spill Containment/Remediation
Gas and Vapor Detector	General Plant Equipment Buildings 12-118	Minimum of 1	Detects O ₂ , H ₂ S, CO and LEL
Mercury Detector	General Plant Equipment Buildings 12-118	Minimum of 1	Detects Mercury Vapor
Photo-ionization Detector	General Plant Equipment Buildings 12-118	Minimum of 1	Detects Organic Vapor

¹ Because of close proximity of the permitted units, the emergency equipment designated for Permitted Unit 12, Building 16-16, also serves as the emergency equipment for Permitted Units 55 and 56, Buildings 9-121 and 9-122. The dry pipe sprinkler system is specific to Building 16-16 and not Building 9-121 and 9-122.

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Table IV.B. – Wastes Managed In Permitted Units

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
1	Lab packs of old chemicals generated from discarding off-spec, unused and/or out-of-date chemicals associated with the assembly/ disassembly of ordnance and accessories.	D001 thru D012, D015 thru D020, D022, D025 thru D030, D032, D035, D036, D038, D039, D040, D043, F001 thru F005, P004, P005, P018, P021, P022, P051, P077, P082, P095, P105, P106, U002, U003, U011, U012, U031, U037, U041, U044, U056, U057, U069, U070, U075, U077, U080, U108, U112, U121, U123, U129, U133, U134, U138, U140, U147, U151, U154, U159, U160, U161, U169, U185, U188, U189, U196, U210, U211, U213, U217, U220, U223, U226, U227, U228, U234, U238, U239, U328, U359, U404, U001, U165	001 H
2	Lab packs of “debris only” associated with the assembly/disassembly of ordnance and accessories. These lab packs may also be generated from support activities associated with the assembly/disassembly process.	D001 thru D011, D018, D027, F001, F002, F003, F005	002 H
3	Waste water / decontamination water and aqueous solutions generated during the assembly/ disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/ disassembly process.	D004 thru D011, F001 thru F006	101 H
4	Waste water/ decontamination water and aqueous solutions containing low suspended inorganic solids and low organic content generated from RCRA closures, corrective action and investigations.	D004 thru D011, D040, F001 thru F005	102 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
5	Acidic aqueous waste (e.g., metal cleaning waste, laboratory waste, environmental monitoring samples) generated from operations associated with the assembly/disassembly of ordnance and accessories.	D001, D002, D004 thru D043, F002, F003, F004, F005	105 H
6	Acidic aqueous waste (e.g., lab samples) generated from operations associated with RCRA closures, corrective actions and/or investigations.	D002, D004 thru D011	105 H
7	Caustic aqueous solutions (e.g., grout water) generated during RCRA closures, corrective actions, and/or investigations.	D002, D005, D006, D007, D008, D011	106 H
8	Caustic aqueous solutions (e.g., metal cleaning waste, laboratory waste, etching waste) generated during the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D002, D004 thru D043, F003, F004, F005	106 H
9	Liquid mercury generated during maintenance on equipment associated with the assembly/disassembly of ordnance and accessories (e.g., laboratory equipment).	D009	117 H
10	Concentrated solvent-water solutions generated during the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D003, D006 thru D011, D018, D027, D035, D039, D040, F001 thru F006	201 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
11	Halogenated and non-halogenated solvent mixture generated from the assembly/disassembly of ordnance and accessories and/or maintenance on equipment utilized during the assembly/disassembly of ordnance and accessories.	D001 thru D043, F001 thru F005, U002, U108, U154, U159, U161, U220	204 H
12	Halogenated/ non- halogenated solvent mixture generated during RCRA closures, corrective actions, and/or investigations.	D001, D003 thru D011, D018, D019, D021 thru D030, D033, D035 thru D043, F001 thru F005	204 H
13	Waste oil contaminated with RCRA metals and/or solvents generated from maintenance on equipment associated with the assembly/disassembly of ordnance and accessories. This waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D006, D007, D008, D009, D018, F001 thru F005	206 H
14	Organic paint, ink, lacquer, or varnish residues generated from processes associated with the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D005 thru D011, D018, D035, D036, D039, F002, F003, F005	209 H
15	Paint thinner/sludge from clean-up of painting equipment from processes associated with the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D005 thru D009, D011, D018, D035, D036, D039, F002, F003, F005	211 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
16	Small containers of discarded, unused and/or expired chemicals including organic paint, ink, lacquer, varnish adhesives, epoxies, petroleum distillates, solvents, etc. (e.g., 35-acct. materials) generated from activities associated with the assembly/disassembly process.	D001 thru D011, D015 thru D019, D021, D022, D026, D027, D028, D029, D030, D033, D035, D039, D040, D043, F001 thru F005, P095, P105, U002, U003, U019, U031, U041, U044, U056, U069, U070, U075, U080, U108, U112, U121, U147, U154, U158, U159, U161, U213, U220, U223, U226, U227, U228, U239, U359	219 H
17	Soil contaminated with organics (e.g., solvents) generated from RCRA closures, corrective actions and investigations. The soil may contain inorganics (e.g., metals) as a secondary contaminant.	D004, D005, D006, D007, D008, D009, D011, D018, D020, D031, F001, F002, F003, F005, F006	301 H
18	Soil contaminated with organics (e.g., solvents) generated from support activities associated with the assembly/disassembly process (e.g., chemical spill clean-up activities, equipment decommissioning).	D004 thru D011, D018, F002, F003, F005, F006	301 H
19	“Burning Ground” waste, including metal parts, wire, scrap & ash from the destruction of high explosives, high explosive components and high explosive contaminated materials.	D004 thru D011, F001 thru F005	304 H
20	Metals scale, filings or scrap ordnance and/or accessory parts, containing or contaminated with RCRA metals, generated from the assembly/disassembly process.	D004 thru D011	307 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
21	Metal scale, filings, or scrap containing or contaminated with RCRA metals generated during the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D004, D005, D006, D007, D008, D009, D010, D011	307 H
22	Used/expired batteries, parts, casings or cores generated from replacement batteries in electronic equipment and plant vehicles. Batteries in this waste stream may be recycled.	D002, D003, D006, D008, D009, D011	309 H
23	Solid inorganic filters or adsorbents (e.g., fuel filters, desiccant, spill response adsorbents, etc.), contaminated with RCRA metals and/or solvents, generated from assembly/ disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/ disassembly process.	D001, D005 thru D011, D018, D035, D036, D039, F001 thru F005	310 H
24	Solid inorganic filters or adsorbents (e.g., spill clean- up adsorbents, fuel filters, desiccant, etc.), contaminated with RCRA metals and/or solvents, generated from RCRA closures, corrective actions and/or investigations.	D001, D008, D009, D018	310 H
25	Metal salts/chemicals generated from RCRA closures, corrective actions and investigations. This waste is primarily inorganic and solid, with low organic content and low-moderate water content; not pumpable.	D007	316 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
26	Inorganic ordnance and accessory parts, containing or contaminated with RCRA metals, generated from the assembly/disassembly process. This waste stream is for inorganic components and/or accessory parts that do not have the potential to be recycled. This waste stream may contain small amounts of organics.	D003, D005 thru D011	319 H
27	Inorganic solids (e.g., fluorescent bulbs, flash lamps, metals other than scrap, glass) containing or contaminated with RCRA metals generated during the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D003 thru D011, F006	319 H
28	Inorganic excess, discarded out-of-date, off- specification, used/depleted chemicals or products generated throughout the Pantex Plant. Waste will not be lab packed.	D001, D003, D005, D007	319 H
29	Explosives contaminated inorganic solids (e.g., fluorescent tubes, flash lamps, metals, glass, soil) generated from activities associated with the assembly/disassembly of ordnance and accessories. This waste may also be generated from support activities associated with the assembly/disassembly process.	D003, D005 thru D011	319 H
30	Inorganic solids (e.g., fluorescent tubes, flash lamps, metals other than scrap, glass) containing or contaminated with RCRA metals generated from RCRA closures, corrective actions and/or investigations.	D005, D006, D007, D008, D009, D010, D011	319 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
31	High explosives (e.g., scrap, residues) & high explosive contaminated support materials (e.g., paper products, foam, plastics) generated during the assembly/disassembly of ordnance and accessories.	D001, D003, D005 thru D011, D018, D026, D030, D035, D040, F001 thru F003, F005, K045	405 H
32	Organic solids (e.g., kimwipes, cardboard, paper, rags, plastics, gloves, PPE) contaminated with halogenated/non- halogenated solvents and RCRA metals, generated from RCRA closures, corrective actions and investigations.	D001, D005 thru D011, D018, D035 thru D040, F001 thru F006	407 H
33	Organic solids (e.g. kimwipes, filter paper, rags, shop towels, plastic bags, gloves, gaskets, plastics, ppe, film) contaminated with halogenated/non- halogenated solvents and RCRA metals, generated during the assembly/disassembly or ordnance and accessories.	D001, D004 thru D043, F001 thru F005, U041, U057, U123, U157, U158, U223	407 H
34	Inorganic sludges composed primarily of soil and water generated during RCRA closure, corrective actions and/or investigations.	D002	519 H
35	Organic reactive sludge and other "wet" explosives generated from explosives manufacturing operations. This waste stream may also be generated during the assembly/disassembly of ordnance and accessories and from support activities associated with the assembly/disassembly process.	D003, K044, K045	605 H

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No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
36	Compressed gas cylinders and aerosol cans (e.g., unused, expired, partially depleted) containing organic gases generated during the assembly/disassembly of ordnance and accessories. The waste may also be generated from support activities associated with the assembly/disassembly process.	D001, D003, D005, D006, D007, D008, D015, D018, D035, D040, P076, P095, U080	801 H

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Table IV.C. – Sampling and Analytical Methods

Waste No. ¹	Sampling Location	Sampling Method ²	Frequency	Parameter	Test Method ²	Desired Accuracy Level ³
1. 001 H	Point of Generation or Container	N/A	See WAP, Section 5.0	See Table IV.B, Column 3	Process Knowledge	≥90% Confidence Interval
2. 002 H	Point of Generation or Container	N/A	See WAP, Section 5.0	See Table IV.B, Column 3	Process Knowledge	≥90% Confidence Interval
3. 101 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,5,7 and/or 8	≥90% Confidence Interval
4. 102 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,5,7 and/or 8	≥90% Confidence Interval
5. 105 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,5,8 and/or 13	≥90% Confidence Interval
6. 105 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,5 and/or 13	≥90% Confidence Interval
7. 106 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,5 and/or 13	≥90% Confidence Interval
8. 106 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,5,8 and/or 13	≥90% Confidence Interval
9. 117 H	Point of Generation or Container	N/A	See WAP, Section 5.0	See Table IV.B, Column 3	Process Knowledge	≥90% Confidence Interval

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10. 201 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4 and/or 8	≥90% Confidence Interval
11. 204 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,8 and/or 13	≥90% Confidence Interval
12. 204 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,8 and/or 13	≥90% Confidence Interval
13. 206 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,8 and/or 10	≥90% Confidence Interval
14. 209 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,8 and/or 13	≥90% Confidence Interval
15. 211 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,8 and/or 13	≥90% Confidence Interval
16. 219 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Peristaltic Pump	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,5 and/or 8	≥90% Confidence Interval
17. 301 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,7,10,11 and/or 13	≥90% Confidence Interval
18. 301 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,7,10,11 and/or 13	≥90% Confidence Interval
19. 304 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,6 and/or 13	≥90% Confidence Interval

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20. 307 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1 and/or 13	≥90% Confidence Interval
21. 307 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1 and/or 13	≥90% Confidence Interval
22. 309 H	Point of Generation or Container	Manual Collection Methods	See WAP, Section 5.0	See Table IV.B, Column 3	1 and/or 13	≥90% Confidence Interval
23. 310 H	Point of Generation or Container	Manual Collection Methods or Trier	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3 and 13	≥90% Confidence Interval
24. 310 H	Point of Generation or Container	Manual Collection Methods or Trier	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3 and 13	≥90% Confidence Interval
25. 316 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1 and/or 13	≥90% Confidence Interval
26. 319 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,4 and/or 13	≥90% Confidence Interval
27. 319 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4 and/or 13	≥90% Confidence Interval
28. 319 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,8 and/or 13	≥90% Confidence Interval
29. 319 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,4 and/or 13	≥90% Confidence Interval
30. 319 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1 and/or 13	≥90% Confidence Interval
31. 405 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,8 and/or 13	≥90% Confidence Interval

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32. 407 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,8 and/or 13	≥90% Confidence Interval
33. 407 H	Point of Generation or Container	Manual Collection Methods, Trier or Auger	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,8 and/or 13	≥90% Confidence Interval
34. 519 H	Point of Generation or Container	Manual Collection Methods, Coliwasa or Trier	See WAP, Section 5.0	See Table IV.B, Column 3	1,5 and/or 13	≥90% Confidence Interval
35. 605 H	Point of Generation or Container	Manual Collection Methods	See WAP, Section 5.0	See Table IV.B, Column 3	1,2,3,4,8 and/or 13	≥90% Confidence Interval
36. 801 H	Point of Generation or Container	N/A	See WAP, Section 5.0	See Table IV.B, Column 3	Process Knowledge	≥90% Confidence Interval

¹ from Table IV.B., first column

² Sampling and Test/Analysis methods should be specified in enough detail to allow determination of whether they are suitable and correct for the purpose indicated while allowing flexibility in selection and future updates to the specified method. Standard methods, such as those from SW-846, will generally require no further submittal. Non-standard and proprietary methods may require additional information to determine suitability. ASTM methods may require submittal of a copy of the specified method.

1 Metals: 6000/7000 series

2 Volatile Organics: 8000 series

3 Semi-Volatile Organics: 8000 series

4 High Explosives: 8000 series

5 pH-liquids: 9000 series

6 pH-solid: 9000 series

7 Total Petroleum Hydrocarbons: 8000 series or TX1005, TX1006

8 Ignitability: 1000 series

9 Reactivity (cyanides/sulfides): 9000 series

10 Polychlorinated Biphenyls: 8000 series

11 Pesticides: 8000 series

12 Asbestos: PLM (Polarizing Light Microscopy). Either National Institute of Occupational Safety & Health or EPA 600/M4-82-020

13 1311 TCLP

³ Desired Accuracy Level should provide a specified numeric minimum performance level (maximum acceptable reporting limit) for method detection and quantitation limits that will be accepted from the laboratory performing the analysis and must ensure that reported data will allow determinations of compliance with regulatory limits for the parameter tested.

Table V.B. - Container Storage Area

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos. ⁴	Rated Capacity ³	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable ¹ , Reactive ¹ , or Incompatible ² waste (state all that apply)	Unit Status
03	Igloo 4-50	014	1 thru 36	25,134 gallons	40' x 27'	116.4 gallons ⁵	Ignitable, Reactive, or Incompatible Waste	Active
12	Building 16-16	017	1 thru 36	1,369 cubic yards (435 cy free liquids)	133' x 113'	17,650 gallons total (3,530 gallons for each sump for 5 sumps)	Ignitable, Reactive, or Incompatible Waste	Active
53	Igloo 4-72	71	1 thru 36	16,500 gallons	40' x 27'	116.4 gallons ⁵	Ignitable, Reactive, or Incompatible Waste	Active
55	Building T9-121	153	1 thru 36	4,400 gallons	42' x 13'	1,975 gallons	Ignitable, Reactive, or Incompatible Waste	Active
56	Building T9-122	154	1 thru 36	4,400 gallons	42' x 13'	1,975 gallons	Ignitable, Reactive, or Incompatible Waste	Active

1. Containers managing ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
2. Incompatible waste must be separated from other waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments by means of a dike, berm, wall, or other device.
3. Container Storage Areas need to include in capacity calculations any nonhazardous wastes and universal wastes managed in the unit in addition to hazardous wastes.
4. from Table IV.B, first column
5. Based on a 4.3 ft by 4.3 ft by 10 in secondary containment pan which will hold four 55-gallon drums. This portable secondary containment pan, or equivalent type, which is capable of containing the volume of the largest container or 10% of all containers stored in each secondary containment pans, whichever is greater, will be utilized. All storage facilities are within an enclosed building.

Table V.K. - Miscellaneous Units

Permit Unit No.*	Miscellaneous Unit	N.O.R. No.	Storage, Processing, and/or Disposal	Waste Nos. ¹	Rated Capacity	Dimensions	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
57	Bldg. 16-18 HWTPE***	017	Processing	3,4,5,6,7,8,23, 24,27,30,32,33	800 cubic yds	166 ft x 80 ft	Ignitable, Reactive, and Incompatible
21	Burn Pan No. 1	040	Processing	29,31,35	1,500 pounds	12 ft x 10 ft	Ignitable and Reactive
24	HE Burning Tray No. 1	043	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
25	HE Burning Tray No. 2	044	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
26	HE Burning Tray No. 3	045	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
27	HE Burning Tray No. 4	046	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
28	HE Burning Tray No. 5	047	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive

¹ From Table IV.B, first column² If YES, describe in the engineering report the procedures used to ensure compliance with 40 CFR 264.17.³ Repackaging, sorting, and sampling may occur on any waste stream; therefore, reactive waste may be managed in this unit. The hazardous waste numbers listed are the waste streams that may undergo the permitted treatment and processing.⁴ Capacity for 16-18 is the volume that could be in-process based on secondary containment allowances.⁵ Capacities for Burning Ground units are based on throughput per burn event.

*** Permit Unit No. 57 also authorizes portable Macroencapsulation Unit with an encapsulating capacity of approximately 3.5 cubic yards.

Table V.K. - Miscellaneous Units (Continued)

Permit Unit No.*	Miscellaneous Unit	N.O.R. No.	Storage, Processing, and/or Disposal	Waste Nos. ¹	Rated Capacity	Dimensions	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
29	HE Burning Tray No. 6	048	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
30	Burn Pan No. 7	049	Processing	29,31,35	1,500 pounds	12 ft x 10 ft	Ignitable and Reactive
31	HE Burning Tray No. 8	050	Processing	29,31,35	1,500 pounds	16 ft x 4 ft	Ignitable and Reactive
32	HE Burning Tray No. 9	051	Processing	29,31,35	1,500 pounds	20 ft x 6 ft	Ignitable and Reactive
43	Flash Chamber	079	Processing	29,31,35	200 cubic yds	20 ft x 12 ft	Ignitable and Reactive

¹ From Table IV.B, first column² If YES, describe in the engineering report the procedures used to ensure compliance with 40 CFR 264.17.³ Repackaging, sorting, and sampling may occur on any waste stream; therefore, reactive waste may be managed in this unit. The hazardous waste numbers listed are the waste streams that may undergo the permitted treatment and processing.⁴ Capacity for 16-18 is the volume that could be in-process based on secondary containment allowances.⁵ Capacities for Burning Ground units are based on throughput per burn event.

*** Permit Unit No. 57 also authorizes portable Macroencapsulation Unit with an encapsulating capacity of approximately 3.5 cubic yards.

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Table VI.D.2.b
Soil and Sediment Monitoring Parameters for RCRA Burning Ground Area

Parameter	Sampling Frequency	Method Detection Limit (mg/kg)	Comparison Value ¹ BG-SS-C1 (mg/kg)	Comparison Value BG-SS-C2 (mg/kg)	Comparison Value BG-SS-C3 (mg/kg)	Comparison Value P3-SS-C1 (mg/kg)	Comparison Value P3-SS-C2 (mg/kg)
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetraazazine (HMX)	Annual	1	² 858.24	1	367.1	1	1
Pentaerythritol tetranitrate (PETN)	Annual	5	5	5	5	5	5
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	Annual	1	2.6 ²	1	1.8	1	1
Triaminonitrobenzene (TATB)	Annual	3	23.25 ²	3	26.86	3	3
Trinitrotoluene (TNT)	Annual	10	10 ²	10	10	10	10
2,4,-dinitrotoluene (2,4-DNT)	Annual	0.5	0.5 ²	0.5	0.5	0.5	0.5
2,6,-dinitrotoluene (2,6-DNT)	Annual	0.5	0.5 ²	0.5	0.5	0.5	0.5
1,3,5,-trinitrobenzene (TNB135)	Annual	10	10 ²	10	10	10	10
Boron (B)	Annual	50	50 ²	50	50	50	50
Cadmium (Cd)	Annual	1	1 ²	1	1	1	1
Chromium (Cr)	Annual	5	19.93 ²	16.23	28.96	35.35	49.34
Cobalt (Co)	Annual	5	17.55 ²	8.77	18.68	35.78	37.21
Copper (Cu)	Annual	5	67.34 ²	75.38	53.84	44.21	43.93
Lead (Pb)	Annual	2	54.76 ²	77.82	54.88	54.13	24.41
Mercury (Hg)	Annual	0.2	0.29 ²	0.2	0.2	0.2	0.2
Nickel (Ni)	Annual	5	29.76 ²	24.53	30.88	43.38	53.18
Silver (Ag)	Annual	1	8.42 ²	1	1	1	1
Zinc (Zn)	Annual	5	160.58 ²	317.32	168	129.756	139.91

1 The Comparison Value (background) is the basis for determining whether a release has occurred from the waste management unit/area. These values were established in 2006 pursuant to the requirements of Hazardous Waste Permit No. HW 50284.

2 Background values are established separately for each grid/playa lake sampling location.

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CP Table I - Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring**A. Corrective Action¹ (30 TAC Section 335.166)**

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴
Remove Last Row		Add Row

B. Compliance Monitoring¹ (30 TAC Section 335.165)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴
Remove Last Row		Add Row

C. Corrective Action² (30 TAC Section 335.167)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴
Burning Ground Indicator Area: SWMUs 14-27, 37-44, 47, 48, 49, 50, 51	004 - SWMUs 14-27 006 - SWMUs 37-44	Not Complete, RRS 3
Zone 11 Indicator Area: AOCs 8a, 11, SWMUs 113, 12, 3, and 5-13a, Unassigned SWMU Evaporation Pit East of Bay 3 (Bldg 11-20), Unassigned SWMU Evaporation Pit South of Bay 11/West of Bay 6 (Bldg 11-20)	013 - SWMU 12	Not Complete, RRS 3
Southeast Indicator Area: AOCs 13a and 13b, SWMUs 122a, 122b, 123, 136, 2, 5-04a, 5-04b, 5-05, 5-12a, 5-13c, Unassigned Concrete Sump (near Bldg 12-5B)	015 - SWMU 122a	Not Complete, RRS 3 SWMU 122a Facility Closed 8/26/2002
North Indicator Area: SWMU 6	001	Not Complete, RRS 3
Remove Last Row		Add Row

D. Alternative Corrective Action³ (30 TAC Section 335.151)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴

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Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴
	Remove Last Row	Add Row

E. Facility Operations Area (FOA)⁴ (30 TAC Section 335.156 and Chapter 350)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁴
	Remove Last Row	Add Row

Note: If a specific program is not applicable to the unit/area then the program should be marked as "Reserved."

Foot Note:

1. Program applies to RCRA-regulated units only.
2. Program applies to releases from solid waste management units (SWMUs) and/or areas of concern (AOCs).
3. Program applies to commingled releases from RCRA-regulated unit and from one or more SWMUs and/or AOCs.
4. List SWMUs, additional units/areas of Investigation, AOCs, RCRA-regulated units within the FOA that are subject to corrective action. For RCRA units, SWMUs and/ or AOC outside the FOA boundary for which compliance monitoring and/ or corrective action applies should be listed separately in Items A, B or C as appropriate.
5. For the purpose of maintaining a historical record to verify the units/areas have met the program requirements in accordance with Permit Provisions XI.A.2, XI.A.3., XI.A.4. and/or XI.A.5., the permittee shall update CP Table I to reflect the new status of the unit/area to include the remedy standard achieved for all media of concern and the date of the Commission's No Further Action (NFA) approval letter. The units/area shall not be deleted from CP Table I until the program objectives have been completed and no further action has been approved through modification or amendment to the Permit.

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CP Table II: Solid Waste Management Units and/or Areas of Concern**Addressed in Permit Section XL.H. for which Corrective Action Applies Pursuant to 30 TAC Section 335.167**

Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
AOC 7b Bldg 12-4 Sulfuric Acid Spill	NA	AOC	SOIL	6/3/2005, RRS 2
SVS 1 Denuded Area near Playa 1	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 106 Waste Accumulation Site at Bldg 16-1	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 109 Concrete Sump (Bldg 12-68)	NA	SWMU	SOIL	6/3/2005, RRS 2
SWMU 11 Surface Impoundment in Zone 5 (Bldg FS-16)	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 110 Bldg 12-68 Electroplating Waste Retention Basin (Moat)	NA	SWMU	SOIL	6/3/2005, RRS 2
SWMU 139 Photo Processing Leaching Bed (Bldg FS-10)	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 140 Old Sewage Treatment Plant/Sludge Beds	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 5-03a Drainage Ditches (Bldg 12-68)	NA	SWMU	SOIL	6/3/2005, RRS 2
SWMU 5-03b Drainage Ditches (Bldg 12-18)	NA	SWMU	SOIL	6/3/2005, RRS 2

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 5-03c Drainage Ditches (Bldg 12-9)	NA	SWMU	SOIL	6/3/2005, RRS 2
SWMU 5-03d Drainage Ditch (Bldg 12-10)	NA	SWMU	SOIL	6/3/2005, RRS 2
SWMU 5-10 Drainage Ditches near the Old Sewage Treatment Plant	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 5-14 Drainage Ditch from Zone 11 to Playa 2	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 53 Temporary High Explosives Burning Ground	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 63 Landfill 12	NA	SWMU	SOIL	12/22/2005, RRS 2
SWMU 70 Firing Site 5	NA	SWMU	SOIL	8/4/1999, RRS 2
SWMU 71 Firing Site 6	NA	SWMU	SOIL	11/1/2000, RRS 2
SWMU 73 Firing Site 15	NA	SWMU	SOIL	11/1/2000, RRS 2
SWMU 97 Waste Accumulation Area, Bldg 12-34	NA	SWMU	SOIL	5/3/1999, RRS 2
Unassigned Dumpster Area near FS-11	NA	SWMU	SOIL	12/22/2005, RRS 2
Unassigned AOC Bldg 12-1 Laundry Sump	NA	AOC	NA	6/3/2005, RRS 2

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
Unassigned SWMU FS-22 Container Gun Barrel	NA	SWMU	SOIL	8/3/1999, RRS 2
Unassigned SWMU 11-14 Hypalon Pond and Waste water Line	NA	SWMU	SOIL	2/21/1995, RRS 2
AOC 2 Main Electrical Substation (4-28)	NA	AOC	NA	9/22/1993, RRS 1
AOC 6a Gasoline Leaks at Bldgs 12-35	NA	AOC	NA	8/24/1999, RRS 1
AOC 6b Gasoline Leak at Bldg 16-1	NA	AOC	NA	8/24/1999, RRS 1
SWMU 108 Bldg 12-68 Batch Master	NA	SWMU	NA	5/29/1997, RRS 1
SWMU 130 Portable Waste Solvent Tanks	NA	SWMU	NA	5/3/1999, RRS 1
SWMU 133 UST #30, Waste Oil Tank at Bldg 16-1	NA	SWMU	NA	8/18/1999, RRS 1
SWMU 79a 11-7A (Unit 41) Container	003, 037, 038	SWMU	NA	3/25/2005, RRS 1
SWMU 79b 11-7B Pad (Unit 42) Container	003, 037, 038	SWMU	NA	3/25/2005, RRS 1
SWMU 80 Container Storage Area Conex 1 (Permitted Unit 4) in Zone 4	NA	SWMU	NA	9/1/2000, RRS 1

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 80 Container Storage Area Conex 2 (Permitted Unit 5) in Zone 4	NA	SWMU	NA	9/1/2000, RRS 1
SWMU 80 Container Storage Area Conex 3 (Permitted Unit 6) in Zone 4	NA	SWMU	NA	9/5/2000, RRS 1
SWMU 80 Container Storage Area Conex 4 (Permitted Unit 7) in Zone 4	NA	SWMU	NA	9/5/2000, RRS 1
SWMU 81 Mixed Waste Storage, Magazine 4-19	NA	SWMU	NA	10/29/1993, RRS 1
Unassigned UST #9 Bldg 12-17E	NA	SWMU	NA	8/18/1999, RRS 1
Unassigned UST #7 Bldg 12-5B	NA	SWMU	NA	8/18/1999, RRS 1
Unassigned UST #38 Bldg 12-98	NA	SWMU	NA	8/18/1999, RRS 1
Unassigned UST #39 North of Bldg 12-84A	NA	SWMU	NA	8/18/1999, RRS 1
Permitted Unit 1 Container Storage 11-7N Pad	NA		NA	3/28/2005, RRS 2
Permitted Unit 10 Container Storage Area (Conex WM7)	NA		NA	9/5/2000, RRS 1
Permitted Unit 11 Container Storage Area (Conex WM8)	NA		NA	9/5/2000, RRS 1

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
Permitted Unit 36 Bldgs 11-9 Tank	NA		NA	2/23/1999, RRS 1
Permitted Unit 37 Bldg 11-9 Tank	NA		NA	2/23/1999, RRS 1
Permitted Unit 38 Bldg 11-15a Tank	NA		NA	2/23/1999, RRS 1
Permitted Unit 39 Bldg 11-15a Tank	NA		NA	2/23/1999, RRS 1
Permitted Unit 40 Bldg 11-9 Container Storage Area	NA		NA	4/22/1998, RRS 1
Permitted Unit 46 Container Storage Area (Conex WM1-A)	NA		NA	4/22/1998, RRS 1
Permitted Unit 47 Container Storage Area (Conex WM1-B)	NA		NA	4/22/1998, RRS 1
Permitted Unit 48 Container Storage Area (Conex WM3-A)	NA		NA	4/22/1998, RRS 1
Permitted Unit 49 Container Storage Area (Conex WM5-A)	NA		NA	4/22/1998, RRS 1
Permitted Unit 50 Container Storage Area (Conex WM5-B)	NA		NA	4/22/1998, RRS 1
Permitted Unit 52 Igloo 4-46 Storage	NA		NA	4/22/1998, RRS 1
Permitted Unit 54 Igloo 4-74 Storage	NA		NA	4/22/1998, RRS 1

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
Permitted Unit 8 Container Storage Area (Conex WM5)	NA		NA	9/5/2000, RRS 1
Permitted Unit 9 Container Storage Area (Conex WM6)	NA		NA	9/1/2000, RRS 1
AOC 1 Transformer Leak (Bldg. 11-14A)	NA	AOC	SOIL	Not Complete, RRS 3
AOC 10a Bldg. 12-43A Pesticide Rinse Area	NA	AOC	SOIL	Not Complete, RRS 3
AOC 10b Bldg. 12-51 Pesticide Rinse Area	NA	AOC	SOIL	Not Complete, RRS 3
AOC 11 Fire Training Area Burn Pits	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 12 Paint Shop/Solvent Pit (Bldg. 12-5D)	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 13a Former Cooling Tower in Zone 12 (Pad)	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 13b Former Cooling Tower in Zone 12 (Piping/Soil)	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 14 Battery Storage Area (Bldg. 12-18)	NA	AOC	SOIL	Not Complete, RRS 3
AOC 15 DDT Release (Bldg. 12-35)	NA	AOC	SOIL	Not Complete, RRS 3
AOC 3a Former Boiler House Areas	NA	AOC	SOIL	Not Complete, RRS 3
AOC 3b Zone 11 Former Boiler House Areas	NA	AOC	SOIL	Not Complete, RRS 3
AOC 5 Electrical Equipment Bone Yard Near Bldg. 12-5	NA	AOC	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
AOC 7a Bldg. 11-36 Sulfuric Acid Spills	NA	AOC	SOIL	Not Complete, RRS 3
AOC 7c Bldg. 12-64 Sulfuric Acid Spills	NA	AOC	SOIL	Not Complete, RRS 3
AOC 8a Pad 11-12 Solvent Leaks	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 8b Pad 11-13 Solvent Leaks	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 8c Bldg. 11-17 Solvent Leaks	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 8d Pad 11-22 Solvent Leaks	NA	AOC	SOIL, GW	Not Complete, RRS 3
AOC 8e Bldg. 11-36 Solvent Leaks	089	AOC	SOIL, GW	Not Complete, RRS 3
SVS 2 Parallel Depressions Bldg. 11-26	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SVS 3 (SWMU 67) Carbon Black Burial Area near Bldg. 10-7	NA	SWMU	SOIL	Not Complete, RRS 3
SVS 5 Landfill East of Pad 11-13	NA	SWMU	SOIL	Not Complete, RRS 3
SVS 6 Unnumbered Zone 7 Landfills	NA	SWMU	SOIL	Not Complete, RRS 3
SVS 7a&b Magazine Demolition Debris Landfills (Zones 4 & 5)	NA	SWMU	SOIL	Not Complete, RRS 3
SVS 8 Abandoned Zone 10 Landfill	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 1 Drainage Ditch (Bldg. 12-17)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 10 Pantex Lake	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 103 Former Battery Storage Area, (Bldg. 12-81)	NA	SWMU	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 113 Overflows from Bldg. 11-36 Collection System/Sump	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 117 High Explosives Settling Tank	010	SWMU	SOIL	03/18/1994, Facility
SWMU 118 Equalization Basin	016	SWMU	SOIL	8/26/2002, Facility
SWMU 119a High Explosives Filters	010	SWMU	SOIL	3/18/1994, Facility
SWMU 119b High Explosives Filters	009	SWMU	SOIL	3/18/1994, Facility
SWMU 12 Drainage Ditch Near Former 11-14 Pond	013	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 120a Carbon Filters	010	SWMU	NA	3/18/1994, Facility
SWMU 120b Carbon Filters	009	SWMU	NA	3/18/1994, Facility
SWMU 121 High Explosives Settling Tank	009	SWMU	NA	03/18/1994, Facility
SWMU 122a Equalization Basin	015	SWMU	SOIL	8/26/2002, Facility
SWMU 122b Bldg. 12-24N & Bldg. 12-43 Upland Soil	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 123 Concrete Sump & Waste water Treatment Unit	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 13 Former Solar Evaporation Pond (Bldg. 11-51)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 135 Leaching Bed (Bldg. 12-44E)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 136 Subsurface Leaching Bed (Bldg. 12-59)	NA	SWMU	SOIL, GW	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 14 Explosive Burn Pad 1 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 143a Former Waste Drum Storage Areas (Bldg. 10-9)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 143b Former Waste Drum Storage Areas (Bldg. 10-7)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 144 Zone 10 TNT Settling Pit (Bldg. 10-13)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 145 Zone 10 TNT Settling Pit (Bldg. 10-17)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 146 Zone 10 TNT Settling Pit (Bldg. 10-26)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 147 Bldg. 11-13 TNT Settling Pit	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 148 Bldg. 11-17 TNT Settling Pits	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 149 Bldg. 11-26 TNT Settling Pit	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 15 Explosive Burn Pad 2 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 150 Bldg. 11-12 TNT Settling Pit	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 16 Explosive Burn Pad 3 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 17 Explosive Burn Pad 4 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 18 Explosive Burn Pad 5 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 19 Explosive Burn Pad 6 (including ash disposal trench)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 2 Drainage Ditch (Bldg. 12-43)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 20 Explosive Burn Pad 7 (including ash disposal trench)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 21 Explosive Burn Pad 7A (including ash disposal trench)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 22 Explosive Burn Pad 8 (including ash disposal trench)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 23 Explosive Burn Pad 9 (including ash disposal trench)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 24 Explosive Burn Pad 10 (including ash disposal trench)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 25 Explosive Burn Pad 11 (including Wash Rack)	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 26 Explosive Burn Pad 12	004	SWMU	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 27 Explosive Burn Pad 13	004	SWMU	SOIL	Not Complete, RRS 3
SWMU 3 Drainage Ditch (Bldg. 11-44)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 37 Burning Ground Landfill 1	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 38 Burning Ground Landfill 2	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 39 Burning Ground Landfill 3	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 4 Drainage Ditch (Bldg. 11-50)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 40 Burning Ground Landfill 4	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 41 Burning Ground Landfill 5	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 42 Burning Ground Landfill 6	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 43 Burning Ground Landfill 7	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 44 Burning Ground Landfill 8	006	SWMU	SOIL	Not Complete, RRS 3
SWMU 45 Explosive Burn Cage	039	SWMU	SOIL	3/4/1997, Facility
SWMU 46 Explosive Burn Cage	039	SWMU	SOIL	3/4/1997, Facility
SWMU 47 Chemical Burn / Evaporation Pits	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 48 Burning Ground Solvent Evap. Pans	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 49 Burning Ground Solvent Evap. Pans	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 50 Burning Ground Solvent Evap. Pans	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-01a Drainage Ditch(es) (Bldg. 12-5)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-01b Drainage Ditch(es) (Bldg. 12-5B)	NA	SWMU	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 5-02a Drainage Ditch (Bldg. 12-51)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-02b Drainage Ditch (Bldg. 12-67)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-02c Drainage Ditch (Bldg. 12-110)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-04a Bldg. 12-19 Drainage Ditches	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-04b Bldg. 12-73 Drainage Ditches	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-05 Drainage Ditch (Bldgs 12-21 & 12-24)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 5-06a Drainage Ditch (Bldg. 12-44E)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-06b Drainage Ditch (Bldg. 12-81)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-07 Bldg. 12-41 Drainage Ditch	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-08 Drainage Ditch (Bldg. 11-36)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-09a Drainage Ditch (Bldg. 11-17)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-09b Drainage Ditch (Bldg. 11-20)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 51 Burning Ground Solvent Evap. Pans	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-11 Main Perimeter Ditch	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 5-12a Main Perimeter Ditch	NA	SWMU	SOIL, GW	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 5-12b Perimeter Drainage Ditch from Zone 12 to SWMU 5-15	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 5-13a,b,c Drainage Ditches to Playa 1	NA	SWMU	SOIL, GW	Not Complete, RRS 3
SWMU 5-15 a&b Drainage Ditch to Playa 4	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 52 Burn Racks and Flashing Pits	004, 052, 053, 054	SWMU	SOIL	3/4/1997, Facility
SWMU 54 Landfill 3	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 55 Landfill 4	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 56 Landfill 5	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 57 Landfill 6	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 58 Landfill 7	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 6 Playa 1	001	SWMU	SOIL, SED, GW	Not Complete, RRS 3
SWMU 60 Landfill 9	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 61 Landfill 10	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 64 Landfill 13	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 66 Landfill 15	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 68a Original Landfill	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 68b Landfill 1	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 68c Landfill 2	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 68d Sanitary Landfill	002	SWMU	SOIL	Not Complete, RRS 3
SWMU 7 Playa 2	012	SWMU	SOIL, SED	Not Complete, RRS 3
SWMU 8 Playa 3	019	SWMU	SOIL, SED	Not Complete, RRS 3
SWMU 82 Nuclear Weapon Accident Residue Storage	NA	SWMU	SOIL	Not Complete, RRS 3

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SWMU 84 Scrap, Salvage, and Storage Yard (Bldg. 10-9)	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 86 11-14 Solvent Storage Shed	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 87 Bldg. 11-20 Solvent Storage Shed	NA	SWMU	SOIL	Not Complete, RRS 3
SWMU 9 Playa 4	NA	SWMU	SOIL, SED	Not Complete, RRS 3
Unassigned Demonstration Facilities	NA	SWMU	SOIL	Not Complete, RRS 3
Unassigned Former 11-15 Pond	NA	SWMU	SOIL, GW	Not Complete, RRS 3
Unassigned Former Leaching Bed North of Bldg. 11-50 and West of Bldg. 11-36	NA	SWMU	SOIL	Not Complete, RRS 3
Unassigned Concrete Sump (near Bldg. 12-5B)	NA	SWMU	SOIL	Not Complete, RRS 3
Unassigned AOC Zone 10 Landfills West and Southwest of SWMU 84 Scrap and Salvage Yard	NA	AOC	SOIL	Not Complete, RRS 3
Unassigned SWMU Zone 10 Berms	NA	SWMU	SOIL	Not Complete, RRS 3
Unassigned SWMU Evaporation Pit East of Bay 3 (Bldg. 11-20)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
Unassigned SWMU Evaporation Pit South of Bay 11/ West of Bay 6 (Bldg. 11-20)	NA	SWMU	SOIL, GW	Not Complete, RRS 3
Unassigned SWMU SWMU Capacitor Bank Rupture	NA	SWMU	SOIL	Not Complete, RRS 3
Permitted Unit 53 Igloo 4-72 Storage	NA	SWMU		Active Site

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Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media ¹	Date Program Requirement and Remedy Standard Completed ²
SVS 4 Old Pistol Range	NA	SWMU		Active Site
SWMU 28 Active Burn Tray	NA	SWMU		Active Site
SWMU 29 Active Burn Tray	NA	SWMU		Active Site
SWMU 30 Active Burn Tray	NA	SWMU		Active Site
SWMU 31 Active Burn Tray	NA	SWMU		Active Site
SWMU 32 Active Burn Tray	NA	SWMU		Active Site
SWMU 33 Active Burn Tray	NA	SWMU		Active Site
SWMU 34 Active Burn Tray	NA	SWMU		Active Site
SWMU 35 Active Burn Tray	NA	SWMU		Active Site
SWMU 36 Active Burn Tray	NA	SWMU		Active Site
SWMU 69 Firing Site 4	NA	SWMU		Inactive Site, No investigation
SWMU 72 Firing Site 10	NA	SWMU		Active Site
SWMU 74 Firing Site 21	NA	SWMU		Active Site
SWMU 75 Firing Site 22	NA	SWMU		Active Site
SWMU 78 Firing Site 24, Concrete Sump	NA	SWMU		Active Site
Building 11-35 AOC	NA	SWMU		Inactive Site, No investigation
		Remove Last Row	Add Row	

SWMU= Solid Waste Management Units**AOC= Area of Concern****Foot Note:**

1. Specify the affected media [i.e. soil, groundwater (GW), surface water (SW), sediment (SED)].
2. For each SWMU or AOC, specify the Remedy Standard that was completed and the date of the Commission's No Further Action (NFA) letter for the media of concern.
3. For sites with FOA authorization, list the SWMUs and/or AOCs that are subject to corrective action at the site. Please separate the SWMUs and/or AOCs that are located within the FOA boundary from the SWMUs and/or AOCs that are located outside of the FOA boundary.

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Note:

CP Table II lists SWMUs and/or AOCs which have been identified in the RCRA Facility Assessment (RFA) Report as having a release(s) or a potential release(s) of hazardous waste, hazardous constituents, or other constituents of concern. The permittee is thus required to meet Corrective Action Objectives for the SWMUs and/or AOCs in accordance with Permit Section XI.H. and 30 TAC Section 335.167.

The permittee shall update CP Table II when a new SWMU and/or AOC that requires corrective action is identified. The permittee shall also update CP Table II as outlined in Footnote 2 when the corrective action status of a media for a SWMU or AOC has changed.

SWMUs and/or AOCs shall not be deleted from this table when the Corrective Action Objectives have been completed and a No Further Action (NFA) determination has been approved for the SWMU and/or AOC. In accordance with Permit Section XI.H., CP Table II is intended to be a historical record of the facility's corrective actions and to reflect when the Corrective Action Objectives have been met for each SWMU/AOC.

There may be cases in which the permittee fulfills the Corrective Action Objectives for soils at a SWMU/AOC, but long-term groundwater monitoring and corrective action may be necessary to meet the groundwater Corrective Action Objectives. In such instances, the SWMU/AOC would be listed in CP Table I, Item C, and would be subject to all applicable provisions of this Compliance Plan. If a release from a SWMU/AOC is commingled with a RCRA-regulated unit, then the unit and the SWMU/AOC would be listed in CP Table I, Item D. In accordance with Permit Section XI.H., once the Corrective Action Objectives for groundwater are completed, the permittee shall modify or amend the Compliance Plan to reassign the SWMU/AOC in CP Table I, Item C or Item D, to CP Table II. CP Table II should reflect the new status of the SWMU/AOC. It should include the Remedy Standard achieved for all media of concern and the date of the Commission's NFA approval letter for each SWMU/AOC.

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
1. All Indicator Areas - Burning Ground, North, Zone 11, and Southeast	Antimony	0.015 BKG	0.015 BKG
	Arsenic	0.012 BKG	0.012 BKG
	Barium	2 MCL	2 MCL
	Beryllium	0.004 MCL	0.004 MCL
	Boron	7.3 MSC	7.3 MSC
	Cadmium	0.005 MCL	0.005 MCL
	Chromium	0.1 MCL	0.1 MCL
	Chromium, Hexavalent	0.1 MCL	0.1 MCL
	Cobalt	2.19 MSC	2.19 MSC
	Copper	1.3 MCL	1.3 MCL
	Lead	0.015 MSC	0.015 MSC
	Mercury	0.003 BKG	0.003 BKG
	Nickel	0.73 MSC	0.73 MSC
	Selenium	0.05 MCL	0.05 MCL
	Silver	0.1825 MSC	0.1825 MSC
	Thallium	0.0339 BKG	0.0339 BKG
	Tin	21.9 MSC	21.9 MSC
	Vanadium	0.2555 MSC	0.2555 MSC
	Zinc	10.95 MSC	10.95 MSC
	1,1,1,2-Tetrachloroethane	0.0328 MSC	0.0328 MSC
	1,1,1-Trichloroethane	0.2 MCL	0.2 MCL
	1,1,2,2-Tetrachloroethane	0.001 PQL	0.001 PQL
	1,1,2-Trichloroethane	0.005 MCL	0.005 MCL
	1,1-Dichloroethane	3.65 MSC	3.65 MSC
	1,1-Dichloroethene	0.007 MCL	0.007 MCL
	1,2,3-Trichloropropane	0.002 PQL	0.002 PQL
	1,2-Dichlorobenzene	0.6 MCL	0.6 MCL
	1,2-Dichloroethane	0.005 MCL	0.005 MCL
	1,2-Dichloropropane	0.005 MCL	0.005 MCL
	1,3-Dichlorobenzene	1.095 MSC	1.095 MSC
	1,4-Dichlorobenzene	0.075 MCL	0.075 MCL
	2-Hexanone	2.19 MSC	2.19 MSC
	Acetone	32.85 MSC	32.85 MSC
	Acetonitrile	1.168 MSC	1.168 MSC
	Acrolein	0.018 MSC	0.018 MSC
	Acrylonitrile	0.015 PQL	0.015 PQL
	Allyl Chloride	0.005 PQL	0.005 PQL
	Benzene	0.005 MCL	0.005 MCL
	Bromoform	0.0108 MSC	0.0108 MSC
	Carbon Disulfide	3.65 MSC	3.65 MSC

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
	Carbon Tetrachloride	0.005 MCL	0.005 MCL
	Chlorobenzene	0.1 MCL	0.1 MCL
	Chloroethane	14.6 MSC	14.6 MSC
	Chloroform	0.08 MCL	0.08 MCL
	Chloromethane	0.0655 MSC	0.0655 MSC
	2-Chloro-1,3-butadiene	0.005 PQL	0.005 PQL
	<i>cis</i> -1,2-Dichloroethene	0.07 MCL	0.07 MCL
	Dibromochloromethane	0.0101 MSC	0.0101 MSC
	Dichlorodifluoromethane	7.3 MSC	7.3 MSC
	Ethyl Methacrylate	3.285 MSC	3.285 MSC
	Ethylbenzene	0.7 MCL	0.7 MCL
	Isobutanol	10.95 MSC	10.95 MSC
	Methacrylonitrile	0.05 PQL	0.05 PQL
	Methyl Bromide	0.0511 MSC	0.0511 MSC
	Methyl Ethyl Ketone	21.9 MSC	21.9 MSC
	Methyl Iodide	0.0511 MSC	0.0511 MSC
	Methyl Isobutyl Ketone	2.92 MSC	2.92 MSC
	Methyl Methacrylate	51.1 MSC	51.1 MSC
	Methylene Bromide	0.1136 MSC	0.1136 MSC
	Methylene Chloride	0.005 MCL	0.005 MCL
	Pentachloroethane	0.0328 MSC	0.0328 MSC
	Propionitrile	0.005 PQL	0.005 PQL
	Styrene	0.1 MCL	0.1 MCL
	Tetrachloroethylene	0.005 MCL	0.005 MCL
	Toluene	1 MCL	1 MCL
	<i>trans</i> -1,2-Dichloroethene	0.1 MCL	0.1 MCL
	<i>trans</i> -1,3-Dichloropropene	0.0085 MSC	0.0085 MSC
	<i>trans</i> -1,4-Dichloro-2-butene	0.01 PQL	0.01 PQL
	Trichloroethylene	0.005 MCL	0.005 MCL
	Trichlorofluoromethane	10.95 MSC	10.95 MSC
	Vinyl Acetate	36.5 MSC	36.5 MSC
	Vinyl Chloride	0.002 MCL	0.002 MCL
	Xylenes, Total	10 MCL	10 MCL
	Sulfide	None ³	None ³
	1,4-Dioxane	0.0077 MSC	0.0077 MSC
	2-Amino-4,6-dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	4-Amino-2,6-dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	1,3-Dinitrobenzene	0.0037 MSC	0.0037 MSC
	2,4-Dinitrotoluene	0.001 PQL	0.001 PQL
	2,6-Dinitrotoluene	0.001 PQL	0.001 PQL
	HMX	0.36 MSC Adj	0.36 MSC Adj

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
	RDX	0.002 HA	0.002 HA
	MNX	0.002 RDX HA	0.002 RDX HA
	DNX	0.002 RDX HA	0.002 RDX HA
	TNX	0.002 RDX HA	0.002 RDX HA
	1,3,5-Trinitrobenzene	0.22 MSC Adj	0.22 MSC Adj
	TNT	0.0036 MSC Adj	0.0036 MSC Adj
	Perchlorate	0.015 HA	0.015 HA

1. Use Column C, specify the GWPS assigned at a POE or APOE (i.e. for sites with MNA or PMZ proposals as applicable under TRRP). (i.e. modify Table and Footnotes to support the establishment of GWPS at POC, POE or APOE monitoring points, as appropriate). Put "N/A" if a specific program or column item is not applicable.
2. For each COC, select the appropriate GWPS designation and include the applicable definition that applies to verify the corrective action program objectives are being achieved either under Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350. The GWPS designation and definitions specified in this table either under 30 TAC Chapter 335 (regarding RRR) or 30 TAC Chapter 350 (regarding TRRP) may not be combined pursuant to 30 TAC Section 350.2(m).
3. Sulfide is not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required for the TCEQ. No secondary MCLs or other criteria were identified for sulfide.

Note:

Any references to AMP wells and associated Attenuation Action Levels (AALs), CAS wells and CAO wells should not be listed in CP Table III. AMP and their associated AALs, CAS wells and CAO wells should only be depicted in the legible CP Attachment A maps or figures. Once the AMP, CAS and CAO wells meet their respective AAL or GWPS, then the Permittee may propose to discontinue monitoring that AMP, CAS, and CAO well(s) to account for changing environmental conditions and/or plume morphology without modification to the Permit. If the AMP and their associated AALs, CAS wells and CAO wells are listed in CP Table III, then any proposed changes would require modification to the Permit. Any changes to the AMP and associated AALs, CAS wells, and CAO wells in the CP Attachment A maps can be approved in the Groundwater Monitoring Report required by CP Table VII and become a part of the Permit by reference.

RRR GWPS Designations and Definitions

MSC ACL pursuant to 30 TAC Section 335.160(b) based upon the Groundwater Medium-Specific Concentration, Residential {...or Industrial...} Risk Reduction Standard No. 2 {...or No. 3} specified in 30 TAC Section 335 Subchapter S.

MCL ACL pursuant to 30 TAC Section 335.160(b) based upon the Groundwater Maximum

Contaminant Level specified in 40 CFR Part 141, National Primary Drinking Water Regulations Subparts B and G.

BKG Background as determined in the approved report titled *Risk Reduction Rule Guidance to the Pantex RFI*, updated March 2004. If further background values have been established, the permittee shall submit a plan and report documenting development of backgrounds for review and approval by the Executive Director.

PQL Non-detectable at PQL as determined by the analytical methods of the EPA SW-846 most recent edition, and as listed in the July 8, 1987 edition of the Federal Register and later editions. PQL is the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating condition.

Adj Value adjusted for a cumulative hazard index or quotient.

HA U.S. EPA Health Advisory, pursuant to published Record of Decision for Pantex Plant (2008).

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and the Groundwater Protection Standard

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
1. Burning Ground Indicator Area	Boron	7.3 MSC	7.3 MSC
	Chloroform	0.08 MCL	0.08 MCL
	Tetrachloroethylene (PCE)	0.005 MCL	0.005 MCL
	Trichloroethylene (TCE)	0.005 MCL	0.005 MCL
	cis-1,2-Dichloroethene	0.07 MCL	0.07 MCL
	trans-1,2- Dichloroethene	0.10 MCL	0.10 MCL
	1,2-Dichloroethane	0.005 MCL	0.005 MCL
	Vinyl Chloride	0.002 MCL	0.002 MCL
	Perchlorate	0.015 HA	0.015 HA
	2-amino-4,6- Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	4-amino-2,6- Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	1,3-Dinitrobenzene	0.0037 MSC	0.0037 MSC
	2,4-Dinitrotoluene	0.001 PQL	0.001 PQL
	2,6-Dinitrotoluene	0.001 PQL	0.001 PQL
	HMX	0.36 MSC Adj	0.36 MSC Adj
	RDX	0.002 HA	0.002 HA
	MNX	0.002 RDX HA	0.002 RDX HA
	DNX	0.002 RDX HA	0.002 RDX HA
	TNX	0.002 RDX HA	0.002 RDX HA
	1,3,5-Trinitrobenzene	0.22 MSC Adj	0.22 MSC Adj
	2,4,6-Trinitrotoluene (TNT)	0.0036 MSC Adj	0.0036 MSC Adj
	Perchlorate	0.015 HA	0.015 HA
2. Zone 11 Indicator Area	Boron	7.3 MSC	7.3 MSC
	Chloroform	0.08 MCL	0.08 MCL
	Tetrachloroethylene (PCE)	0.005 MCL	0.005 MCL
	Trichloroethylene (TCE)	0.005 MCL	0.005 MCL
	cis-1,2-Dichloroethene	0.07 MCL	0.07 MCL
	trans-1,2- Dichloroethene	0.10 MCL	0.10 MCL
	1,2-Dichloroethane	0.005 MCL	0.005 MCL
	Vinyl Chloride	0.002 MCL	0.002 MCL
	Perchlorate	0.015 HA	0.015 HA

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
	2-amino-4,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	4-amino-2,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	1,3-Dinitrobenzene	0.0037 MSC	0.0037 MSC
	2,4-Dinitrotoluene	0.001 PQL	0.001 PQL
	2,6-Dinitrotoluene	0.001 PQL	0.001 PQL
	HMX	0.36 MSC Adj	0.36 MSC Adj
	RDX	0.002 HA	0.002 HA
	MNX	0.002 RDX HA	0.002 RDX HA
	DNX	0.002 RDX HA	0.002 RDX HA
	TNX	0.002 RDX HA	0.002 RDX HA
	1,3,5-Trinitrobenzene	0.22 MSC Adj	0.22 MSC Adj
	2,4,6-Trinitrotoluene (TNT)	0.0036 MSC Adj	0.0036 MSC Adj
	Perchlorate	0.015 HA	
	1,4-Dioxane	0.0077 MSC	
3. North Indicator Area	Boron	7.3 MSC	7.3 MSC
	Chloroform	0.08 MCL	0.08 MCL
	Tetrachloroethylene (PCE)	0.005 MCL	0.005 MCL
	Trichloroethylene (TCE)	0.005 MCL	0.005 MCL
	cis-1,2-Dichloroethene	0.07 MCL	0.07 MCL
	trans-1,2-Dichloroethene	0.10 MCL	0.10 MCL
	1,2-Dichloroethane	0.005 MCL	0.005 MCL
	Vinyl Chloride	0.002 MCL	0.002 MCL
	2-amino-4,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	4-amino-2,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	1,3-Dinitrobenzene	0.0037 MSC	0.0037 MSC
	2,4-Dinitrotoluene	0.001 PQL	0.001 PQL
	2,6-Dinitrotoluene	0.001 PQL	0.001 PQL
	HMX	0.36 MSC Adj	0.36 MSC Adj
	RDX	0.002 HA	0.002 HA
	MNX	0.002 RDX HA	0.002 RDX HA
	DNX	0.002 RDX HA	0.002 RDX HA
	TNX	0.002 RDX HA	0.002 RDX HA
	1,3,5-Trinitrobenzene	0.22 MSC Adj	0.22 MSC Adj
	2,4,6-Trinitrotoluene (TNT)	0.0036 MSC Adj	0.0036 MSC Adj

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) ²	Column C Groundwater Protection Standards (mg/l) at the POE or APOE ^{1,2}
4. Southeast Indicator Area	Boron	7.3 MSC	7.3 MSC
	Chloroform	0.08 MCL	0.08 MCL
	Tetrachloroethylene (PCE)	0.005 MCL	0.005 MCL
	Trichloroethylene (TCE)	0.005 MCL	0.005 MCL
	cis-1,2-Dichloroethene	0.07 MCL	0.07 MCL
	trans-1,2-Dichloroethene	0.10 MCL	0.10 MCL
	1,2-Dichloroethane	0.005 MCL	0.005 MCL
	Vinyl Chloride	0.002 MCL	0.002 MCL
	2-amino-4,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	4-amino-2,6-Dinitrotoluene	0.0012 MSC Adj	0.0012 MSC Adj
	1,3-Dinitrobenzene	0.0037 MSC	0.0037 MSC
	2,4-Dinitrotoluene	0.001 PQL	0.001 PQL
	2,6-Dinitrotoluene	0.001 PQL	0.001 PQL
	HMX	0.36 MSC Adj	0.36 MSC Adj
	RDX	0.002 HA	0.002 HA
	MNX	0.002 RDX HA	0.002 RDX HA
	DNX	0.002 RDX HA	0.002 RDX HA
	TNX	0.002 RDX HA	0.002 RDX HA
	1,3,5-Trinitrobenzene	0.22 MSC Adj	0.22 MSC Adj
	2,4,6-Trinitrotoluene (TNT)	0.0036 MSC Adj	0.0036 MSC Adj
	Total Chromium	0.1 MCL	0.1 MCL
	Hexavalent Chromium	0.1 MCL	0.1 MCL

Note:

CP Table IIIA represents the short list of constituents (i.e. indicator parameters) developed from CP Table III to be monitored in accordance with Provision XI.F.3.c.(1) during the Corrective Action Program to verify GWPSs are met.

1. Use Column C, specify the GWPS assigned at a POE or APOE (i.e. for sites with MNA or PMZ proposals as applicable under TRRP). (i.e. modify Table and Footnotes to support the establishment of GWPS at POC, POE or APOE monitoring points, as appropriate). Put "N/A" if a specific program or column item is not applicable.
2. For each COC, select the appropriate GWPS designation and include the applicable definition that applies to verify the corrective action program objectives are being achieved either under Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350. The GWPS designation and

definitions specified in this table either under 30 TAC Chapter 335 (regarding RRR) or 30 TAC Chapter 350 (regarding TRRP) may not be combined pursuant to 30 TAC Section 350.2(m).

RRR GWPS Designations and Definitions

MSC ACL pursuant to 30 TAC Section 335.160(b) based upon the Groundwater Medium-Specific Concentration, Residential {...or Industrial...} Risk Reduction Standard No. 2 {...or No. 3} specified in 30 TAC Section 335 Subchapter S.

MCL ACL pursuant to 30 TAC Section 335.160(b) based upon the Groundwater Maximum Contaminant Level specified in 40 CFR Part 141, National Primary Drinking Water Regulations Subparts B and G.

SMCL ALC pursuant to 30 TAC Section 335.160(b) based upon the Groundwater Secondary Maximum Contaminant Level (SMCL) specified in 40 CFR Part 143, National Secondary Drinking Water Regulations.

AL ACL pursuant to 30 TAC Section 335.160(b) based upon the Action Level specified in 40 CFR Part 141, National Primary Drinking Water Regulations Subpart I.

BKG Background as determined in the approved report titled *Risk Reduction Rule Guidance to the Pantex RFI*, updated March 2004. If further background values have been established, the permittee shall submit a plan and report documenting development of backgrounds for review and approval by the Executive Director.

PQL Non-detectable at PQL as determined by the analytical methods of the EPA SW-846 most recent edition, and as listed in the July 8, 1987 edition of the Federal Register and later editions. PQL is the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating condition.

HA U.S. EPA Health Advisory, pursuant to published Record of Decision for Pantex Plant (2008).

Adj Value adjusted for a cumulative hazard index or quotient.

Permittee: United States Department of Energy and Consolidated Nuclear Security LLC

CP Table IV: Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Quantitation Limits (RESERVED)

Unit Name	Column A Hazardous Constituents ²	Column B Concentration Limits (mg/l) ¹	
1. [Unit Name]	*parameter*		ND(0.00*)
	parameter		ND(0.00*)
	parameter		0.00 BKG

Notes:

- If there are no RCRA-regulated units subject to the Compliance Monitoring Program, mark “Reserved” next to the CP Table IV heading.
- CP Table IV represents the long list of hazardous constituents that are reasonably expected to be in, or derived from, waste placed in a RCRA-regulated unit, but may not be detected in groundwater above the constituents' respective quantitation limits.
- CP Table IV constituents are to be monitored annually in accordance with Provision XI.F.3.(2). Any CP Table IV constituents detected in the groundwater should be carried over to CP Table IVA.

Footnotes:

- For each constituent of concern, select the appropriate quantitation limit designation and definition according to either the Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or the Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350.
- If applicable, “Appendix IX” can be used in Column A for a unit instead of listing each chemical of concern (COC). The permittee may petition the Executive Director for the deletion of a specific COC from the Appendix IX analysis if the permittee can demonstrate that the COC was never used in the facility's operations nor was disposed of in the waste management area.

Permittee: United States Department of Energy and Consolidated Nuclear Security LLC

CP Table IVA: Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard (RESERVED)

Unit Name	Column A Hazardous Constituents	Column B Concentration Limits (mg/l)	
1. [Unit Name]	*parameter*		ND(0.00*)
	parameter		ND(0.00*)
	parameter		0.00 BKG

Notes:

- If there are no RCRA-regulated units subject to the Compliance Monitoring Program (Provision ?), mark “Reserved” next to the CP Table IVA heading.
- CP Table IVA represents the short list of hazardous constituents detected in groundwater above the quantitation limits specified in CP Table IV.
- CP Table IVA constituents are monitored semiannually in accordance with Provision XI.F.3.c.(2) to verify that the groundwater protection standards (GWPS) are being met.

Footnotes:

- Use Column C, specify the GWPS assigned at a POE or APOE (i.e. as applicable under TRRP). (i.e. modify Table and Footnotes to support the establishment of GWPS at POC, POE or APOE monitoring points, as appropriate). Put “N/A” if a specific program or column item is not applicable.
- For each constituent of concern (COC), select the appropriate GWPS designation and definition to demonstrate that the compliance monitoring program objectives are being achieved either under the Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or the Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350. The RRR and TRRP GWPS designations and definitions may not be combined pursuant to 30 TAC Section 350.2(m). Delete all designations and definitions that are not applicable.

ACL = alternative concentration limit; PQL = practical quantitation limit; PCL = protective concentration level; RSA = Remedy Standard A; RSB = Remedy Standard B

CP Table V: Designation of Wells**Point of Compliance Wells**

1. Units: Burning Ground Indicator Area
Well Nos. PTX01-1001, PTX01-1008, and PTX01-1010
2. Units: North Indicator Area
Well Nos: PTX06-1050, PTX07-1002
3. Units: Zone 11 Indicator Area
Well Nos: PTX07-1P02, PTX06-1150, PTX06-1155, PTX06-1156, PTX06-1175, PTX06-1052, PTX06-1166
4. Units: Southeast Indicator Area
Well Nos: PTX06-1023, PTX06-1146, PTX06-1045, PTX06-1046, PTX06-1056, PTX06-1154, PTX06-1196, PTX06-1215, PTX06-1218, and PTX06-1221

Point of Exposure Wells

1. Units: Burning Ground Indicator Area
Well Nos. PTX01-1012, PTX01-1013, and PTX06-1064
2. Units: North and Zone 11 Indicator Areas
Well Nos. PTX06-1144, PTX06-1068, PTX06-1143
3. Units: Southeast Indicator Area
Well Nos: PTX06-1138 and PTX06-1139

Alternate Point of Exposure Wells

1. None

Background Wells

1. None

FOA Boundary of Compliance Wells Background Wells

1. None

Note:

Attenuation monitoring point (AMP) wells, corrective action system (CAS) wells, and corrective action observation (CAO) wells required by Permit Section XI.B.2. should not be listed in CP Table V. These wells should only be depicted in the CP Attachment A maps. Once an AMP, CAS, or CAO well meets its respective attenuation action levels (AALs) or GWPS, then the Permittee may propose to discontinue monitoring that well without modification to the Permit. If the AMP, CAS, or CAO well is listed in CP Table V, then any proposed change to the well would require modification to the Permit. Changes to the wells depicted in the CP Attachment A maps can be approved in the Groundwater Monitoring Report required by CP Table VII and become a part of the Permit by reference.

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CP Table VI: Compliance Period for RCRA-Regulated Units (Reserved)

[*Unit Name*]	Year or Number of Years
Year Waste Management Activities Initiated	20**
Year Closed	20**
Compliance Period (years)	Ex. 30 years
Compliance Period Began	20**
Remove Last Unit	Add Unit

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CP Table VII: Reporting Requirements

Item	Program	Reporting Frequency	Requirements
1.	All programs	Annual by June 30	Each report shall be certified by a qualified engineer and/or geoscientist.
2.	Corrective Action and/or Compliance Monitoring	Annual by June 30	A table of all modifications and amendments made to this Compliance Plan with their corresponding approval dates by the Executive Director or the Commission and a brief description of each action;
3.	Corrective Action and/or Compliance Monitoring	Annual by June 30	A summary of any activity within an area subject to institutional control.
4.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Tabulation of well casing elevations in accordance with CP Attachment C;
5.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Certification and well installation diagram for any new well installation or replacement and certification for any well plugging and abandonment;
6.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Recommendation for any changes to the program;
7.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Any other items requested by the Executive Director;
8.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Water table maps shall be prepared from the groundwater data collected pursuant to Permit Provision XI.G. and shall be evaluated by the permittee with regard to the following parameters: a. Development and maintenance of a cone of depression during operation of the system; b. Direction and gradient of groundwater flow; c. Effectiveness of hydrodynamic control of the contaminated zone during operation; and d. Estimation of the rate and direction of groundwater contamination migration.

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Item	Program	Reporting Frequency	Requirements
9.	Corrective Action and/or Compliance Monitoring	Annual by June 30	The permittee shall submit a report to each recipient listed in <u>Provision XI.J.3.</u> , which includes the all applicable information listed in this table (CP Table VII: Reporting Requirements), determined since the previously submitted report, if those items are applicable. If both Corrective Action and Compliance Monitoring Programs are authorized, then the Groundwater Monitoring Report required by CP Table VII shall contain information required for both programs.
10.	Corrective Action and/or Compliance Monitoring	Annual by June 30	The Corrective Action System(s) authorized under <u>Provision XI.B.3.</u> in operation during the reporting period and a narrative summary of the evaluations made in accordance with Permit Sections XI.E., XI.F., and XI.G. for the preceding reporting period. The reporting periods shall be January 1 through June 30 and July 1 through December 31 for Corrective Action Monitoring, unless an alternative semiannual schedule is approved by the Commission. The period for Compliance Monitoring shall be based on the calendar year.
11.	Corrective Action and/or Compliance Monitoring	Annual by June 30	The method(s) utilized for management of recovered/purged groundwater shall be identified in accordance with <u>Provision XI.B.8.</u> The permittee shall maintain this list as part of the facility operating record and make it available for inspection upon request.

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Item	Program	Reporting Frequency	Requirements
12.	Corrective Action and/or Compliance Monitoring	Annual by June 30	An updated table and map of all monitoring and corrective action system wells. The wells to be sampled shall be those wells proposed in the Compliance Plan Application referenced in <u>Provision I.B.</u> and any changes subsequently approved by the Executive Director pursuant to <u>Provision XI.B.3.</u> Provide in chronological order, a list of those wells which have been added to, or deleted from, the groundwater monitoring and remediation systems since original issuance of the Compliance Plan. Include the date of the Commission's approval for each entry;
13.	Corrective Action and/or Compliance Monitoring	Annual by June 30	The results of the chemical analyses, submitted in a tabulated format acceptable to the Executive Director which clearly indicates each parameter that exceeds the Groundwater Protection Standard (GWPS). Copies of the original laboratory report for chemical analyses showing detection limits and quality control and quality assurance data shall be provided if requested by the Executive Director;
14.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Tabulation of all water level elevations required in <u>Provision XI.F.3.d.(1)</u> , depth to water measurements, and total depth of well measurements collected since the data that was submitted in the previous monitoring report;
15.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Potentiometric surface maps showing the elevation of the water table at the time of sampling, delineation of the radius of influence of the Corrective Action System, and the direction of groundwater flow gradients outside any radius of influence;
16.	Corrective Action and/or Compliance Monitoring	Annual by June 30	Tabulation of all data evaluation results pursuant to <u>Provision XI.F.4.</u> and status of each well with regard to compliance with the Corrective Action objectives and compliance with the GWPS;
17.	Corrective Action and/or Compliance Monitoring	Annual by June 30	An updated summary as required by CP Table VIII;

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Item	Program	Reporting Frequency	Requirements
18.	Corrective Action and/or Compliance Monitoring	Semiannual by December 30	Summary of any changes made to the monitoring/ corrective action program and a summary of well inspections, repairs, and any operational difficulties;
19.	Corrective Action and/or Compliance Monitoring	Annual by June 30	A notation of the presence or absence of non-aqueous phase liquids (NAPLs), both light and dense phases, in each well during each sampling event since the last event covered in the previous monitoring report and tabulation of depth and thickness of NAPLs, if detected;
20.	Corrective Action only	Annual by June 30	Quarterly tabulations of quantities of recovered groundwater and NAPLs, and graphs of monthly recorded flow rates versus time for the Recovery Wells during each reporting period. A narrative summary describing and evaluating the NAPL recovery program shall also be submitted;
21.	Corrective Action only	Semiannual by December 30	Tabulation of the total contaminant mass recovered from each recovery system for each reporting period;
22.	Corrective Action only	Annual by June 30	Maps of the contaminated area where GWPSs are exceeded depicting concentrations of CP Table IIIA constituents and any newly detected CP Table III constituents as isopleth contours or discrete concentrations if isopleth contours cannot be inferred. Areas where concentrations of constituents exceed the GWPS should be clearly delineated. Depict the boundary of the plume management zone (PMZ), if applicable;
23.	Corrective Action only	Annual by June 30	Maps and tables indicating the extent and thickness of the NAPLs both light and dense phases, if detected;

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Item	Program	Reporting Frequency	Requirements
24.	Corrective Action only	Annual by June 30	Corrective Measures Implementation (CMI) Progress Report or Response Action Effectiveness Report or Response Action Completion Report to be submitted as a section of the Compliance Plan report in accordance with <u>Provision XI.H.6.</u> , if necessary. The permittee will include a narrative summary of the status of the approved final corrective measures conducted in accordance with the approved CMI Workplan or RAP, and that the requirements of <u>Provision XI.H.7.</u> are being met.
25.	Corrective Action only	Annual by June 30	The permittee will include a narrative summary of the status of each Solid Waste Management Unit (SWMU) and/or Area of Concern (AOC) subject to the requirements of <u>Permit Provision XI.H.</u> and ICM Program for a SWMU and/or AOC which documents that the objectives of <u>Provision XI.H.8.b.</u> are being achieved. This summary shall be included as a section of the Compliance Plan groundwater monitoring report.
26.	PMZ	NA	A summary evaluating the effectiveness of the corrective action system in controlling migration beyond the downgradient boundary and vertical limit of the PMZ to achieve the GWPS. The summary shall include an evaluation of whether the attenuation action levels are not exceeded at their respective attenuation monitoring points pursuant to 30 TAC Sections 350.33(f)(4)(A) and 350.33(f)(4)(D)(ii), if applicable;
27.	PMZ	NA	An estimate of the percentage of the response action which has been completed within the PMZ, if applicable;
28.	PMZ	NA	An estimate in years of the additional time necessary to complete the response actions for the PMZ, if applicable;
29.	PMZ	NA	A determination whether sufficient progress is being made to achieve the selected remedy standard within a reasonable time frame given the circumstance of the affected property in the PMZ, if applicable.

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Item	Program	Reporting Frequency	Requirements
30.	Facility Operations Area (FOA)	NA	The following additional reporting requirements to fulfill requirements of 30 TAC Section 350.134 and 30 TAC Section 350.135. These include but are not limited to: a. Provide an average of both lost workday injury case rates and injury incidence rates for the most recent three (3) year period compared to the most recent specific industry national average published by the Bureau of Labor Statistics. (continued on next page)

CP Table VIII: Compliance Schedule

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
A.	Annual Report required by Provision XI.G.3.	Compliance Plan	Submit to the Executive Director a schedule summarizing all activities required by the Compliance Plan. The schedule shall be included in the annual groundwater monitoring report required by Provision XI.G.3. and shall list the starting dates of all routine activities. The permittee shall include an updated schedule in the groundwater monitoring report required by <u>Provision XI.G.3.</u> The schedule shall list the activity or report, the Compliance Plan Section which requires the activity or report and the calendar date the activity or report is to be completed or submitted (if this date can be determined.)
B.	11/15/2024 and every five years thereafter	30 TAC §335.163(4) and Provision XI.F.2.	Submit to the Executive Director for review and approval a Sampling & Analysis Plan (SAP) unless the SAP has been submitted with the application and referenced in Provision I.B.
C.	NA	30 TAC §335.166	Corrective action monitoring shall be conducted on a semi-annual basis for any RCRA-regulated units subject to the corrective action program, listed in CP Table I.A.
D.	NA	30 TAC §335.165	Compliance monitoring shall be conducted on a semi-annual basis for any RCRA-regulated units subject to the corrective action program listed in CP Table I.B.

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
E.	Before the end of each semi-annual period	30 TAC §335.167	For SWMUs and/or AOCs subject to corrective action monitoring, corrective action monitoring shall be conducted in accordance with the approved Sampling and Analysis Plan referenced in Item B of this table.
F.	NA	30 TAC §335.151	For units subject to alternative corrective action, alternative corrective action shall be conducted on a semi-annual basis for those units listed in CP Table I.D.
G.	NA	30 TAC Section 335.156 and Chapter 350	Corrective action monitoring shall be conducted on a semi-annual basis for the RCRA-regulated units, SWMUs and/or AOCs listed in CP Table I.E. located within the FOA Boundary
H.	NA	30 TAC §350.31(g)	If a Plume Management Zone (PMZ) has been authorized, submit to the Executive Director proof of compliance with the institutional control requirements. This provides notice of the existence and location of the PMZ) which prevents exposure to groundwater from this zone until such a time as constituents of concern may be reduced to below the GWPS of CP Table III.
I.	NA	30 TAC §350.33(k)	If a PMZ has been authorized, after an unexpected event occurs, or a condition is detected, during post-response action care period which indicates that additional response actions will be required at an affected property.

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
J.	6/30/2024		The Permittee shall submit a schedule in the annual report required by CP Table VII for completion of the following activities: Installation of two In Situ Bioremediation Systems – Perchlorate/Chromium ISB and County Road 8 ISB.
K.	12/31/2026 and every five years thereafter		Pantex will conduct uncertainty management monitoring to address uncertainty in the RCRA Facility Investigations. This monitoring will be conducted once every five years, applying CP Table III parameters. The results of the analysis will be included in the corresponding annual report referenced in CP Table VII and in the Five-Year Review Report conducted in accordance with the Record of Decision.

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CP Table IX: Description of Uppermost Aquifer

The term “Uppermost Aquifer” as referenced in this Compliance Plan refers to the: Groundwater beneath Pantex Plant and vicinity occurs in the Ogallala and Dockum Formations at two intervals. The first water-bearing unit below Pantex Plant in the Ogallala Formation is a discontinuous zone of perched groundwater located at approximately 200 to 300 feet (ft.) below ground surface and 100 to 200 ft. above the drinking water aquifer. A zone of fine-grained sediment (consisting of sand, silt, and clay) that created the perched groundwater is found between the perched groundwater and the underlying drinking water aquifer. The fine-grained zone (FGZ) acts as a significant barrier to downward migration of contaminated water. The perched groundwater ranges in saturated thickness from less than a foot at the margins to more than 75 ft. beneath Playa 1. Perched groundwater forms by surface water in the playas that initially migrates down to the fine-grained zone. It then flows outward in a radial manner away from the playa lakes and becomes influenced by the regional south to southeast gradient. The largest area of perched groundwater beneath Pantex Plant is associated with natural recharge from Playas 1, 2, and 4, treated wastewater discharge to Playa 1, historical releases to the ditches draining Zones 11 and 12, and storm water runoff that drains to the unlined ditches and playas. Two hydraulically separate, relatively small, perched zones occur around Playa 3 (near the Burning Ground in the north central portion of Pantex Plant) and near the Old Sewage Treatment Plant in the northeast corner of Pantex Plant. Where the perched aquifer is absent, the Ogallala Aquifer is the uppermost aquifer.

The second water-bearing zone, the Ogallala Aquifer, is located below the fine-grained zone in the Ogallala and Dockum Formations. The Ogallala Aquifer is the uppermost aquifer where the perched aquifer is absent. The Ogallala Aquifer is a primary drinking and irrigation water source for most of the High Plains. The groundwater surface of the Ogallala Aquifer beneath Pantex Plant is approximately 400 to 500 ft. below ground surface with a saturated thickness of approximately one to 100 ft. in the southern regions of Pantex Plant and approximately 250 to 400 ft. in the northern regions. At Pantex Plant, the primary flow direction of the Ogallala Aquifer is north to northeast due to the influence of the City of Amarillo’s well field located to the north of Pantex Plant.

Permit No. 50284
Attachment A - Legal Description of Facility

Application to Renew and Modify Permits HW 50284 & CP 50284
Part A
Attachment B

Legal Description of Facility

Description of U.S. DOE-Pantex Plant, Amarillo, Texas

A tract of land consisting of the south 437.20 acres of the M.F. Write Survey No. 7; all of Sections 32, 33, 34, 36, 37, 38, 49, 50, 51, 54 and 55, J.H. Gibson Survey, Block M-4; that portion of the Lyman Brewer Survey No. 6 1/2 and portions of Sections 31, 39, 48 and 56, J.H. Gibson Survey, Block M-4 lying east of State Farm Highway No. 683 and north of the following described line: Beginning at a point on the east line of said Section 31, said point being 2,666.5' north of the SE corner thereof; thence S 89° 14' W, 11,881.5'; thence S 51° 33' W, 1,985.3'; thence N 89°; thence N 0° 5' W, 7,000.0' along the west line of Sections 48 and 2,887.0'; thence S 89° 23' W, 2,987.0' to a point on the east R.O.W. line of State Farm Highway No. 683.

A tract of land consisting of 1,526 acres of J.H. Gibson Survey, Block M-4, Sections 21, 22 and portions of 23 lying east of State Farm Highway No. 2373.

Those described contain 10,252 acres, more or less, of land, situated in Carson County, TX, and subject to all assessments or restrictions pertaining thereto.

Pantex Lake

A tract or parcel of land in B.S.&F. Survey, Block T, Sections 56, 57, 58 and 64 described as follows:

The east 900 feet of the south ½ of Section 56, all of Section 57, the west 3,200 feet of the south 2,400 feet of Section 58, and the west 3,200 feet of the north 2,800 feet of Section 64, containing 1,077 acres, more or less.

Leased Land

See Tracts I, II and III

Texas Tech University Research Farm - Pantex Plant
Description: Tract No. 1

A 3,019.9 acre tract of land situated north of the A.T. & S.F. R.R. and west of FM Hwy. 2373 in the western portion of Carson County, Texas, said tract being that portion of section 30 north of the A.T. & S.F. R.R.; approximately the south one-halves of Sections 31 and 30; those portions of Sections 40, 41 and 46 north of A.T.&S.F. R.R.; all of Section 47 and a portion of the south one-half of Section 48 all in block M4, J.H. Gibson Survey, Carson County, Texas, said tract is described by metes and bounds to-wit:

BEGINNING at a concrete R.O.W. monument in the west R.O.W. line of FM Hwy. 2373, whence the southeast corner of said Section 31 bears S 00° 06' 53" E, 40.12 ft. and N 89° 53' 07" E, 59.22 ft.;

THENCE S 00° 06'53" E, along said west R.O.W. line, 3091.06 ft. to a 3-1/4 inch aluminum cap stamped X 30944.429, Y 3456.180 marking the southeast corner of this tract, said point being the intersection of said west R.O.W. line of FM Hwy. 2373 and the northwesterly R.O.W. line of the A.T. & S.F.R.R.;

THENCE S 69° 23' W, along said railroad R.O.W. LINE, 1519.64 ft. to a railroad R.O.W. monument (railroad rail set vertical);

THENCE N 20° 37' W, 25.00 ft. to a similar railroad R.O.W. monument;

THENCE S 69° 23' W, along said railroad R.O.W. line, 1232.00 ft to a similar railroad monument;

THENCE S 20° 37' E, 20.00 ft. to a similar railroad R.O.W. monument;

THENCE S 69° 23' W, along said railroad R.O.W. LINE, 3793.60 ft. to a 2 inch iron rod marking a point of intersection in said railroad R.O.W. line;

THENCE N 89° 15' E, 14.71 ft. to a 2 inch iron rod marking a point of intersection in said railroad R.O.W. line;

THENCE S 69° 23' W, along said railroad R.O.W. LINE, 6088.24 ft to a 2 inch iron rod marking a point of intersection in said railroad right-of-way line;

Thence S 20° 37' E, 25.00 ft. to a 2 inch iron rod marking a point of intersection in said railroad R.O.W. line;

Thence S 69° 23' W, along said railroad right-of-way line 4249.65 ft to a 3-1/4 inch aluminum cap stamped X 15164.294, Y-2507.131 marking the intersection of said railroad R.O.W. line and the west line of said Section 46;

THENCE N 00° 17' 35" W, along the west lines of said Sections 46, 47 and 48, 10,261.44 ft to a 3-1/4 inch aluminum cap, set at the base of a steel post, stamped X 15,111.806, Y 7754.177 marking the northwest corner of this tract;

THENCE S 89° 36' 22" E, along a fence line, 2446.55 ft. to a 3-1/4 inch aluminum cap, set at the base of a steel post, stamped X 17,558.301, Y 7737.354 marking a point of intersection in the north line of this tract;

THENCE N 51° 20'46" E, along a fence line, 1984.96 ft. to a 3-1/4 inch aluminum cap, stamped X 19,108.421, Y 8977.191, set between 2 steel posts to replace a 1-inch iron pipe found in place marking a point of intersection in the north line of this tract;

THENCE N 89° 00'42" E, along a fence line, 11,820.54 ft. to a 3-1/4 inch aluminum cap stamped X 30,927.200, Y 9181.060, set in the west R.O.W. line of FM Hwy. 2373 marking the northeast corner of this tract;

THENCE S 00° 14'25" E, along said west R.O.W. line, 2633.84 ft to the place of beginning and containing 3,019.9 acres of land more or less.

Texas Tech University Research Farm - Pantex Plant
Description: Tract No. 2

A 147.2 acre tract of land situated in Section 56, Block M4, J.H. Gibson Survey, Carson County, Texas, described by metes and bounds as follows:

BEGINNING at a 3-1/4 inch aluminum cap stamped X 15,091.644, Y 12,692.601 set in a fence line along the easement line of said section 56, marking the southeast corner of this tract, thence a 3-1/4 inch aluminum cap stamped X 15,111.806, Y 7754.177, marking the northeast corner of Tract No. 1 (3,019.8969 acres) bears S 00° 14'02" E, 4038.48 feet;

THENCE N 89° 31'40" W, 4134.37 feet to a 3-1/4 inch aluminum cap, stamped X 10,957.414, Y 12,726.675, set at the base of a steel post marking the southeast corner of this tract;

THENCE N 44° 54'34" E, along a fence line, 2887.01 feet to a 3-1/4 inch aluminum cap, stamped X 12,995.610, Y 14,771.323, set at the base of a steel post, marking the northeast corner of this tract;

THENCE S 89° 31'40" E, along a fence line, 2087.69 feet to a 3-1/4 inch aluminum cap, stamped X 15,083.229, Y 14,754.117, set at the base of a steel corner post, marking the northwest corner of this tract;

THENCE S 00° 14'02" E, along a fence line and the easement line of said Section 56, 2061.49 feet to the place of beginning and containing 147.2 acres of land more or less.

Description: Texas Tech Tract III - Excluding Texas Tech Property Manager Land, Pantex Railroad Right-of-Way and Texas Tech Killgore Beef Cattle Center

Part A (East of Pantex Railroad Right-of-Way)

1,321.3-acre tract of land situated in Sections 56, 57, 58 and 59, Block M-4, J.H. Gibson Survey, Carson County, Texas, and being more particularly described by metes and bounds, as follows:

BEGINNING at a 2 inch iron rod marking the southeast corner of this tract, said iron rod located in the easement line of said Section 59 and in the northeast right-of-way line of the Pantex Railroad, being in a non-adjacent curve to the right;

THENCE North 89° 31' 40" West, along said northeast right-of-way line and along said curve to the right, whose center bears north 1° 01' 51" east 915.10 feet, having a center angle of 60° 38' 43", an arc distance of 968.60 feet to an aluminum disc set in concrete marking a point of tangency;

THENCE North 28° 19' 26" West, along said northeast right-of-way line, 8,926.85 feet to an aluminum disc set in concrete marking the beginning of a curve to the right;

THENCE North 89° 31' 40" West, along said northeast right-of-way line and along said curve to the right, whose center bears north 61° 40' 34" east 1,382.40 feet, having a center angle of 28° 18' 36", an arc distance of 683.05 feet to an aluminum disc set in concrete marking a point of tangency;

THENCE North 0° 00' 50" West, along the easterly railroad right-of-way line, 4,605.81 feet to a 2 inch iron rod marking the beginning of a curve to the right;

THENCE North 1/4, a long sad eas e y a oad gh -of-way ne and a long sad cu ve o he gh , whose cen e bea s no h 89° 59' 10" eas 904.9 fee , hav ng a cen a ang e of 14° 26' 5 " an a c dis ance of 228.19 fee o a 2 nch on od ma k ng a po n of agency;

THENCE North 14° 26' 0 " Eas , a long sad eas e y a oad gh -of-way ne, 109.52 fee o a 2 nch on od ma k ng he beg nn ng of a cu ve o he ef ;

THENCE North 1/4, a long sad eas e y a oad gh -of-way ne and a long sad cu ve o he ef , whose cen e bea s no h 75° ' 57" Wes 1,004.9 fee , hav ng a cen a ang e of 14° 42' 8", an a c d s ance of 258.01 fee o a 2 nch on od ma k ng a po n of agency;

THENCE North 0° 16' 5" Wes , a long sad eas e y a oad gh -of-way ne, 5 .81 fee o a 2 nch on od ma k ng he beg nn ng of a cu ve o he gh ;

THENCE North 1/4, a long sad eas e y a oad gh -of-way ne and a long sad cu ve o he gh , whose cen e bea s sou h 89° 4 '25" Eas 904.9 fee , hav ng a cen a ang e of 44° 55' " , an a c d s ance of 709.56 fee o an a uminum d sc se n conc e e ma k ng a po n of agency;

THENCE North 44° 8' 58" Eas , a long he sou heas e y a oad gh -of-way ne, 98.57 fee o an a uminum d sc se n conc e e n he sou h bounda y of he Pan ex p ope y ma k ng he mos no he y no hwes co ne of h s ac ;

THENCE South 89° ' 8" Eas , a long sad sou h bounda y of Pan ex, 54.55 fee o an a uminum d sc se n conc e e ma k ng a po n n sad sou h bounda y of Pan ex:

THENCE South 89° 6' 8" Eas , a long sad sou h bounda y of Pan ex, 4,128.42 fee o an a uminum d sc se n conc e e ma k ng an n e o co ne of sad Pan ex p ope y and he no heas co ne of h s ac , sad d sc oca ed n he eas ne of sad Sec on 56;

THENCE South 0° 18' 06" Eas , a long he eas ne of sad Sec ons 56, 57, 58 and 59, 15, 14.56 fee o he sou heas and BEGINNING co ne of h s ac , and CONT INING an a ea of 1, 21. ac es of and, mo e o ess.

Tract III, Part B (West of Pantex Railroad Right-of-Way)

1, 11.7 ac e ac of and s ua ed n Sec ons 56, 57, 58, 59 and 60, Block M-4, J.H. Gibson Su vey, W.P. Snodgrass Su vey, L. B ewe Su vey 6 and L. B ewe Su vey 6 2, a oca ed n Ca son Coun y, Texas, and be ng mo e pa cu a y desc bed by me es and bounds o-w :

BEGINNING a a 2 nch on od w h a ed pas c cap s amped Ke ey-RPS-158 " (K-Cap) n he eas gh -of-way ne of FM 68 and n he no he y gh -of-way ne of he .T.& S.F. Ra way;

THENCE North 0° 04' 2 " Wes , a long sad eas FM 68 gh -of-way ne, 2,482.65 fee o a 2 nch on od w h a ye ow pas c cap s amped AThomas RPS 220 " (T&I Cap) ma k ng he sou hwes co ne of an adjacen 6.1 9 ac e ac of and (K go e Beef Ca e Cen e and Bu Ba n Shed a ea);

THENCE North 75° 12' 09" East, along the southerly boundary of said 6.139 acre tract of land, 329.07 feet to a 2 inch iron rod with a T&I cap;

THENCE North 74° 52' 4" East, along the southerly boundary of said 6.19 acre tract of land, 641.50 feet to a 2 inch iron rod with a T&I cap making the southeasterly corner of said 6.19 acre tract of land;

THENCE North 15° 07' 26" West, along the westerly boundary of said 6.19 acre tract of land, 217.40 feet to a 2 inch iron rod with a T&I Cap making the northeasterly corner of said 6.19 acre tract of land;

THENCE South 82° 58' 8" West, along the northerly boundary of said 6.19 acre tract of land, 575.4 feet to a 2 inch iron rod with a T&I cap.

THENCE South 89° 55' 7" West, along the northerly boundary of said 6.19 acre tract of land, 10.19 feet to a 2 inch iron rod with a T&I Cap on said easement FM 68 right-of-way line making the northwest corner of said 6.19 acre tract of land.

THENCE North 0° 04' 2" West, along said easement FM 68 right-of-way line, 2,016.16 feet to a 2 inch iron rod with a K-Cap making the most westerly southeasterly corner of an adjacent 4.092 acre tract of land (Texas Tech property managed and);

THENCE North 88° 42' 46" East, along the southerly boundary of said 4.092 acre tract of land, 0.25 feet to a 2 inch iron rod with a K-Cap;

THENCE North 81° 01' 48" East, along the southerly boundary of said 4.092 acre tract of land, 144.55 feet to a 2 inch iron rod with a K-Cap.

THENCE North 72° 22' 01" East, along the southerly boundary of said 4.092 acre tract of land, 229.80 feet to a 2 inch iron rod with a K-Cap;

THENCE South 75° 48' 1" East, along the southerly boundary of said 4.092 acre tract of land, 127.76 feet to a 2 inch iron rod with a K-Cap;

THENCE South 71° 06' 2" East, along the southerly boundary of said 4.092 acre tract of land, 261.84 feet to a 2 inch iron rod with a K-Cap;

THENCE North 12° 50' 51" West, along the easterly boundary of said 4.092 acre tract of land, 270.94 feet to a 2 inch iron rod with a K-Cap;

THENCE South 89° 01' 45" West, along the easterly boundary of said 4.092 acre tract of land, 46.78 feet to a 2 inch iron rod with a K-Cap;

THENCE North 68° 29' 57" West, along the easterly boundary of said 4.092 acre tract of land, 94.58 feet to a 2 inch iron rod with a K-Cap;

THENCE North 24° 4' 51" West, along the easterly boundary of said 4.092 acre tract of land, 90.96 feet to a 2 inch iron rod with a K-Cap;

THENCE North 8° 06' 28" East, along the easterly boundary of said 4.092 acre tract of land, 161.6 feet to a 2 inch iron rod with a K-Cap;

THENCE North 67° 19' 50" West, along the northerly boundary of said 4.092 acre tract of land, 247.72 feet to a 2 inch iron rod with a K-Cap;

THENCE South 68° 29' 18" West, along the northerly boundary of said 4.092 acre tract of and, 305.04 feet to a 2 inch iron rod with a K-Cap;

THENCE South 25° 09' 55" East, along the northerly boundary of said 4.092 acre tract of and, 203.96 feet to a 2 inch iron rod with a K-Cap;

THENCE South 72° 44' 42" West, along the northerly boundary of said 4.092 acre tract of and, 222.15 feet to a 2 inch iron rod with a K-Cap;

THENCE South 80° 01' 47" West, along the northerly boundary of said 4.092 acre tract of and, 119.06 feet to a 2 inch iron rod with a K-Cap;

THENCE South 89° 04' 22" West, along the northerly boundary of said 4.092 acre tract of and, 127.71 feet to a 2 inch iron rod with a K-Cap; then said easement 68 feet right-of-way line making the most westerly no-hwys corner of said 4.092 acre tract of and;

THENCE North 0° 04' 21" West, along said easement 68 feet right-of-way line, 12,896.17 feet to an aluminum disc section corner making a corner of Panexpopey and the no-hwys corner of the section;

THENCE South 89° 01' 08" East, along the southerly boundary of said Panexpopey, 2,442.22 feet to an aluminum disc section corner the no-hwys easterly right-of-way line of the Panexpoad;

THENCE South 44° 08' 58" West, along said no-hwys easterly road right-of-way line, 295.01 feet to an aluminum disc section corner making the beginning of a curve to the left;

THENCE Southwesterly, along said no-hwys easterly road right-of-way line and along said curve to the left, whose center bears south 45° 21' 02" east 1,224 feet, having a center angle of 44° 09' 48", an arc distance of 1,015.0 feet to a 2 inch iron rod making a point of tangency;

THENCE South 0° 00' 50" East, along the westerly road right-of-way line, 5,016.66 feet to an aluminum disc section corner making the beginning of a curve to the left;

THENCE Southwesterly, along the westerly road right-of-way line and along said curve to the left, whose center bears north 89° 59' 10" east 1,482.40 feet, having a center angle of 28° 18' 06", an arc distance of 722.46 feet to an aluminum disc section corner making a point of tangency;

THENCE South 28° 19' 26" East, along the westerly road right-of-way line, 8,756.66 feet to an aluminum disc section corner making the beginning of a curve to the right;

THENCE Southwesterly, along the westerly road right-of-way line and along said curve to the right, whose center bears south 61° 40' 04" west 791.0 feet, having a center angle of 97° 41' 07", an arc distance of 1,492 feet to a 2 inch iron rod with a K-Cap; then the northerly right-of-way of the T.&S.F. Railway;

THENCE North 20° 05' 49" West, along the northerly T.&S.F. Railway right-of-way, 25.00 feet to a 2 inch iron rod with a K-Cap;

THENCE South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way, 1,692.64 feet to a 2 inch iron rod with a K-Cap;

THENCE North 20° 5' 49" West, along the northerly A.T.&S.F. Railway right-of-way line, 50.00 feet to a 2 inch iron rod with a K-Cap;

THENCE South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way line, 150.00 feet to a 2 inch iron rod with a K-Cap;

THENCE South 20° 35' 49" East, along the northerly A.T.&S.F. Railway right-of-way line, 50.00 feet to a 2 inch iron rod with a K-Cap;

THENCE South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way line, 1,157.09 feet to a 2 inch iron rod with a K-Cap;

THENCE South 20° 35' 49" East, along the northerly A.T.&S.F. Railway right-of-way line, 25.00 feet to a 2 inch iron rod with a K-Cap;

THENCE South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way line, 835.63 feet to a 2 inch iron rod with a K-Cap;

THENCE North 89° 17' 11" East, along the northerly A.T.&S.F. Railway right-of-way line, 73.55 feet to a 2 inch iron rod with a K-Cap;

THENCE South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way line, 2,032.75 feet to a 2 inch iron rod with a K-Cap;

THENCE North 20° 35' 49" West, along the northerly A.T.&S.F. Railway right-of-way line, 75.00 feet to a 2 inch iron rod with a K-Cap;

THENCE, South 69° 24' 11" West, along the northerly A.T.&S.F. Railway right-of-way line, 320.18 feet to a 2 inch iron rod with a K-Cap in the east right-of-way line of FM 683, the BEGINNING corner of this tract, and CONTAINING an area of 1,311.7 acres of land, more or less.

Leased Land

Pantex ASC, LLC

A 52.26-acre tract of land out of the northern portion of Section 30 and the south half of Section 31, Block M-4, J.H. Gibson Survey, Carson County, Texas, and more particularly described as follows:

Beginning at a ½" iron rod with a yellow cap inscribed "RPLS 4263" (such type cap and rod hereafter referred to as an OJD cap) found on the west right-of-way line of F.M. No. 2373 same being on the north line of said south half of said Section 21 which bears S 00° 12' 30" E. A distance of 2644.40 feet and S. 89° 21' 01" W. A distance of 58.19 feet from a railroad spike found at the northeast corner of said Section 31 for the northeast corner of this tract.

THENCE S. 00° 11' 06" E. along said west right-of-way line, a distance of 2626.71 feet to an OJD cap found on said west right-of-way line for an angle corner of this tract.

THENCE S. 00° 05' 06" E., continuing along said west right-of-way line, a distance of 1018.47 feet to an OJD cap found on said west right-of-way line for the southeast corner of this tract.

THENCE S. 89° 54' 54" W. a distance of 1281.57 feet to an OJD cap found for the southwest corner of this tract.

THENCE N. 00° 05' 06" W. a distance of 1698.80 feet to an OJD cap found for the most westerly northwest corner of this tract.

THENCE N. 89° 48' 54" E. a distance of 1230.38 feet to an OJD cap found for and ELL corner of this tract.

THENCE N. 00° 11' 06" W. a distance of 1893.74 feet to an OJD cap found for an angle corner of this tract.

THENCE N. 45° 25' 02" W. a distance of 70.43 feet to an OJD cap found on said north line for the most northerly northwest corner of this tract.

THENCE N. 89° 21' 01" E. a distance of 100.00 feet to the place of beginning and containing 52.26 acres of land.

Leased Land

Ghem Farms, LTD.

Tract 1: A 295.96-acre tract of land out of Section 14, Block M-4, J.H. Gibson Survey, Carson County, Texas, and being a portion of a tract of land described in Volume 274, Page 881 of the Official Public Records of Carson County, Texas, said 295.96-acre tract of land being more particularly described by metes and bounds are as follows:

COMMENCING at a ½" x 24" rebar with a plastic cap stamped "DAVIS GEOMATICS" (such type rebar and cap hereafter referred to as DAVIS CAP found at the Northwest corner of said Section 13 whence a railroad spike found at the Northwest corner of Section 23, Block M-4, J.H. Gibson Survey bears S 89° 15' 20" W, 5286.32 feet;

THENCE S 00° 14' 11" E (Base Bearing) – bearings contained herein are relative to true North as determined from GPS observations – 1507.30 feet to a DAVIS CAP set at the intersection of the West line of said Section 14 and the Southerly right-of-way line of U.S. Highway 60 whence a Brass Highway right-of-way monument found bears S 69° 19' 00" W, 3959.44 feet, said intersection being the POINT OF BEGINNING of this tract of land;

THENCE N 69° 19' 00" E, 999.49 feet pass a concrete right-of-way monument found, continue for a total distance of 1850.70 feet to a DAVIS CAP set;

THENCE N 89° 12' 27" E, 2306.69 feet to a DAVIS CAP set;

THENCE 00° 20' 29 " E, 3342.76 feet to a DAVIS CAP set;

THENCE S 89° 45' 49" W, 4036.81 feet pass a DAVIS CAP set, continue for a total distance of 4046.81 feet to a point on the West line of said Section 14 whence the Southwest corner of said Section 14 bears S 00° 14' 11" E, 1111.86 feet;

THENCE N 00° 14' 11" W, at 1125.33 feet pass a DAVIS CAP set, continue for a total distance of 2673.83 feet to the POINT OF BEGINNING;

Said tract contains a computed area of 295.69 acres of land as described.

Tract II: A 19.67-acre tract of land out of Section 14, Block M-4, J.H. Gibson Survey, Carson County, Texas, and being a portion of a tract of land described in Volume 274, Page 881 of the Official Public Records of Carson County, Texas, this 19.67-acre tract of land being more particularly described by metes and bounds as follows:

COMMENCING at a ½" x 24" rebar with a plastic cap stamped "DAVIS GEOMATICS" (such type rebar and cap hereafter referred to as DAVIS CAP) found at the Northwest corner of said Section 14 whence a railroad spike found at the Northwest corner of Section 2, Block M-4, J.H. Gibson Survey bears S 89° 15' 20" W, 5286.32 feet;

THENCE S 00° 14' 11" E (Base Bearing) – bearings contained herein are a value No has determined from GPS observations – 272.44 feet to a DAVIS CAP set at the POINT OF BEGINNING of this tract of land;

THENCE N 89° 54' 56" E, 1649.10 feet to a DAVIS CAP set;

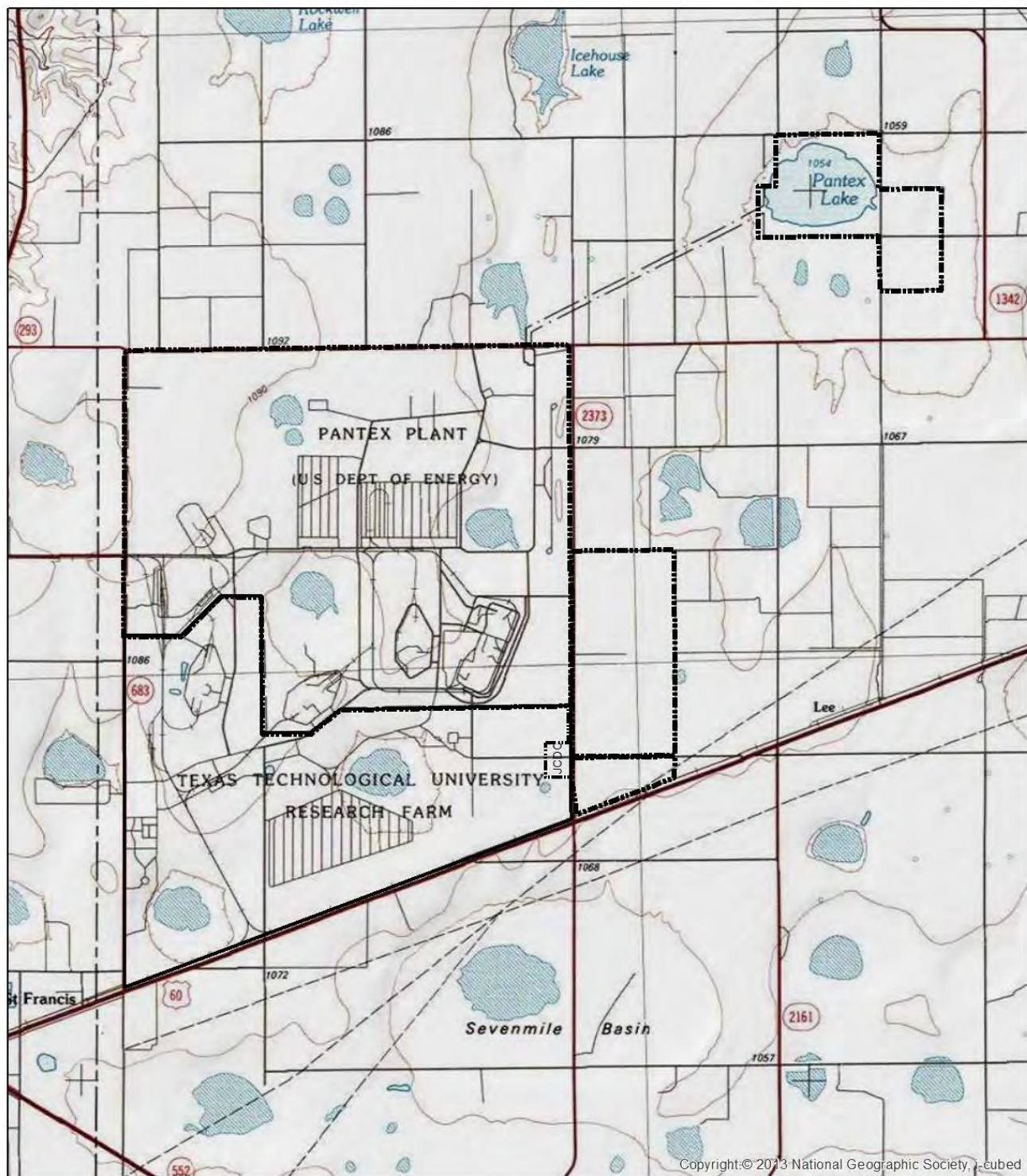
THENCE S 00° 14' 11" E, 210.10 feet to a DAVIS CAP set on the Northerly right-of-way line of Buington No. 1 & Santa Fe Railroad;

THENCE S 69° 19' 00" W, 1758.90 feet pass an aluminum pipe with 3-1/4" cap stamped "DAVIS GEOMATICS 5626" found, continue for a total distance of 1759.98 feet to a DAVIS CAP set at the northeast corner of said No. 1 right-of-way line of Buington No. 1 & Santa Fe Railroad and the West line of Section 14 whence the Southwest corner of said Section 14 bears S 00° 14' 11" E, 4191.24 feet;

THENCE N 00° 14' 11" W, 829.31 feet to the POINT OF BEGINNING;

Said tract contains a computed area of 19.67 acres of land as described.

Permit No. 50284
Attachment B - Facility Map



Source: USGS USA Topographic Maps

-  DOE Property
-  John C. Drummond Center (JCDC)
-  Texas Tech University Property

0 0.5 1 2 3
Miles



PantEX

Attachment C – Permit Application Revision Chronology

Classification	Revision No.¹	Application Date²	Purpose
Permit Renewal Application	0	11/16/2023	Permit renewal
Permit Renewal Application	01	12/18/2023	Administrative NOD response
Permit Renewal Application	02	6/5/2024	Technical NOD response
Permit Renewal Application	03	7/21/2025	Technical NOD response

¹Start from Revision 0 using the new permit or permit renewal Application Date and sequentially increase the revision numbers for each subsequent submittal.

²Use the application signature page date as the Application Date

List of Incorporated Application Materials

The following is a list of Part A and Part B Industrial & Hazardous Waste Application elements which are incorporated into all Industrial & Hazardous Waste permits by reference as per Provision I.B.

TCEQ Part A Application Form

- I. General Information
- II. Facility Background Information
- III. Wastes and Waste Management

TCEQ Part B Application Form

I. General Information

- A. Facility Name
- B. Facility Contact
- C. Operator
- D. Application Type and Facility Status
- E. Facility Siting Summary
- F. Wastewater and Stormwater Disposition
- G. Information Required to Provide Notice
- H. TCEQ Core Data Form Requirements
- I. Signature on Application

II. Facility Siting Criteria

- A. Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills
- B. Additional Requirements for Land Treatment Facilities
- C. Additional Requirements for Waste Piles
- D. Additional Requirements for Storage Surface Impoundments
- E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with Wastes in Place)
- F. Flooding
- G. Additional Information Requirements

III. Facility Management

- A. Compliance History and Applicant Experience
- B. Personnel Training Plan
- C. Security
- D. Inspection Schedule
- E. Contingency Plan
- F. Emergency Response Plan

Table III.D. - Inspection Schedule

Table III.E.1. - Arrangements with Local Authorities

Table III.E.2. - Emergency Coordinators
Table III.E.3. - Emergency Equipment

IV.Wastes And Waste Analysis

- A. Waste Management Information
- B. Wastes Managed In Permitted Units
- C. Sampling and Analytical Methods
- D. Waste Analysis Plan

Table IV.A. - Waste Management Information
Table IV.B. - Wastes Managed in Permitted Units
Table IV.C. - Sampling and Analytical Methods

V.Engineering Reports

- A. General Engineering Reports
- B. Container Storage Areas
- C. Tanks and Tank Systems
- D. Surface Impoundments
- E. Waste Piles
- F. Land Treatment Units
- G. Landfills
- H. Incinerators
- I. Boilers and Industrial Furnaces
- J. Drip Pads
- K. Miscellaneous Units
- L. Containment Buildings

Table V.B. - Container Storage Areas
Table V.C. - Tanks and Tank Systems
Table V.D.1. - Surface Impoundments
Table V.D.6. - Surface Impoundment Liner System
Table V.E.1. - Waste Piles
Table V.E.3. - Waste Pile Liner System
Table V.F.1. - Land Treatment Units
Table V.F.2. - Land Treatment Unit Capacity
Table V.F.3. - Land Treatment Principal Hazardous Constituents
Table V.G.1. - Landfills
Table V.G.3. - Landfill Liner System
Table V.G.4. - Landfill Leachate Collection System
Table V.H.1. - Incinerators
Table V.H.2. - Incinerator Permit Conditions, Monitoring, and Automatic Waste Feed
Cutoff Systems
Table V.H.3. - Maximum Constituent Feed Rates
Table V.H.4. - Maximum Allowable Emission Rates
Table V.H.5. - Incinerator Permit Conditions, Monitoring, And Automatic Waste Feed
Cutoff Systems - Short-term Operation
Table V.H.8. - Principal Organic Hazardous Constituents
Table V.I.1. - Boilers and Industrial Furnaces

Table V.I.2. - Boiler and Industrial Furnace Permit Conditions, Monitoring, and Automatic Waste Feed Cutoff Systems

Table V.I.3. - Maximum Constituent Feed Rates

Table V.I.4. - Maximum Allowable Emission Rates

Table V.I.5. - Boiler and Industrial Furnace Permit Conditions, Monitoring, and Automatic Waste Feed Cutoff Systems - Short-term Operation

Table V.I.8. - Principal Organic Hazardous Constituents

Table V.J.1. - Drip Pads

Table V.J.2. - Drip Pad Synthetic Liner System

Table V.K. - Miscellaneous Units

Table V.L. - Containment Buildings

VI.Geology Report

A. Geology and Topography

B. Facility Groundwater

C. Exemption from Groundwater Monitoring for an Entire Facility

D. Unsaturated Zone Monitoring

Table VI.A.1. - Major Geologic Formations

Table VI.A.4. - Waste Management Area Subsurface Conditions

Table VI.B.3.b. - Unit Groundwater Detection Monitoring System

Table VI.B.3.c. - Groundwater Sample Analysis

VII.Closure And Post-Closure Plans

A. Closure

B. Closure Cost Estimate

C. Post-closure

D. Post-closure Cost Estimate

E. Closure and Post-Closure Cost Summary

Table VII.A. - Unit Closure

Table TABLE VII.B. - Unit Closure Cost Estimate

Table VII.C.5. - Land-based Units Closed under Interim Status

Table VII.D. - Unit Post-Closure Cost Estimate

Table VII.E.1. - Permitted Unit Closure Cost Summary

Table VII.E.2. - Permitted Unit Post-Closure Cost Summary

VIII.Financial Assurance

A. Financial Assurance Information Requirements for all Applicants

B. Applicant Financial Disclosure Statements

C. Applicants Requesting Facility Expansion, Capacity Expansion, or New Construction

Table VIII.C. - Estimated Capital Costs

IX.Releases From Solid Waste Units And Corrective Action

A. Preliminary Review Checklists

B. Appendices to Preliminary Review

C. Preliminary Review Submittal Format

X. Air Emission Standards

- A. Process Vents
- B. Equipment Leaks
- C. Tanks, Surface Impoundments, and Containers
- D. Optional TCEQ Office of Air Quality Information

Table X.A. - Process Vents

Table X.B. - Equipment Leaks

XI. Compliance Plan

- A. Site Specific Information
- B. Groundwater Protection Standard
- C. Compliance Monitoring Program
- D. Corrective Action Program
- E. Cost Estimates for Financial Assurance

Table XI.A.1. - Facility History for Waste Management Units

Table XI.E.1. - Corrective Action Program Cost Estimate

Table XI.E.2. - Groundwater Monitoring Cost Estimate

Table XI.E.3. - Financial Assurance Summary

CP Table I - Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring

CP Table II - Solid Waste Management Units and Areas of Concern for which Corrective Action applies pursuant to 30 TAC 335.167

CP Table III - Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

CP Table IIIA - Corrective Action Program Table of Indicator Parameters and the Groundwater Protection Standard

CP Table IV - Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Practical Quantitation Limits or Method Quantitation Limits for Compliance Monitoring

CP Table IVA - Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard for Compliance Monitoring

CP Table V - Designation of Wells by Function

CP Table VI - Compliance Period for RCRA-Regulated Units

CP Table VIII - Compliance Schedule

Attachment A - Alternate Concentration Limits

Attachment B - Well Design and Construction Specifications

Attachment C - Sampling and Analysis Plan

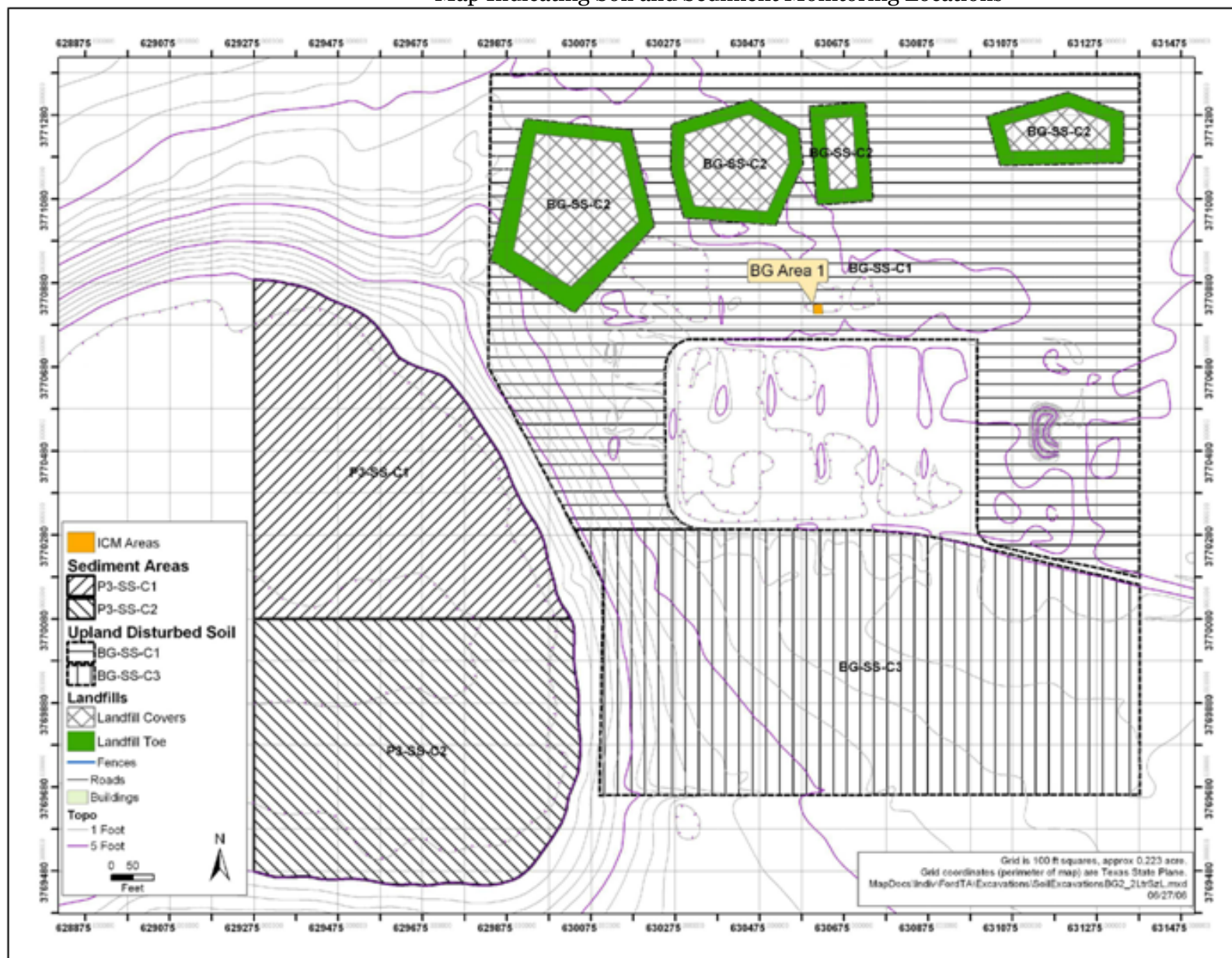
XII. Confidential Material

Authorized Facility Units

TCEQ Permit Unit No.	Unit Name	Unit Description	Capacity
3	Igloo 4-50	Container storage unit, enclosed	25,134 gallons
12	Building 16-16	Container storage unit, enclosed	1,369 cu yds. (435 cu yds. Free liquids
21	Burn Pan No. 1	Pan, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
24	High Explosive Burning Tray No. 1	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
25	High Explosive Burning Tray No. 2	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
26	High Explosive Burning Tray No. 3	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
27	High Explosive Burning Tray No. 4	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
28	High Explosive Burning Tray No. 5	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
29	High Explosive Burning Tray No. 6	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
30	Burn Pan No. 7	Pan, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
31	High Explosive Burning Tray No. 8	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
32	High Explosive Burning Tray No. 9	Tray, carbon steel, covered when not in use. Built without secondary containment.	1500 pounds
43	Flash Chamber	Flash chamber. Built without secondary containment.	200 cubic yards
53	Igloo 4-72	Container storage unit, enclosed	16,500 gallons
55	Building T9-121	Container storage unit, enclosed	4,400 gallons

TCEQ Permit Unit No.	Unit Name	Unit Description	Capacity
56	Building T9-122	Container storage unit, enclosed	4,400 gallons
57	Building 16-18 HWTPF	Treatment and processing facility, enclosed.	800 cubic yards

Map Indicating Soil and Sediment Monitoring Locations



Burning Ground Monitoring Statistical Procedure For Data Evaluation

1. Statistical Procedure for Background Determination

If all of the analytical results of a data set are less than the method detection limit (MDL) provided in Table VI.D.2.b, the MDL of Table VI.D.2.b or the practical quantitation limit (PQL), whichever is greater, will be used as the background value.

If the analytical results of less than 50 percent (%) of the background samples for a particular constituent are greater than the MDL, background will be set at the highest detected value, the MDL, or the PQL, whichever is greater.

If the analytical results of 50% or more of the background samples for a particular constituent are greater than the MDL, background will be calculated using a 95% ($1 - \alpha = 0.95$) upper tolerance limit with 99.9% coverage ($\rho = 0.999$ or ρ^{th} quintile of a distribution). The result of this calculation will represent the value that contains 99.9% of the population (percent coverage) with a 95% degree of confidence.

The Upper Tolerance Limit will be calculated using the following equation:

$$95\% \text{ upper Tolerance Limit} = \bar{x} + sK$$

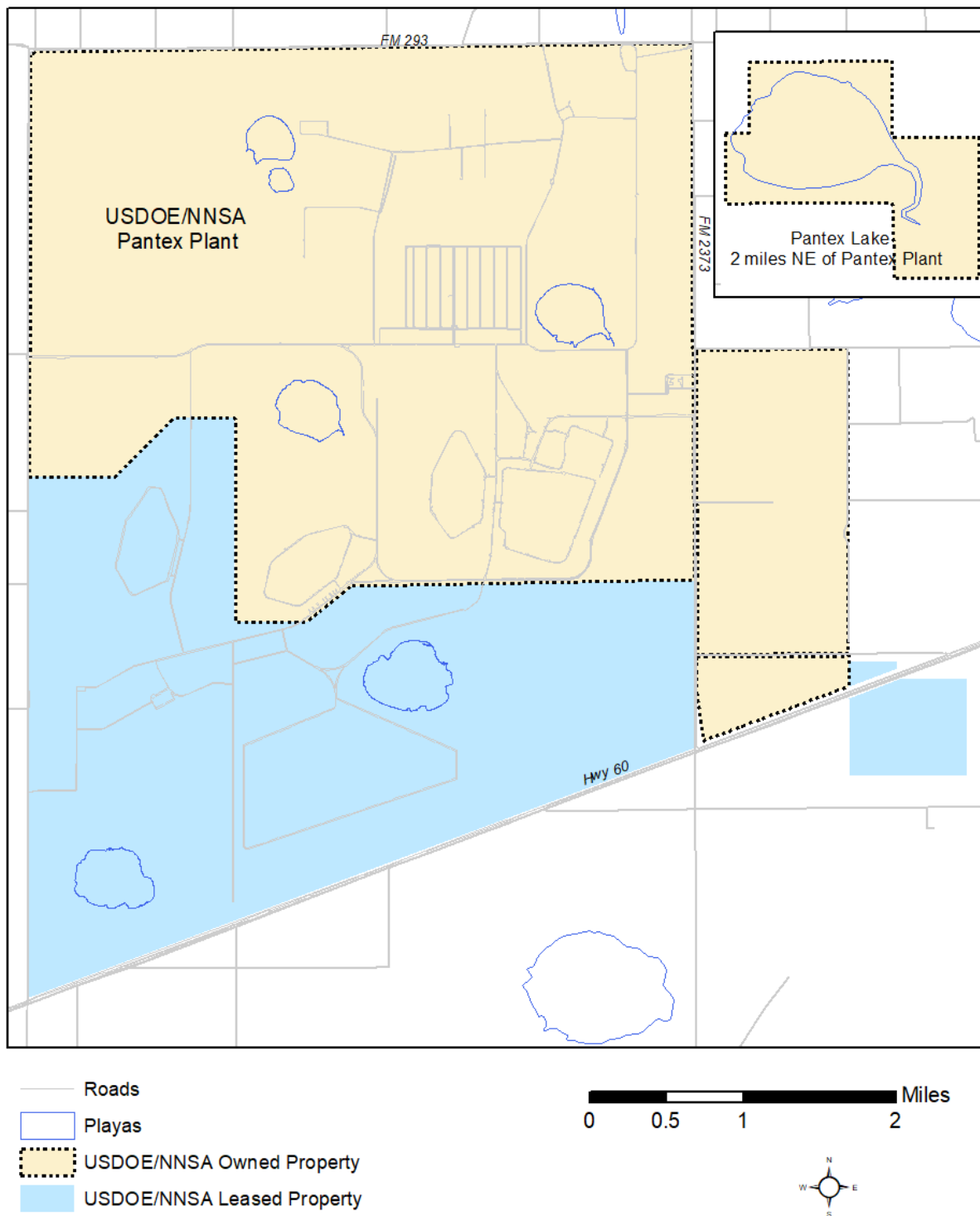
Where: $\bar{x}$ = population mean

s = sample standard deviation

$K_{1-\alpha, \rho} = K$ (statistical table-value) at $1 - \alpha = 0.95$, $\rho = 0.999$, at n (n = number of samples) (Gilbert, 1987, Appendix A, Table A3).

2. Statistical Procedure for Data Evaluation to Determine if an SSI in Monitoring Parameter Concentration has Occurred

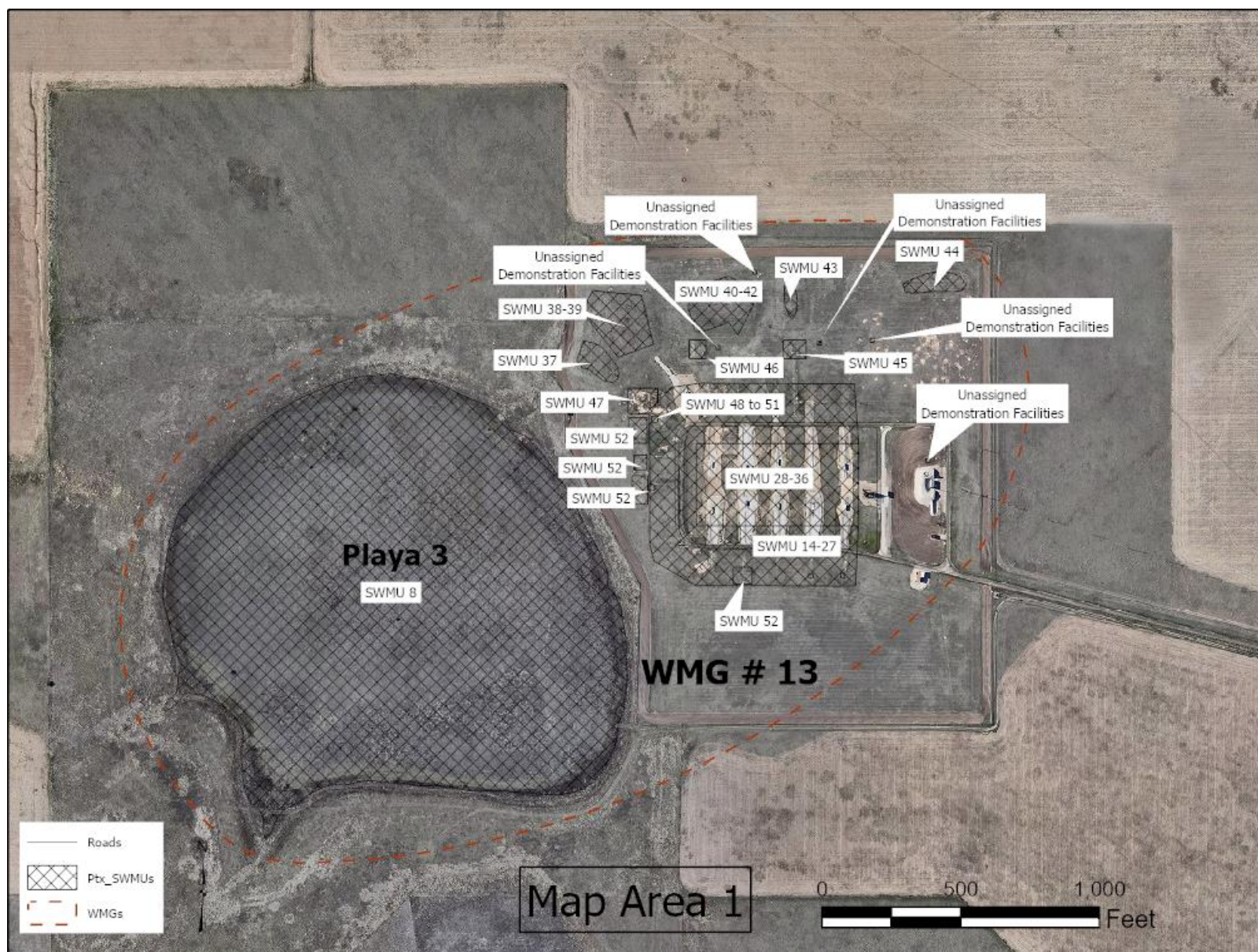
To determine that an SSI has occurred, compare the Monitored Parameter sample results to the background quality data.



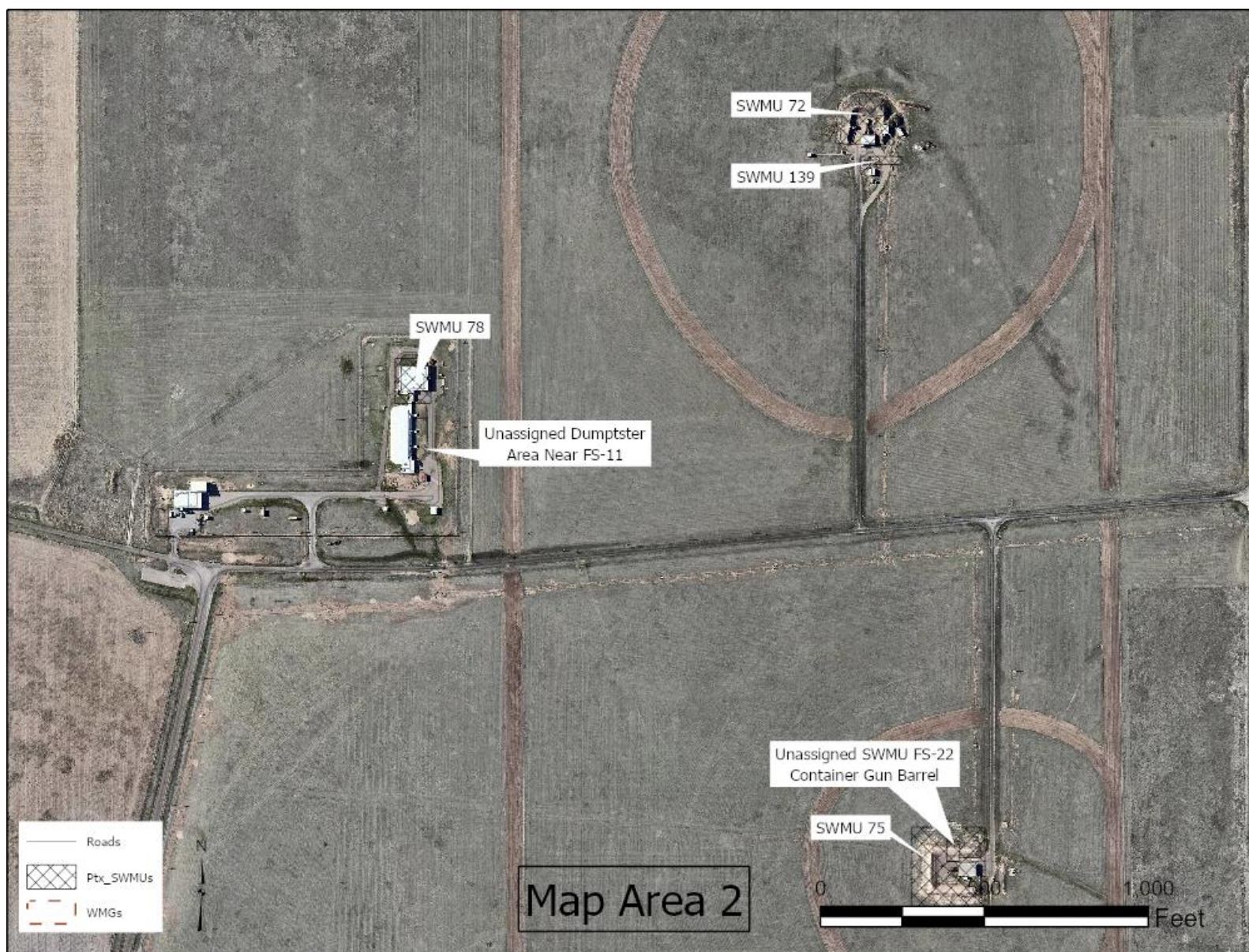
CP Attachment A, Sheet 1 of 27 – Facility Site Map



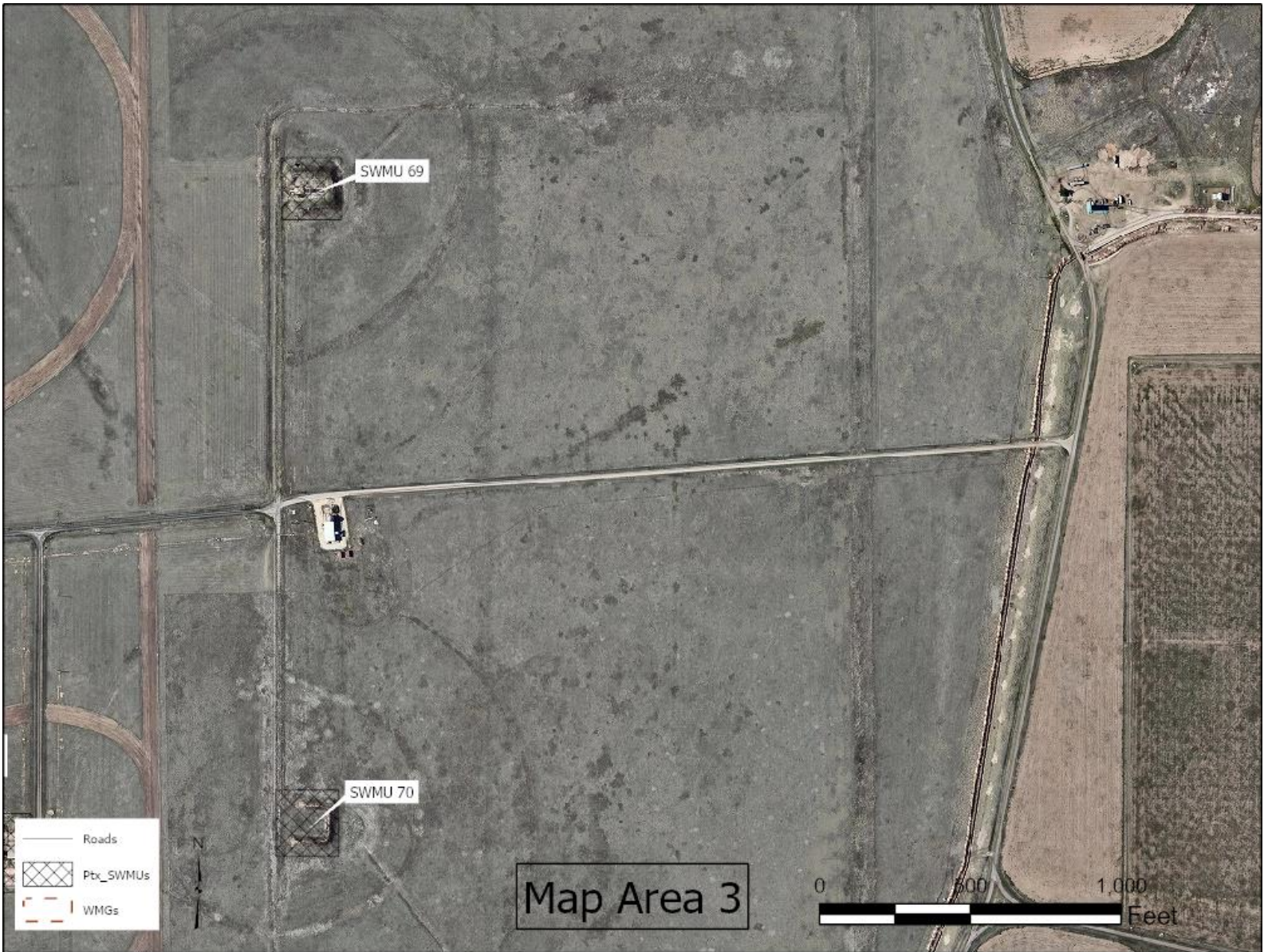
CP Attachment A, Sheet 2 of 27 – SWMU/AOC Map



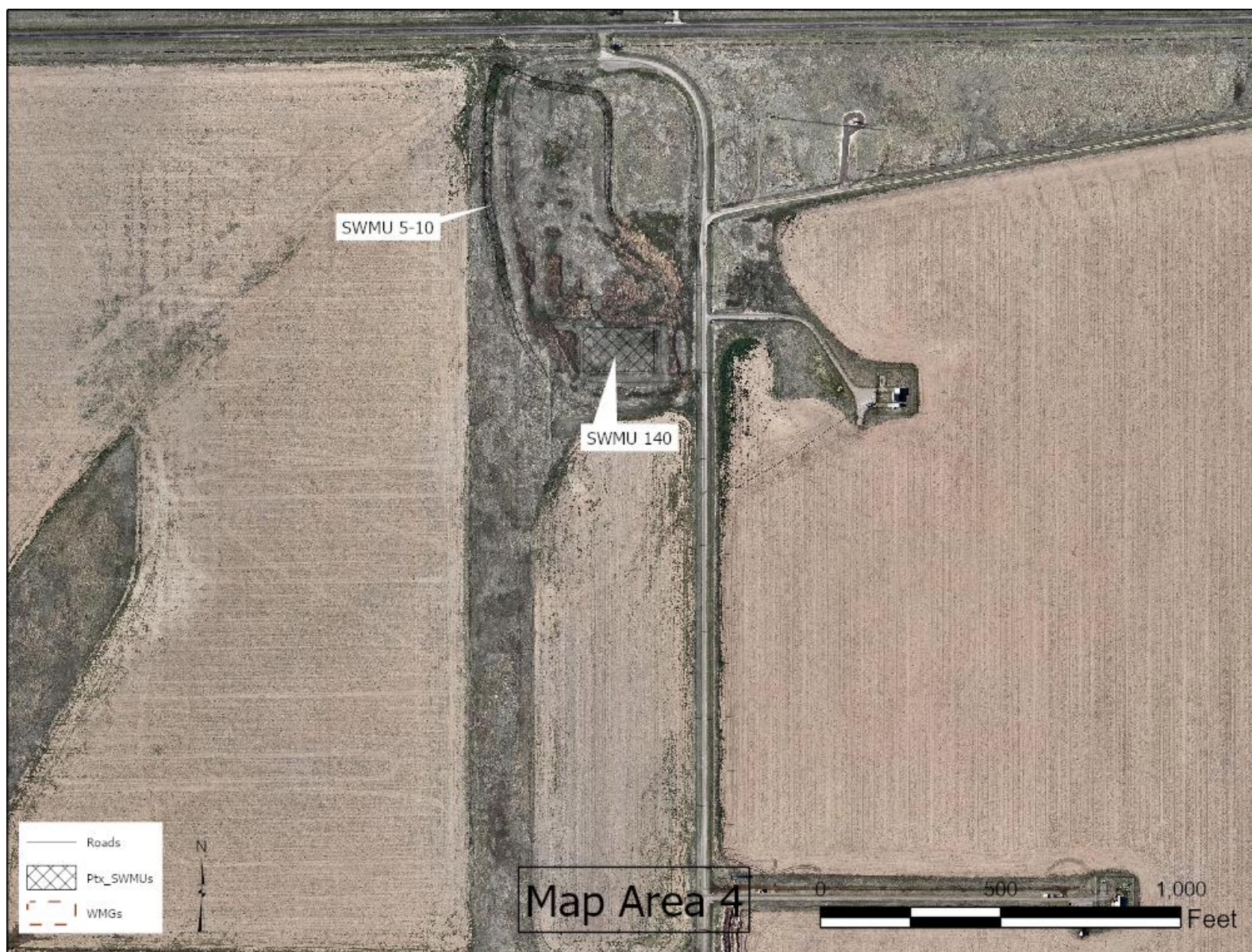
Attachment A, Sheet 3 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 4 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 5 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 6 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 7 of 27 – SWMU/AOC Map



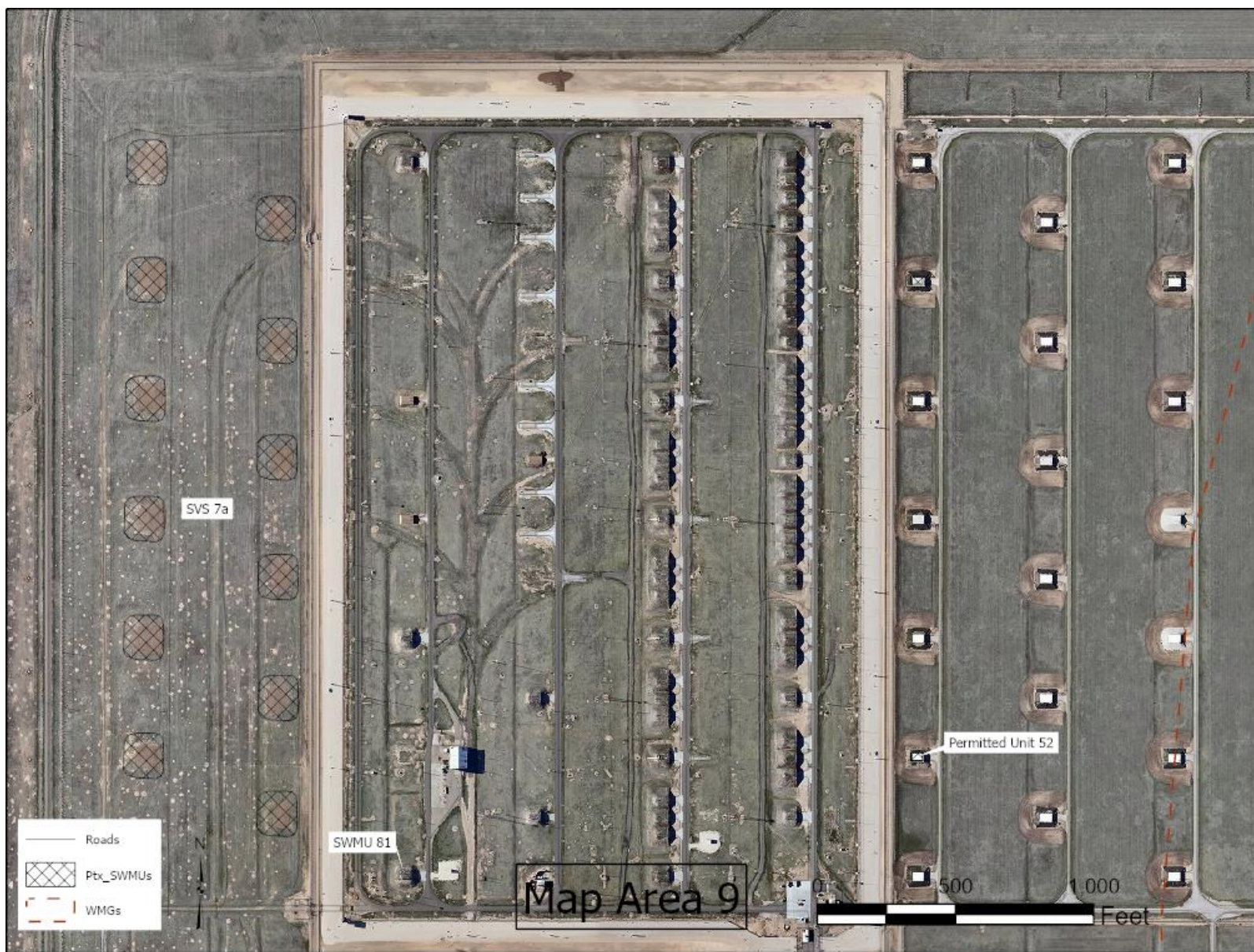
CP Attachment A, Sheet 8 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 9 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 10 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 11 of 27 – SWMU/AOC Map



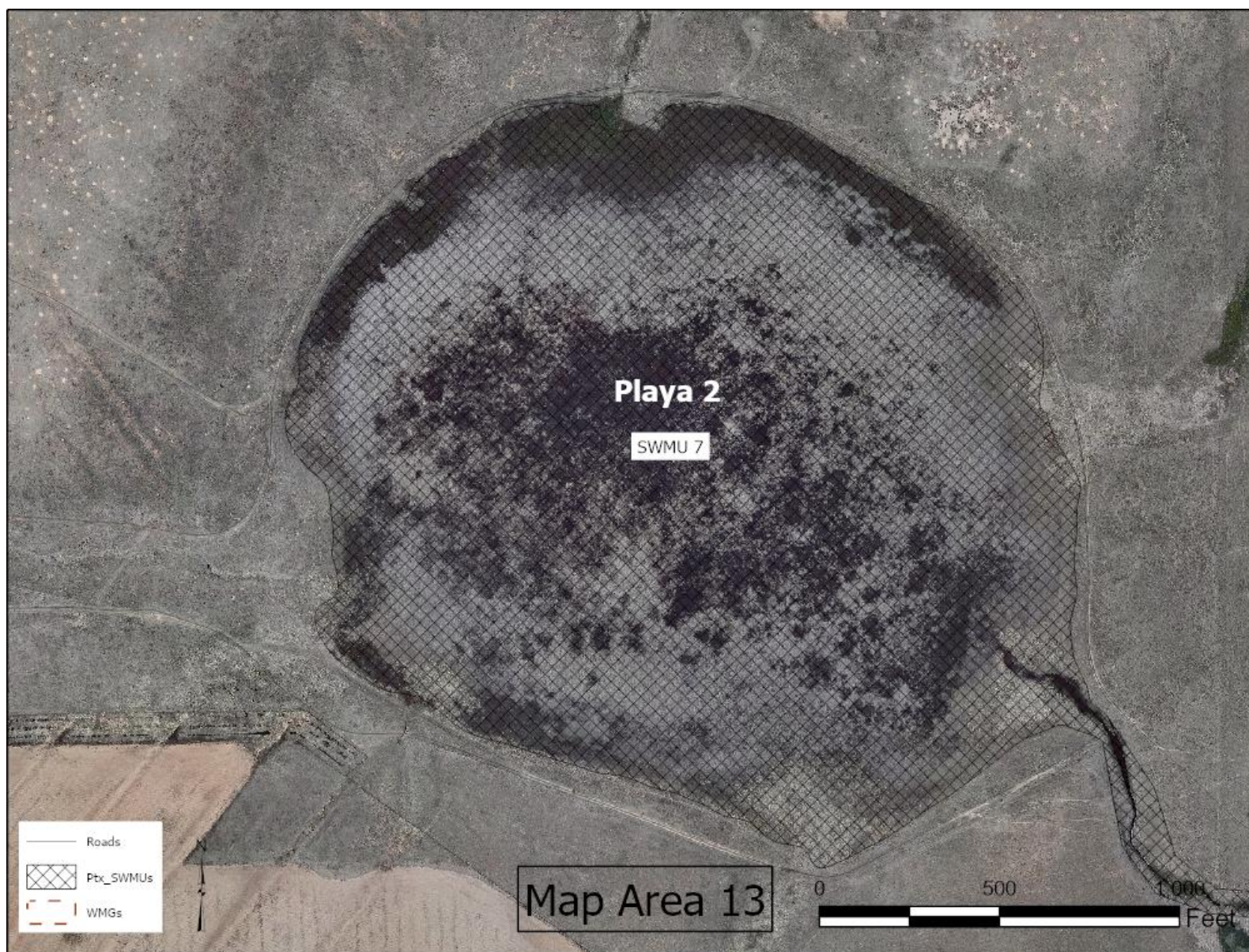
CP Attachment A, Sheet 12 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 13 of 27 – SWMU/AOC Map



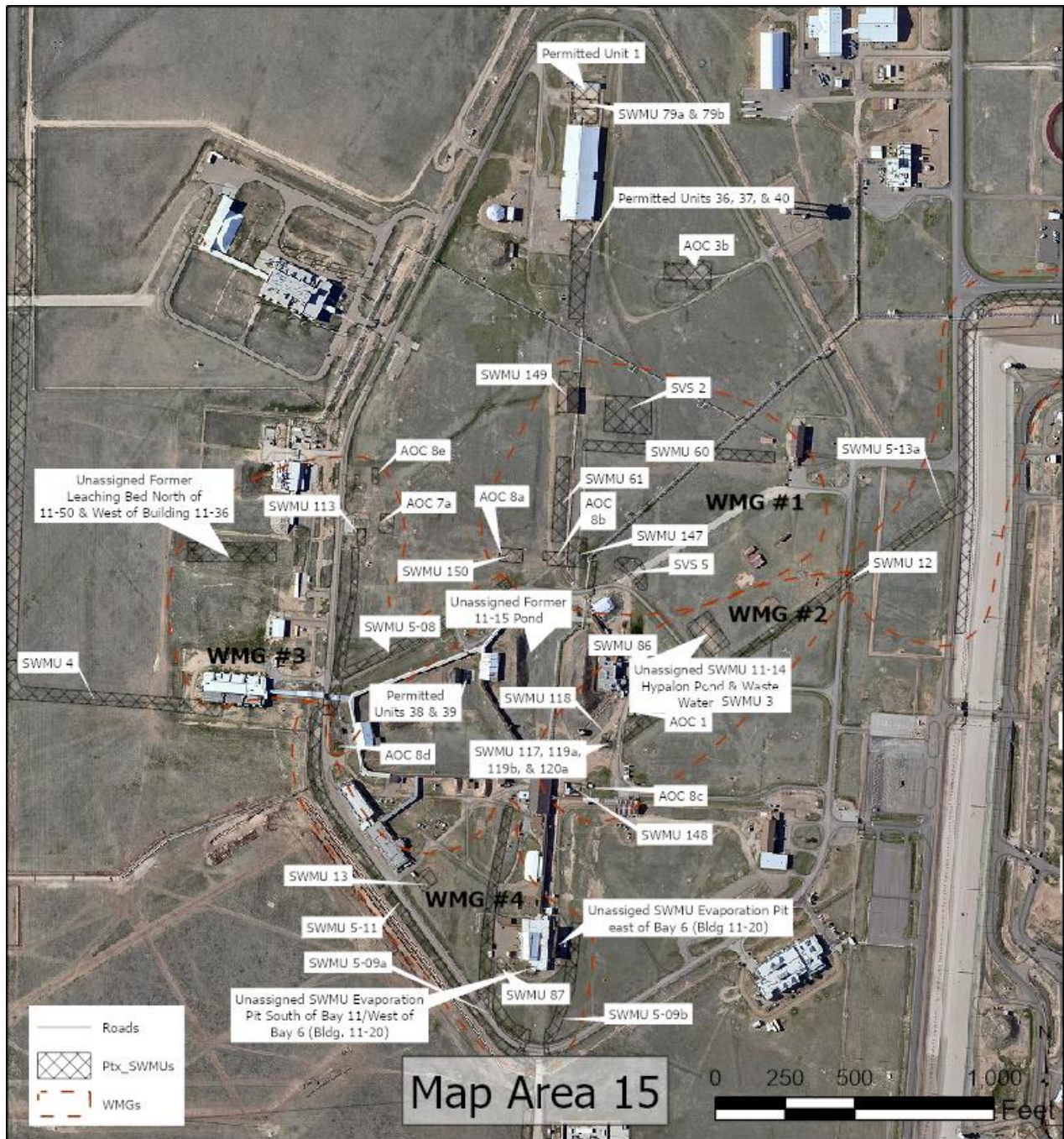
CP Attachment A, Sheet 14 of 27 – SWMU/AOC Map



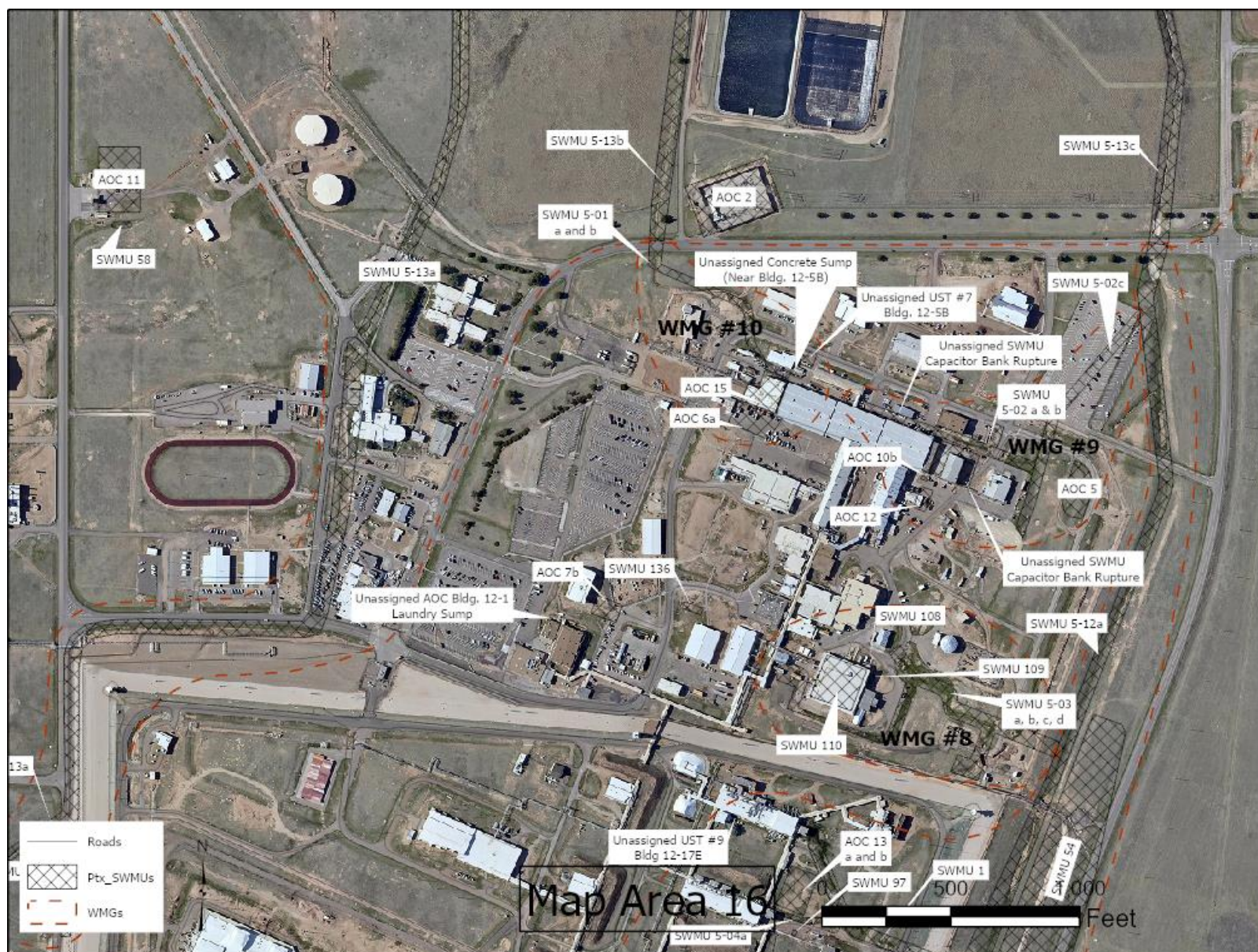
CP Attachment A, Sheet 15 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 16 of 27 – SWMU/AOC Map



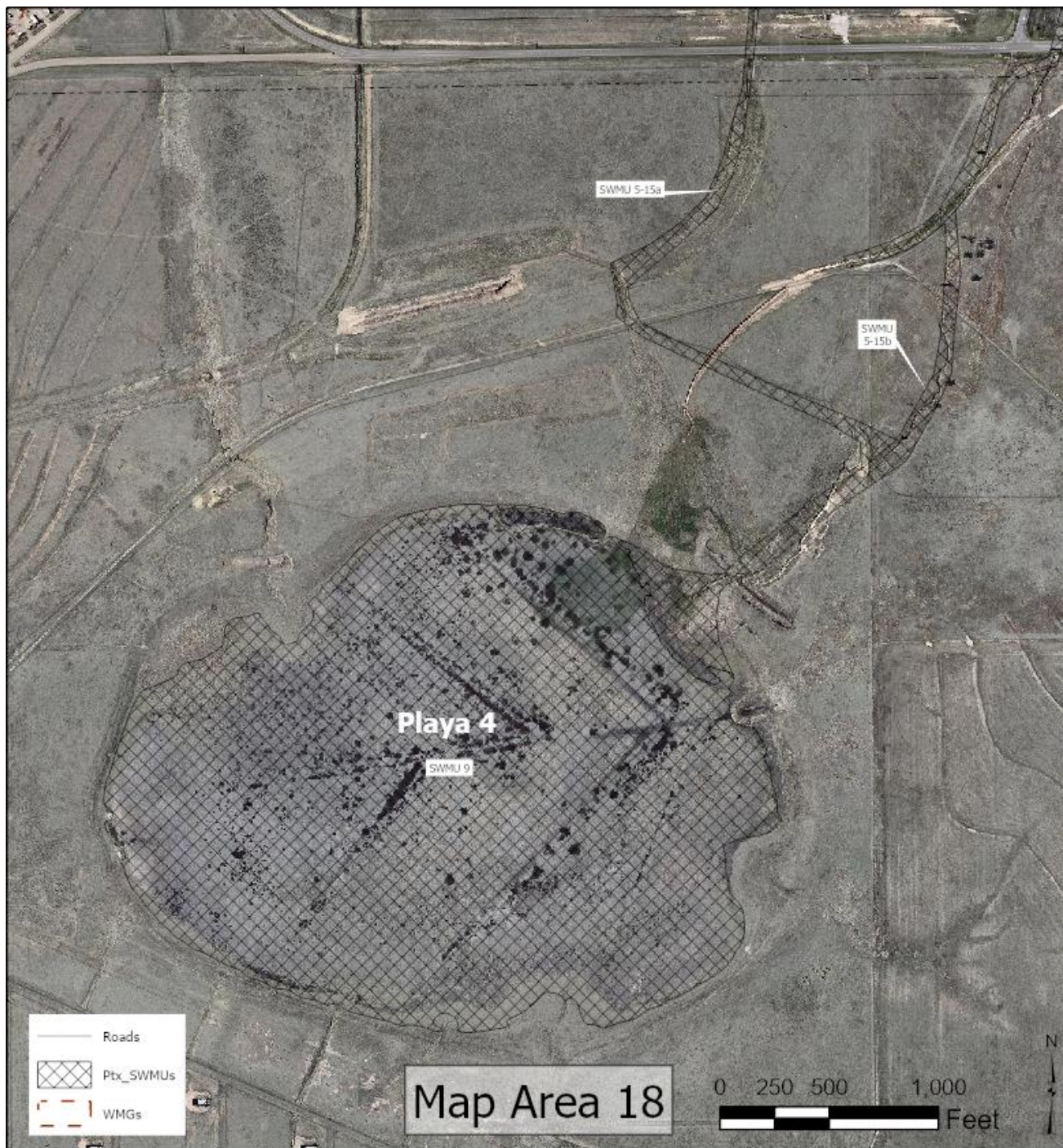
CP Attachment A, Sheet 17 of 27 – SWMU/AOC Map



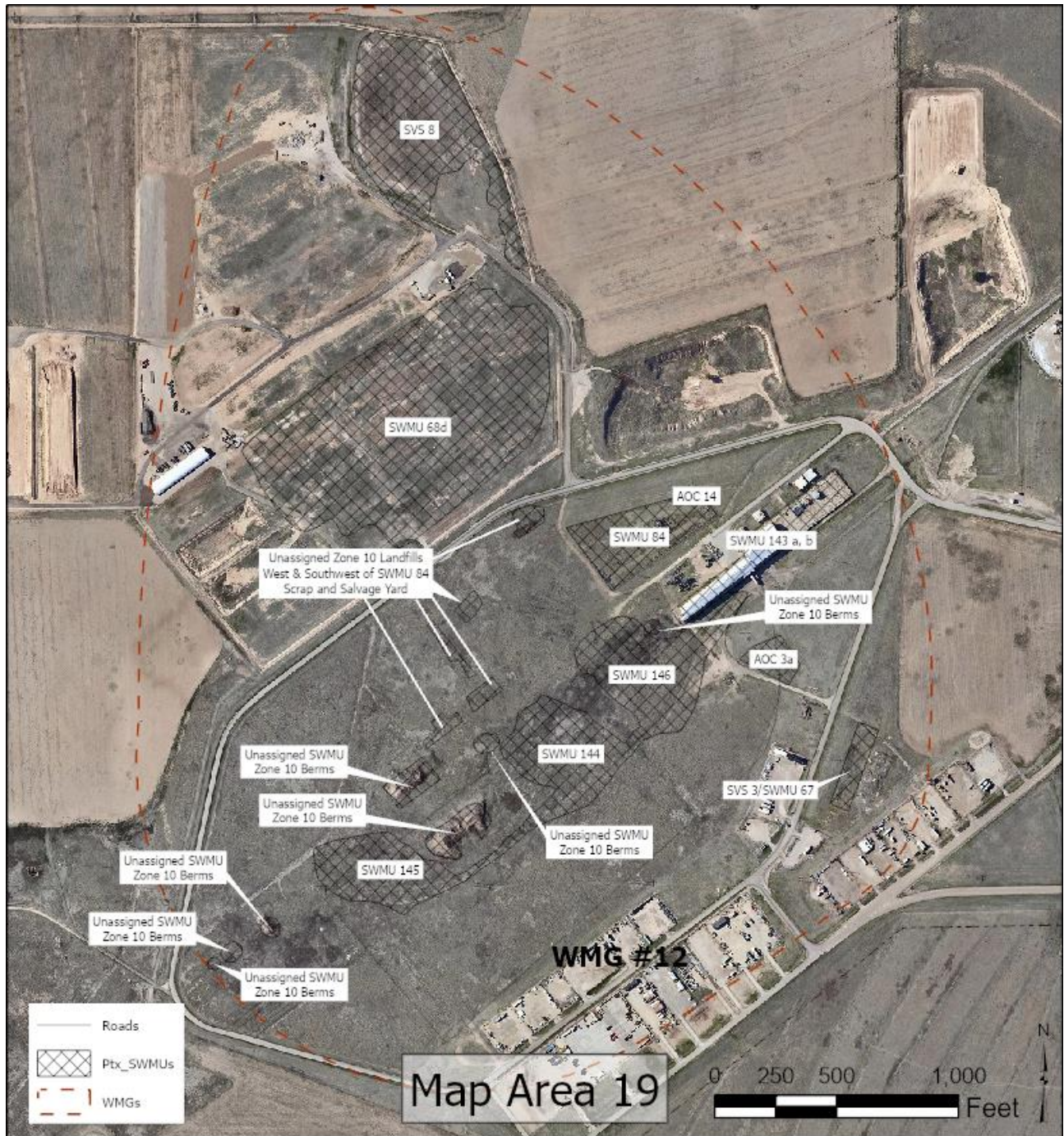
CP Attachment A, Sheet 18 of 27 – SWMU/AOC Map



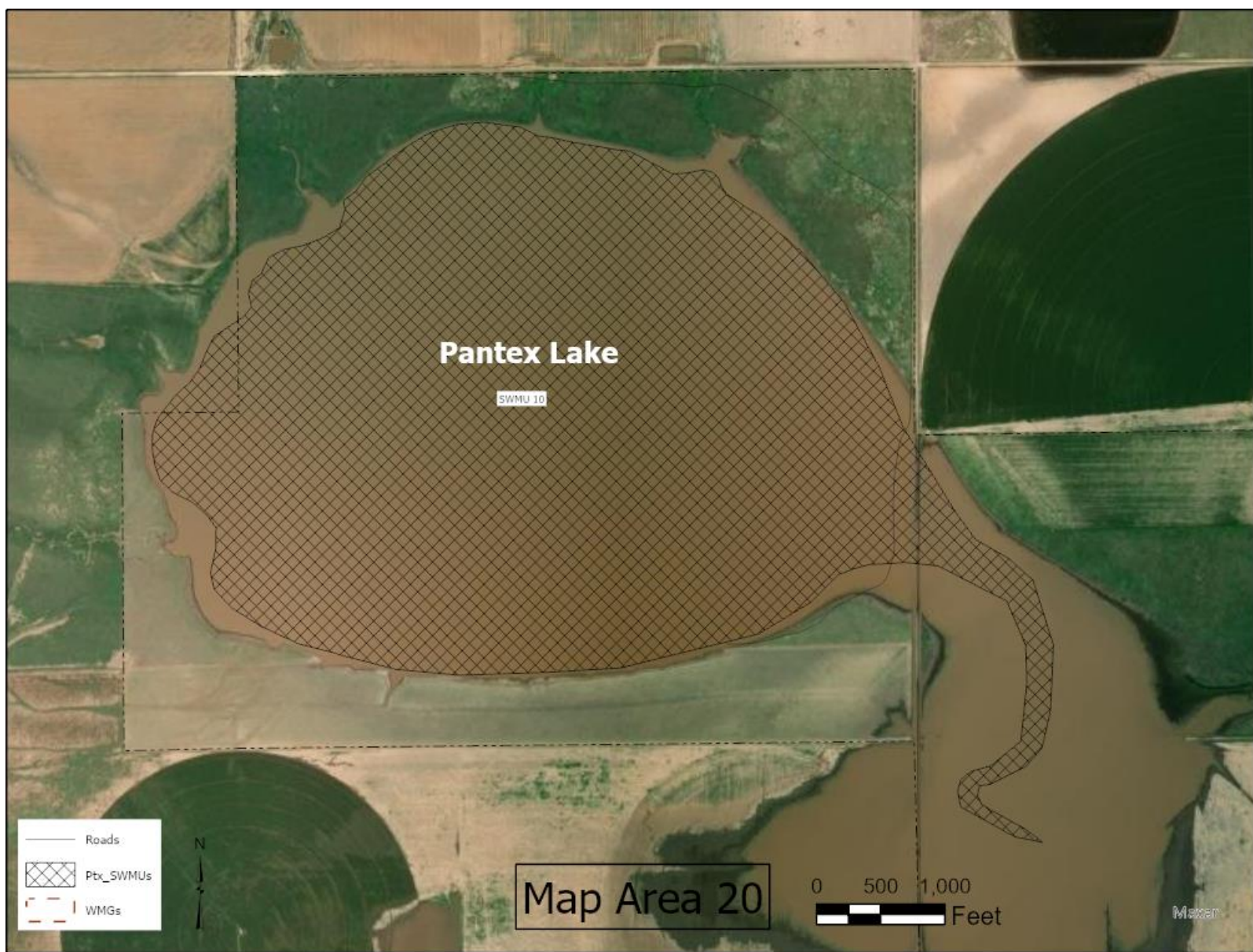
CP Attachment A, Sheet 19 of 27 – SWMU/AOC Map



CP Attachment A, Sheet 20 of 27 – SWMU/AOC Map



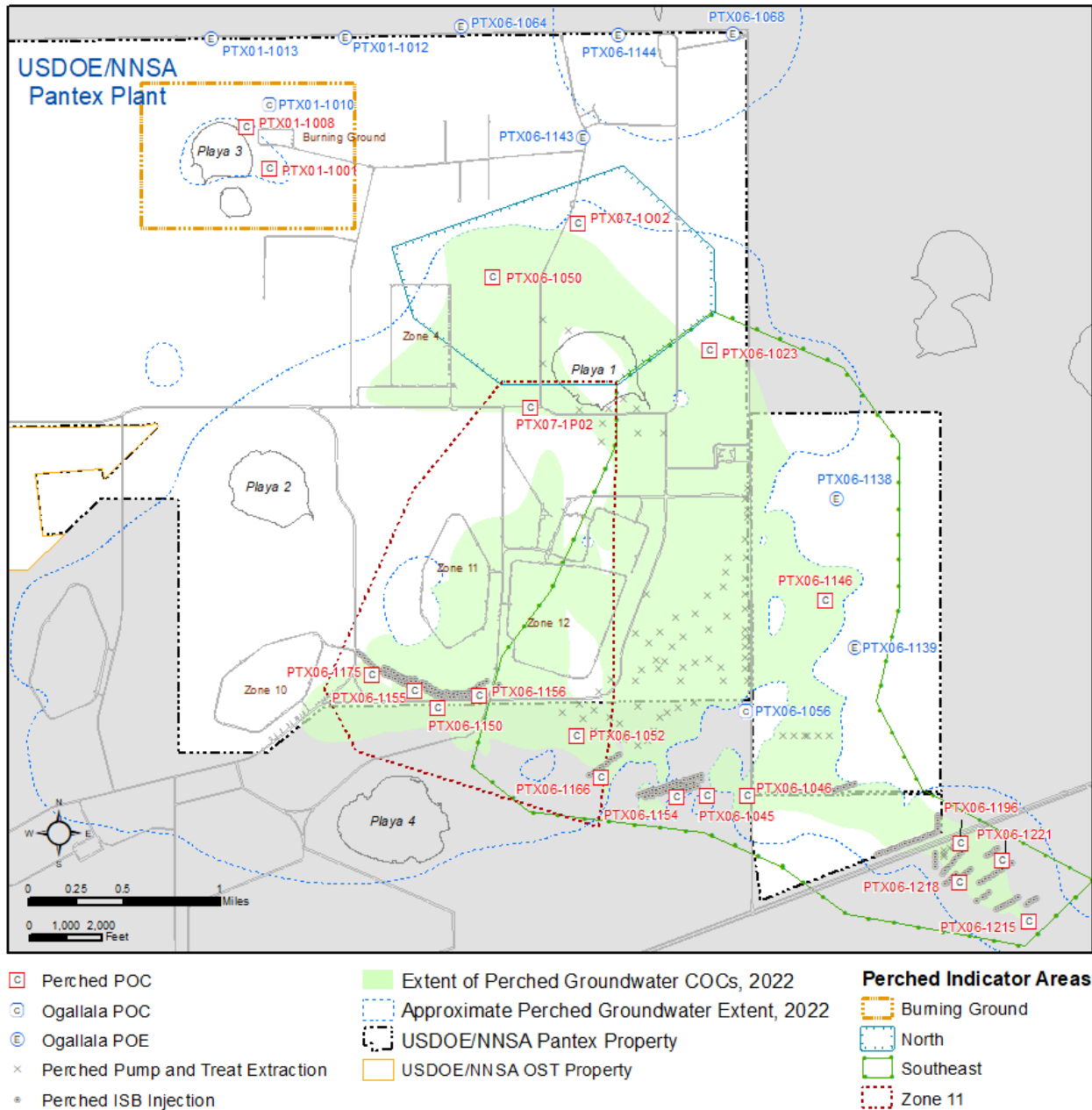
CP Attachment A, Sheet 21 of 27 – SWMU/AOC Map



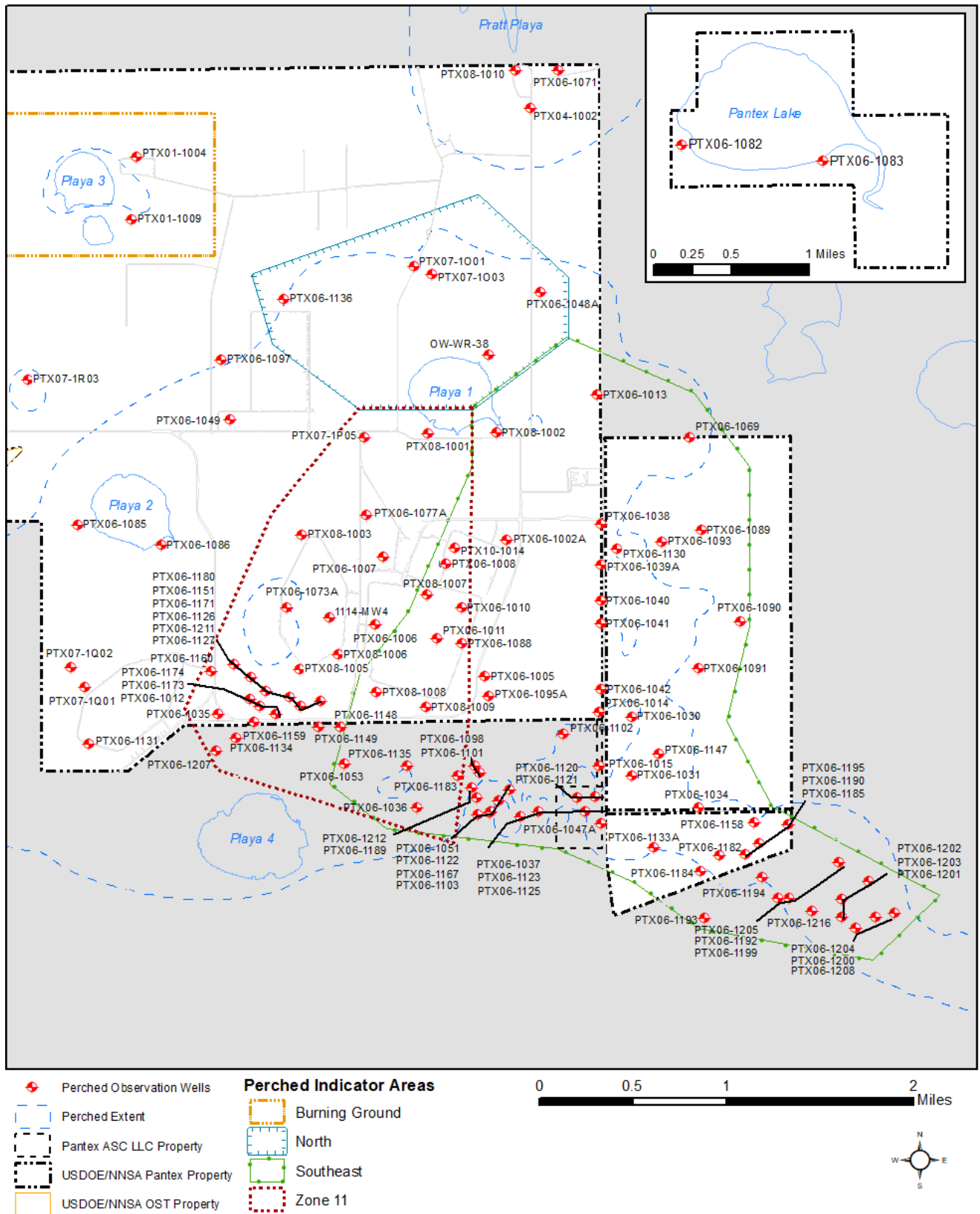
CP Attachment A, Sheet 22 of 27 – SWMU/AOC Map



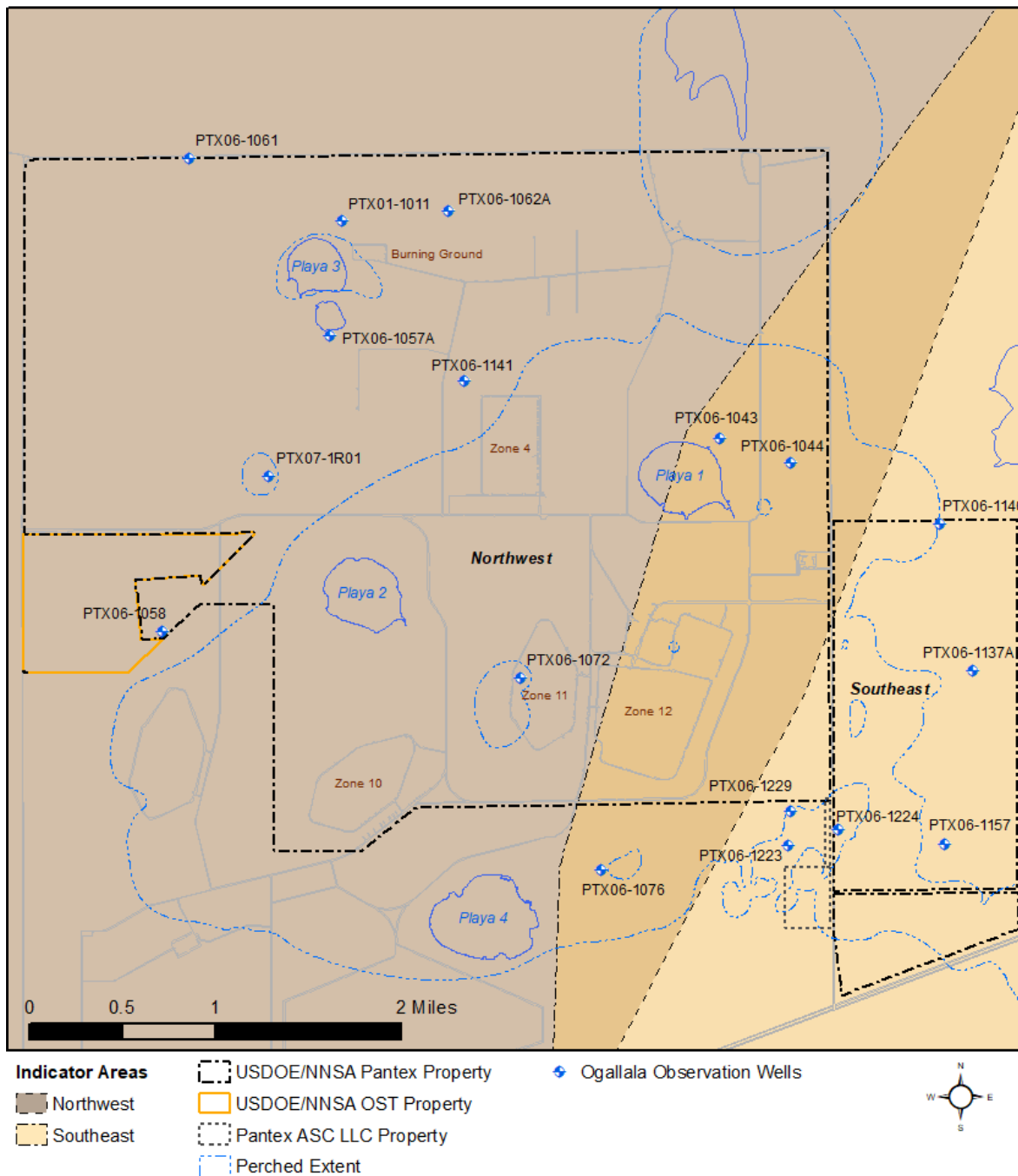
CP Attachment A, Sheet 23 of 27 – SWMU/AOC Map



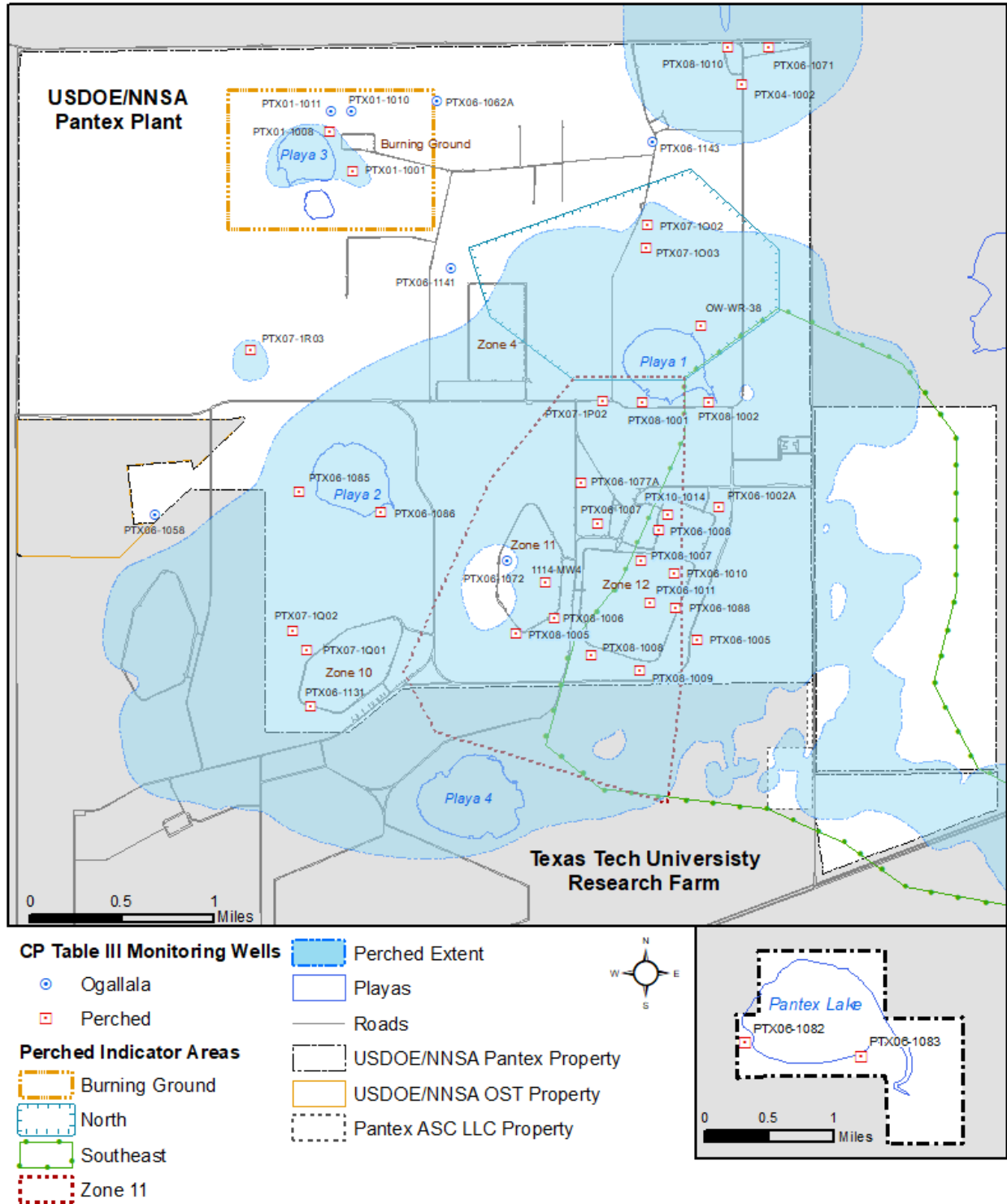
CP Attachment A, Sheet 24 of 27 – CP Table V Point of Compliance and Exposure Wells



CP Attachment A, Sheet 25 of 27 - Perched Observation Wells



CP Attachment A, Sheet 26 of 27 - Ogallala Observation Wells

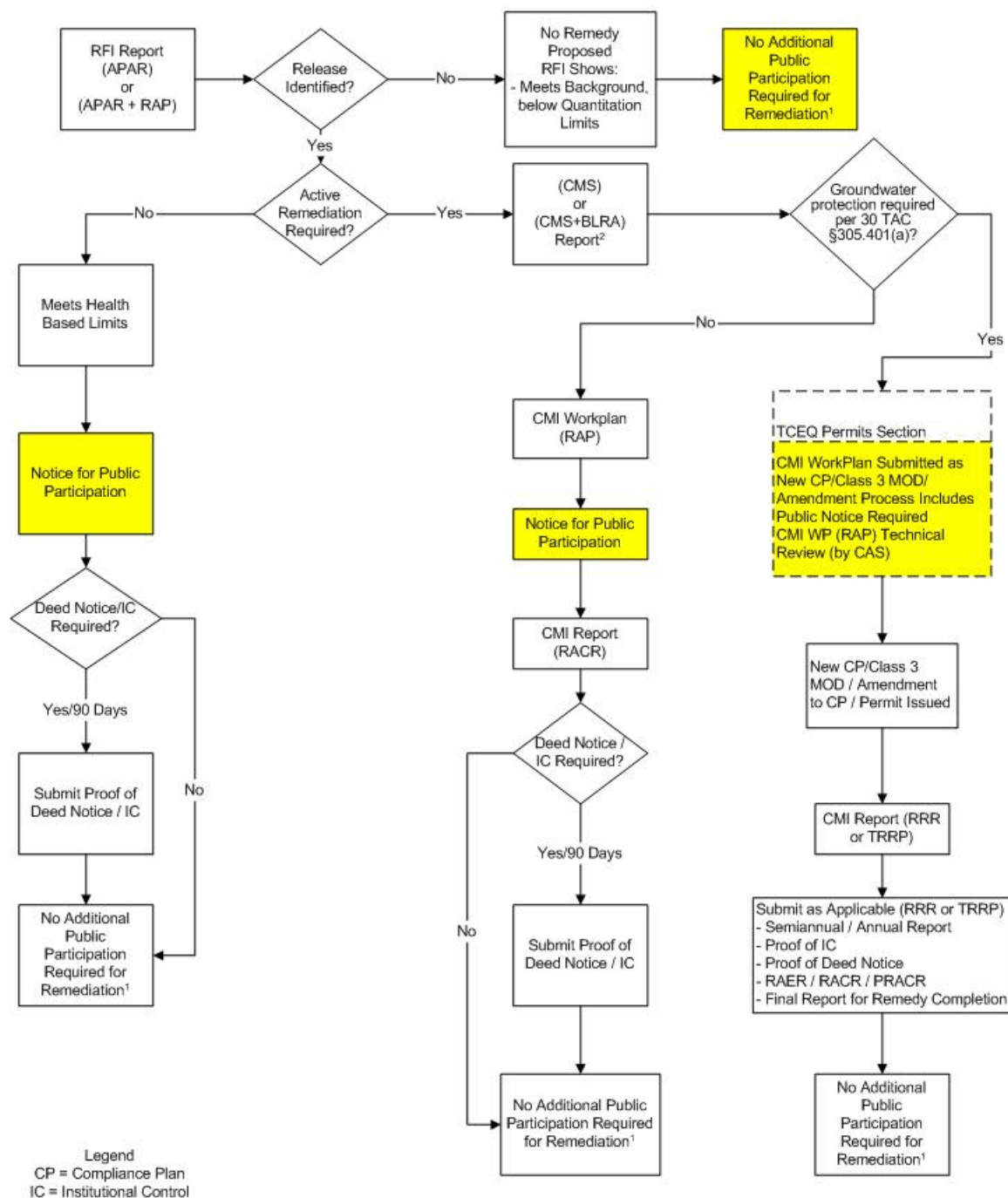


CP Attachment A, Sheet 27 of 27 – CP Table III Observation Wells

CP Attachment B, Sheet 1 of 1

Public Participation in HSWA Corrective Action

6/22/2005



1 To Incorporate a Status Change to RFI unit(s) in the Permit or CP Requires Modification and Public Notice through the Permits Section

2 As Required by Rule, Permit, or CP

CP Attachment C: Well Design, Construction, Installation, Certification, Plugging and Abandonment Procedures and Specifications

1. The Permittee shall use well drilling methods that minimize potential adverse effects on the quality of water samples withdrawn from the well, and that minimize or eliminate the introduction of foreign fluids into the borehole.
2. All wells constructed to meet the terms of this Compliance Plan shall be constructed such that the wells can be routinely sampled with a pump, bailer, or alternate sampling device. Piping associated with recovery wells should be fitted with sample ports or an acceptable alternative sampling method to facilitate sampling of the recovered groundwater on a well by well basis.
3. Above the saturated zone, the well casing may be two (2)-inch diameter or larger Schedule 40 or 80 polyvinyl chloride (PVC) rigid pipe or stainless steel or polytetrafluoroethylene (PTFE or "Teflon®") or an approved alternate material. The PVC casing must bear the National Sanitation Foundation logo for potable water applications (NSF-pw). Solvent cementing compounds shall not be used to bond joints and all connections shall be flush-threaded. In and below the saturated zone, the well casing shall be stainless steel or PTFE.

The Permittee may use PVC or fiberglass reinforced resin as an alternate well casing material in and below the saturated zone provided that it yields samples for groundwater quality analysis that are unaffected by the well casing material.

4. The Permittee shall replace any well that has deteriorated due to incompatibility of the casing material with the groundwater contaminants or due to any other factors. Replacement of the damaged well shall be completed within ninety (90) days of the date of the inspection that identified the deterioration.
5. Well casings and screens shall be steam cleaned prior to installation to remove all oils, greases, and waxes. Well casings and screens made of fluorocarbon resins shall be cleaned by detergent washing.
6. For wells constructed after the date of issuance of this Compliance Plan, the screen length shall not exceed ten (10) feet within a given transmissive zone unless otherwise approved by the Executive Director. Screen lengths exceeding ten (10) feet may be installed in groundwater recovery or injection wells to optimize the groundwater remediation process in accordance with standard engineering practice.
7. The Permittee shall design and construct the intake portion of a well so as to allow sufficient water flow into the well for sampling purposes and minimize the passage of formation materials into the well during pumping. The intake portion of a well shall consist of commercially manufactured stainless steel or PTFE screen or approved alternate material. The annular space between the screen and the borehole shall be filled with clean siliceous granular material (i.e., filter pack) that has a proper size gradation to provide mechanical retention of the formation sand and silt. The well screen slot size shall be compatible with the filter pack size as determined by sieve analysis data. The filter pack should extend no more than three (3) feet above the well screen. A silt trap, no greater than one (1) foot in length, may be added to the bottom of the well screen to collect any silt that may enter the well. The bottom of the well casing shall be capped with PTFE or stainless steel or approved alternate material.

Groundwater recovery and injection wells shall be designed in accordance with standard engineering practice to ensure adequate well production and accommodate ancillary equipment. Silt traps exceeding one (1) foot may be utilized to accommodate ancillary

equipment. Well heads shall be fitted with mechanical well seals, or equivalent, to prevent entry of surface water or debris.

8. A minimum of two (2) feet of pellet or granular bentonite shall immediately overlie the filter pack in the annular space between the well casing and borehole. Where the saturated zone extends above the filter pack, pellet or granular bentonite shall be used to seal the annulus. The bentonite shall be allowed to settle and hydrate for a sufficient amount of time prior to placement of grout in the annular space. Above the minimum two (2)-foot thick bentonite seal, the annular space shall be sealed with a cement/bentonite grout mixture. The grout shall be placed in the annular space by means of a tremie pipe or pressure grouting methods equivalent to tremie grouting standards.

The cement/bentonite grout mixture or TCEQ approved alternative grout mixture shall fill the annular space to within two (2) feet of the surface. A suitable amount of time shall be allowed for settling to occur. The annular space shall be sealed with concrete, blending into a cement apron at the surface that extends at least two (2) feet from the outer edge of the monitor well for above-ground completions. Alternative annular-space seal material may be proposed with justification and must be approved by the Executive Director prior to installation.

In cases where flush-to-ground completions are unavoidable, a protective structure such as a utility vault or meter box should be installed around the well casing and the concrete pad design should prevent infiltration of water into the vault. In addition, the Permittee must ensure that 1) the well/cap juncture is watertight; 2) the bond between the cement surface seal and the protective structure is watertight; and 3) the protective structure with a steel lid or manhole cover has a rubber seal or gasket.

9. Water added as a drilling fluid to a well shall contain no bacteriological or chemical constituents that could interfere with the formation or with the chemical constituents being monitored. For groundwater recovery and injection wells, drilling fluids containing freshwater and treatment agents may be utilized in accordance with standard engineering practice to facilitate proper well installation. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent practicable during well development.
10. Upon completion of installation of a well, the well must be developed to remove any fluids used during well drilling and to remove fines from the formation to provide a particulate-free discharge to the extent achievable by accepted completion methods and by commercially available well screens. Development shall be accomplished by reversing flow direction, surging the well or by air lift procedures. No fluids other than formation water shall be added during development of a well unless the aquifer to be screened is a low-yielding water-bearing aquifer. In these cases, the water to be added should be chemically analyzed to evaluate its potential impact on in-situ water quality, and to assess the potential for formation damage.

For recovery and injection wells, well development methods may be utilized in accordance with standard engineering practice to remove fines and maximize well efficiency and specific capacity. Addition of freshwater and treatment agents may be utilized during well development or re-development to remove drilling fluids, inorganic scale or bacterial slime. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent practicable during well development.

11. Each well shall be secured and/or designed to maintain the integrity of the well borehole and groundwater.
12. The Permittee shall protect the above-ground portion of the well by bumper guards and/or metal outer casing protection when wells are located in traffic areas or outside the secured plant area.
13. The attached Table of Well Construction Details is to be completed or updated for each well installed and kept on site. Items in the table that require a yes or no answer indicate diagrams, plans, or procedures that shall be kept on site and made available to inspection. The completed table and other records shall include all of the following information:
 - name/number of well (well designation);
 - intended use of the well (sampling, recovery, etc.);
 - date/time of construction;
 - drilling method and drilling fluid used;
 - well location (± 0.5 ft.);
 - borehole diameter and well casing diameter;
 - well depth (± 0.1 ft.);
 - drilling and lithologic logs;
 - depth to first saturated zone;
 - casing materials;
 - screen materials and design;
 - casing and screen joint type;
 - screen slot size/length;
 - filter pack material/size;
 - filter pack volume (how many bags, buckets, etc.);
 - filter pack placement method;
 - sealant materials;
 - sealant volume (how many bags, buckets, etc.);
 - sealant placement method;
 - surface seal design/construction;
 - well development procedure;
 - type of protective well cap;
 - ground surface elevation (± 0.01 ft. MSL);
 - top of casing elevation (± 0.01 ft. MSL); and,
 - detailed drawing of well (include dimensions).
14. The Permittee shall clearly mark and maintain the well number on each well at the site.
15. The Permittee shall measure and keep a record of the elevation of the top of each well casing in feet above mean sea level to the nearest 0.01 foot and permanently mark the measuring point on the well. The Permittee shall compare old and new elevations from previously surveyed wells and determine a frequency of surveying not to exceed five (5) year intervals.
16. A well's screened interval shall be appropriately designed and installed to meet the well's specific objective (i.e., recovery of either DNAPL, LNAPL, or both, or other objective of the well). All wells designed to detect, monitor, or recover DNAPL must be drilled to intercept the bottom confining layer of the aquifer. The screened interval to detect DNAPL should extend from the top of the lower confining layer to above the portion of the aquifer saturated with DNAPL. The screened interval for all wells designed to detect, monitor, or recover LNAPL must extend high enough into the vadose zone to provide for fluctuations in the seasonal water table. In addition, the filter pack

for the recovery or monitoring well's screened interval shall be coarser than surrounding media to ensure the movement of NAPL to the well.

Certification, Plugging and Abandonment Procedures

17. Prior to installation of a Point of Compliance (POC), FOA Boundary of Compliance (FBOC), Point of Exposure (POE), Alternate Point of Exposure (APOE) or Background replacement well listed in CP Table V, the Permittee shall submit to the Executive Director for approval, the replacement well specifications and an explanation of why the well is being replaced. For any such well to be considered as a replacement well and not as a new well, the well shall have no substantive design changes from the well being replaced as determined by the Executive Director. The well shall be drilled within fifteen (15) feet of the well being replaced unless an alternate location is authorized by the Executive Director. The Permittee shall submit a replacement well certification to the Executive Director in accordance with CP Table VII and CP Attachment C, Provision 19.
18. Plugging and abandonment of a Corrective Action System Background, POC, FBOC, POE, and/or APOE wells in Provision XI.B.1, shall be subject to the Compliance Plan modification provisions in 30 TAC Chapter 305 Subchapter D. Plugging and abandonment of Corrective Action Observation, Corrective Action System and/or Attenuation Monitoring Point wells in Provision XI.B.2, shall commence upon written approval of the Executive Director. The well shall be plugged and abandoned in accordance with requirements of this Attachment C. The Permittee shall certify proper plugging and abandonment in accordance with CP Table VII and CP Attachment C, Provision 19.
19. The Permittee shall complete construction or plugging and abandonment of each well in accordance with the requirements of this Permit and 16 TAC Chapter 76 and shall certify such proper construction or plugging and abandonment in the first report submitted pursuant to CP Table VII following installation or plugging and abandonment. Copies of the State of Texas Plugging Report filed with the Texas Department of Licensing and Regulation and completion logs for each newly installed or replaced well shall be included with the report. The certification shall be prepared by a qualified geoscientist or engineer. Each well certification shall be accompanied by a certification report, including an accurate log of the soil boring, which thoroughly describes and depicts the location, elevations, material specifications, construction details, and soil conditions encountered in the boring for the well. A copy of the certification and certification report shall be kept on-site, and a second copy shall be submitted to the Executive Director. Required certification shall be in the following format, edited as appropriate, and shall specify the Compliance Plan Number as indicated:

"This is to certify that installation (or plugging and abandonment) of the following facility components authorized or required by TCEQ Permit No. (Insert Permit number) has been completed, and that construction (or plugging) of said components has been performed in accordance with and in compliance with the design and construction specifications of this Permit No. (Insert Permit number):" (Add description of facility components with reference to applicable Compliance Plan provisions).
20. Wells may be replaced at any time the Permittee or Executive Director determines that the well integrity or materials of construction or well placement no longer enable the well to yield samples representative of groundwater quality.
21. The Permittee shall plug soil test borings and wells removed from service after issuance of the Compliance Plan with a cement/bentonite grout mixture so as to prevent the preferential migration of fluids in the area of the borehole. Certification of each plugging shall be reported in accordance with Provision 19 of CP Attachment C of this

Permit No. 50284

Continuation Sheets 5 of 7

Permittee: United States Department of Energy and Consolidated Nuclear Security LLC

Compliance Plan. The plugging of wells shall be in accordance with 16 TAC Chapter 76 dealing with Well Drilling, Completion, Capping and Plugging.

Table of Well Construction Details

Well number					
Borehole diameter (in)					
Well diameter (in)					
Total borehole depth (ft)					
Constructed well depth (ft)					
Well location available (Y/N)					
Intended Use of Well (sampling, recovery, etc.)					
Drilling & lithologic logs available (Y/N)					
Drill method					
Date drilled					
Casing I.D. (in)					
Casing type/materials					
How joined					
Stick-up length					
Top of casing (± 0.01 ft. MSL)					
Ground surface elevation (± 0.01 ft. MSL)					
Capped/lockable					
Surface pad size (ft)					
Detailed drawing of well (include dimensions) Y/N					
Depth to surface seal (ft)					
Surface seal design & construction available (Y/N)					
Well development procedure available (Y/N)					
Annulus fill					
Depth to annulus seal (ft)					
Depth to filter pack (ft)					

Depth to 1 st saturated zone					
Length of filter pack (ft)					
Size of filter pack					
Filter pack volume (how many bags, buckets, etc.)					
Filter pack placement method					
Depth to screen (ft)					
Sealant materials					
Sealant volume (how many bags, buckets, etc.)					
Sealant placement method					
Screen slot size/length (in)					
Screen type					
Screen length (ft)					
Blank length (ft)					
Development Method					
Well coordinates (lat & long)					