

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AN ORDER concerning the application by the US Department of the Army for renewal and major amendment of Hazardous Waste Permit No. 50292; TCEQ Docket No. 2020-1326-IHW.

On January 13, 2021, the Texas Commission on Environmental Quality (Commission) considered during its open meeting one hearing request filed by Teresa Lee Slack concerning the application by the US Department of the Army for renewal and major amendment of Hazardous Waste Permit No. 50292. The request was evaluated under the requirements in the applicable statutes and Commission rules, including 30 Texas Administrative Code (TAC) Chapter 55. The Commission also considered the responses to the requests filed by the Executive Director, the Office of Public Interest Counsel, and the Applicant; and all timely public comment.

After evaluation of all relevant filings, the Commission denied the request for a contested case hearing. The Commission also adopted the Executive Director's Response to Public Comment and issued renewed and amended Hazardous Waste Permit No. 50292.

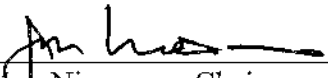
NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY that:

1. The request for a contested case hearing by Teresa Lee Slack is hereby DENIED;

2. Renewed and amended Hazardous Waste Permit No. 50292 is hereby ISSUED in the form as shown in the draft permit prepared by the Executive Director;
3. The Executive Director's Response to Public Comment is ADOPTED in accordance with 30 TAC Chapter 55; and
4. If any provision, sentence, clause or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.

Issue date: *January 16, 2021*

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY



Jon Niermann, Chairman



Hazardous Waste Permit No. 50292
EPA ID. No. TXR000084774
ISWR No. 30991

**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

Name of Permittee: US Department of the Army
US Highway 82 West
Texarkana, Texas 75505-9101

Site Owner: US Department of the Army
US Highway 82 West
Texarkana, Texas 75505-9101

Classification of Site: Hazardous waste closure, and compliance
plan facility.

The permittee is authorized to conduct closure in accordance with the limitations, requirements, and other conditions set forth herein. This permit is granted subject to the 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 to manage wastes shall expire midnight, ten (10) years after the date of this renewal permit approval. This permit was originally issued on June 24, 1992, and subsequently renewed on September 15, 2003.

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 HSWA for which the Texas Commission on Environmental Quality has not been authorized.

Issued Date: *January 16, 2021*

For the Commission

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List of Attachments:

- A - Legal Description of Facility
- B - Facility Map
- C - Permit Application Revision Chronology
- D - List of Incorporated Application Materials
- E - List of Permitted Facility Units

List of Compliance Plan Attachments:

CP A	Facility Site Maps
	Sheet 1 of 10 Lone Star Army Ammunition Plant - Facility Site Map
	Sheet 2 of 10 RCRA Permitted Unit and SWMU Location Map
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CP B	Public Participation in HSWA Corrective Action
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CP D	Legal Description of Solid Waste Management Units and Areas of Concern

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
C/I	-	Commercial/Industrial
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
ESCA	-	Environmental Services Cooperative Agreement
GWPS	-	Groundwater Protection Standard
HH	-	Human Health
HSWA	-	Hazardous and Solid Waste Amendments of 1984
ICM	-	Interim Corrective Measures
LDR	-	Land Disposal Restrictions
MEC	-	Munitions and Explosives of Concern
MDL	-	Method Detection Limit
MFD	-	Maximum Fragmentation Distance
MQL	-	Method Quantitation Limit
MRS	-	Munitions Response Site
MSL	-	Mean Sea Level
NAPL	-	Non-Aqueous Phase Liquid
NFA	-	No Further Action
NOR	-	Notice of Registration
PCB	-	Polychlorinated Biphenyl
PCI	-	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

RAFR	-	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)
SWPS	-	Surface Water Protection Standard
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

1. A permit is issued to US Department of the Army (hereafter called the permittee), to close a hazardous waste facility located adjacent to Highway 82 West, approximately 12 miles west of Texarkana and nine (9) miles east of New Boston, in Bowie County, Texas, and within the drainage area of Segment 0201 in the Red River Basin and Segment 0302 in the Sulphur River Basin (North Latitude 33° 24' 58", West Longitude 94° 13' 43"). The legal description of the facility submitted in Permit No. 50292 application dated June 27, 2013, February 20, 2020, and April 20, 2020 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."

Boundary Connection Extending Outside of Property - the Boundary Connection Extending Outside of Property is a GPS-mapped connection used to demonstrate that the permitted property is a contiguous property and meets the definition of a facility in 30 TAC 335.1(61) through access right from the owner(s), other than the permitted facility owner(s), and such boundary connection may not be a part of the "active portion" of the facility as defined in 30 TAC 335.1(4). If either the High-Explosive Burning Ground (HEBG) or the High-Explosives Detonation Grounds (HEDG), or both, are removed from the permit, the boundary connection will automatically be removed from the permit. In addition, if the permit is replaced by a post-closure care permit, the connection will be terminated by a modification for a second permit separating the two units.

2. This permit renewal redefines the facility boundaries. The facility was formerly all Army-owned contiguous property, extended from boundary fence-line to boundary fence-line, in all directions. The proposed facility for the permit renewal is defined as the survey boundaries of the HEBG (includes the XX-97 IIWCSF and HEBG HWCSF within the surveyed boundaries) and HEDG, both previously identified as individual permitted units under Permit No. 50292. Additional, non-contiguous regulated units under this permit include sites undergoing corrective action and they include the Salvage Yard and Western Buffer Area, XX Test Area, Western Inactive Sanitary Landfill, and Old Boston Road Landfill. The permitted North Area G-Ponds (G-Ponds), closed with controls, is now identified as a separate facility and is covered under its own post-closure care permit.
3. The permittee must submit a Class 1 modification within 90 days of permit issuance to revise application materials incorporated in Section I.B. by providing a copy of the Boundary Connection Agreement for the connection used to show the facility is contiguous.

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 dated June 27, 2013, the revisions to the permit and permit application that are listed in "Attachment C" as those revisions relate to units listed in "Attachment E" and CP Table I, 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 Texas Commission on Environmental Quality (TCEQ)¹. 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.

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]

¹ The Department of the Army submitted a permit renewal and major amendment application dated June 27, 2013, to the TCEQ for the Lone Star Ammunition Plant (LSAAP). As part of the permit renewal, the U.S. Department of the Army sought to redefine the facility boundary by removing acreage that did not require corrective action or post-closure care from the facility boundary. During the permit renewal, the facility was divided into two separate, smaller facilities. Instead of one permit, the TCEQ issued two separate permits from the 2013 renewal application. One permit was issued for the G-Ponds [Permit No. 50419], and the second permit was issued for the HEBG/HEDG [Permit No. 50292]. Due to the issuance of a second permit from the initial renewal application, some of the incorporated application materials may no longer apply in their entirety. The executive director added specific citations to Section I.B. to clarify which portions of the submitted application materials apply to this permit.

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.

Reserved - Used to maintain uniform numbering and formatting across permits issued by the Industrial & Hazardous Waste Permits Section. If site conditions change or are anticipated to change, then a permittee must timely submit a permit modification application to document those changes in circumstances; a condition that is reserved may be updated, as needed, to meet the changes in circumstance during that modification process.

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, the permittee may not commence storage, processing, or disposal of solid waste; and for a facility being modified, the permittee may not process, store or dispose of solid waste in the modified portion of the facility, except as provided in 30 TAC Section 305.69 (relating to Solid Waste Permit Modification at the Request of the Permittee) 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 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. 50292 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. 50292."

- 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 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) 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 - Reserved

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 the latest version specified in current edition of Test Methods for Evaluating Solid Waste:

Physical/Chemical Methods, SW-846 (EPA SW-846); Standard Methods for the Examination of Water and Wastewater; RCRA Groundwater Monitoring; Draft Technical Guidance, 1992, OSWER Directive 9950.1, or an equivalent method, as specified in the Waste Analysis Plan, Section IV.D. 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.
- e. All engineering and geoscientific information submitted to the TCEQ shall be prepared by, or under the supervision of, a licensed professional engineer or licensed professional geoscientist, and shall be signed, sealed, and dated by qualified professionals as required by the Texas Engineering Practice Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts.

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) 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 may satisfy the biennial reporting requirement by submitting an annual waste summary in accordance with 30 TAC 335.9(a)(2).

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 Environmental Assistance Division. This report must be submitted annually on the dates specified in the rule.

9. Annual Detection Monitoring Report - Reserved

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 Requirements²

1. State Regulations

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

- a. 30 TAC Chapter 305, Subchapter A: General Provisions;
- b. 30 TAC Chapter 305, Subchapter C: Application for Permit;
- c. 30 TAC Sections 305.61 - 305.69 (regarding amendments, renewals, transfers, corrections, revocation and suspension of permits);
- d. 30 TAC Sections 305.121 - 305.125 (regarding permit characteristics and conditions);
- e. 30 TAC Sections 305.127 - 305.129 (regarding permit conditions, signatories and variance procedures);
- f. 30 TAC Chapter 305, Subchapter G: Additional Conditions for Hazardous and Industrial Solid Waste Storage, Processing and Disposal 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 Section 335.174 (regarding closure and post-closure care of landfills);
- m. 30 TAC Sections 335.175 - 335.176 (regarding special requirements for containers and bulk and containerized waste);
- n. 30 TAC Section 335.177 (regarding general performance standard);

² Not all listed incorporated by reference provisions may apply to the specific facility or units covered by this permit. If site conditions change, then incorporated by reference provisions that were not previously applicable may become applicable to meet the changes in circumstance.

- o. 30 TAC Sections 335.271 - 335.272 (regarding standards for management of military munitions);
- p. 30 TAC Sections 335.325, 335.328 and 335.329 (regarding waste management fee assessment, fee payment, and records and reports);
- q. 30 TAC Chapter 335, Subchapter Q: Pollution Prevention: Source Reduction and Waste Minimization; and
- r. 30 TAC Chapter 350, Texas Risk Reduction Program (TRRP).

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, 266 Subpart M, and Part 268, adopted by reference by 30 TAC Section 335.152 and 30 TAC Chapter 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 N -- Landfills;
- h. Subpart X -- Miscellaneous Units;
- i. Subpart EE -- Hazardous Waste Munitions and Explosives Storage; and
- j. 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. Security consistent with Permit Provision III.C. is only required for the "active portion" of the facility, as defined in 30 TAC 335.1. Boundary connections that do not meet the definition of "active portion" of a facility do not require security. [40 CFR 264.14(a)]. In the event waste is transferred between the active portions of the facility (HEBG and HEDG), the waste will be manifested in accordance with regulations and, for transportation purposes, the boundary connection will not be considered an active portion of the facility.

2. High Explosive Burning Ground (HEBG)

- a. The permittee shall provide a twenty-four (24) hour surveillance system which continuously monitors and controls entry onto the active portion of HEBG as shown in Appendix G-1, Figure III.C-1 of the application. The camera feed is to be monitored continuously by security personnel.
- b. The HEBG must be fully enclosed by a forty-eight (48) inch high, 4-strand barbed-wire fence. Roving patrols must check the entrance of the facility twice every eight (8) hours. The perimeter must be inspected monthly as shown in Appendix G-1, Figure III.C-1 of the application.
- c. The permittee shall post warning signs at all points of access and in fifty (50) foot intervals surrounding the HEBG along the natural and/or artificial barriers in sufficient numbers to be seen from any approach to that portion 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:

(1) Danger - Unauthorized Personnel Keep Out; and

(2) US Army - Restricted Area Warning.

3. High Explosive Detonation Grounds (HEDG)

- a. The permittee shall provide a twenty-four (24) hour surveillance system which continuously monitors and controls entry onto the active portion of HEDG as shown in Appendix G-1, Figure III.C-2 of the application. The camera feed is to be monitored continuously by security personnel.

- b. The HEDG must be fully enclosed by a forty-eight (48) inch high, 4-strand barbed-wire fence which abuts into the Day & Zimmermann Lone Star, LLC six (6) foot chain link fence topped with 3 strands of barbed-wire as shown in Appendix G-1, Figure III.C-2. Roving patrols must check the entrance of the facility twice every eight (8) hours. The perimeter must be inspected monthly as shown in Appendix G-1, Figure III.C-2 of the application.
- c. The permittee shall post warning signs at all points of access and in fifty(50) foot intervals surrounding the HEDG along the natural and/or artificial barriers in sufficient numbers to be seen from any approach to that portion 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:
 - (1) Danger - Unauthorized Personnel Keep Out; and
 - (2) US Army - Restricted Area Warning.

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 as soon as practicable, initiate clean-up procedures at the HEBG 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. The permittee shall, as soon as practicable, initiate clean-up procedures at the HEDG 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.
4. 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.
5. 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.4.
6. Preparedness and Prevention
- a. At a minimum, the permittee shall equip the facility with emergency equipment as required by 40 CFR 264.32 (see Table III.E.3. in Section III. of the Part B permit application referenced in Provision I.B. of this permit for the list of approved emergency equipment).
 - 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

The permittee must submit a Class 3 permit modification to add a corrective action management unit for the closure of the HEBG and HEDG within 1,050 days of March 30, 2024, per the application materials incorporated by Provision I.B., or in accordance with an alternate schedule approved by the executive director.

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 and non-hazardous industrial solid wastes listed in Table IV.B. - Wastes Managed in Permitted Units, subject to the limitations provided herein.
2. Hazardous and Non-hazardous Waste Received from Off-Site Sources

The permittee may receive hazardous or non-hazardous remediation waste from the following off-site facility: Lone Star Army Ammunition Plant, High Explosive Burning Ground.
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 specific licensing and permitting requirements under Chapter 401 of the Texas Health and Safety Code. In accordance with 30 TAC Section 336.203, no person shall dispose of radioactive material unless that person has a license or an exemption from the TCEQ under Texas Health and Safety Code, Section 401.106(a);
 - c. Dioxin-containing wastes, identified by EPA as F020, F021, F022, F023, F026, and F027 wastes in 40 CFR 261.31;
 - d. Ignitable compressed gases;
 - e. Garbage as defined in 30 TAC Section 330.3(56);
 - f. Municipal Solid Waste as defined in 30 TAC Section 330.3(88);
 - g. Putrescible Waste as defined in 30 TAC Section 330.3(119); or
 - h. 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; and

- 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 permitted facility units listed in "Attachment E" for closure subject to the limitations herein. All waste management activities not otherwise exempted from permitting under 30TAC Section 335.2 shall be confined to the authorized facility units subject to permitting listed in "Attachment E." References hereinafter in this permit to "TCEQ Permit Unit No. _____" shall be to the authorized permitted 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.
4. The permittee shall operate and maintain the facility to prevent washout of any hazardous waste by a 100-year flood, as required by 40 CFR 264.18(b)(1).

B. Container Storage Areas

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

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 closure activities only subject to the limitations contained in the permit application submittals referenced in Section I.B.
2. Miscellaneous units 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; and 40 CFR 264.603, post-closure care.

L. Containment Buildings - Reserved

VI. Groundwater Detection Monitoring - Reserved

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 Section I.B.

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), final closure of the HEBG (Permit Unit Nos. 007, 008, 010, 013, 014, 015, and 016) must be completed within 6,015 days after receiving the final known volume of hazardous wastes at the hazardous waste management unit. It should be noted that Permit Unit No. 008 was subdivided into four separate 40 CFR Part 264, Subpart X Miscellaneous Units corresponding to the four individual burn pads (Permit Unit Nos. 013, 014, 015, 016).
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., 30 TAC Section 350.32 (Texas Risk Reduction Program (TRRP) Remedy Standard A), 30 TAC Section 350.33 (TRRP, Remedy Standard B), and 30 TAC Section 350.95 (Response Action Completion Report (RACR)). Documentation supporting the licensed Professional Engineer's certification shall be furnished to the Executive Director upon request.

7. For each disposal unit closed after permit issuance, the permittee shall submit documentation to demonstrate compliance with 40 CFR 264.116 (relating to survey plat) and 264.119 (relating to post-closure notices). Documentation to demonstrate compliance with survey plat requirements must be submitted to the TCEQ at the time of submission of the certification of closure. Documentation to show compliance with post-closure notices must be submitted to the TCEQ no later than sixty (60) days after certification of closure.
8. 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.
9. 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.
10. 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.
11. All hard-surfaced areas within the hazardous waste management unit areas shall be decontaminated and the wash water generated treated and/or disposed at an authorized off-site facility.
12. Verification of decontamination shall be performed by analyzing wash water, 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.
13. Unless it can be demonstrated that soil contamination has not occurred, 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.

14. Soil and/or wash water 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.
15. Decontamination shall be deemed complete when no visible evidence of contamination is observed and when the results from verification sampling and analyses for wash water and soil meet the following criteria:
 - a. Decontamination of hard-surfaced areas used for waste management (such as tank interiors, secondary containment structures, ancillary equipment, sumps, loading/unloading docks, etc.) shall be deemed complete when the concentration of each chemical of concern in the final rinsate sample(s) collected from the wash water is below TCEQ Texas Risk Reduction Program (TRRP), Remedy Standard A, Tier 1 Residential Class 1 Groundwater PCL; and
 - b. Unless it can be demonstrated that soil contamination has not occurred, underlying soils shall be decontaminated or removed to the TRRP Remedy Standard A, Residential PCL, for no further action. 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.

B. Financial Assurance for Closure - Reserved

C. Storage and Processing Unit Closure Requirements

The permittee shall close the storage and processing unit(s) identified as TCEQ Permit Unit No(s). 007, 009, 010, 013, 014, 015, and 016 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (Use and Management of Containers), and 40 CFR 264.1202 (Hazardous Waste Munitions and Explosives Storage) the Texas Risk Reduction Program of 30 TAC Chapter 350 and the following requirements.

D. Surface Impoundment Closure Requirements - Reserved

E. Landfill Closure and Certification Requirements - Reserved

F. Containment Buildings Closure Requirements - Reserved

G. Facility Post-Closure Care Requirements - Reserved

H. Financial Assurance for Post-Closure - Reserved

VIII. Liability Requirements - Reserved

IX. Corrective Action for Solid Waste Management Units

A. Notification of Release from Solid Waste Management Unit

If a Solid Waste Management Unit (SWMU) or area of contamination not previously addressed in the RCRA Facility Assessment (RFA) dated January 30, 1989, or any release of hazardous waste or hazardous constituents that may have occurred from any SWMU and/or Area of Concern (AOC), that is discovered subsequent to issuance of this permit, the permittee shall notify the Executive Director in writing within fifteen (15) days of the discovery. Within forty-five (45) days of such discovery, the permittee shall submit an RFA for that unit or release which shall be based on EPA's RCRA Facility Assessment Guidance, October 1986, NTIS PB 87-107769. If the RFA indicates a release or suspected release warrants further investigation, the permittee shall comply with the requirements of Provision XI.A.6. and Section XI.H. of this permit.

B. Corrective Action Obligations - Refer to Section XI.

C. Units Requiring Investigation - Refer to Section XI.

D. Variance from Investigation - Refer to Section XI.

E. RCRA Facility Investigation (RFI)/Affected Property Assessment (APA) - Refer to Section XI.

F. Remedy Selection - Refer to Section XI.

G. Compliance Plan

The permittee shall follow 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.
2. 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 Sections 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 Sections X.B. and X.C., the permittee must immediately comply with these requirements.

- B. Process Vents – Reserved
- C. Equipment Leaks – Reserved
- D. Tanks, Surface Impoundments and Containers – Reserved

XI. Compliance Plan

A. General Information (and Applicability)

1. The term “Uppermost Aquifer” as referenced in this Compliance Plan refers to the Quaternary Alluvium, Lower Wilcox Group, and the Upper Midway Group consisting of sand, silt, clay, gravel, clayey and silty sand that crop out in elevation from approximately 300 feet above Mean Sea Level (MSL) to 450 feet above MSL. The Wilcox Group crops out in the southern portion of the facility and is approximately 800 feet in thickness (although the total thickness does not occur at the facility). Groundwater is typically encountered at 7 to 31 feet below ground surface (BGS). The regional aquifer consists of the Nacatoch Sand member of the Navarro Group and the Wilcox Group. The depth to the top of the Nacatoch Sand beneath the facility is estimated at 600 to 750 feet BGS. The Midway Group, which consists primarily of Marine Clays, overlies the Navarro Group and underlies the Wilcox Group. The Midway Group crops out in the northern portion of the facility. 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 SWMUs and/or AOCs listed in CP Table I (Item C) and depicted in CP Attachment A, for which the Corrective Action Program applies pursuant to 30 TAC Section 335.167 and Chapter 350 for releases from the SWMUs and/or AOCs.
5. The Compliance Plan is specific to the SWMUs and/or AOCs listed in CP Table II for which investigation and necessary corrective action applies pursuant to 30 TAC Section 335.167 and Chapter 350 and Section XI.II.

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 forty-five (45) days of discovering a SWMU or AOC, the permittee shall complete the following: Submit a 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 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 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 and D. 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.

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. Point of Compliance (POC) Wells to demonstrate compliance with the Groundwater Protection Standard (GWPS).
 - c. Point of Exposure (POE) Wells, to demonstrate compliance with the GWPS and evaluate the effectiveness of the remediation program.
 - d. 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. The permittee is authorized to install and operate the following additional corrective action system wells to monitor groundwater quality and hydrogeological conditions of the uppermost 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. 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. Supplemental Wells to gauge hydrogeologic conditions of the uppermost 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.

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 XLB.1. through XLB.9., to be operated according to the plans and specifications as approved in Provision XIC.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 semiannual 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 authorized components of the 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 ninety (90) 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 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 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 the POE (and APOE, if any) wells for which groundwater monitoring procedures will apply (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 IVA 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 of CP Tables III and 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 and 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 the 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 (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 30TAC 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.
 - g. Conduct surface water monitoring in accordance with Provision XI.F.3.c.(1)(e) to monitor the concentration of all hazardous constituents listed in CP Table IIIA for seasonal variation and trends in accordance with the schedule specified in CP Table VIII. Surface water sample locations are listed in CP Table V and shown in CP Attachment A, Sheet 9 of 10. If results of an affected property assessment determine surface water monitoring is no longer necessary, then within ninety (90) days, the permittee may apply for a modification or amendment to the Compliance Plan to terminate surface water monitoring for that unit. Until approval, the permittee shall continue surface water monitoring under the current Compliance Plan provisions.
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.
- d. Conduct surface water monitoring in accordance with Provision XI.F.3.c.(2)(b) to monitor the hazardous constituents listed in CP Table IVA for seasonal variation and trends in accordance with the schedule specified in CP Table VIII. Surface water sample locations are listed in CP Table V and shown in CP Attachment A, Sheet 8 of 10. If results of an affected property assessment determines that surface water monitoring is no longer necessary, then within ninety (90) days, the permittee may apply for a modification or amendment to the Compliance Plan to terminate surface water monitoring for that unit. Until approval, the permittee shall continue surface water monitoring under the 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. 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 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. in accordance with the following:

- a. At the POC (POE and APOE, if any) and between the POC (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.

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, and Point of Compliance, and other wells as necessary which have been approved by the Executive Director (e.g. POE, and APOE, 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 CP 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 CP 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 as specified in CP Table VIII. Thereafter, samples shall be collected on a frequency as specified in CP Table VIII. Data evaluations shall be completed within sixty (60) 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 sixty (60) 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.
 - (a) Each Background, POC, POE, and APOE well listed in CP Table V; and each AMP if applicable, CAO, and CAS well depicted in CP 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 XLD.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 as 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 XLD.6.
- (d) If the GWPS is achieved in all wells (Background, POC, POE, APOE, AMP, CAO and CAS), in accordance with Provision XLD.6.a., then the permittee may apply to modify or amend the Compliance Plan according to Provisions XLD.6.b., XLD.6.d., XLD.6.e., or XLD.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.

Surface Water Monitoring Program: For each sampling location specified in CP Table V and shown in CP Attachment A, Sheet 9 of 10, a surface water sample shall be collected and analyzed for pH, specific conductivity, temperature and for hazardous constituents listed in CP Table IIIA in accordance with the frequency specified in CP Table VIII. Stream flow measurements and surface water level measurements shall be recorded at the time of sampling. Results shall be reported in accordance with CP Table VII.

(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 on a frequency as specified in CP Table VIII 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.

Surface Water Monitoring Program; For each sampling location of CP Table V and shown in CP Attachment A, Sheet 8 of 10, a surface water sample shall be collected and analyzed for pH, specific conductivity, temperature and for the hazardous constituents listed in CP Table IVA in accordance with the frequency specified in CP Table VIII. Stream flow measurements and surface water level measurements shall be recorded at the time of sampling. Results shall be reported in accordance with CP Table VII.

- d. Field Determination Requirements - All Wells Specified in CP Table VII (Item 12).
- (1) Water level measurements relative to Mean Sea Level (MSL) 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 micropurging 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. 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.

4. Data Evaluation Procedures

Data evaluation in accordance with this provision shall be performed for all wells within sixty (60) 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 or surface water sample location shall be considered compliant with the concentration limit 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 or SWPS 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 or surface water sample location shall be considered compliant with the concentration limit 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 or SWPS 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 groundwater at 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).
 - 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 Sections 335.166 or 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, the permittee must, within ninety (90) days of the date of the Executive Director's notification unless otherwise directed, 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 or mitigate impacts to surface water and/or need for additional surface water sampling locations; 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(8)(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(9); 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 the 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 sixty (60) 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 human health and the 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 Groundwater Report required by CP Table VII, Item 26 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 human health and the 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 CP 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 CP Table VIII of 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 and one copy to the Corrective Action Section, Mail Code MC-127, Remediation Division, Texas Commission on Environmental Quality in Austin, Texas; and
- b. One copy to the Waste Program, Texas Commission on Environmental Quality Region 5 Office in Tyler, Texas.

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
High Explosive Detonation Ground (HEDG) [Notice of Registration (NOR) No. 004]		
	Two-way radio not working	Daily
	Entrance not secure during security inspection	Twice/8-hour shift daily
	Unexploded ordinance on the ground surface ¹	Quarterly
	Camera not operational or not providing complete field of view	Weekly
	Camera feed backup not operating properly	Weekly
	Gate in need of repair	Weekly
	Locks in need of repair	Weekly
	Office unlocked when unattended	Weekly
	Berm shows signs of erosion/other items that affect its integrity	Weekly
	Operating record incorrect/not current	Weekly
	Inspection log incorrect/not current	Weekly
	Demolition ground not managed/contoured to promote run-off	Monthly
	Fence perimeter/warning signs need repair	Monthly
HEDG Retention/Sedimentation Basin		
	Retention/sedimentation basin capacity check/release required ²	Weekly
	Retention/sedimentation basin structural features damage/overgrown vegetation	Weekly

¹ Exposed UXO will be addressed with the currently planned quarterly surface UXO removal actions.

² Releases may occur outside of the regular weekly inspections and will be scheduled based on levels observed during the weekly inspection.

Table III.D. - Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
High Explosive Burning Ground (HEBG) Pads 1 - 4 (NOR Nos. 066, 067, 068, 069), HEBG Hazardous Waste Container Storage Facility (HWCSF) (NOR No. 011), and XX-97 HWCSF (NOR No. 020)		
	Two-way radio not working	Daily
	Entrance not secure during security inspection	Twice/8-hour shift daily
	Camera not operational or not providing complete field of view	Weekly
	Cameral feed backup not operating properly	Weekly
	Gate in need of repair	Weekly
	Locks in need of repair	Weekly
	Inspection log incorrect/not current	Weekly
	Fence perimeter/warning signs need repair	Monthly
Benchmarks (Plant Wide)		
	Pad or paint in need of repair	As required by Compliance Plan
	Area around benchmark (grass/burrows) needs maintenance	As required by Compliance Plan
	Elevation of top of benchmark requires resurveying	As required by Compliance Plan
Groundwater Monitoring Wells (Plant Wide)		
	Pad, guard pipe, well casing, paint, or lock in need of repair	As required by Compliance Plan
	Area around well (grass/burrows) needs maintenance	As required by Compliance Plan

Table IV.B. – Wastes Managed in Permitted Units

No.	Waste	EPA Hazardous Waste Number	TCEQ Waste Form Codes and Classification Codes
2023	Acetone with Comp A5	D003, F003	2023219H
2024	Solvent, explosive contaminated	D001, D003, D005, D007, D008, F002, F003, F005	2024219H
2029	Soil contaminated with explosives	D003, D005, D007, D008, D010, D030	2029301H
2031	Ash from thermal treatment of waste explosives with HM ¹ HEBG Pad 2	D005, D006, D007, D008, D009, D010, F002, F003, F005	2031304H
2033	Ash from HEBG Pads 1, 3, and 4	Nonhazardous	20333041
2034	Ash from HEBG Pads 1, 3, and 4	Nonhazardous	20343042
2043	Explosive scrap with HM	D003, D005, D007, D008, D009, D030	2043315H
2044	Chem lab QA explosive waste with HM	D003, D005, D007, D008, D009, D030	2044315H
2045	Excess/reject ammunition with HM	D003, D005, D007, D008, D009, D030	2045315H
2046	Explosive contaminated solids with HM	D003, D005, D007, D008, D009, D030, F002, F003, F005	2046315H
2047	Ammunition test samples HM	D003, D005, D007, D008, D009, D030	2047315H
2048	Equipment/materials with HM for decontamination	D003, D005, D007, D008, D009, D030	2048315H
2050	Demilitarization of ammunition items with HM	D003, D005, D007, D008, D009, D030	2050315H
2058	Anthrafil, explosive contaminated	D003, K045	2058404H
2062	Ammunition test samples without HM	D003	2062405H
2063	Equipment material without HM for decontamination	D003, D030	2063405H
2064	Explosive contaminated solids without HM	D003, F002, F003, F005	2064405H
2065	Excess/reject ammunition without HM	D003	2065405H
2066	Chem lab QA explosive waste without HM	D003	2066405H

Table IV.C. - Sampling and Analytical Methods

Waste No.¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
2023	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2024	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2029	At point of generation or at storage location	Refer to the appropriate SW-846 method	Each drum/container is analyzed	Explosive Reactivity, Reactive Cyanide, Reactive Sulfide	Process knowledge and EPA Method 1030, Methods SW 9030, 9010	Refer to the appropriate SW-846 method
	At point of generation	Refer to the appropriate SW-846 method	When waste is generated	RDX, TNT	8330	Refer to the appropriate SW-846 method
	At point of generation	Refer to the appropriate SW-846 method	When waste is generated	TCLP for Barium, Chromium, and Lead	1311/7470 Series 6010/6020	Refer to the appropriate SW-846 method
2031	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Explosive Reactivity	Process knowledge and EPA Method 1030	Refer to the appropriate SW-846 method
2033	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	TCLP Metals	1311/7000 Series 6010A	Refer to the appropriate SW-846 method
	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Explosive Reactivity	Process knowledge and EPA Method 1030	Refer to the appropriate SW-846 method

Table IV.C. – Sampling and Analytical Methods

Waste No. ¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Reactive Cyanide, Reactive Sulfide	7.3.3.2 7.3.4.2	Refer to the appropriate SW-846 method
2034	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	TCLP Metals	1311/7000 Series 6010A	Refer to the appropriate SW-846 method
	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Explosive Reactivity	Process knowledge and EPA Method 1030	Refer to the appropriate SW-846 method
	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Reactive Cyanide, Reactive Sulfide	7.3.3.2 7.3.4.2	Refer to the appropriate SW-846 method
2043	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2044	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2045	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2046	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A

Table IV.C. - Sampling and Analytical Methods

Waste No.¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
2047	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2048	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2050	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2058	At point of generation or at storage location	Refer to the appropriate SW-846 method	At the request of the disposal facility	As specified by the disposal facility	Refer to the appropriate SW-846 method	Refer to the appropriate SW-846 method
2062	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2063	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2064	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A

Table IV.C. - Sampling and Analytical Methods

Waste No.¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
2065	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2066	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2067	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2068	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2071	N/A	N/A	N/A	No analysis necessary	N/A	N/A
2078	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2079	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A

Table IV.C. – Sampling and Analytical Methods

Waste No. ¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
2080	At point of generation or at storage location	Refer to the appropriate SW-846 method	At the request of the disposal facility	As specified by the disposal contractors	Refer to the appropriate SW-846 method	Refer to the appropriate SW-846 method
2081	N/A	N/A	N/A	No analysis due to safety concerns. Use process knowledge.	N/A	N/A
2135	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	TCLP Metals: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver	1311/7470 Series 6010/6020	Refer to the appropriate SW-846 method
	At storage location	Refer to the appropriate SW-846 method	Each drum is analyzed	Explosive reactivity, Reactive Cyanide, Reactive Sulfide	EPA Method 1030 Methods SW-846 9030, 9010	Refer to the appropriate SW-846 method

¹ From Table IV.B, first column

Table V.B. - Container Storage Areas

Permit Unit No.	Container Storage Area	NOR No.	Rated Capacity	Dimensions	Containment Volume <i>(including rainfall for unenclosed areas)</i>	Unit will manage Ignitable ¹ , Reactive ¹ , or Incompatible ² Waste <i>(state all that apply)</i>
007	HEBG HWCSE ³	011	640 drums 35,200 gallons	N/A	N/A	Reactive
010	XX-97 HWCSE ³	020	64 drums 3,520 gallons	90' x 40'	1,645 gallons	Reactive, Ignitable

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 The unit is no longer used and is undergoing closure.

Table V.K. - Miscellaneous Units

Permit Unit No.	Miscellaneous Unit	NOR No.	Storage, Processing, and/or Disposal	Waste Nos. ¹	Rated Capacity	Dimensions	Unit will manage Ignitable, Reactive or Incompatible Waste (state all that apply)
009	High Explosive Detonation Ground	004	Processing	2029, 2043, 2044, 2045, 2047, 2050, 2058, 2062, 2065, 2066, 2067, 2068, 2079, 2080, 2081	5,400 lb/day	1700' x 1900'	Reactive
013	High Explosive Burning Ground (HEBG) Pad 1	066	Processing	2045, 2046, 2048, 2050, 2062, 2063, 2064, 2065, 2067, 2071, 2078	14,500 lbs/day NEW ² (Net rated capacity for 066, 067, 068, 069)	290' x 200'	Reactive
014	HEBG Pad 2	067	Processing	2023, 2024, 2043, 2044, 2046, 2047, 2064, 2068, 2071, 2078	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	110' x 75'	Ignitable, Reactive
015	HEBG Pad 3	068	Processing	2045, 2046, 2048, 2050, 2062, 2063, 2065, 2066, 2067, 2071	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	875' x 160'	Reactive
016	HEBG Pad 4	069	Processing	2045, 2046, 2048, 2050, 2065, 2067, 2068, 2071	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	872' x 160'	Reactive

¹ From Table IV.B., first column

² Net Explosive Weight

**CP Table I: Waste Management Units and Areas Subject to Groundwater
 Corrective Action and Compliance Monitoring – Lone Star Army Ammunition Plant**

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
1. High Explosives Demolition Ground (HEDG) SWMU No. 18	004	Not Complete

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
1. High Explosives Burning Ground (HEBG) SWMU No. 16	001	Not Complete

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
1. Reserved		

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
1. Reserved		

Foot Notes:

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 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 NFA has been approved through modification or amendment to the Permit. Put "N/A" if a specific program or column item is not applicable.

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

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
1. Reserved		

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
1. Reserved		

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
1. <u>Western Inactive Sanitary Landfill</u> (WISL) Unit No. 002 ³	032	
2. <u>XX Test Area AOC</u> (consisting of XX Test SWMU No. 55, Pistol Range and XX Test Area Perimeter MRS/AOC)	046	Groundwater monitoring Termination approved per TCEQ 1/28/20 letter.

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
1. Reserved		

Foot Notes:

- 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 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

CP Table I: Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring – TexAmericas Center*

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 NFA has been approved through modification or amendment to the Permit. Put "N/A" if a specific program or column item is not applicable.

¹ Monitored natural attenuation (MNA) is the final measure for groundwater at Western Inactive Sanitary Landfill (SWMU 002, NOR 032) located on TAC Parcels. This measure was selected as part of the Response Action Plan (RAP) approved by TCEQ January 2003. As part of the RAP, a MNA Demonstration Report was prepared and submitted September 2003 and approved October 2003.

*The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – Lone Star Army Ammunition Plant

A. Remedy/Closure Required

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
1. High Explosives Burning Ground (HEBG) consisting of:			
HEBG SWMU 16 ^(A)	001	1, 2, 4	
XX3 (7) HRPRX - AOC ^(A)		1, 2, 4	
IWCSA HEBG - SWMU/HWMU	011	1, 2, 4	
HEBG - XX-97 - SWMU/HWMU	020	1, 2, 4	
HEBG Pad #1 - SWMU/HWMU	066	1, 2, 4	
HEBG Pad #2- SWMU/HWMU	067	1, 2, 4	
HEBG Pad #3 - SWMU/HWMU	068	1, 2, 4	
HEBG Pad #4- SWMU/HWMU	069	1, 2, 4	
2. High Explosives Demolition Ground (HEDG) consisting of:		1, 2, 4	
SWMU/HWMU 18 ^(B)	004	1, 2, 4	
XX1 (7) IIRX; HEDG Perimeter - AOC ^(B)		1, 2, 4	
3. Old Boston Landfill (Eastern Inactive Landfill (SWMU 3)	014		

B. Remedy/Closure Completed

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
1. Old Demolition Area (ODA) - SWMU 17	054	1,3	Remedy Implemented. This unit was transferred to Superfund Program for EPA and State oversight. Land Use Controls and future maintenance and monitoring are applied per Record of Decision (ROD).

Footnotes: MEC: Munitions and explosives of concern; SWMU: Solid Waste Management Unit; AOC: Area of Concern; HWMU: Hazardous Waste Management Unit.

(A) The AOC/ Munitions Response Site (MRS) for the HEBG is defined as the area within the fence and is approximately 78 acres. The maximum fragmentation distance (MFD) - High (MFD-H) is 911 feet (based on the 37mm, M54). The MFD-II does not define the AOC but is a safety arc distance for when an item might detonate during operations (sifting or excavation). This distance is presented for illustrative purpose only. The MRS/AOC is divided into two MRS sub-areas: a 57-acre area on the east side of the unit corresponding to the developed area at the unit, and the undeveloped area on the west side of the unit containing the remaining 21 acres. The limits of the AOC/MRS and the MFD-H are

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. - Lone Star Army Ammunition Plant

presented on CP Attachment A, Sheet 4 of 10. XX3 (7) IIRPRX AOC is also located within the HEBG AOC/MRS.

(B) For the IIEDG, the MRS is defined as an area extending 2,000 feet beyond the IIEDG berm. This distance is not based on an MFD but instead is based on the information in the RCRA Facility Assessment that indicated munitions debris was found out to 1,500 feet beyond the berm. An additional 500 feet is added to that distance to be conservative. The limits of the AOC/MRS are presented on CP Attachment A, Sheet 5 of 10.

1. Specify the date of Commissions No Further Action approval letter for program requirement and remedy standard completed for all media of concern.
2. NOR: Notice of Registration Number, if applicable.
3. Land Use Control Definitions required:
 - 1 - Groundwater use restriction - define this as a ban on the extraction on any water underlying the aquifer for any purposes, this has been and will continue to be applied site wide.
 - 2 - Restriction on digging - define this as a requirement that all intrusive activity that involves penetrating the soil surface or otherwise disturbing the soil to a depth in excess of 3 inches follow strict work procedures and training.
 - 3 - Continued performance of post-closure care requirements - activities are defined by whatever is currently identified in the document establishing the requirement and will apply to whatever boundaries are similarly identified in that document.
 - 4 - Maintain existing perimeter fencing and locks - this should be defined as repair of any breaches in the barriers and subsequent maintenance of those barriers including the use of locks with access to keys controlled to ensure unauthorized personal cannot obtain and use them. Should perimeter fencing be abandoned, similar requirement will apply to the individual sites until or unless they are demonstrated lean or corrective action taken.
 - 5 - Implement and maintain access control - this will consist of construction of whatever barriers and procedures are mutually accepted by State, the Army, and the landowner.
 - 6 - Close and lock doors - This refers to all buildings that contain chemical hazards. All doors will be locked and access to keys will be managed in the same manner as the keys for existing site barriers in Item No. 4 of the preceding.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – TexAmericas Center*

A. Remedy/Closure Required

Unit Name	NOR No. ²	Land Use Control for unit or area ³	Date Program Requirement and Remedy Standard Completed ¹
1. XX-Test Area AOC consisting of the following SWMUs/AOCs:		1, 2, 4	Draft Final APAR and MEC Removal Report dated 09/25/2017. TCEQ 10/9/2018 Comments need to be addressed. Closure Remedy Standard B, C/I considered. Proof of filing Deed Notice required. Monitoring terminated per approval TCEQ.
XX-Test SWMU 55 and Pistol Range ^(A)	046		
XX-Test Area perimeter MEC MRS/AOC ^(B)			
2. Western Inactive Sanitary Landfill (WISL) SWMU 2	032	1, 2 Landfill foot print	Closure Remedy Standard B, C/I considered. Continued GW monitoring, and cap inspection and any necessary maintenance required by RAP approved by TCEQ January 2003.
3. Salvage Yard F-33 AOC consisting of the following SWMUs/AOCs:		1	Draft Final APAR and MEC Removal Report dated 10/26/2017. TCEQ 11/29/2018 Comments need to be addressed. Closure Remedy Standard B, C/I considered. MEC clearance to 1 foot, and MEC/MD still present below 1 foot at F1. Proof of filing Deed Notice is required.
F-33 – SWMU 31 (F1 Salvage Yard and F2 Former Incinerator Area)	024		
Western Buffer Area (Adjacent to F1 Salvage Yard) AOC			

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

B. Remedy/Closure Completed

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
1. 1313 CC Landfill (SWMU 1)		1, 2 Landfill foot print	Completion of Post-Closure Care Period and Permit Revocation, 03-05-2008. Part of Red River Army Depot (PRAD).
2. Paint Filter Disposal Area (SWMU 5)	033		RFI report NFA approved 11-29-2001
3. Rubber and Glass Landfill (SWMU 6)	052		Part of PRAD's 1313 CC Landfill (SWMU 1).
4. Abandoned Landfill 1 (SWMU 7)			No further RFI; NFA approved 08-12-1992
5. Abandoned Landfill 2 (SWMU 8)	034		NFA approved 04-12-1992
6. Abandoned Construction Landfill 1 (SWMU 9)	035	1, 3	NFA approved 04-25-2003, RRS 2.
7. Construction Debris Disposal Sites 1 & 2 (SWMUs 10 & 11)			NFI approved by TWC 08-12-1992.
8. Abandoned Construction Landfill 2 south of Area V (SWMU 14)	035	1, 3 (per TCEQ April 2006 letter)	In IUC Table, under 01-07-2010 Meeting Notes (Ramsauer): Site could not be located on site tour. Research 1992 RFI Work Plan. Administrative Closure approved upon issuance of this Permit Renewal application.
9. Road Oil Burial Site (SWMU 15)	036		NFA approved 06-27-2002, RRS 2.
10. Chemical Burial Site 1 & 2 (SWMUs 19 & 20)			NFI approved by TWC 08-12-1992.
11. A-8 HWCSF - SWMU 28	005		Closed in accordance with Permit. Closure Certification Accepted by TCEQ 07-03-2012.
12. Loadline B/Area B AOC consisting of the following SWMUs/AOCs:		1	Conditional Approval of APAR Remedy Standard A, C/I on 03-25-2015 for Loadline B/Area B. Conditional Approval of interim actions for ACM removal on 05/12/2016. Conditional Approval of interim removal of MD from AOCs 1 and 2 on 05/25/2018. Public Notice approved NFA 01-28-2020.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
Area B (B [7] HRPR) which includes the two AOCs 1 and 2 where munitions debris (MD) were identified and removed.			Public Notice approved NFA 01-28-2020
Area B Pink Water Ponds (SWMU 56)			Public Notice approved NFA 01-28-2020 approved NFA 01-28-2020
B-2 Vacuum Wet Wash (SWMU 94)			Public Notice approved NFA 01-28-2020
B-2 Vacuum Wet Wash (SWMU 95)			Public Notice approved NFA 01-28-2020
B-2 Vacuum Wet Wash (SWMU 96)			Public Notice approved NFA 01-28-2020
B-2 Vacuum Wet Wash (SWMU 97)			Public Notice approved NFA 01-28-2020
B-35 Vacuum Wet Wash (SWMU 98)			Public Notice approved NFA 01-28-2020
B-44 Vacuum Wet Wash (SWMU 99)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 100)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 101)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 102)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 103)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 104)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 105)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 106)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 107)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 108)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 109)			Public Notice approved NFA 01-28-2020

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ⁴
B-46 Vacuum Wet Wash (SWMU 110)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 111)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 112)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 113)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 114)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 115)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 116)			Public Notice approved NFA 01-28-2020
B-46 Vacuum Wet Wash (SWMU 117)			Public Notice approved NFA 01-28-2020
B-6 Vacuum Wet Wash (SWMU 118)			Public Notice approved NFA 01-28-2020
B-69 Settling Tank (SWMU 249)	026		Public Notice approved NFA 01-28-2020
B-70 Collection Sump (SWMU 250)	026		Public Notice approved NFA 01-28-2020
B-71 Settling Tank (SWMU 251)	026		Public Notice approved NFA 01-28-2020
B-106 Filter Sump (SWMU 294)	026		Public Notice approved NFA 01-28-2020
B-106 Filter Sump (SWMU 295)	026		Public Notice approved NFA 01-28-2020
B-107 Filter Sump (SWMU 296)	008		Public Notice approved NFA 01-28-2020
B-107 Filter Sump (SWMU 297)	008		Public Notice approved NFA 01-28-2020
B-111 Filter Sump (SWMU 298)	026		Public Notice approved NFA 01-28-2020
B-111 Filter Sump (SWMU 299)	026		Public Notice approved NFA 01-28-2020
B-112 Filter Sump (SWMU 300)	026		Public Notice approved NFA 01-28-2020
B-112 Filter Sump (SWMU 301)	026		Public Notice approved NFA 01-28-2020

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
B-113 Filter Sump (SWMU 302)	026		Public Notice approved NFA 01-28-2020
B-113 Filter Sump (SWMU 303)	026		Public Notice approved NFA 01-28-2020
B-40 Settling Tank (SWMU 322)	007		Public Notice approved NFA 01-28-2020
B-40 Settling Tank (SWMU 323)	007		Public Notice approved NFA 01-28-2020
B-42 Settling Tank (SWMU 324)	026		Public Notice approved NFA 01-28-2020
B-43 Settling Tank (SWMU 325)	008		Public Notice approved NFA 01-28-2020
B-46 Settling Tank (SWMU 411)	026		Public Notice approved NFA 01-28-2020
B-105 Filter Sump (SWMU 426)	007		Public Notice approved NFA 01-28-2020
B-105 Filter Sump (SWMU 427)	007		Public Notice approved NFA 01-28-2020
B-109 Collection Sump (SWMU 428)	007		Public Notice approved NFA 01-28-2020
B-117 Oil Collection Tank (SWMU 461)	027		Public Notice approved NFA 01-28-2020
B-63 Oil Collection Tank (SWMU 462)	027		Public Notice approved NFA 01-28-2020
Area B, Boiler Dump (SWMU 491)			Public Notice approved NFA 01-28-2020
Area B, Boiler Dump (SWMU 492)			Public Notice approved NFA 01-28-2020
13. Black Powder Dump to Stream (SWMU 36)			NFA, RFA Report Rev 3 approved 12-08-2008
14. Cistern VII (SWMU 45)	040		Public Notice approved NFA 09-26-2000
15. Cistern V (SWMU 52)			NFA approved 09-29-2000
16. Cistern VIII (SWMU 54)	045		Public Notice approved NFA 09-26-2000
17. RDX Pit B-46 - SWMU 67			NFI by TWC approved 08-12-1992
18. G-23 Filter Sump - SWMU 252	007		NFA approved 08-08-2005

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
19. G-23 Settling Tank - SWMU 253	007		NFA approved 08-08-2005
20. G-83 Filter/Settling - SWMU 254	007		NFA approved 08-08-2005
21. G-83 Filter/Settling - SWMU 255	007		NFA approved 08-08-2005
22. F-69 Recirculation Tanks - SWMU 264	007		NFA approved 08-08-2005
23. F-126 Settling Tank - SWMU 277	007		NFA approved 08-08-2005
24. E-142 Settling Tank - SWMU 278	007		NFA approved 08-08-2005
25. E-143 Settling Tank - SWMU 279	007		NFA approved 08-08-2005
26. E-146 Settling Tank - SWMU 280	007		NFA approved 08-08-2005
27. E-150 Holding Tank - SWMU 281	007		NFA approved 08-08-2005
28. E-153 Settling Tank - SWMU 282	007		NFA approved 08-08-2005
29. E-154 Settling Tank - SWMU 283	007		NFA approved 08-08-2005
30. E-155 Settling Tank - SWMU 284	007		NFA approved 08-08-2005
31. E-162 Settling Tank - SWMU 285	007		NFA approved 08-08-2005
32. E-165 Settling Tank - SWMU 286	007		NFA approved 08-08-2005
33. E-78 Settling Tank - SWMU 287	007		NFA approved 08-08-2005
34. E-79 Settling Tank - SWMU 288	007		NFA approved 08-08-2005
35. E-79 Filter Sump - SWMU 289	007		NFA approved 08-08-2005
36. E-79 Filter Sump - SWMU 290	007		NFA approved 08-08-2005
37. E-120 Collection Tank - SWMU 329	007		NFA approved 08-08-2005
38. E-123 Collection Tank - SWMU 330	007		NFA approved 08-08-2005

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
39. E-133 Collection Tank - SWMU 331	007		NFA approved 08-08-2005
40. E-150 Transfer Tank - SWMU 332	007		NFA approved 08-08-2005
41. E-161 Collection Tank - SWMU 333	007		NFA approved 08-08-2005
42. E-166 Collection Tank - SWMU 334	007		NFA approved 08-08-2005
43. E-167 Collection Tank - SWMU 335	007		NFA approved 08-08-2005
44. E-150 Leaf Filter - SWMU 346	007		NFA approved 08-08-2005
45. E-150 Leaf Filter - SWMU 347	007		NFA approved 08-08-2005
46. E-150 Rotary Filter - SWMU 348	007		NFA approved 08-08-2005
47. E-150 Leaf Filter - SWMU 349	007		NFA approved 08-08-2005
48. E-150 Leaf Filter - SWMU 350	007		NFA approved 08-08-2005
49. E-150 Leaf Filter - SWMU 351	007		NFA approved 08-08-2005
50. E-150 Leaf Filter - SWMU 352	007		NFA approved 08-08-2005
51. E-150 Leaf Filter - SWMU 353	007		NFA approved 08-08-2005
52. E-150 Carbon Column - SWMU 366	007		NFA approved 08-08-2005
53. E-150 Carbon Column - SWMU 367	007		NFA approved 08-08-2005
54. E-150 Carbon Column - SWMU 368	007		NFA approved 08-08-2005
55. E-150 Carbon Column - SWMU 369	007		NFA approved 08-08-2005
56. E-150 Carbon Column - SWMU 370	007		NFA approved 08-08-2005
57. E-150 Carbon Column - SWMU 371	007		NFA approved 08-08-2005
58. E-150 Carbon Column - SWMU 372	007		NFA approved 08-08-2005

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ⁴
59. F-150 Carbon Column - SWMU 373	007		NFA approved 08-08-2005
60. E-120 Floor Sump - SWMU 381	007		NFA approved 08-08-2005
61. E-123 Floor Sump - SWMU 382	007		NFA approved 08-08-2005
62. F-125 Floor Sump - SWMU 383	007		NFA approved 08-08-2005
63. F-125 Floor Sump - SWMU 384	007		NFA approved 08-08-2005
64. E-129 Floor Sump - SWMU 385	007		NFA approved 08-08-2005
65. E-130 Floor Sump - SWMU 386	007		NFA approved 08-08-2005
66. E-131 Floor Sump - SWMU 387	007		NFA approved 08-08-2005
67. E-133 Floor Sump - SWMU 388	007		NFA approved 08-08-2005
68. E-134 Floor Sump - SWMU 389	007		NFA approved 08-08-2005
69. E-161 Floor Sump - SWMU 390	007		NFA approved 08-08-2005
70. E-166 Floor Sump - SWMU 391	007		NFA approved 08-08-2005
71. E-167 Floor Sump - SWMU 392	007		NFA approved 08-08-2005
72. E-4 Floor Sump - SWMU 393	007		NFA approved 08-08-2005
73. E-4 Floor Sump - SWMU 395	007		NFA approved 08-08-2005
74. E-4 Floor Sump - SWMU 396	007		NFA approved 08-08-2005
75. Area A Bldg. A-8 (SWMU 28)	005	1	Closure Certification Report approved, Remedy Standard A 07-13-2012.
76. B-5 Washrack Sump - SWMU 429	007		NFA approved 08-05-2005
77. B-67 Settling Tank - SWMU 430	007		APAR approved with NFA, Remedy Standard A 06-03-2002

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
78. B-68 Filter Tank - SWMU 431	007		APAR approved with NFA, Remedy Standard A 06-03-2002
79. B-79 Washrack Sump - SWMU 432	007		NFA approved 08-05-2005
80. B-80 Washrack Sump - SWMU 433	007		NFA approved 08-05-2005
81. B-91 Washrack Sump - SWMU 434	007		NFA approved 08-05-2005
82. B-91 Washrack Sump - SWMU 435	007		NFA approved 08-05-2005
83. E-66 Settling Tank - SWMU 436	007		RACR approved with NFA, Remedy Standard A 08-15-2006
84. E-68 Settling Tank - SWMU 437	007		APAR approved with NFA, Remedy Standard A 06-03-2002
85. E-68 Settling Tank - SWMU 438	007		APAR approved with NFA, Remedy Standard A 06-03-2002
86. E-68 Filter Sump - SWMU 439	007		APAR approved with NFA, Remedy Standard A 06-03-2002
87. E-68 Filter Sump - SWMU 440	007		APAR approved with NFA, Remedy Standard A 06-03-2002
88. E-68 Filter Sump - SWMU 441	007		APAR approved with NFA, Remedy Standard A 06-03-2002
89. E-68 Filter Sump - SWMU 442	007		APAR approved with NFA, Remedy Standard A 06-03-2002
90. E-68 Settling Tank - SWMU 443	007		APAR approved with NFA, Remedy Standard A 06-03-2002
91. E-76 Settling Tank - SWMU 444	007		APAR approved with NFA, Remedy Standard A 06-03-2002
92. E-76 Settling Tank - SWMU 445	007		APAR approved with NFA, Remedy Standard A 06-03-2002
93. E-77 Settling Tank - SWMU 446	007		RACR approved with NFA, Remedy Standard A 08-15-2006
94. E-77 Settling Tank - SWMU 447	007		RACR approved with NFA, Remedy Standard A 08-15-2006
95. E-97 Filter Tank - SWMU 448	007		APAR approved with NFA, Remedy Standard A 06-03-2002
96. E-98 Settling Tank - SWMU 449	007		APAR approved with NFA, Remedy Standard A 06-03-2002
97. G-96 Filter/Settling - SWMU 453	007		NFA approved 08-05-2005

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
98. G-96 Filter/Settling-SWMU 454	007		NFA approved 08-05-2005
99. G-33 Chemical Sludge Pit- SWMU 478	053		NFA approved 02-18-2010 meeting
100. Tanker Truck - SWMU 479			NFA approved 02-18-2010 meeting
101. Waste Oil Tanker Truck - SWMU 490			NFA approved 02-18-2010 meeting
102. Area A (A 7 HR)		1	Public Notice approval NFA Remedy Standard A C/I. 07-16-2018.
103. Sanitary Sewer System (SWMU 498)			NFI approved by TWC on 08-12-1992
104. C-19 Vacuum Wet Wash (SWMU 119)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
105. C-2 Vacuum Wet Wash (SWMU 120)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
106. C-23 Vacuum Wet Wash (SWMU 121)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
107. C-33 Vacuum Wet Wash (SWMU 122)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
108. C-49 Vacuum Wet Wash (SWMU 123)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
109. C-58 Vacuum Wet Wash (SWMU 124)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
110. C-58 Vacuum Wet Wash (SWMU 125)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
111. C-60 Vacuum Wet Wash (SWMU 126)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
112. C-61 Vacuum Wet Wash (SWMU 127)		1	NFA, Conditional APAR Approval Remedy Standard A 04-30-2015
113. F-74 Filter Sump (SWMU 291)	007	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
114. F-74 Settling Tank (SWMU 292)	007	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
115. F-74 Settling Tank (SWMU 293)	007	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
116. F-23 Settling Tank (SWMU 315)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
117. F-23 Settling Tank (SWMU 316)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
118.F-23 Settling Tank (SWMU 317)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
119.F-58 Settling Sump (SWMU 318)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
120.F-59 Settling Sump (SWMU 319)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
121.F-62 Settling Sump (SWMU 320)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
122.F-65 Settling Sump (SWMU 321)	026	1	NFA, Conditional APAR Approval Remedy Standard A 04-07-2015
123.Area B Soils, B-8 Battery Wash down Sump (SWMU 422)	049		RFI Report, NFA approved 12-30-2002, RRS 2
124.Area C Pink Water Ponds (SWMU 57)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
125.C-45 Settling Tank (SWMU 265)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
126.C-45 Filter Tank (SWMU 266)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
127.C-5 Wash down Sump (SWMU 267)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
128.C-51 Wash down Sump (SWMU 268)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
129.C-53 Wash down Sump (SWMU 269)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
130.C-53 Wash down Sump (SWMU 270)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
131.C-54 Settling Tank (SWMU 271)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
132.C-56 Recirculation Tank (SWMU 272)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
133.C-62 Filter Tank (SWMU 273)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
134.C-63 Filter Tank (SWMU 274)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
135.C-64 Settling Tank (SWMU 275)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
136.C-80 Transfer Sump (SWMU 276)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
137.C-4 Washout Tank (SWMU 327)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
138.C-4 Washout Tank (SWMU 328)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
139.C-80 Leaf Filter (SWMU 342)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
140.C-80 Treated Water Storage Tank (SWMU 343)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
141.C-80 Leaf Filter (SWMU 344)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
142.C-80 Carbon Column (SWMU 364)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
143.C-80 Carbon Column (SWMU 365)	008	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
144.C-79 Oil Collection Tank (SWMU 475)	027	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
145.Area C (C [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
146.Area C (HRPRX)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
147.Area D Pink Water Ponds (SWMU 58)		1	NFA approved 01-22-2014, Remedy Standard A
148.Area D (D [7] HRPRX)		1	NFA approved 01-22-2014, Remedy Standard A
149.Area E Pink Water Ponds (SWMU 59)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
150.E-0 Vacuum Wet Wash (SWMU 128)			Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
151.E-153 Vacuum Wet Wash (SWMU 129)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
152.E-153 Vacuum Wet Wash (SWMU 130)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
153.E-153 Vacuum Wet Wash (SWMU 131)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
154.E-155 Vacuum Wet Wash (SWMU 132)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
155.E-154 Vacuum Wet Wash (SWMU 133)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
156.E-154 Vacuum Wet Wash (SWMU 134)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
157.E-155 Vacuum Wet Wash (SWMU 135)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
158.E-155 Vacuum Wet Wash (SWMU 136)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
159.E-155 Vacuum Wet Wash (SWMU 137)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
160.E-22 Vacuum Wet Wash (SWMU 138)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
161.E-24 Vacuum Wet Wash (SWMU 139)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
162.E-30 Vacuum Wet Wash (SWMU 140)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
163.F-33 Vacuum Wet Wash (SWMU 141)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
164.E-33 Vacuum Wet Wash (SWMU 142)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
165.E-33 Vacuum Wet Wash (SWMU 143)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
166.E-63 Vacuum Wet Wash (SWMU 144)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
167.E-64 Vacuum Wet Wash (SWMU 145)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
168.E-65 Vacuum Wet Wash (SWMU 146)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
169.F-73 Vacuum Wet Wash (SWMU 147)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
170.E-74 Vacuum Wet Wash (SWMU 148)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
171.E-75 Vacuum Wet Wash (SWMU 149)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
172.E-84 Vacuum Wet Wash (SWMU 150)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
173.E-85 Vacuum Wet Wash (SWMU 151)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
174.E-87 Vacuum Wet Wash (SWMU 152)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
175.E-88 Vacuum Wet Wash (SWMU 153)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
176.E-94 Vacuum Wet Wash (SWMU 154)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
177.E-95 Vacuum Wet Wash (SWMU 155)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
178.E-138 Silver Recovery Tank (SWMU 420)	057	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
179.E-128 Oil Collection Tank (SWMU 476)	027	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
180.Area E (E [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
181.Area F, Area behind Buildings F-7 (SWMU 505)			NFA approved 05-14-2004, Remedy Standard A
182.Area F, Area behind Buildings F-11 (SWMU 506)			NFA approved 05-14-2004, Remedy Standard A

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ⁴
183.Area F, Area behind Buildings F-13 (SWMU 507)			NFA approved 05-14-2004, Remedy Standard A
184.Area F, F-92 (SWMU 30)	012		NFA approved 05-02-2000, RRS 1
185.Area F Pink Water Ponds (SWMU 60)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
186.F-23 Vacuum Wet Wash (SWMU 156)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
187.F-23 Vacuum Wet Wash (SWMU 157)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
188.F-40 Vacuum Wet Wash (SWMU 158)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
189.F-7 Vacuum Wet Wash (SWMU 159)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
190.F-7 Vacuum Wet Wash (SWMU 160)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
191.F-7 Vacuum Wet Wash (SWMU 161)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
192.F-7 Vacuum Wet Wash (SWMU 162)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
193.F-70 Vacuum Wet Wash (SWMU 163)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
194.F-78 Vacuum Wet Wash (SWMU 164)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
195.F-79 Vacuum Wet Wash (SWMU 165)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
196.F-11 Settling Tank (SWMU 336)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
197.F-17 Settling Tank (SWMU 337)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
198.F-17 Settling Tank (SWMU 338)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
199.F-18 Settling Tank (SWMU 339)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
200.F-18 Settling Tank (SWMU 340)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
201.F-5 Settling Tank (SWMU 341)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
202.F-93 Leaf Filter (SWMU 354)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
203.F-93 Treated Water Storage Tank (SWMU 355)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
204.F-93 Carbon Column (SWMU 374)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
205.F-18 Settling Tank (SWMU 412)	026	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
206.F-90 Oil Collection Tank (SWMU 463)	027	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
207.G-137 Oil Collection Tank (SWMU 464)	027	1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
208.Area F Boiler Sump (SWMU 493)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
209.Area F Boiler Sump (SWMU 494)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
210.Area F Boiler Sump (SWMU 495)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
211.Area F (F [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
212.Area F (F1 [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
213.Area F (F2 [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
214.Area G-Pink Water Ponds (SWMU 61)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
215.G-15 Vacuum Wet Wash (SWMU 166)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
216.G-15 Vacuum Wet Wash (SWMU 167)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
217.G-15 Vacuum Wet Wash (SWMU 168)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
218.G-15 Vacuum Wet Wash (SWMU 169)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
219.G-18 Vacuum Wet Wash (SWMU 170)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
220.G-19 Vacuum Wet Wash (SWMU 171)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
221.G-19 Vacuum Wet Wash (SWMU 172)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
222.G-59 Vacuum Wet Wash (SWMU 173)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
223.G-7 Vacuum Wet Wash (SWMU 174)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
224.G-7 Vacuum Wet Wash (SWMU 175)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
225.G-82 Vacuum Wet Wash (SWMU 176)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
226.G-82 Vacuum Wet Wash (SWMU 177)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
227.G-88 Vacuum Wet Wash (SWMU 178)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
228.G-89 Vacuum Wet Wash (SWMU 179)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
229.G-90 Vacuum Wet Wash (SWMU 180)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
230.G-91 Filter Sump (SWMU 256)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
231.G-91 Filter Sump (SWMU 257)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
232.G-91 Filter Sump (SWMU 258)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
233.G-91 Filter Sump (SWMU 259)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
234.G-93 Settling Tank (SWMU 260)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
235.G-95 Filter Tank (SWMU 261)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
236.G-141 Treated Water Storage Tank (SWMU 356)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
237.G-141 Leaf Filter (SWMU 357)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ⁴
238.G-141 Leaf Filter (SWMU 358)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
239.G-141 Carbon Column (SWMU 375)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
240.G-141 Carbon Column (SWMU 376)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
241.G-18 Floor Sump (SWMU 394)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
242.G-130 Elec. Chem. Precipitation (SWMU 397)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
243.G-130 Transfer Tank (SWMU 398)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
244.G-130 Transfer Tank (SWMU 399)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
245.G-130 Carbon Column (SWMU 400)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
246.G-130 Transfer Tank (SWMU 401)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
247.G-130 Transfer Tank (SWMU 402)	025		Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
248.G-130 Floor Sump (SWMU 403)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
249.G-130 Transfer Tank (SWMU 404)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
250.G-130 Treated Water Storage Tank (SWMU 405)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
251.G-130 Transfer Tank (SWMU 406)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
252.G-11 Settling Tank (SWMU 407)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
253.G-13 Settling Tank (SWMU 408)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
254.G-33 Settling Tank (SWMU 409)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
255.G-5 Settling Tank (SWMU 410)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
256.G-5 Settling Tank (SWMU 413)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
257.G-33 Settling Tank (SWMU 414)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
258.G-33 Settling Tank (SWMU 415)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
259.G-75 Settling Tank (SWMU 416)	026	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
260.G-11 Filter Sump (SWMU 417)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
261.G-33 Filter Sump (SWMU 418)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
262.G-130 Ultrafiltration Pretreatment Unit (SWMU 425)	025	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
263.G-132 Neutralization Tank (SWMU 450)	010	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
264.G-70 Settling Tank (SWMU 451)	010	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
265.G-71 Settling Tank (SWMU 452)	010	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
266.G-62 Oil Collection Tank (SWMU 477)	027	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
267.G-114 Grease Trap (SWMU 487)	027	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
268.G-114 Oil Water Separator (SWMU 488)	027	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
269.G-143 Sedimentation Trap (SWMU 489)	027	1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
270.G Area Bulk Fuel Storage (SWMU 513)	038		TCEQ NFA 07-31-2006
271.Area G (G [7] HRPR)		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
272.Area G Inert Storage and Maintenance		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
273.G-29 Spill Location (SWMU 501)			RFA report NFA approved 10-24-2001

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XLH. - TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
274.Area II (7) HR; I-9 Hospital		1	NFA approved 01-22-2014, Remedy Standard A
275.Area I4 (7) PR		1	NFA approved 01-22-2014, Remedy Standard A
276.Area U (magazines)		1	NFA approved 08-21-2014, Remedy Standard A
277.Area V (V igloos)		1	NFA approved 08-21-2014, Remedy Standard A
278.Area V (7) HR		1	NFA approved 08-21-2014, Remedy Standard A
279.Area V (V1 [7] HRX)		1	NFA approved 08-21-2014, Remedy Standard A
280.Area W Soils (SWMU 506)			NFA approved 07-27-2002, RRS 2
281.Abandoned Landfill Near Area W (SWMU 509)			NFA approved 07-11-2007 Remedy B C/I. Deed Recordation accepted 08-12-2008
282.ROB-1 (SWMU 508)	036		NFA approved 06-08-2005
283.Railroad Classification (SWMU 512)			NFA approved 08-12-1992
284.2 (7) HRPR Old Boston Road		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
285.3 (7) HR Abandoned Pistol Range		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018
286.5 (7) IIRPRX Main Pit Road		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
287.18 (7) HRPR Looped Access Road		1	Public Notice approval NFA, Remedy Standard A C/I 02-28-2017
288.19 (7) HRPR Chemical Burial Site		1	Public Notice approval NFA, Remedy Standard A C/I 07-16-2018.
289.OB/Demolition Debris Fill Area	051	1	Part of PRAD's 1313 CC Landfill (SWMU 1).
290.TPDES Out Fall No. 2 (SWMU 517)	025	1	Administrative Closure approval upon issuance of this Permit Renewal application.
291.TPDES Out Fall No. 4 (SWMU 518)		1	Administrative Closure approval upon issuance of this Permit Renewal application.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

Unit Name	NOR No. ²	Land Use Control ³	Date Program Requirement and Remedy Standard Completed ¹
292.TPDES Out Fall No. 6 (SWMU 519)		1	Administrative Closure approval upon issuance of this Permit Renewal application.
293.Area BB Sump (SWMU 423)	061	1	NFA approved 02-04-2011, Remedy Standard A
294.Area BB (BB[7] HRPR)		1	NFA approved 06-02-2014, Remedy Standard A
295.Area BB15 (SWMU 514)	064		NFA approved 09-24-2007 Remedy Standard A; Follow-up TCEQ letter approved NFA for residential, Remedy A on 08-12-2008.

Foot Notes: MEC: Munitions explosives of concern; HH: Human Health; ESCA: Environmental Services Cooperative Agreement; APAR: Affected Property Assessment Report; TRRP: Texas Risk Reduction Program; RFI: RCRA Facility Investigation; RACR: Response Action Completion Report; RAP: Response Action Plan, C/I: Commercial/Industrial; GW: Groundwater.

(A) For the XX Test AOC, the munitions response site (MRS) is defined as corresponding to the fenced perimeter of the area, with the exception of the 100-foot extension of the western fence line to include the Wester Fence Line AOC. The limits of the AOC/MRS are presented in CP Attachment A Sheet 6 of 10.

1. Specify the date of Commissions No Further Action (NFA) approval letter for program requirement and remedy standard completed for all media of concern.
2. NOR: Notice of Registration Number, if applicable.
3. Land Use Control Definitions required:
 - 1 - Groundwater use restriction - define this as a ban on the extraction on any water underlying the aquifer for any purposes, this has been and will continue to be applied site wide.
 - 2 - Restriction on digging - define this as a requirement that all intrusive activity that involves penetrating the soil surface or otherwise disturbing the soil to a depth in excess of 5 inches follow strict work procedures and training.
 - 3 - Continued performance of post-closure care requirements - activities are defined by whatever is currently identified in the document establishing the requirement and will apply to whatever boundaries are similarly identified in that document.
 - 4 - Maintain existing perimeter fencing and locks - this should be defined as repair of any breaches in the barriers and subsequent maintenance of those barriers including the use of locks with access to keys controlled to ensure unauthorized personal cannot obtain and use them. Should perimeter fencing be abandoned, similar requirement will apply to the individual sites until or unless they are demonstrated lean or corrective action taken.
 - 5 - Implement and maintain access control - this will consist of construction of whatever barriers and procedures are mutually accepted by State, the Army, and the landowner.

CP Table II: Solid Waste Management Units and/or Areas of Concern Addressed in Section XI.H. – TexAmericas Center*

- 6 - Close and lock doors - This refers to all buildings that contain chemical hazards. All doors will be locked and access to keys will be managed in the same manner as the keys for existing site barriers in Item no. 4 of the preceding.

*The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard - Lone Star Army Ammunition Plant

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standard (mg/l)
1. High Explosives Demolition Ground	Perchlorate	0.051 ^{GW} GW _{ing}
	Chloroform	0.73 ^{GW} GW _{ing}
	HMX	3.7 ^{GW} GW _{ing}
	RDX	0.019 ^{GW} GW _{ing}
	Tetryl	0.15 ^{GW} GW _{ing}
	Nitrobenzene	0.15 ^{GW} GW _{ing}
	4-amino-2,6-Dinitrotoluene	0.012 ^{GW} GW _{ing}
	2-Nitrotoluene (o-Nitrotoluene)	0.009 ^{GW} GW _{ing}
	3-Nitrotoluene (m-Nitrotoluene)	0.73 ^{GW} GW _{ing}
	Aluminum	73 ^{GW} GW _{ing}
	Antimony	0.006 ^{GW} GW _{ing}
	Arsenic	0.01 ^{GW} GW _{ing}
	Barium	2.0 ^{GW} GW _{ing}
	Beryllium	0.004 ^{GW} GW _{ing}
	Chromium	0.1 ^{GW} GW _{ing}
	Cobalt	0.73 ^{GW} GW _{ing}
	Copper	1.3 ^{GW} GW _{ing}
	Lead	0.015 ^{GW} GW _{ing}
	Manganese	10. ^{GW} GW _{ing}
	Mercury	0.002 ^{GW} GW _{ing}
	Nickel	1.5 ^{GW} GW _{ing}
Nitrite/Nitrate	10/1 ^{GW} GW _{ing}	
Silver	0.37 ^{GW} GW _{ing}	
Vanadium	0.13 ^{GW} GW _{ing}	
Zinc	22 ^{GW} GW _{ing}	

Foot Note:

^{GW}GW_{ing} ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial/Industrial) for Class 1 or Class 2 Groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table. In accordance with Section 350.72(b), ^{GW}GW_{ing} PCLs may need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level (less than or equal to 1x10⁻⁴) and hazard index criteria (less than or equal to 10) when there are more than 10 carcinogenic and/or more than 10 noncarcinogenic chemicals of concern within a source medium.

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

Footnotes:

^{GW}ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial/Industrial) for Class 1 or Class 2 Groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table. In accordance with Section 350.72(h), ^{GW}ACLs may need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level (less than or equal to 1×10^{-4}) and hazard index criteria (less than or equal to 10) when there are more than 10 carcinogenic and/or more than 10 noncarcinogenic chemicals of concern within a source medium.

*The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

¹ Monitored Natural Attenuation (MNA) is the final measure for groundwater at Western Inactive Sanitary Landfill (SWMU 002, NOR 032) located on TAC Parcels. This measure was selected as part of the Response Action Plan (RAP) approved by TCEQ January 2003. As part of the RAP, a MNA Demonstration Report was prepared and submitted September 2003 and approved October 2003. As part of this remedy, the progress of MNA is evaluated through monitoring for pH, temperature, conductance, ethane, ethane, chloride and carbon dioxide (CO₂) to monitor the anaerobic biodegradation of Trichloroethylene (TCE) on a Semiannual Basis.

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard - Lone Star Army Ammunition Plant

Unit Name	Column A Hazardous Waste Constituents	Column B Groundwater Protection Standard (mg/l)
1. High Explosives Demolition Ground ¹ - Groundwater Monitoring	Perchlorate	0.051 ^{GW} GW _{ing}
	HMX	3.7 ^{GW} GW _{ing}
	RDX	0.019 ^{GW} GW _{ing}
	Tetryl	0.15 ^{GW} GW _{ing}
	Nitrobenzene	0.15 ^{GW} GW _{ing}
	4-amino-2,6-Dinitrotoluene	0.012 ^{GW} GW _{ing}
	2-Nitrotoluene (o-Nitrotoluene)	0.009 ^{GW} GW _{ing}
	3-Nitrotoluene (m-Nitrotoluene)	0.73 ^{GW} GW _{ing}
	Arsenic	0.01 ^{GW} GW _{ing}
	Barium	2.0 ^{GW} GW _{ing}
	Chromium	0.1 ^{GW} GW _{ing}
	Copper	1.3 ^{GW} GW _{ing}
	Lead	0.015 ^{GW} GW _{ing}
	Mercury	0.002 ^{GW} GW _{ing}
	Manganese	10.0 ^{GW} GW _{ing}
	Silver	0.37 ^{GW} GW _{ing}
Vanadium	0.13 ^{GW} GW _{ing}	
Zinc	22 ^{GW} GW _{ing}	

Unit Name	COLUMN A Hazardous Constituents	
1. High Explosives Demolition Ground ² - Surface Water Monitoring	Dissolved Copper	
	Dissolved Zinc	

¹ ^{GW}GW_{ing} ACI pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial/Industrial) for Class 1 or Class 2 Groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table. In accordance with Section 350.72(b), ^{GW}GW_{ing} PCLs may need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard – Lone Star Army Ammunition Plant

(less than or equal to 1×10^{-4}) and hazard index criteria (less than or equal to 10) when there are more than 10 carcinogenic and/or more than 10 noncarcinogenic chemicals of concern within a source medium.

- ² Surface water monitoring is being performed to monitor for seasonal variation and trends. Surface water sample locations are in CP Attachment A, Sheet 9 of 10. If the results of the affected property assessment determine that surface water monitoring is no longer necessary, then within ninety (90) days, the permittee may apply for a modification or amendment to the Compliance Plan to terminate surface water monitoring at that unit. Until approval, the permittee shall continue surface water monitoring under the current Compliance Plan provisions.

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard – TexAmericas Center*

Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

¹ Monitored Natural Attenuation (MNA) is the final measure for groundwater at Western Inactive Sanitary Landfill (SWMU 002, NOR 032) located on TAC Parcels. This measure was selected as part of the Response Action Plan (RAP) approved by TCEQ January 2003. As part of the RAP, a MNA Demonstration Report was prepared and submitted September 2003 and approved October 2003. As part of this remedy, the progress of MNA is evaluated through monitoring for pH, temperature, conductance, ethane, chloride and carbon dioxide (CO₂) to monitor the anaerobic biodegradation of Trichloroethylene (TCE) on a Semiannual Basis.

CP Table IV: Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Quantitation Limits for Compliance Monitoring - Lone Star Army Ammunition Plant

Unit Name	Column A Hazardous Constituents	Column B Concentration Limits (mg/l)
1. High Explosives Burning Ground	Perchlorate	ND <0.001
	Cyclotetramethylenetetranitamine (HMX)	ND <0.0004
	Cyclotrimethylenetrinitramene (RDX)	ND <0.0002
	1,3-Dinitrobenzene	ND <0.0004
	Trinitrophenylmethylnitramine (Tetryl)	ND <0.00024
	1,3,5-Trinitrobenzene	ND <0.001
	Nitrobenzene	ND <0.0004
	4-amino-2,6-Dinitrotoluene	ND <0.0002
	2-amino-4,6-Dinitrotoluene	ND <0.0002
	2,4-Dinitrotoluene	ND <0.0004
	3-Nitrotoluene (m-Nitrotoluene)	ND <0.0004
	Nitrate	ND <0.50
	Aluminum	ND <0.01
	Antimony	ND <0.005
	Arsenic	ND <0.01
	Barium	ND <2.0
	Total Chromium	ND <0.1
	Copper	ND <1.30
	Lead	ND <0.015
	Manganese	ND <2.91
Mercury	ND <0.2	
Nickel	ND <0.158	
Silver	ND <0.0046	
Thallium	ND <0.0008	
Vanadium	ND <0.001	
Zinc	ND <7.30	

Footnote:

ND Non-detectable at MQL 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. MQL is indicated in parentheses. MQL is defined in 30 TAC Section 350.4(54)

**CP Table IV: Compliance Monitoring Program Table of Hazardous and Solid Waste
Constituents and Quantitation Limits for Compliance Monitoring – Lone Star Army
Ammunition Plant**

as the lowest non-zero concentration standard in the laboratory's initial calibration curve and is based on the final volume of extract (or sample) used by the laboratory.

**CP Table IV: Compliance Monitoring Program Table of Hazardous and Solid Waste
Constituents and Quantitation Limits for Compliance Monitoring - TexAmericas Center
(Reserved)**

CP Table IVA: Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard for Compliance Monitoring – Lone Star Army Ammunition Plant

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standard (mg/l)
1. High Explosives Burning Ground ¹ - Groundwater Monitoring	Perchlorate	5.1 ^{GW} GW _{Class3}
	HMX	370 ^{GW} GW _{Class3}
	RDX	1.9 ^{GW} GW _{Class3}
	1,3-Dinitrobenzene	0.73 ^{GW} GW _{Class3}
	Tetryl	15 ^{GW} GW _{Class3}
	1,3,5-Trinitrobenzene	220 ^{GW} GW _{Class3}
	Nitrobenzene	15 ^{GW} GW _{Class3}
	4-amino-2,6-Dinitrotoluene	1.2 ^{GW} GW _{Class3}
	2-amino-4,6-Dinitrotoluene	1.2 ^{GW} GW _{Class3}
	2,4-Dinitrotoluene	0.3 ^{GW} GW _{Class3}
	2,6-Dinitrotoluene	0.3 ^{GW} GW _{Class3}
	3-Nitrotoluene (m-Nitrotoluene)	73 ^{GW} GW _{Class3}
	Antimony	0.6 ^{GW} GW _{Class3}
	Arsenic	1.0 ^{GW} GW _{Class3}
	Barium	200 ^{GW} GW _{Class3}
	Copper	130 ^{GW} GW _{Class3}
	Lead	1.5 ^{GW} GW _{Class3}
	Mercury	0.2 ^{GW} GW _{Class3}
	Zinc	2200 ^{GW} GW _{Class3}

Unit Name	COLUMN A Hazardous Constituents	
1. High Explosives Burning Ground ² - Surface Water Monitoring	Aluminum	
	Antimony	

CP Table IVA: Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard for Compliance Monitoring - Lone Star Army Ammunition Plant

Unit Name	COLUMN A Hazardous Constituents	
	Arsenic	
	Barium	
	Total Chromium	
	Chromium VI	
	Copper	
	Lead	
	Total Manganese	
	Mercury	
	Nickel	
	Silver	
	Thallium	
	Vanadium	
	Zinc	
	1,3,5-Trinitrobenzene	
	1,3-Dinitrotoluene	
	2,4,6-Trinitrotoluene	
	2,4-Dinitrotoluene	
	2,6-Dinitrotoluene	
	3-Nitrotoluene	
	2-Amino-2,6- Dinitrotoluene	
	HMX	
	Nitrobenzene	
	RDX	
	Tetryl	
	Nitrates	
	Perchlorate	

¹ $^{GW}_{class3}$ ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial/Industrial) Tier I for Class 3 Groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

² Surface water monitoring is being performed to monitor for seasonal variation and trends. Surface water sample locations are in CP Attachment A, Sheet 8 of 10. If the results of the

**CP Table IVA: Compliance Monitoring Program Table of Detected Hazardous Constituents
and the Groundwater Protection Standard for Compliance Monitoring - Lone Star Army
Ammunition Plant**

affected property assessment determine that surface water monitoring is no longer necessary, then within ninety (90) days, the permittee may apply for a modification or amendment to the Compliance Plan to terminate surface water monitoring at that unit. Until approval, the permittee shall continue surface water monitoring under the current Compliance Plan provisions.

**CP Table IVA: Compliance Monitoring Program of Detected Hazardous Constituents and the
Groundwater Protection Standard for Compliance Monitoring - TexAmericas Center
(Reserved)**

CP Table V: Designation of Wells - Lone Star Army Ammunition Plant

Point of Compliance Wells

1. High Explosives Burning Ground

BG-9, BG-22, and BG-25

Surface Water Sampling Locations

SW-16-UP, SW-16MID, and SW-16-DOWN

2. High Explosives Demolition Ground

CDG-10, CDG-11, CDG-12, CDG-13, CDG-15, and CDG-16*

Surface Water Sampling Locations

SW-18-Upgradient, SW-18-UP, SW-18-MD, and SW-18-DN

Point of Exposure Wells - Reserved

Alternate Point of Exposure Wells - Reserved

Background Wells

1. High Explosives Burning Ground

BG-23R

2. High Explosives Demolition Ground

CDG-14 and CDG-17

Note: Wells that are not listed in this table but are required by Permit Section XI.B.2 (e.g. AMP wells, CAO wells, etc.) and depicted only in CP Attachment A are subject to change, upon approval by the Executive Director, without modification to the Compliance Plan.

*Additional CAO wells are identified for this unit in CP Attachment A.

CP Table V: Designation of Wells - TexAmericas Center**

Point of Compliance Wells

1. Western Inactive Sanitary Landfill
CC-10R, CC-11R, CC-20, and CC-8*

Point of Exposure Wells - Reserved

Alternate Point of Exposure Wells - Reserved

Background Wells

1. Western Inactive Sanitary Landfill
C-18

Note: Wells that are not listed in this table but are required by Permit Section XI.B.2 (e.g. AMP wells, CAO wells, etc.) and depicted only in CP Attachment A are subject to change, upon approval by the Executive Director, without modification to the Compliance Plan.

*Additional CAO wells are identified for this unit in CP Attachment A.

**The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

**CP Table VI: Compliance Period for RCRA-Regulated Units - Lone Star Army
Ammunition Plant**

High Explosive Burning Ground	Year or Number of Years
Year Waste Management Activities Initiated	1947
Year Closed	To be determined
Compliance Period	30 Years
Compliance Period Began	2003

High Explosives Demolition Ground	Year or Number of Years
Year Waste Management Activities Initiated	1945
Year Closed	To be determined
Compliance Period	30 Years
Compliance Period Began	2003

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

CP Table VII Reporting Requirements

Item	Program	Reporting Frequency	Requirements
1.	All programs	Annually by January 21	Each report shall be certified by a qualified engineer and/or geoscientist.
2.	Corrective Action Compliance Monitoring	Annually by January 21	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 Compliance Monitoring	Annually by January 21	A summary of any activity within an area subject to institutional control.
4.	Corrective Action Compliance Monitoring	Annually by January 21	Tabulation of well casing elevations in accordance with Attachment C;
5.	Corrective Action Compliance Monitoring	Annually by January 21	Certification and well installation diagram for any new well installation or replacement and certification for any well plugging and abandonment;
6.	Corrective Action Compliance Monitoring	Annually by January 21	Recommendation for any changes to the program;
7.	Corrective Action Compliance Monitoring	Annually by January 21	Any other items requested by the Executive Director;
8.	Corrective Action Compliance Monitoring	Annually by January 21	Water table maps shall be prepared from the groundwater data collected pursuant to <u>Permit Provision XI.G.</u> and shall be evaluated by the permittee with regard to the following parameters: a. Direction and gradient of groundwater flow; and b. Estimation of the rate and direction of groundwater contamination migration.
9.	Corrective Action Compliance Monitoring	Annually by January 21	The permittee shall submit a report to each recipient listed in <u>Provision XI.L.3.</u> , which includes the following information in items 3 through 26 determined since the previously submitted report, if those items are applicable. If both Corrective Action and Compliance Monitoring Programs are authorized, then the January 21st report shall contain information required for both programs.

CP Table VII Reporting Requirements

Item	Program	Reporting Frequency	Requirements
10.	Corrective Action Compliance Monitoring	Annually by January 21	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 <u>Sections XI.E., XI.F., and XI.G.</u> for the preceding reporting period. The reporting periods shall be January 1 through December 31 for Corrective Action Monitoring, unless an alternative schedule is approved by the Commission. The period for Compliance Monitoring shall be based on the calendar year;
11.	Corrective Action Compliance Monitoring	Annually by January 21	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.
12.	Corrective Action Compliance Monitoring	Annually by January 21	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 Compliance Monitoring	Annually by January 21	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 Compliance Monitoring	Annually by January 21	The surface water results of the chemical analyses, submitted in a tabulated format acceptable to the Executive Director. Copies of the original laboratory report shall be provided if requested by the Executive Director.
15.	Corrective Action Compliance Monitoring	Annually by January 21	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;

CP Table VII Reporting Requirements

Item	Program	Reporting Frequency	Requirements
16.	Corrective Action Compliance Monitoring	Annually by January 21	Potentiometric surface maps showing the elevation of the water table at the time of sampling and the direction of groundwater flow gradients. The maps should also include the direction of surface water flow in each creek or stream;
17.	Corrective Action Compliance Monitoring	Annually by January 21	Tabulation of all data evaluation results pursuant to <u>Provision XLF.4.</u> and status of each well with regard to compliance with the monitoring objectives and compliance with the GWPS;
18.	Corrective Action Compliance Monitoring	Annually by January 21	An updated summary as required by CP Table VIII;
19.	Corrective Action Compliance Monitoring	Annually by January 21	Summary of any changes made to the monitoring/corrective action program and a summary of well inspections, repairs, and any operational difficulties;
20.	Corrective Action Compliance Monitoring	Annually by January 21	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;
21.	Corrective Action only	Annually by January 21	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;
22.	Corrective Action only	Annually by January 21	Tabulation of the total contaminant mass remediated or recovered from each recovery system for each reporting period;
23.	Corrective Action only	Annually by January 21	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;
24.	Corrective Action only	Annually by January 21	Maps and tables indicating the extent and thickness of the NAPLs both light and dense phases, if detected;

CP Table VII Reporting Requirements

Item	Program	Reporting Frequency	Requirements
25.	Corrective Action only	Annually by January 21	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 XL.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 XL.H.7.</u> are being met.
26.	Corrective Action only	Annually by January 21	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 Permit Provision <u>XL.II.</u> and ICM Program for a SWMU and/or AOC which documents that the objectives of <u>Provision XL.II.8.b.</u> are being achieved. This summary shall be included as a section of the Compliance Plan groundwater monitoring report.

Note: The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

CP Table VIII Compliance Schedule

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
A.	60	Compliance Plan	Submit to the Executive Director a schedule summarizing all activities required by the Compliance Plan. The schedule shall list the starting dates of all routine activities. The Permittee shall include an updated schedule in the report required by Compliance Plan CP Table VII - Reporting Requirements. 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 it to be completed or submitted (if this date can be determined).
B.	Notify within 30 days	30 TAC §350.33(k)	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.
C.	Semiannually by January 21 and July 21 of each year	30 TAC §335.167, and Permit Provision XII.H.4.	The permittee shall submit a schedule for completion of the RFI(s)/APA to the Executive Director for review and approval in accordance with Provision XI.H.4. of the Permit. The schedule shall be kept updated to document the current status/progress for the RFI(s)/APA for those SWMUs/AOCs listed in CP Table II and any new SWMUs/AOCs identified in accordance with Provision XI.A.5. until the assessment activities are completed.
D.	During the first thirty (30) days of the 2 nd and 4 th Quarters	30 TAC §335.166 or §335.167	Corrective Action Monitoring shall be conducted on a semiannual basis for WISL, and HEDG listed in CP Table I. Results will be provided in the Annual Groundwater Report as specified by CP Table VII - Reporting Requirements
E.	During the first thirty (30) days of the 2 nd and 4 th Quarters	30 TAC §335.165	Compliance Monitoring shall be conducted on a semiannual basis for the HEBG listed in CP Table I. Results will be provided in the Annual Groundwater Report as specified by CP Table VII - Reporting Requirements

CP Table VIII Compliance Schedule

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
F.	During the first thirty (30) days of the 2 nd and 4 th Quarters	30 TAC §335.165	Surface water monitoring for the HEBG shall be conducted in accordance with Provision XI.F.3.c.(2)(b) at the sampling locations shown in CP Attachment A, Sheet 8 of 10. Surface water monitoring shall continue in accordance with Provision XI.D.7.d. Results shall be provided in the Annual Groundwater Report as specified by CP Table VII.
G.	Quarterly (January, April, August and December) unless an alternative schedule is approved by the Executive Director	30 TAC §335.166	Surface water monitoring for the HEDG shall be conducted in accordance with Provision XI.F.3.c.(1)(e) at the sampling locations shown in CP Attachment A, Sheet 9 of 10. Surface water monitoring shall continue in accordance with Provision XI.D.7.d. Results shall be provided in the Annual Groundwater Report as specified by CP Table VII.
H.	Within 90 days of approval of the APAR or Annual Groundwater Report unless an alternative schedule is approved by the Executive Director.	Provisions XI.D. and XI.J.4	If assessment results for the HEBG and/or HEDG as documented in an APAR or as a section of the Annual Groundwater Report (CP Table VII) indicate surface water monitoring is no longer necessary, then the Permittee may submit a Permit Modification or Amendment application in accordance with Provisions XI.D.6.g., XI.D.7.d. and XI.J.4 to cease surface water monitoring at the HEBG and/or HEDG.
I.	Within 90 days	Provision XI.C.2. and CP Attachment C	Submit a notification with schedule for the plugging and abandonment (P&A) of XX Test Area monitoring wells XX-1 through XX-9 for TCEQ review and approval. The P&A of XX-Test Area well shall be conducted in accordance with the requirements of Section XI.C.2 and CP Attachment C.

Note: The land under the Waste Management Units, areas subject to groundwater Corrective Action and compliance monitoring and/or Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) or land otherwise subject to requirements of this Permit, as may be identified or made reference to in this table, is owned by TexAmericas Center (TAC). The operator under

CP Table VIII Compliance Schedule

this Permit and associated Compliance Plan is the U.S. Department of the Army (Army). The Army has and retains going forward operational control and the obligation to complete all of the Permit and associated Compliance Plan requirements including all Corrective Action and Corrective Action obligations, investigations, compliance monitoring and implementation, remedy implementation, MEC-related actions, post-closure care and related administrative and reporting obligations. This paragraph is incorporated into and made a part of this Permit and associated Compliance Plan. See also the Department of the Army Economic Development Conveyance Memorandum of Agreement with the Red River Redevelopment Authority (currently TexAmericas Center), dated September 1, 2010.

**Attachment A - Legal Description of Facility
Lone Star Army Ammunition Plant**

HEBG (92 acres)

All that certain lot, tract or parcel of land lying and situated in the John A. Talbot Headright Survey, Abstract 563, Bowie County, Texas, being a part of that certain tract of land described as Tract No. 34(3) in the Declaration of Taking by the United States of America, dated July 7, 1941, recorded in Volume 183, Page 527 of the Deed Records of Bowie County, Texas, same being that certain tract of land described as the First Tract (34(3)) in the deed from W. J. Henry, et ux, to W. E. Henry, dated November 10, 1913, recorded in Volume 67, Page 505 of the Deed Records of Bowie County, Texas, a part of that certain tract of land described as Tract No. 51 in the deed from Laure E. Henry, et vir, to United States of America, dated January 14, 1942, recorded in Volume 186, Page 94 of the Deed Records of Bowie County, Texas, same being that certain tract of land described as 100 acres (51) in the deed from M. D. Tilson to R. D. Henry, dated November 6, 1909, recorded in Volume 52, Page 506 of the Deed Records of Bowie County, Texas, a part of that certain tract of land described as Tract No. 89(1) in the deed from W. A. Reed, et ux, to United States of America, dated April 22, 1942, recorded in Volume 192, Page 99 of the Deed Records of Bowie County, Texas, a part of that certain tract of land described as Tract No. 92, with 70 acres in the Declaration of Taking by the United States of America, dated July 7, 1941, recorded in Volume 190, Page 341 of the Deed Records of Bowie County, Texas, same being that certain tract of land described as 70 acres in the deed from Rachel E. Watson, et al, to Phillip Watson, et al, dated January 28, 1935, recorded in Volume 153, Page 24 of the Deed Records of Bowie County, Texas, a part of that certain tract of land described as Tract No. 93, with 36 acres in the Declaration of Taking by the United States of America, dated July 7, 1941, recorded in Volume 181, Page 334 of the Deed Records of Bowie County, Texas, same being that certain tract of land described as 36 acres (93) in the deed from Rachel E. Watson, et al, to Phillip Watson, et al, dated January 28, 1935, recorded in Volume 153, Page 24 of the Deed Records of Bowie County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch steel rod set for a corner, capped Texas MG 5760, said corner bears North 28 degrees 55 minutes 40 seconds West a distance of 11114.41 feet from a point being the Southeast corner of proposed Central Avenue, lying in the South line of that certain tract of land described as Easement for Public Road from the Department of the Army to the State of Texas and the County of Bowie, Texas, dated June 25, 1958, recorded in Volume 360, Page 268 of the Deed Records of Bowie County, Texas, and the South line of that certain tract of land described as Tract 166 in the Declaration of taking by the United States of America, dated July 7, 1941, recorded in Volume 192, Page 138 of the Deed Records of Bowie County, Texas, said corner bears South 74 degrees 27 minutes 12 seconds West (basis of bearings) a distance of 2718.28 feet to a Type I TXDOT right-of-way marker, found for control monument no. 2 and North 23 degrees 33 minutes 51 seconds West a distance of 10945.58 feet from a Type I TXDOT right-of-way marker, found for control monument no. 1;

**Attachment A - Legal Description of Facility
Lone Star Army Ammunition Plant**

THENCE North 90 degrees 00 minutes 00 seconds West a distance of 1887.53 feet to a 1/2 inch steel rod set for a corner, capped Texas MG 5760;

THENCE North 16 degrees 57 minutes 35 seconds West a distance of 585.16 feet to a 1/2 inch steel rod set for a corner, capped Texas MG 5760, at an angle point;

THENCE North 01 degrees 00 minutes 02 seconds West a distance of 1399.92 feet to a 1/2 inch steel rod set for a corner, capped Texas MG 5760;

THENCE South 90 degrees 00 minutes 00 seconds East a distance of 2082.67 feet to a 1/2 inch steel rod set for a corner, capped Texas MG 5760;

THENCE South 00 degrees 00 minutes 00 seconds West a distance of 1959.42 feet to the point of beginning and containing 91.879 acres of land, more or less.

The bearings are based on Grid North within the "Texas Coordinate System Of 1983, North Central Zone", NAD83 (CORS96, EPOCH2002.0), with a bearing of South 74 degrees 27 minutes 12 seconds West. The combined scale factor to go from grid to surface is 1.00012. The following control monuments were used to establish the basis of bearings:

Control Monument No. 1
N = 7219546.1073
E = 3274071.3889

Control Monument No. 2
N = 7218817.6299
E = 3271452.8802

This description is based on the survey and plat made by Mike Gardner, Registered Professional Land Surveyor No. 5760, on January 15, 2010, and revised on May 5, 2010.

**Attachment A - Legal Description of Facility
Lone Star Army Ammunition Plant**

HEDG (1,065 acres)

All that certain tract or parcel of land being a part of the Nancy Dycus Headright Survey, A-146 and being a part of the E.T. Jackson Headright Survey, A-301 and being a part of the James B. McWhorton Headright Survey, A-383 and being a part of the John W. Lane Headright Survey, A-344 and being a part of the David Jarrett Headright Survey, A315 and being a part of the Mary Burnside Headright Survey, A-49, all in Bowie County, Texas and being all of Tract No. 133 as described in Warranty Deed to the United States of America recorded in Volume 190, Page 12 of the Deed Records of Bowie County, Texas (D.R.B.C.T.) and being all of Tract No. 169 as described in Warranty Deed to the United States of America recorded in Volume 186, Page 202 of the D.R.B.C.T. and being all of Tract No. 184 as described in Warranty Deed to the United States of America recorded in Volume 186, Page 58 of the D.R.B.C.T. and being all of Tract No. 185 as described in Warranty Deed to the United States of America recorded in Volume 181, Page 269 of the D.R.B.C.T. and being all of Tract No. 248 as described in Warranty Deed to the United States of America recorded in Volume 188, Page 353 of the D.R.B.C.T. and being all of Tract No. 129 as described in Declaration of Taking No. 1, Civil Action No. 51 awarded to the United States of America recorded in Volume 183, Page 527 of the D.R.B.C.T. and being all of Tract No. 134 as described in Declaration of Taking No. 1, Civil Action No. 51 awarded in the United States of America recorded in Volume 183, Page 527 of the D.R.B.C.T. and being all of Tract No. 247 as described in Declaration of Taking No. 1, Civil Action No. 51 awarded to the United States of America recorded in Volume 183, Page 527 of the D.R.B.C.T. and being a part of Tract No. 128 as described in Declaration of Taking No. 2, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 322 of the D.R.B.C.T. and being all of Tract No. 135 as described in Declaration of Taking No. 2, Civil Action No. 51 awarded in the United States of America recorded in Volume 181, Page 322 of the D.R.B.C.T. and being a part of Tract No. 136 as described in Declaration of Taking No. 2, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 322 of the D.R.B.C.T. and being a part of Tract No. 165 as described in Declaration of Taking No. 2, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 322 of the D.R.B.C.T. and being a part of Tract No. 167 as described in Declaration of Taking No. 3, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 334 of the D.R.B.C.T. and being all of Tract No. 166 as described in Declaration of Taking No. 11, Civil Action No. 51 awarded to the United States of America recorded in Volume 192, Page 138 of the D.R.B.C.T. and being a part of Tract No. 130 as described in Declaration of Taking No. 13, Civil Action No. 51 awarded to the United States of America recorded in Volume 192, Page 288 of the D.R.B.C.T. and being all of Tract No. 170 as described in Declaration of Taking No. 13, Civil Action No. 51 awarded to the United States of America recorded in Volume 192, Page 288 of the D.R.B.C.T. and being all of Tract No. 131 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 189, Page 430 of the D.R.B.C.T. and being all of Tract No. 132 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 189, Page 430 of the D.R.B.C.T. and being all of Tract No. 249 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America

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recorded in Volume 189, Page 430 of the D.R.B.C.T. and being a part of Tract No. 182 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 184, Page 72 of the D.R.B.C.T. and being a part of Tract No. 183 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 184, Page 73 of the D.R.B.C.T. and being more particularly described as follows:

COMMENCING: At a set 5/8" rebar with plastic cap (Stamped R.P.L.S. 4874 Typical) for corner on the South Right-of-Way line of the Texas and Pacific Railroad (now owned and operated by the Union Pacific Railroad) at the Northeast corner of the above described Tract No. 64, same being the Northwest corner of a 20.045 Acre tract as described in Warranty Deed to Amy Torrans recorded in Volume 1473, Page 149 of the Real Property Records of Bowie County, Texas (R.P.R.B.C.T.), same being N 78°06'17" W, 1.63 feet from a found 5/8" rebar at an existing fence corner, same being N 28°27'26" E, 22,621.62 feet from a found 1/2" rebar with plastic cap stamped "Texas MG 5760" at the Southeast corner of proposed Central Avenue, lying in the South line of that certain tract of land described as Easement for Public Road from the Department of the Army to the State of Texas and the County of Bowie, Texas, dated June 25, 1958, recorded in Volume 360, Page 268 of the Deed Records of Bowie County, Texas and the South line of that certain tract of land described as Tract No. 166 in the Declaration of Taking by the United States of America, dated July 7, 1941, recorded in Volume 192, Page 148 of the Deed Records of Bowie County, Texas, said corner bears S 74°27'12" W, (basis of bearings) a distance of 2718.28 feet to a Type I TXDOT right-of-way marker, found for control monument No. 2 and N 08°36'03" W, a distance of 22915.64 feet from a Type I TXDOT right-of-way marker, found for control monument No. 1;

THENCE: S 02°23'51" E, with the East boundary line of the above described Tract No. 64 and Tract No. 65 as described in Warranty Deed to the United States of America recorded in Volume 192, Page 382 of the D.R.B.C.T., passing at 4457.40 feet a found 1/2" iron pipe set in concrete and continuing a total distance of 4462.39 feet to a found 12" wooden corner post set in concrete for corner;

THENCE: S 87°58'59" W, with the South boundary line of the above described Tract No. 65, same being the North boundary line of a 194 Acre tract as described in Warranty Deed to Josh R. Morriss III, et al, recorded in Volume 3017, Page 149 of the R.P.R.B.C.T., passing at 5.37 feet a found 1/2" iron pipe set in concrete and passing at 686.04 feet a found 1/2" iron pipe set in concrete and continuing a total distance of 690.90 feet to a found 12" wooden corner post set in concrete for corner;

THENCE: S 02°11'04" E, with the East boundary line of Tract No. 73 as described in Warranty Deed to the United States of America recorded in Volume 186, Page 159 of the D.R.B.C.T. and Tract No. 72 as described in Warranty Deed to the United States of America recorded in Volume 186, Page 115 of the D.R.B.C.T. and Tract No. 175 as described in Declaration of Taking No. 4, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 457 of the D.R.B.C.T., passing at 5.32 feet a found 1/2"

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iron pipe set concrete and passing at 3341.87 feet a found 1" square iron pipe at an existing fence corner and passing at 3737.89 feet a found 1/2" iron pipe set in concrete and passing at 3772.91 feet a found 1/4" rebar set in concrete and continuing a total distance 5179.57 feet to a found 1/2" rebar for corner at the Northwest corner of a 12.91 Acre tract (Parcel No. 1) as described Warranty Deed to Bowie County Soil and Water Conservation District, recorded in Volume 567, Page 722 of the D.R.B.C.T.;

THENCE: S 24°16'20" W, over and across the above described Tract No. 175, same being the West boundary line of the above described 12.91 Acre tract, 1682.95 feet to a found 5/8" rebar for corner in an existing fence line, same being the North boundary line of a 4.560 Acre tract as described in Warranty Deed to Darla M. Hancock recorded in Volume 4221, Page 8 of the R.P.R.B.C.T.;

THENCE: S 87°18'49" W, with the South boundary line of the above described Tract No. 175, same being the North boundary line of the above described 4.560 Acre tract, 126.89 feet to a found Army Corps of Engineers Concrete Monument with Brass Cap Stamped "BM F 1960" for corner;

THENCE: S 01°44'37" E, with the East boundary line of Tract No. 195 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 186, Page 61 of the D.R.B.C.T., same being the West boundary line of the above described 4.560 Acre tract, 301.99 feet to a found 5/8" rebar for corner at the Southwest corner of the above described 4.560 Acre tract, same being the Northeast corner of a 34.086 Acre tract as described in Warranty Deed to Bowie County Soil and Water Conservation District Parcel No. 3, recorded in Volume 567, Page 722 of the D.R.B.C.T.;

THENCE: S 53°52'24" W, over and across the above described Tract No. 195 and Tract No. 196 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 190, Page 16 of the D.R.B.C.T. and Tract No. 210 as described in Declaration of Taking No. 4, Civil Action No. 51 awarded in the United States of America recorded in Volume 181, Page 457 of the D.R.B.C.T. and Tract No. 211 as described in Declaration of Taking No. 4, Civil Action No. 51 awarded to the United States of America recorded in Volume 181, Page 457 of the D.R.B.C.T., same being the Northwest boundary line of a 47.335 Acre tract (Parcel No. 2) as described in Warranty Deed to Bowie County Soil and Water Conservation District recorded in Volume 567, Page 722 of the D.R.B.C.T., 3028.44 feet to a found 5/8" rebar for corner in the South boundary line of the above described Tract No. 210, same being in the North boundary line of a tract as described in Warranty Deed to Charles Thomas Rampy, Douglas Allen Rampy and Connie Rampy Gregory recorded in Volume 1505, Page 260 in the R.P.R.B.C.T.;

THENCE: S 86°53'27" W, with the South boundary line of the above described Tracts No. 210 and 212, same being the North boundary line of the above described Rampy tract and the North boundary line of a 0.5 Acre tract as described in Warranty Deed to the City of Redwater recorded in Volume 3751,

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Page 300 of the R.P.R.B.C.T., 277.13 feet to a found Army Corps of Engineers Concrete Monument with Brass Cap Stamped "EM D 1960" for corner;

THENCE: S 02°40'11" E, with the East boundary line of Tract No. 213 as described in Declaration of Taking No. 14, Civil Action No. 51 awarded to the United States of America recorded in Volume 186, Page 65 of the D.R.B.C.T., same the West boundary line of the above described 0.5 Acre tract and the Rampy tract, passing at 207.60 feet a found 1/2" rebar and continuing a total distance of 216.73 feet to a found 3/4" iron pipe for corner;

THENCE: S 88°19'08" W, over and across the above described Tract No. 213, same being the North boundary line of a 34.086 Acre tract (Parcel No. 3) as described in Warranty Deed to Bowie County Soil and Water Conservation District recorded in Volume 567, Page 722 of the D.R.B.C.T., 900.12 feet to a found 5/8" rebar for corner and being the POINT OF BEGINNING for the herein described tract of land;;

THENCE: N 82°26'13" W, over and across the above described Tracts No. 213, 186, 208 and 130, 2269.77 feet to a set 5/8" rebar with plastic cap for corner;

THENCE: N 00°31'25" W, over and across the above described Tract No. 130, 1666.22 feet to a set 5/8" rebar with plastic cap for corner;

THENCE: S 89°28'37" W, over and across the above described Tracts No. 130, 102 and 103, 4912.94 feet to a found 1/2" rebar with plastic cap stamped "Texas MG 5760" for corner on the proposed East Right-of-Way line of Central Avenue;

THENCE: S 00°01'47" E, over and across the above described Tracts No. 103 and 128, same being the proposed East Right-of-Way line of Central Avenue, 1722.38 feet a found 1/2" rebar with plastic cap stamped "Texas MG 5760" for corner;

THENCE: Southeasterly, with the proposed East Right-of-Way line of Central Avenue, same being a curve to the left having a radius of 2216.85 feet, a central angle of 10°01'45", a tangent length of 194.52 feet, an arc length of 388.04 feet, a chord bearing of S 05°02'40" E and a chord distance of 387.55 feet to a found 1/2" rebar with plastic cap stamped "Texas MG 5760" for corner;

THENCE: S 10°03'33" E, with the proposed East Right-of-Way line of Central Avenue, same being over and across the above described Tracts No. 136, 167, 165 and 166, passing at 6232.02 feet to a found 1/2" rebar with plastic cap stamped "Texas MG 5760" on the North Right-of-Way line of Farm Road No. 991 and continuing a total distance of 6252.07 feet to a found 1/2" rebar with plastic cap stamped "Texas MG 5760" for corner;

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THENCE: N 71°56'17" E, with the South boundary line of the above described Tract No. 166, 1407.69 feet to a point for corner, from which a found TXDOT Type I right-of-way marker bears N 18°03'45" W, 19.76 feet;

THENCE: Northeasterly, with the South boundary line of the above described Tract No. 166, same being a non-tangent curve to the right having a radius of 3859.72 feet, a central angle of 03°58'49", a tangent length of 134.12 feet, an arc length of 268.13 feet, a chord bearing of N 74°01'03" E and a chord length of 268.08 feet to a point for corner, from which a found TXDOT Type I right-of-way marker bears N 14°13'15" W, 19.86 feet;

THENCE: N 76°00'28" E, with the South boundary line of the above described Tracts No. 166 and 170, 775.45 feet to a point for corner, from which a found TXDOT Type I right-of-way marker bears N 12°03'14" W, 20.24 feet;

THENCE: Northeasterly, with the South boundary line of the above described Tract No. 170, same being a curve to the right having a radius of 2904.79 feet, a central angle of 03°47'00", a tangent length of 95.94 feet, an arc length of 191.81 feet, a chord bearing of N 77°53'58" E and a chord length of 191.77 feet to a point for corner, from which a found 5/8" rebar bears N 10°14'50" W, 20.00 feet;

THENCE: N 79°47'28" E, with the South boundary line of the above described Tracts No. 170 and 248, 1230.10 feet to a point for corner, from which a found TXDOT Type I right-of-way marker bears N 12°03'14" W, 20.24 feet;

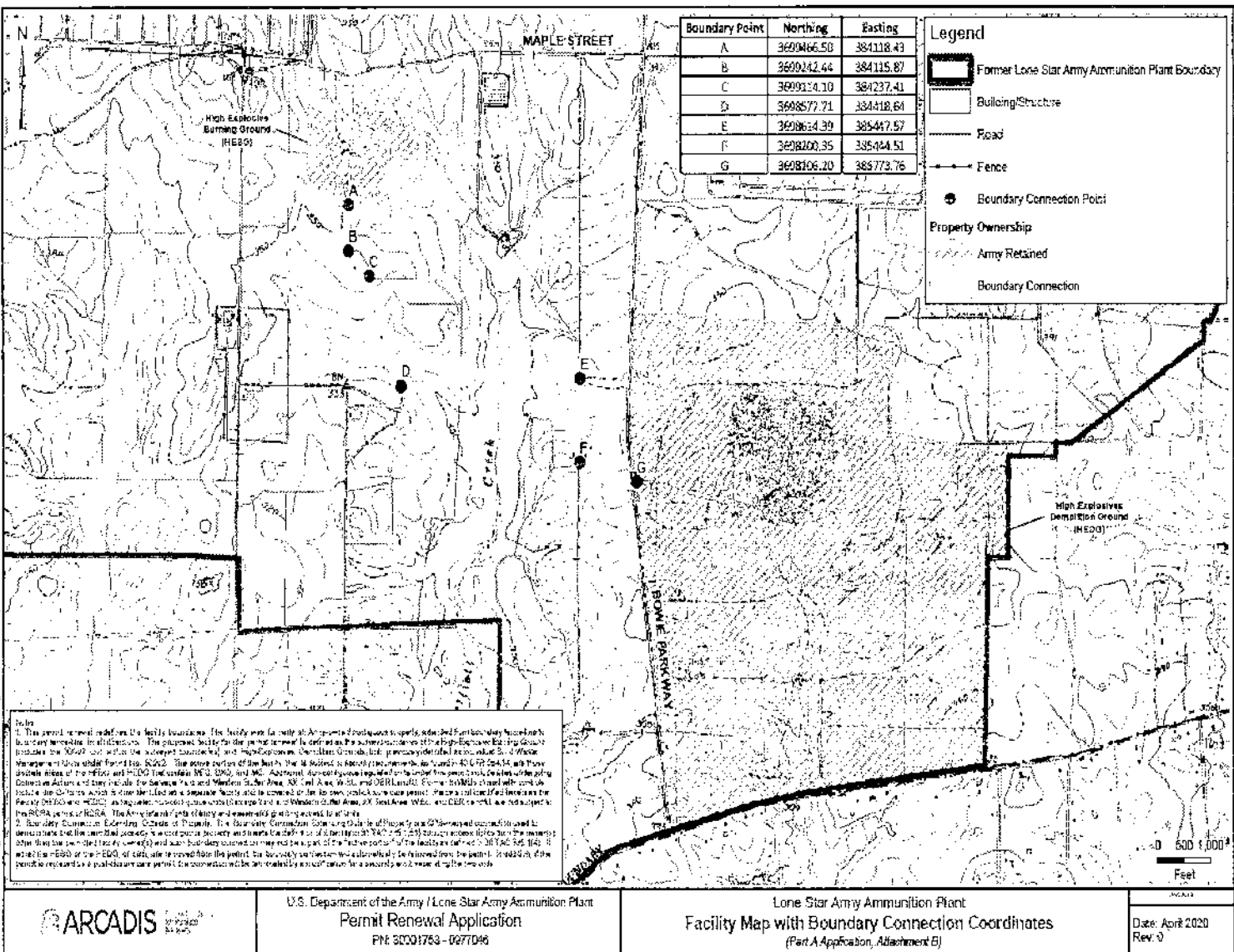
THENCE: N 79°49'13" E, with the South boundary line of the above described Tract No. 248, 2141.09 feet to a set 5/8" rebar with plastic cap for corner;

THENCE: N 01°46'47" W, with the East boundary line of the above described Tracts No. 248 and 247, passing at 20.22 feet a found Army Corps of Engineers concrete monument with Brass Cap Stamped "BM A 1960" and continuing a total distance of 3346.72 feet to a found Army Corps of Engineers concrete monument with Brass Cap Stamped "BM B 1960" for corner;

THENCE: N 87°24'23" E, with the South boundary line of the above described Tract No. 183, 371.72 feet to a found 5/8" rebar for corner;

THENCE: N 02°38'56" W, over and across the above described Tracts No. 183, 182 and 213, 1649.60 feet to the POINT OF BEGINNING, containing 1,064.8810 Acres of land, with 200.3039 Acres being in the Nancy Dycus Hrs., with 34.8361 Acres being in the E.T. Jackson Hrs., with 73.9001 Acres being in the James B. McWhorton Hrs., with 3.6735 Acres being in the John W.F. Elliott Hrs., with 372.3815 Acres being in the John W. Lane Hrs., with 157.8200 Acres being in the Julia Davis Hrs., with 83.6433 Acres being in the David Jarrett Hrs. and with 138.3225 Acres in the Mary Burnside Hrs., all in Bowie County, Texas.

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 Lone Star Army Ammunition Plant



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U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application
 PH: 30001763 - 0977046

Lone Star Army Ammunition Plant
 Facility Map with Boundary Connection Coordinates
 (Part A Application, Attachment B)

Date: April 2020
 Rev: 0

Attachment D – List of Incorporated Application Materials

The following is a list of Part A and Part B Industrial & Hazardous Waste Application elements, as they relate to units listed in “Attachment E” and CP Table I, which are incorporated into all Industrial & Hazardous Waste permits by reference as per Section I.B.

TCEQ Part A Application Form

- I. General Information
- II. Facility Background Information
- III. Wastes and Waste Management
- IV. Index of Attachments

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. TCFQ 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 – Reserved
 - C. Additional Requirements for Waste Piles – Reserved
 - D. Additional Requirements for Storage Surface Impoundments – Reserved
 - E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with Wastes in Place) – Reserved
 - 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

Attachment D – List of Incorporated Application Materials

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 – Reserved
- D. Surface Impoundments – Reserved
- E. Waste Piles – Reserved
- F. Land Treatment Units – Reserved
- G. Landfills – Reserved
- H. Incinerators – Reserved
- I. Boilers and Industrial Furnaces – Reserved
- J. Drip Pads – Reserved
- K. Miscellaneous Units
- L. Containment Buildings – Reserved

Table V.B. – Container Storage Areas
Table V.K. – Miscellaneous Units

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

VII. Closure and Post-Closure Plans

- A. Closure
- B. Closure Cost Estimate – Reserved
- C. Post-closure
- D. Post-closure Cost Estimate – Reserved
- E. Closure and Post-Closure Cost Summary – Reserved

Table VII.A. – Unit Closure

VIII. Financial Assurance

- A. Financial Assurance Information Requirements for all Applicants – Reserved
- B. Applicant Financial Disclosure Statements – Reserved
- C. Applicants Requesting Facility Expansion, Capacity Expansion, or New Construction – Reserved

Attachment D - List of Incorporated Application Materials

- 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 - US Department of the Army-Lone Star Army Ammunition Plant and TexAmericas Center
 - A. Site Specific Information
 - B. Groundwater Protection Standard
 - C. Compliance Monitoring Program
 - D. Corrective Action Program
 - E. Cost Estimates for Financial Assurance - Reserved

Table XI.A.1. - Facility History for Waste Management Units
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. Hazardous Waste Permit Application Fee
 - Table XII.A. - Hazardous Waste Units (For Application Fee Calculations)
 - Table XII.B. - Hazardous Waste Permit Application Fee Worksheet

- XIII. Confidential Material

Attachment E - List of Permitted Facility Units

Authorized Permitted Units

TCEQ Permit Unit No.¹	Unit Name	NOR Unit No.¹	Unit Description	Capacity	Unit Status²
007	High Explosive Burning Ground (HEBG) Hazardous Waste Container Storage Facility (HWCSF)	011	Container Storage Area	35,200 gallons	Inactive
009	High Explosive Detonation Ground	004	Miscellaneous Unit	5,400 lbs/day	Inactive
010	XX-97 HWCSF	020	Container Storage Area	3,520 gallons	Inactive
013	HEBG ³ Pad 1	066	Miscellaneous Unit	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	Inactive
014	IIEBG Pad 2	067	Miscellaneous Unit	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	Inactive
015	HEBG Pad 3	068	Miscellaneous Unit	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	Inactive
016	IIEBG Pad 4	069	Miscellaneous Unit	14,500 lbs/day NEW (Net rated capacity for 066, 067, 068, 069)	Inactive

Attachment E – List of Permitted Facility Units

Historical Permitted Units no Longer Subject to this Permit⁴

TCEQ Permit Unit No. ¹	Unit Name	NOR Unit No. ¹	Unit Description	Capacity	Unit Status ²
001	P-82 HWCSF	019	Container Storage Area	456 drums, 25,080 gallons	Transferred
002	F-92 HWCSF	012	Container Storage Area	1,980 gallons	Closed
003	A-8 HWCSF	005	Container Storage Area	104 drums	Closed
004	T-2-1 HWCSF	015	Container Storage Area	11,800 gallons	Transferred
005	T-3-2 HWCSF	013	Container Storage Area	216 drums, 11,800 gallons	Transferred
006	T-4-2 HWCSF	016	Container Storage Area	11,800 gallons	Transferred
011	North Area G-Ponds	017	Surface Impoundment	1.2 acres	Transferred
012	South Area O-Ponds	018	Surface Impoundment	~6.1 acres	Transferred

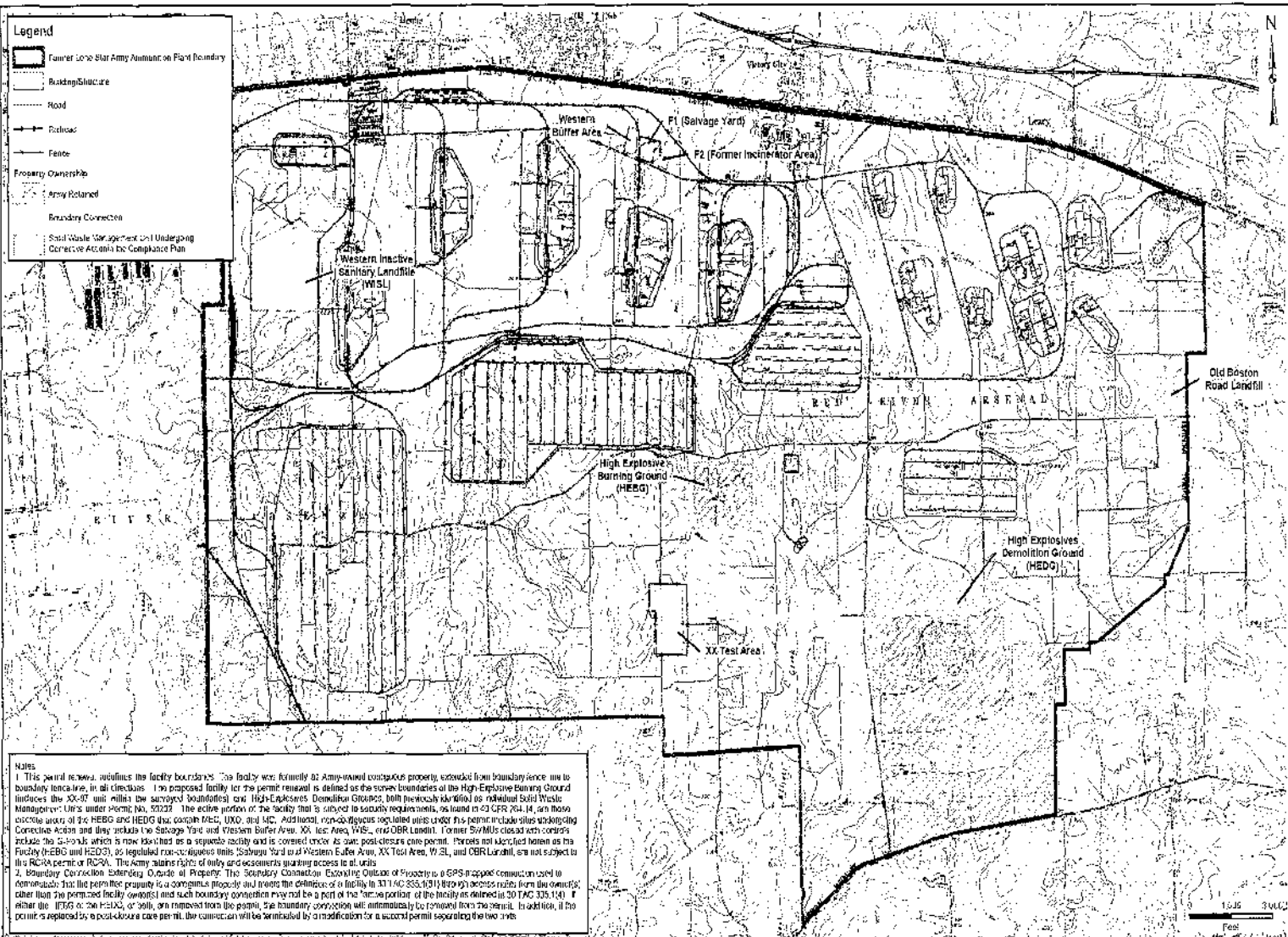
¹ Permitted Unit No. and NOR Unit No. cannot be reassigned to new units or used more than once and all units that were in the Attachment D of a previously issued permit must be listed.

² Unit Status options: Active, Closed, Inactive (built but not managing waste), Proposed (not yet built), Never Built, Transferred, Post-Closure.

³ HEBG, Permit Unit No. 008 was split into four burn pans (Permit Unit Nos. 013-016)

⁴ The historical units are closed and/or no longer subject to RCRA permit requirements and are included in this table for informational purposes.

CP Attachment A: Facility Site Maps

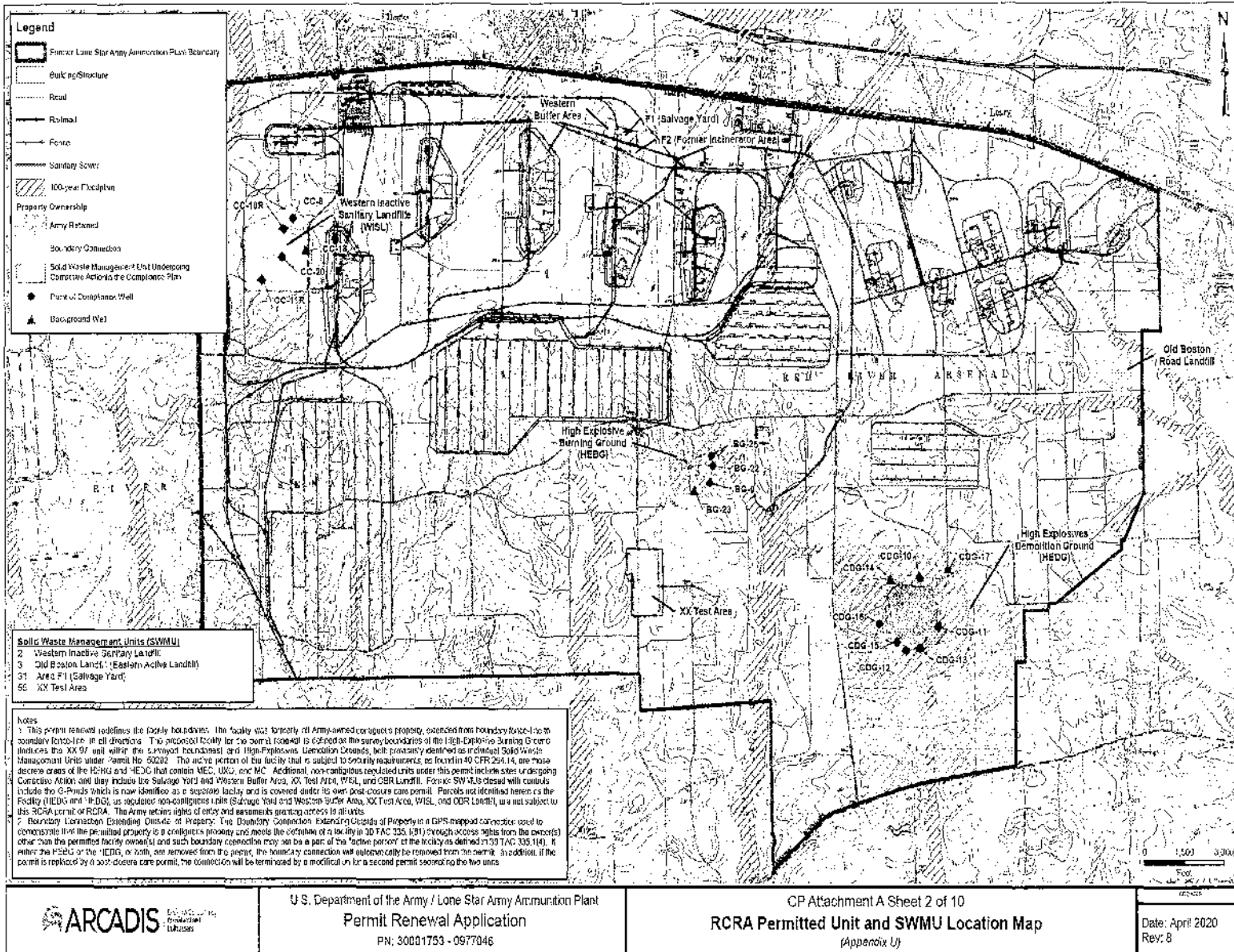


NOTES

1. This permit renewal reaffirms the facility boundaries. The facility was formerly an Army-owned contiguous property, enclosed from boundary fence, and to boundary fence line, in all directions. The proposed facility for the permit renewal is defined as the survey boundaries of the High Explosive Burning Ground (HEBG) and the XX-07 unit within the surveyed boundaries of the High Explosives Demolition Ground, both previously identified as individual Solid Waste Management Units under permit No. 50292. The active portion of the facility that is subject to safety requirements, as found in 30 CFR 304.14, are those discrete areas of the HEBG and HEDG that contain HMX, UXO, and SAC. Additional, non-safety regulated areas under this permit include sites undergoing Corrective Action and they include the Salvage Yard and Western Buffer Area, XX Test Area, WISL, and OBR Landfill. Former SWMUs closed area contents include the 2-4-0-0-0 which is now identified as a separate facility and is covered under a post-closure care permit. Parcels not identified herein as the Facility (HEBG and HEDG), or regulated non-safety units (Salvage Yard and Western Buffer Area, XX Test Area, WISL, and OBR Landfill), are not subject to the RCRA permit or RCPA. The Army retains rights of entry and egress and guaranty access to all units.

2. Boundary Connection: Extending Outside of Property. The Boundary Connection, Extending Outside of Property is a GPS-tracked connection used to demonstrate that the permit property is a contiguous property and meets the definition of a facility in 30 TAC 335.1211(a)(9) access route from the owner's other than the permitted facility owners and such boundary connection may not be a part of the "active portion" of the facility as defined in 30 TAC 335.141. If either the HEBG or HEDG, or both, are removed from the permit, the boundary connection will automatically be removed from the permit. In addition, if the permit is replaced by a post-closure care permit, the connection will be maintained by a modification to a second permit separating the two units.

CP Attachment A: Facility Site Maps



U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application
 PN: 30001793 - 0977046

CP Attachment A Sheet 2 of 10
 RCRA Permitted Unit and SWMU Location Map
 (Appendix U)

Date: April 2020
 Rev: 8

CP Attachment A: Facility Site Maps



Legend
Old Boston Road Landfill

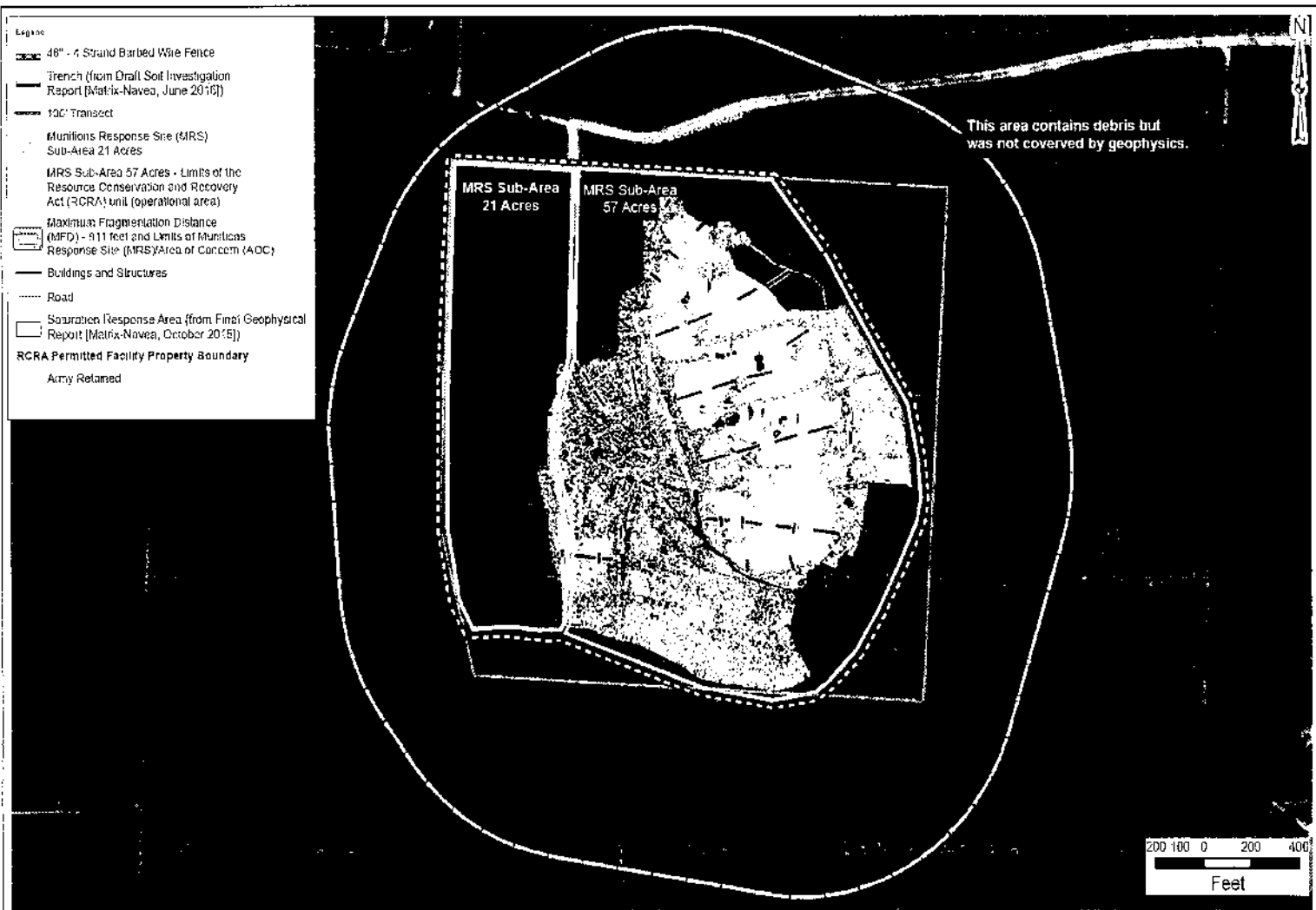
U.S. Department of the Army / Lone Star Army Ammunition Plant
Permit Renewal Application
PN: 30001753 - 0977046

CP Attachment A Sheet 3 of 10
Old Boston Road Landfill
(Appendix U)

 **ARCADIS** Supporting
for natural and
built assets

ARCADIS
Date: April 2020
Revision Number: 1

CP Attachment A: Facility Site Maps

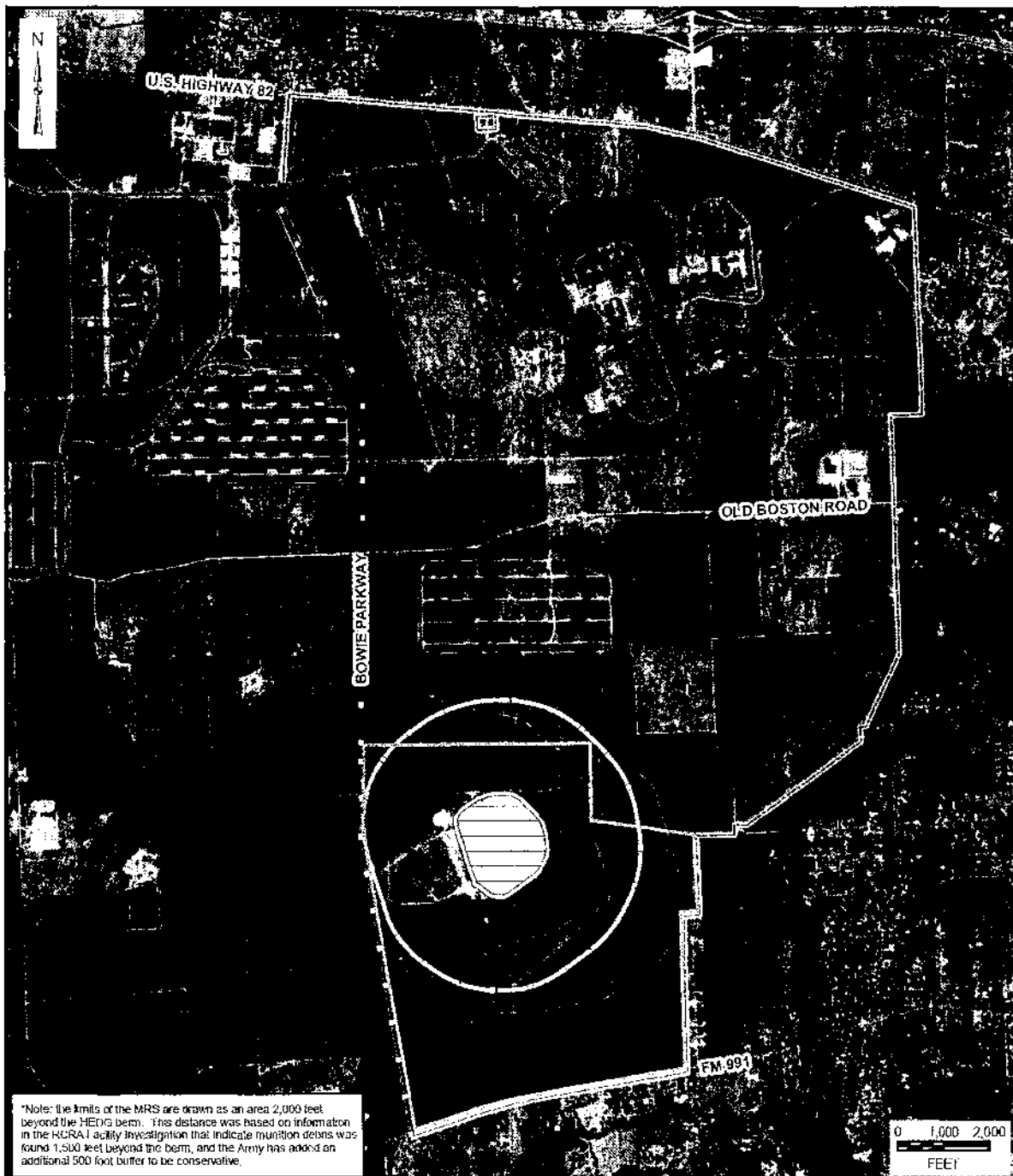


U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application

CP ATTACHMENT A SHEET 4 OF 10
 High Explosive Burning Ground (HEBG) and Limits of AOC/MRS
 (Appendix U)

ARCADIS
 Date: April 2020
 Revision Number: 7

CP Attachment A: Facility Site Maps



*Note: The limits of the MRS are drawn as an area 2,000 feet beyond the HEDG berm. This distance was based on information in the RCRA Facility Investigation that indicate munition debris was found 1,500 feet beyond the berm, and the Army has added an additional 500 foot buffer to be conservative.

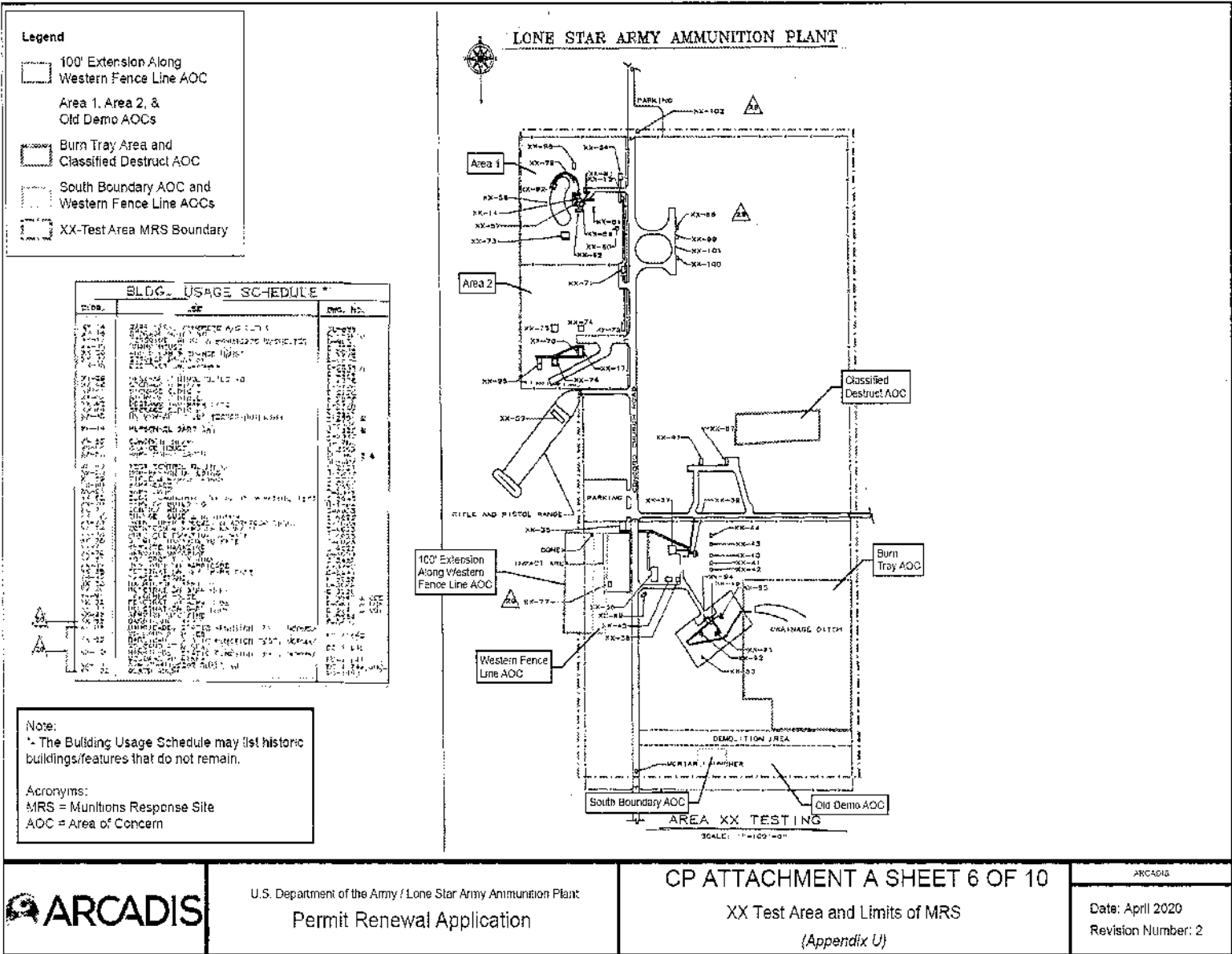
Legend	
48" - 4 Strand Barbed Wire Fence (DZ1 owned)	Limits of Munitions Response Site/Area of Concern*
48" - 4 Strand Barbed Wire Fence (Army-owned)	HEDG Berm - Limits of the Resource Conservation and Recovery Act (RCRA) unit (operational area).
6" Fence Chain Link / 3-Strand Barbed Wire (DZ1 owned)	RCRA Permitted Facility Property Boundary
6" Fence Chain Link / 3-Strand Barbed Wire (Army-owned)	Army Retained

U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application
 PN: 30001753 - 0977046

CP Attachment A Sheet 5 of 10
 High Explosive Detonation Ground (HEDG) and Limits of AOC/MRS
 (Appendix U)

	ARCADIS
	Date: April 2020 Revision Number: 7

CP Attachment A: Facility Site Maps

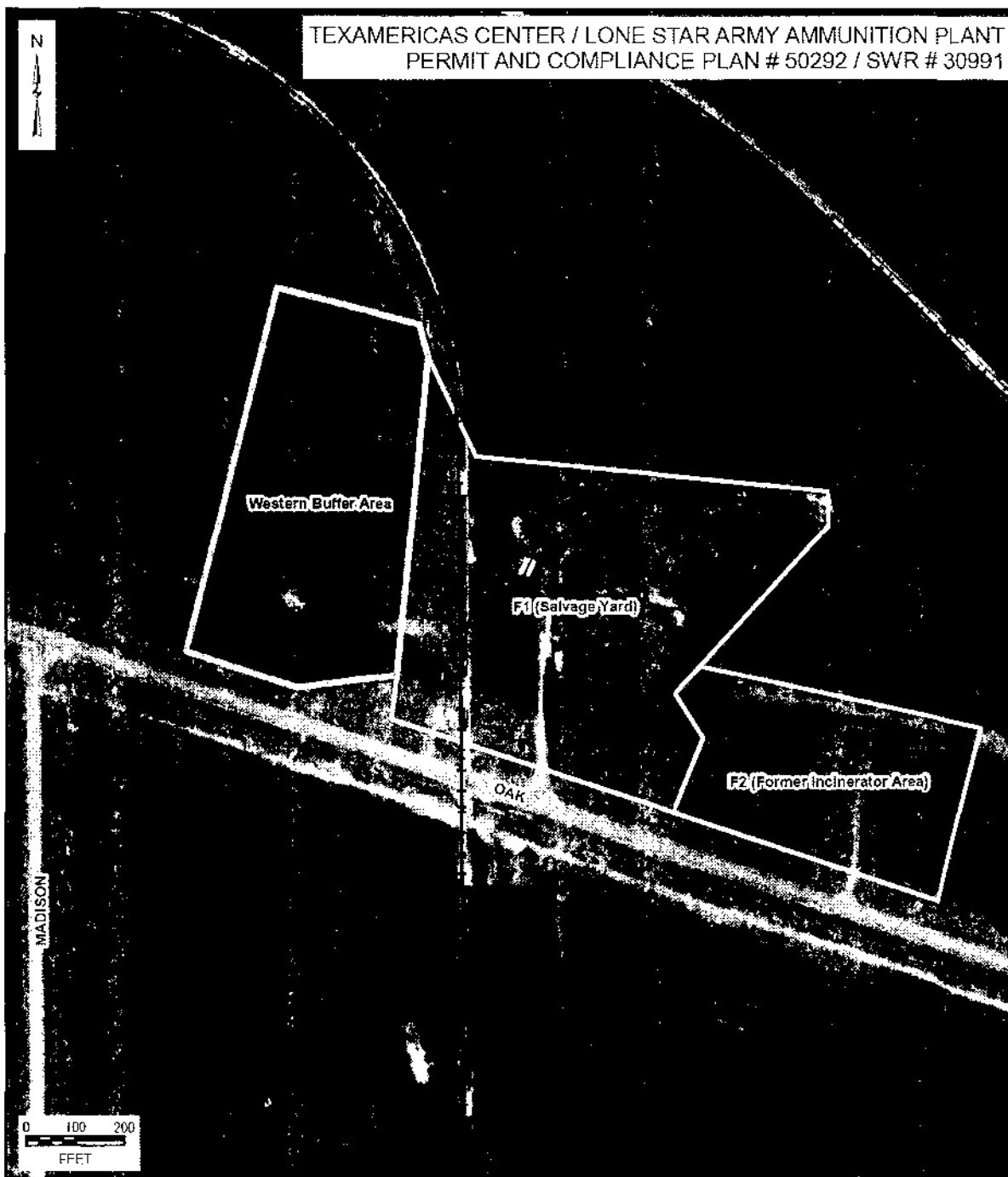


U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application

CP ATTACHMENT A SHEET 6 OF 10
 XX Test Area and Limits of MRS
 (Appendix U)

ARCADIS
 Date: April 2020
 Revision Number: 2

CP Attachment A: Facility Site Maps



Legend

- F1 (Salvage Yard) & F2 (Former Incinerator Area)
- Western Buffer Area
- Railroad

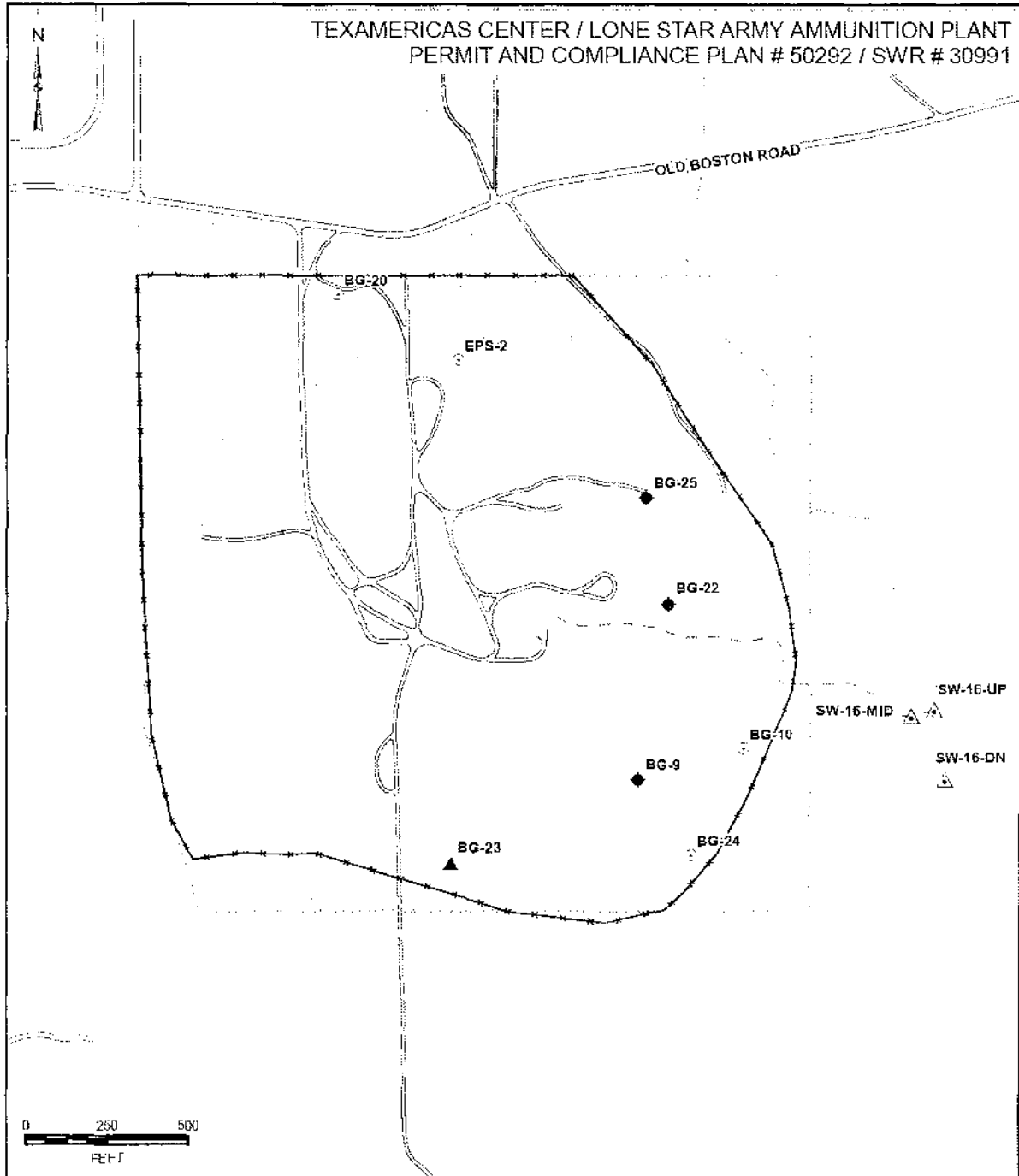
U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application
 PN: 30001753 - 0977046

CP Attachment A Sheet 7 of 10
 F33 Salvage Yard AOC
 (Appendix U)

ARCADIS Environmental and Infrastructure

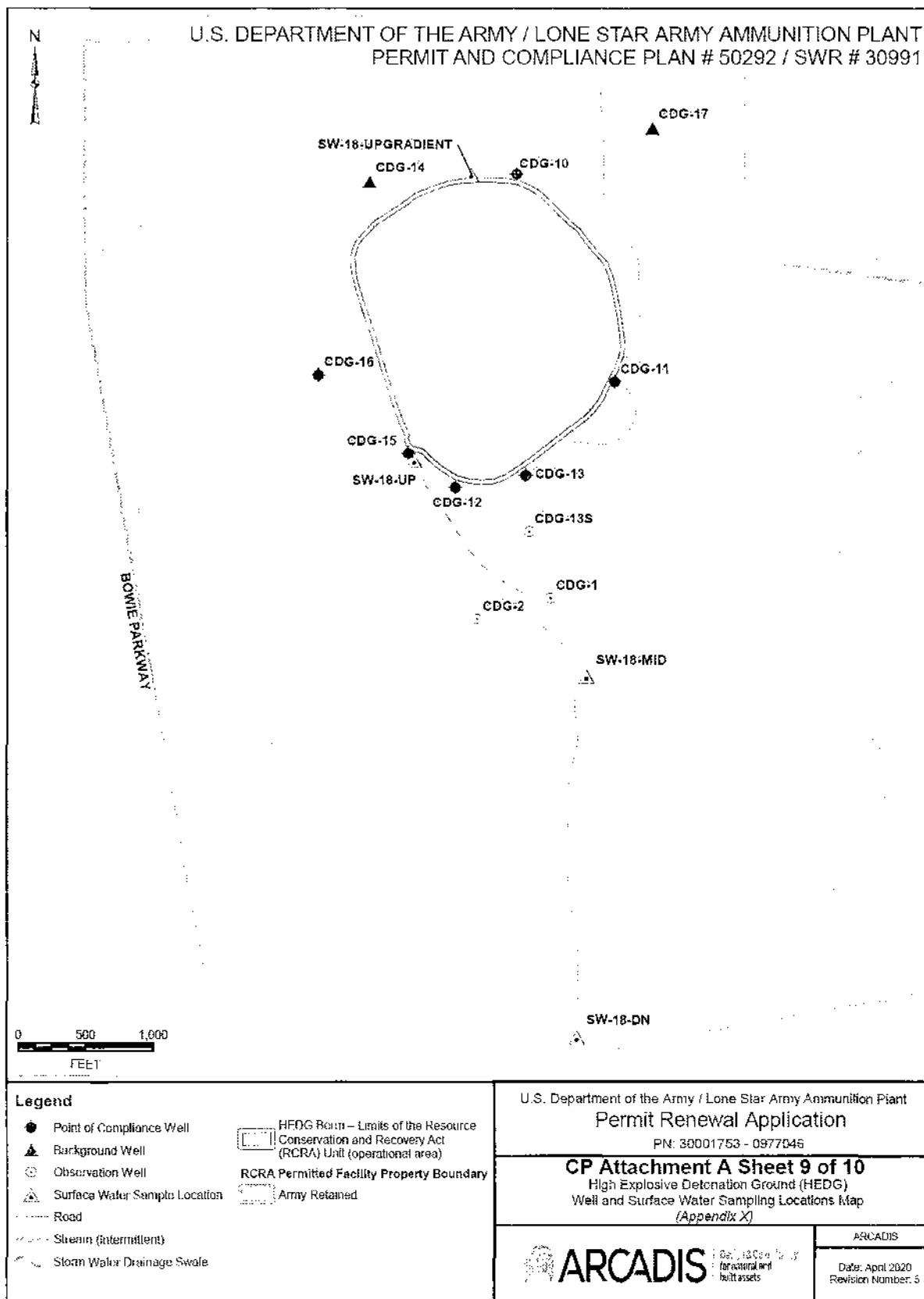
ARCADIS
 Date: April 2020
 Revision Number: 2

CP Attachment A: Facility Site Maps

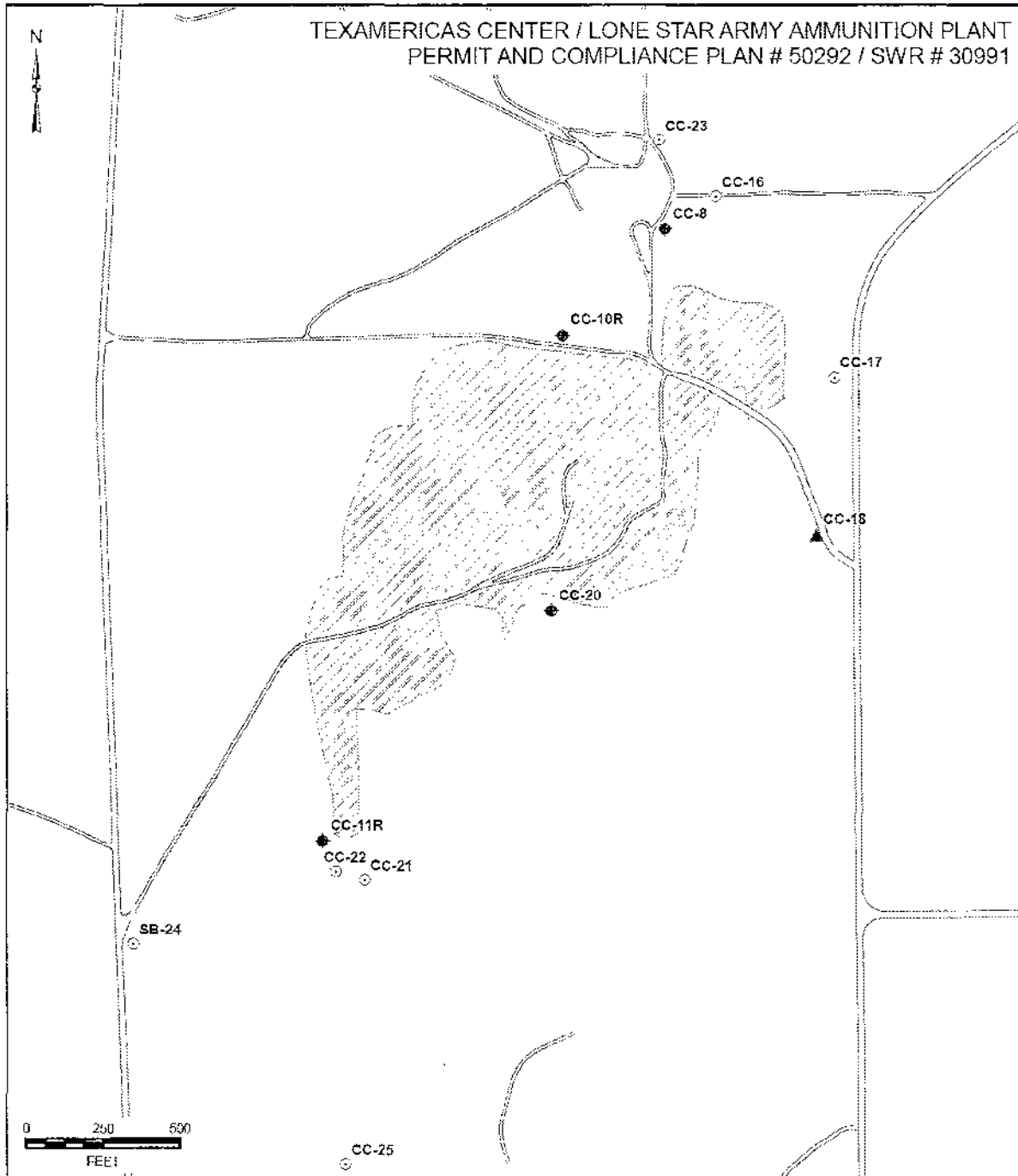


Legend <ul style="list-style-type: none"> ◆ Point of Compliance Well ▲ Background Well ○ Observation Well △ Surface Water Sample Location --- Stream (Intermittent) --- Storm Water Drainage Swale — Fencing — Road 		RCRA Permitted Facility Property Boundary Army Retained		U.S. Department of the Army / Lone Star Army Ammunition Plant Permit Renewal Application PN: 30081753 - 0977046	
CP Attachment A Sheet 8 of 10 High Explosive Burning Ground (HEBG) Well and Surface Water Sampling Locations Map <i>(Appendix X)</i>				ARCADIS Date: April 2020 Revision Number: 4	
		Services for natural and built assets			

CP Attachment A: Facility Site Maps



CP Attachment A: Facility Site Maps



Legend	
SWMU Boundary	Point of Compliance Well
Limits of Landfill	Background Well
Road	Observation Well

U.S. Department of the Army / Lone Star Army Ammunition Plant
 Permit Renewal Application
 PN: 30001753 - 0977646

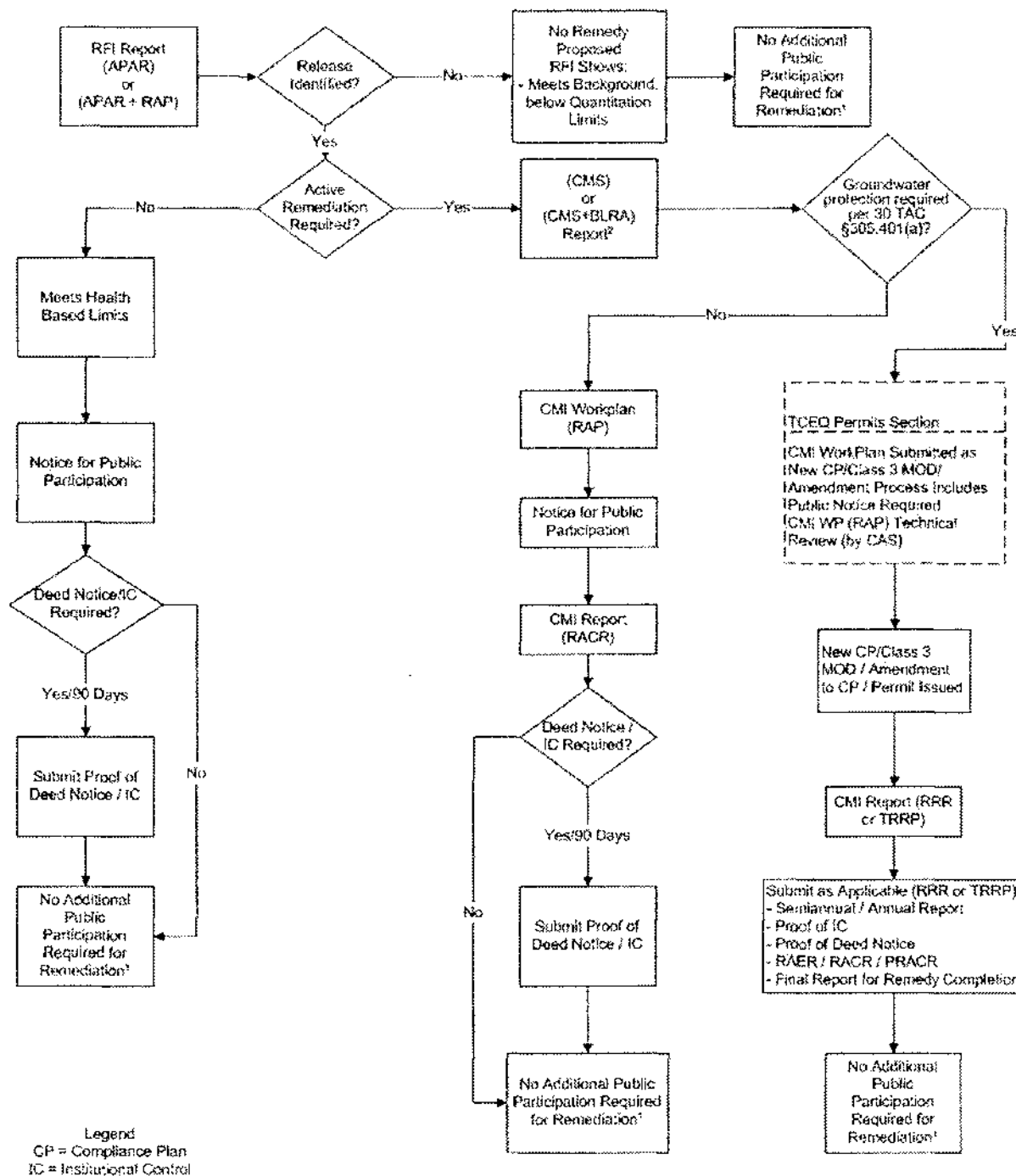
CP Attachment A Sheet 10 of 10
 Western Inactive Sanitary Landfill (WISL) Well Location Map
 (Appendix X)



ARCADIS
 Date: April 2020
 Revision Number: 4

CP Attachment B
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.

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

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 TCFQ 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.

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

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;

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

- 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.

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

19. The Permittee shall complete construction or plugging and abandonment of each well in accordance with the requirements of this Compliance Plan 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 TCFQ Compliance Plan No. 50292 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 Compliance Plan No. 50292:" (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 Compliance Plan. The plugging of wells shall be in accordance with 16 TAC Chapter 76 dealing with Well Drilling, Completion, Capping and Plugging.

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

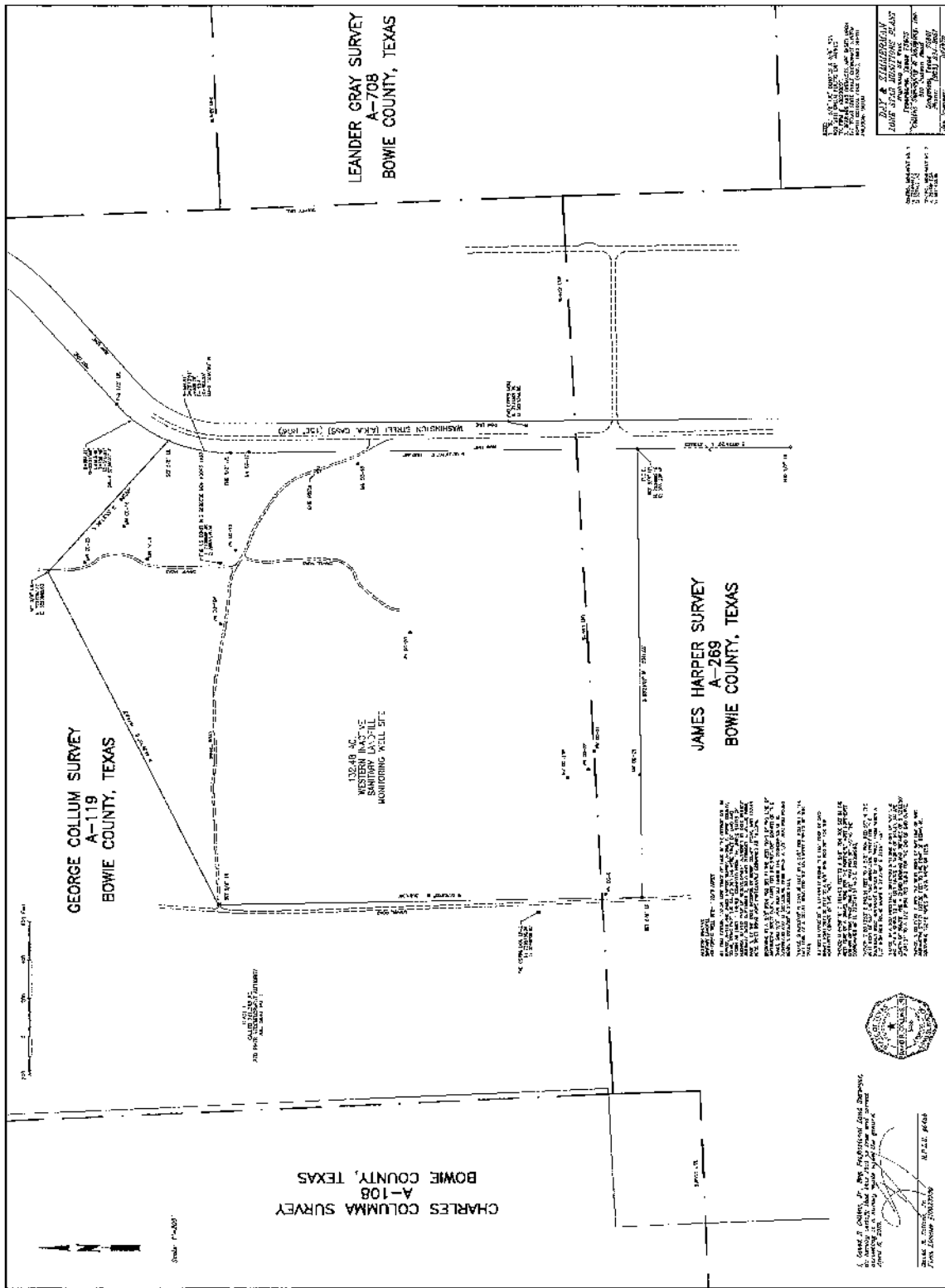
Table of Well Construction Details

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 MSL)					
Ground surface elevation (±0.01 MSL)					
Capped/lockable					
Surface pad size (ft)					
Detailed drawing of well (include dimensions) Y/N					
Depth to surface seal (ft)					

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

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" 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)					

CP Attachment D: Legal Description of Solid Waste Management Units and Areas of Concern



CP Attachment D: Legal Description of Solid Waste Management Units and Areas of Concern

