Hazardous Waste Permit No. 50335
EPA ID. No. TX4210020133
ISWR No. 69062

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 Air Force Joint Base San Antonio - Camp Bullis (JBSA-BUL) 5050 Wilkerson Rd, Building 5000 San Antonio, Texas 78257
Site Owner:	US Department of the Air Force 502nd Civil Engineering Squadron 1555 Gott Street, Building 5595 JBSA-Lackland, San Antonio, Texas 78236
Classification of Site:	Hazardous and Nonhazardous Class 1, Class 2 and Class 3 industrial solid waste, on-site/off-site processing, noncommercial facility, corrective action.

The permittee is authorized to manage wastes 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 process wastes shall expire midnight, ten (10) years after the date of this renewal permit approval. This permit was originally issued on November 7, 1997 and subsequently renewed on December 19, 2008.

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. Those provisions marked with a double asterisk (**) stem from federal authority only.

Issued Date: May 23, 2019

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For the Commission

Table of Contents

List of Tables:

Table VII.G.	Post-Closure Period
CP Table I	Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring
CP Table II	Solid Waste Management Units and/or Areas of Concern Addressed in Provision XI.H. for which Corrective Action Applies Pursuant to 30 TAC Section 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 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
CP Table VI	Compliance Period for RCRA-Regulated Units
CP Table VII	Reporting Requirements
CP Table VIII	Compliance Schedule

List of Attachments:

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

List of Compliance Plan Attachments:

CP Attachment A Facility Site Maps

Sheet 1 of 7	Facility Site Map, Location of RCR-Regulated Units, Solid Waste Management Units (SEMUs) and Areas of Concern (AOCs)
Sheet 2 of 7	OB/OD First GWBU and Second GWBU Well Location Map
Sheet 3 of 7	Soil PCLE Zone of SWMU 10, Landfill 12
Sheet 4 of 7	Response Action Plan View Map Site 8 (Landfill Site 8)
Sheet 5 of 7	Injection System Process Flow Diagram Site 8 (Landfill Site 8)
Sheet 6 of 7	Horizontal Well Construction Diagram, Site 8 (Landfill Site 8)
Sheet 7 of 7	Site 8 (Landfill Site 8) Well Location Map

CP Attachment B Public Participation in HSWA Corrective Action
CP Attachment C (E or F) Well Design, Construction, Installation, Certification, Plugging and Abandonment Procedures and Specifications

Permit/Compliance Plan Acronyms

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

RFI	–	RCRA Facility Investigation
RRR	–	TCEQ Risk Reduction Rules
RSA	–	Remedy Standard A
RSB	–	Remedy Standard B
SR/WM	–	Source Reduction and Waste Minimization
SSI	–	Statistically Significant Increase
SWDA	–	Solid Waste Disposal Act
SWMU	–	Solid Waste Management Unit(s)
TAC	–	Texas Administrative Code
TCEQ	–	Texas Commission on Environmental Quality
TCEQ QAPP	–	"Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act and Underground Injection Control"
THC	–	Total Hydrocarbons
TRRP	–	Texas Risk Reduction Program

I. Facility Description

A. Size and Location of Site

A permit is issued to Joint Base San Antonio – Camp Bullis (hereafter called the permittee), to operate a hazardous waste processing facility located at 5050 Wilkerson Road, Building 5000, San Antonio, in Bexar County, Texas, and within the drainage area of Segment 1910 in the Salado Creek Drainage Basin (North Latitude 29° 40' 30", West Longitude 98° 33' 10"). The legal description of the facility submitted in Permit No. 50335 application dated November 13, 2017, and revised January 26, 2018, September 24, 2018, is hereby made a part of this permit as "Attachment A." The hazardous waste management facility as delineated by the permittee's application map is hereby made a part of this permit as "Attachment B."

B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial & Hazardous Waste Application submittals dated November 13, 2017, January 26, 2018, September 24, 2018, the Application Elements listed in "Attachment C," which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ). These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

II. General Facility Standards

A. Standard Permit Conditions

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

1. Modification of Permitted Facilities

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

2. Duty to Comply

The permittee must comply with all the conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency order issued by the Commission. Any permit noncompliance, other than noncompliance

authorized by an emergency order, constitutes a violation of the Resource Conservation and Recovery Act (RCRA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [30 TAC Section 305.142]

3. Severability

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

4. Definitions

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

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

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. 50335 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. 50335."

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

8. Pollution Prevention

Facilities subject to 30 TAC Chapter 335, Subchapter Q - Pollution Prevention: Source Reduction and Waste Minimization must prepare a five (5) year Source Reduction and Waste Minimization Plan and submit a Source Reduction and Waste Minimization (SR/WM) Annual Report to the TCEQ 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 Requirements

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 Sections 335.325, 335.328 and 335.329 (regarding waste management fee assessment, fee payment, and records and reports);

m. 30 TAC Chapter 335, Subchapter Q: Pollution Prevention: Source Reduction and Waste Minimization; and

n. 30 TAC Chapter 350, Texas Risk Reduction Program.

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

2. Federal Regulations

To the extent applicable to the activities authorized by this permit, the following provisions of 40 CFR Parts 264, 266 Subpart M, and Part 268, adopted by reference by 30 TAC Section 335.152 and 335 Subchapter O are hereby made provisions and conditions of this permit, to the extent consistent with the Texas Solid Waste Disposal Act, Texas Health and Safety Code Ann., Chapter 361 (Vernon), and the rules of the TCEQ:

a. Subpart B -- General Facility Standards;

b. Subpart C -- Preparedness and Prevention;

c. Subpart D -- Contingency Plan and Emergency Procedures;

d. Subpart E -- Manifest System, Recordkeeping, and Reporting;

e. Subpart G -- Closure and Post-Closure;

f. Subpart X -- Miscellaneous Units;

g. Subpart EE -- Hazardous Waste Munitions and Explosives Storage;

h. 40 CFR Part 266, Subpart M - Military Munitions;

i. 40 CFR Part 268 -- Land Disposal Restrictions (LDR).

III. Facility Management

A. Operation of Facility

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

B. Personnel Training

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

C. Security

1. The permittee shall provide and maintain an artificial or natural barrier which completely surrounds the active waste management portion(s) of the facility and shall have a means to control entry, at all times, through gates or other entrances to these same facility areas.

2. The permittee shall post warning signs at all points of access to the active waste management portion(s) of the facility and along the natural and/or artificial barriers in sufficient numbers to be seen from any approach to that (those) portion(s) of the facility. The signs shall be printed so that they may be clearly read from a distance of at least twenty-five (25), feet and shall state “Danger - Unauthorized Personnel Keep Out” in English and in Spanish.

D. General Inspection Requirements

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

E. Contingency Plan

1. The permittee shall follow the Contingency Plan, developed in accordance with 40 CFR Part 264 Subpart D, and contained in the permit application submittals identified in Section I.B. of this permit. Copies of this plan shall be available to all employees involved in waste management at the facility.

2. The permittee shall immediately initiate clean-up procedures for removal of any spilled hazardous or industrial nonhazardous wastes and waste residues and shall take all steps necessary to prevent surface water or groundwater contamination as a result of any spills.

3. Collected hazardous or industrial nonhazardous wastes, spills, leaks, clean-up residues, and contaminated rainfall runoff, including contaminated stormwater from the drainage control system(s) associated with the permitted units, shall be removed promptly after the spillage and/or rainfall event in as timely a manner as is necessary to prevent overflow of the system by the following method(s):

a. Removal to an on-site authorized facility unit;

b. Removal to an authorized industrial solid waste management facility or authorized off-site facility; or

c. Discharge in accordance with a wastewater discharge permit.

4. The permittee shall ensure that any equipment or vehicles which have come in contact with waste in the loading/unloading, storage, processing, and/or disposal areas have been decontaminated prior to their movement into designated uncontaminated areas of the site property. At a minimum, all contaminated equipment shall be externally decontaminated and contaminated vehicles shall have their undercarriages and tires or tracks decontaminated to remove all waste residues and to prevent contamination of uncontaminated areas. All wash water generated shall be collected and disposed of in accordance with Provision III.E.3.

5. Preparedness and Prevention

   a. At a minimum, the permittee shall equip the facility 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 Section 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 - Reserved

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.

Wastes authorized for processing include those generated from facility sources and from off-site sources.

2. Hazardous and Non-Hazardous Waste Received from Off-Site Sources

   When the permittee may receive hazardous or non-hazardous waste from an off-site source (except where the permittee is also the generator), the permittee shall inform the generator in writing that the permittee has the appropriate permits and will accept the waste the generator is shipping. The permittee shall keep a copy of this written notice as part of the operating record. [40 CFR 264.12(b)]}

   The permittee may receive hazardous or non-hazardous waste from the off-site facilities as described below:

   The permittee may receive Propellants, Explosives, and Pyrotechnics (PEP) as described in 40 CFR §266.202(b) during an emergency situation from an off-site source. When PEP has been declared a waste by an authorized military official it will be handled and managed by Explosive Ordinance Detonation (EOD) trained personnel in consultation with waste management personnel until it is processed at the OB/OD Unit and determined to be “explosive free”.

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 Texas Commission on Environmental Quality (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 D" for storage and processing subject to the limitations herein. All waste management activities not otherwise exempted from permitting under 30 TAC Section 335.2 shall be confined to the authorized facility units subject to permitting listed in "Attachment D." References hereinafter in this permit to "TCEQ Permit Unit No____" shall be to the authorized permitted facility units listed in "Attachment D." All authorized units must be clearly identified as numbered in "Attachment D." 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 construct, 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).

5. The permittee shall provide the following information to the Executive Director:

Reserved

B. Container Storage Areas - Reserved

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

Miscellaneous units and their approved waste types are shown in Table V.K. - Miscellaneous Units. The permittee is authorized to operate the miscellaneous units for processing subject to the limitations contained herein.

L. Containment Buildings - Reserved

VI. Groundwater Detection Monitoring

The permittee shall conduct groundwater monitoring in accordance with Section XI of this permit.

A. Groundwater Monitoring Program - Reserved

B. Construction, Certification, and Plugging - Reserved

C. Detection Monitoring System Operation - Reserved

D. Sampling and Analysis - Reserved

E. Response Requirements for SSI - Reserved

F. Revised Detection Monitoring Program - Reserved

G. Annual Detection Monitoring Reporting Requirements. - Reserved

H. Record Keeping Requirements - Reserved

I. Compliance Scheduling Requirements - 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. except as modified in Section VII.C. of this permit.

   In addition, facility closure shall commence:

   a. Upon direction of the TCEQ for violation of the permit, TCEQ rules, or state statutes; or

   b. Upon suspension, cancellation, or revocation of the terms and conditions of this permit concerning the authorization to receive, store, process, or dispose of waste materials; or

   c. Upon abandonment of the site; or

   d. Upon direction of the TCEQ for failure to secure and maintain an adequate bond or other financial assurance as required by Provision VII.B.1.

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

   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.

e. The permittee shall notify the TCEQ Regional Office at least ten (10) days prior to any closure sampling activity required by the permit in order to afford regional personnel the opportunity to observe these events and collect samples.

5. Unless the Executive Director approves an extension to the closure period, as per the requirements of 40 CFR 264.113(b), the permittee must complete partial and final closure activities within 180 days after receiving the final known volume of hazardous wastes at the hazardous waste management unit or facility.

6. As per the requirements of 40 CFR 264.115, within sixty (60) days of completion of closure of each permitted hazardous waste surface impoundment, or landfill unit, and within sixty (60) days of the completion of final closure, the permittee shall submit to the Executive Director, by registered mail, with a copy to the TCEQ Regional Office, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved Closure Plan and this permit. The certification, which shall be signed by the permittee and by a Professional Engineer licensed in Texas, must be in the form described in Provision II.A.6. A closure certification report shall be submitted with the required certifications which includes a summary of the activities conducted during closure and the results of all analyses performed. The certification report shall contain the information required by Provision II.A.6. and as may be applicable, insert as appropriate, and 30 TAC Section 350.32 (Texas Risk Reduction Program (TRRP) Remedy Standard A) and 30 TAC Section 350.33 (TRRP, Remedy Standard B) and 30 TAC Section 350.95 (Response Action Completion Report (RACR). Documentation supporting the licensed Professional Engineer's certification shall be furnished to the Executive Director upon request until the Executive Director releases the permittee from the financial assurance requirements for closure under 40 CFR 264.143(i).

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 rinse water generated treated and/or disposed at an authorized off-site facility.

12. Verification of decontamination shall be performed by analyzing rinse 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 rinse 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 rinse 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 rinse 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, Processing, and Combustion Unit Closure Requirements

The permittee shall close the processing units identified as TCEQ Permit Unit Nos. 1, 2, 3, and 4 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.601 (miscellaneous units), the Texas Risk Reduction Program of 30 TAC Chapter 350 and the following requirements.

If all contaminated soils cannot be removed or decontaminated to TRRP Remedy Standard A (RSA), the permittee shall close the miscellaneous unit(s) and perform post-closure care in accordance with the contingent Closure and Post-Closure Plans in the permit application, the closure and post-closure requirements for landfills, 30 TAC Section 335.152(a)(5), 30 TAC Chapter 350, Subchapter B, Subchapter C, Subchapter D, and Subchapter E as applicable.

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

For each hazardous waste management unit which is closed as a landfill, the permittee shall conduct post-closure care of the unit for a period of at least thirty (30) years after certification of closure of each respective unit. The Post-Closure Care Period for each closed unit is specified in Table VII.G. - Post-Closure Period. Post-Closure Care shall continue beyond the specified date in Table VII.G. until the Executive Director has approved the permittee's request to reduce or terminate the post-closure period, consistent with 40 CFR Section 264.117 and 30 TAC Section 335.152(a)(5). Post-Closure Care shall be performed in accordance with the Post-Closure Plans referenced in Section I.B., 40 CFR 264.117, and the following requirements:

1. Maintain all storm water conveyance structures in good functional condition.

2. Maintain all benchmarks at the facility.

3. Maintain the facility perimeter fence, manned or locked gates, and warning signs in good functional condition.

4. Ensure that all entrances to the facility have manned or locked gates.

5. Ensure that the TCEQ has access to the facility.

6. Prepare and submit the Biennial Report required by Provision II.B.7.

7. Perform all groundwater monitoring and related activities specified in Compliance Plan of the permit.

8. General Post-Closure Requirements

   a. 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 Post-Closure Plan(s) in accordance with 40 CFR 264.118 (d)(2). The written request shall include a copy of the amended Post-Closure Plan(s) for approval by the Executive Director.

   b. Time Frames for Modification/Amendment Request

      The permittee shall submit a written request for a permit modification or amendment in accordance with the time frames in 40 CFR 264.118 (d)(3).

9. Post-Closure Notice and Certification Requirements

   No later than sixty (60) days after completion of the established post-closure period for each unit, the owner or operator shall submit to the Executive Director, by registered mail with a copy to the TCEQ Regional Office, a certification that the Post-Closure Care Period for the unit was performed in accordance with the specifications of the approved Post-Closure Plan and this permit. The certification shall be signed by the permittee and a registered professional engineer. Documentation supporting the registered professional engineer's certification must be furnished to the Executive Director upon request until the Executive Director releases the owner or operator from the financial assurance requirements for post-closure under 40 CFR 264.145 (i).

H. Financial Assurance for Post-Closure - Reserved

VIII. Liability Requirements - Reserved

A. Sudden Accidental Occurrences - Reserved

B. Incapacity of Owners or Operators, Guarantors, or Financial Institutions - Reserved

IX. Corrective Action for Solid Waste Management Units

A. Notification of Release from Solid Waste Management Unit

If a solid waste management unit (SWMU) or area of contamination not previously addressed in the RCRA Facility Assessment (RFA), 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 - Reserved

C. Units Requiring Investigation - Reserved

D. Variance from Investigation - Reserved.

E. RCRA Facility Investigation (RFI)/Affected Property Assessment (APA) - Reserved

F. Remedy Selection - Reserved

G. Compliance Plan

The permittee shall follow 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 Provision X.B. and X.C., if these requirements are not applicable to any hazardous waste management units or associated ancillary equipment at this facility. If at any time any hazardous waste management units or associated ancillary equipment become subject to the requirements in 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 Perched Shallow Zone of the Upper Glen Rose and Lower Glen Rose Limestone Formation of the Trinity Aquifer (a karst aquifer). The Glen Rose, a karst limestone contains hundreds of caves, springs, sinkholes, sinking streams, solution cavities, open fractures, and other karst features creating preferential groundwater flow paths. Groundwater movement in the Upper and Lower Glen Rose Limestones are noted for rapid flow, (preliminary data from tracer studies indicate groundwater velocities in karst aquifer range between 1,000 to 2,500 feet per day). The region is transected by faults that may affect groundwater flow. The Upper Glen Rose is approximately 312 feet thick, consisting of thin bedded dolomitic fossiliferous limestones, and crops out in stream valleys at ground surface where soils are poorly developed and eroded. The Lower Glen Rose is approximately 230 feet thick, consisting of thinly bedded marl and marly biomicrite, vuggy limestone that grades upward to thin beds of limestone, marl and shale. Karst features are most prevalent at depth of 42 to 74 feet below ground surface (BGS) occurring in fossiliferous limestone (biostrome layer) of the Upper Glen Rose which underlies Camp Bullis. The occurrence of karst features (i.e. Lewis Valley and Cannonball Caves) increase in number and frequency in the southern portion of the Camp Bullis installation. Camp Bullis is located just north of the Edwards Aquifer recharge zone. The general direction of groundwater flow is from north to south. Groundwater is typically encountered at 20 feet BGS.

   As with Site 8 (Landfill Site 8) the uppermost aquifer at the Open Burning/Open Detonation (OB/OD) Area consists of two water bearing zones, the Perched Zone and the Karst Zone. Both of these zones are in the upper portions of the Upper Glen Rose, within 200 feet of the contact of the overlying Edwards Group. While the lower of the two-identified water bearing zones has been labeled as the Karst Zone, the degree of karstification in either of the zones has not been determined. The upper Perched Zone is characteristic of a fractured rock aquifer, while the lower Karst Zone exhibits those of a karst aquifer. The upper zone is in a portion of the formation where the shale/mudstone-rick rock may have inhibited karstification to the degree that is present lower in the sequence where limestone and dolomite dominate (the second water bearing zone). The geology and hydrogeology near the OB/OD Area has been characterized in a similar manner to Site 8 (Landfill Site 8) which included using surface geophysics, additional borings, monitoring wells, seep sampling, tracer studies, etc.

   Language for both the Corrective Action Program (30 TAC Section 335.166) and the Compliance Monitoring Program (30 TAC Section 335.165) is included in this Compliance Plan for reference and as contingency for future changes in accordance with Provision XI.D.6. Applicability of specific Corrective Action Program or Compliance Monitoring Program requirements depends on the status of the units, as defined in Provisions XI.A.2. through A.4. and CP Table I.

2. The Compliance Plan is specific to the waste management units listed in CP Table I (Items A and B) and depicted in CP Attachment A, for which the groundwater Corrective Action Program and Compliance Monitoring Program apply, pursuant to 30 TAC Sections 335.166 and 335.165, for releases from RCRA-regulated units.

3. The Compliance Plan is specific to the waste management units listed in CP Table I (Item D) and depicted in CP Attachment A, for which alternative requirements for the groundwater Corrective Action Program apply, pursuant to 30 TAC Sections 335.151, 335.156 and Chapter 350, for commingled releases from RCRA-regulated units and one or more SWMUs and/or AOC.

4. The Compliance Plan is specific to the SWMU and/or AOC 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.

5. The Compliance Plan is specific to the SWMU and/or AOC listed in CP Table II for which investigation and necessary corrective action applies pursuant to 30 TAC Section 335.167 and Chapter 350 and Section XI.H.

6. The Compliance Plan applies to any SWMU and/or AOC discovered subsequent to issuance of this Compliance Plan. The permittee shall notify the Executive Director within fifteen (15) days of such a discovery. Within 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. 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 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 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, horizontal 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 XI.B.1. through XI.B.9., to be operated according to the plans and specifications as approved in Provision XI.C.1 and CP Table VIII. 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 Section 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 30 TAC Sections 335.8 and 335.167 are met, then the permittee may apply for a modification or amendment to the Compliance Plan to terminate the Corrective Action Program for those units/areas.

Compliance Monitoring Program - Reserved

7. Compliance with the GWPS for each well is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents do not exhibit a statistically significant increase (SSI) or exceed the concentration limits when directly compared to the concentration limits of CP Table IVA. If any POC (and/or POE, if any) well of CP Table V is non-compliant with the GWPS at any time during the Compliance Monitoring Program, the permittee shall respond and report according to CP Table VII. The groundwater Compliance Monitoring Program established by this Compliance Plan shall extend until expiration of the Compliance Period specified in CP Table VI. At the end of the Compliance Period, the permittee shall either:

a. Submit a permit modification or amendment request to re-establish a Detection Monitoring Program under 30 TAC Section 335.164 for the remaining portion of the thirty (30) year post-closure care period in accordance with 40 CFR Part 264.117 if none of the hazardous constituents are detected at concentrations equal to or greater than the values listed in CP Table IV. Until approval of the request, the permittee shall continue groundwater monitoring under current Compliance Plan provisions;

b. Continue monitoring under the Compliance Monitoring Program if any hazardous constituent continues to be detected at concentrations equal to or greater than the value listed in CP Table IV and the GWPS in CP Table IVA is not exceeded during remaining portion of the thirty (30) year post-closure care period; or

c. If the thirty (30) year post-closure care period has expired and hazardous constituents continue to be detected in groundwater by Compliance Monitoring Program, then the permittee may request groundwater monitoring be discontinued if the GWPS of CP Table IVA are not exceeded at the end of the Compliance Period. Until approval, the permittee shall continue groundwater monitoring under current Compliance Plan provisions.

E. Corrective Action Program

The Corrective Action Program applies to units specified in CP Table I, Items A, C and D. 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 Section 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. In a karst aquifer, groundwater flow and contaminant transport characteristics may be greatly affected by rainfall event(s), therefore, groundwater sampling at Site 8 (Landfill Site 8) has been determined to be performed suitably at time intervals related to the aquifers response time to precipitation events, which is called stage based sampling. The frequency of stage based sampling events shall commence during flood flow (soon after high precipitation event), moderate flow (following the high stage), and the base flow (between precipitation events when water levels are constant). While Site 8 (Landfill Site 8) is using stage based sampling approach, the OB/OD Area will continue to be evaluated to determine whether stage base sampling can provide valuable information, and is appropriate for groundwater monitoring for this unit considering the geologic and hydrogeologic characteristics. Sampling of wells shall commence during the first complete quarter after issuance of this Compliance Plan. Thereafter, samples shall be collected on a frequency as specified in CP Table VIII for both Site 8 (Landfill Site 8) and OB/OD Area.

Sediment and surface water monitoring program: For each sampling location specified in CP Attachment A, Sheet 7 of 7, a sediment and/or surface water sample shall be collected and analyzed for approved constituents of concern (COC) list in accordance with the frequency specified in CP Table VIII. Stream Flow measurements, surface water level measurements, and physical parameters (pH, specific conductivity, temperature) of the surface water will be recorded at the time of sampling. Results shall be reported in accordance with CP Table VII.

Data evaluations shall be completed within ninety (90) days of collection of the last sample unless QA/QC procedures show that data is unacceptable and re-analyses or re-sampling must be performed. In such cases, the Executive Director will be notified as soon as it becomes apparent that the ninety (90) day time limit will not be met.

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

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

(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 XI.D.3., until analytical results satisfy the GWPS of CP Table IIIA for all wells of CP Table V of that unit or area for two consecutive sampling events. All wells listed in CP Table V shall then be sampled and analyzed on a frequency 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 XI.D.6.
(d) If the GWPS is achieved in all wells (Background, POC, POE, APOE, AMP, CAO and CAS), in accordance with Provision XI.D.6.a., then the permittee may apply to modify or amend the Compliance Plan according to Provisions XI.D.6.b., XI.D.6.d., XI.D.6.e., or XI.D.6.f.
(e) Any well with NAPLs detected in the wellbore shall be considered as non-compliant with the GWPS and is not required to be analyzed for the constituents of CP Table III or IIIA.

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

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

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

(1) Water level measurements relative to Mean Sea Level shall be measured to within 0.01 ft and shall be performed during each sampling event effective immediately with issuance of this Compliance Plan. Measurements shall be taken in all monitor wells specified in this Compliance Plan.

(2) Field determinations of pH, temperature and Specific Conductivity are required for all wells of CP Table V and as depicted in CP Attachment A excluding wells containing NAPLs. Turbidity in nephelometric turbidity units is required if micropurging techniques are utilized during sample collection.

(3) Field observations including descriptions of appearance (clarity, color, etc.) shall be recorded semiannually 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 shall be considered compliant with the GWPS for the sampling event. If one or more constituent value is greater than the respective concentration limit, then the well shall be considered non-compliant with the GWPS for the sampling event; or

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

b. Compare the value of each constituent to its respective concentration limit of CP Table III or IIIA for corrective action monitoring, or CP Table IV or IVA for compliance monitoring, using one of the following procedures:

(1) The Confidence Interval Procedure for the mean concentration based on a normal, log-normal, or non-parametric distribution. The 95 percent confidence coefficient of the t-distribution will be used in constructing the confidence interval (Chapter 21 of Statistical Analysis of Groundwater Data at RCRA Facilities-Unified Guidance, U.S. EPA, March 2009), and subsequent updates acceptable to the Executive Director. The confidence interval upper limit for each constituent shall be compared with the corresponding concentration limit in CP Table III or IIIA for corrective action monitoring, or CP Table IV or IVA for compliance monitoring. To be considered in compliance, the confidence interval upper limit for a well in question must not exceed the tabled concentration limit. A confidence interval upper limit above the tabled concentration limit shall be considered as evidence of statistically significant contamination; or

(2) An alternative statistical method proposed by the permittee and approved by the TCEQ. Any proposed alternative method must be appropriate with respect to distributional assumptions and must provide reasonable control of both false positive and false negative error rates.

c. Within thirty (30) days of an initial data evaluation that determines concentration limits have been exceeded in a well, pursuant to Provisions XI.F.4.a. or XI.F.4.b., the permittee may resample and repeat the analysis to verify concentration limits have been exceeded. If the second analysis indicates that the sample does not exceed the concentration limits, then the well shall be considered compliant with the concentration limits for the sampling event.

G. Response and Reporting

1. Corrective Action Monitoring for units specified in CP Table I, Items A, C, or D (if alternative corrective action requirements apply).

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; 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 -Reserved.

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 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 the human health and environment, then the permittee shall submit for approval a CMI Work Plan(s) or propose a response action (TRRP) within 180 days of receipt of approval of the RFI and/or BLRA/CMS Report or APAR unless otherwise extended by the Executive Director. The CMI Workplan shall address all of the applicable items contained in the EPA publications referenced in Provision XI.H.4. or other guidance acceptable to the Executive Director. Response actions, including TRRP Remedy Standard A or Risk Reduction Standard (RRS) No. 2, cannot be self-implemented as normally allowed by TRRP or RRS because under Hazardous Solid Waste Amendments (HSWA) corrective action and permit provisions requires the CMI workplan to be reviewed prior to approval and public participation (see also Provision XI.H.7.). For TRRP response actions, the permittee shall submit a RAP in accordance with schedules and requirements of 30 TAC Chapter 350. The CMI Workplan or RAP shall contain detailed final proposed engineering design, monitoring plans and schedule to implement the selected remedy and assurances of financial responsibility for completing the corrective action. Upon completion of the response action, the permittee shall submit a CMI Report or Response Action Completion Report (RACR) to the TCEQ for review and approval. The CMI Report shall address all the applicable items in the EPA publications EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 or other guidance acceptable to the Executive Director. The RACR shall address all the applicable items in Title 30 TAC Chapter 350 and applicable guidance.

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

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

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

7. Public Notice

   a. The permittee shall conduct public notice when:

      (1) CMI Work Plan or RAP is submitted to the Executive Director, in accordance with Provision XI.H.6., which contains the proposed final corrective measure for SWMU(s) and/or AOC(s) from which a release has occurred, and with proposed institutional control (as applicable). This process occurs through Compliance Plan renewal, or modification/ amendment; or

      (2) If on the basis of the RFI/BLRA or APAR required by Provisions XI.H.4. and XI.H.5., it is determined the release from SWMU(s) and/or AOC(s) meets the performance standards under RRR or TRRP such that no remedy is needed, there is no risk to the human health and environment, and the permittee seeks approval of no further action determination by the Executive Director. This process occurs through corrective action process.

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

   The purpose of the public notice is to give the members of the public the opportunity to submit written comments on the proposed corrective measure(s) or proposed no further action determination. Refer to 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 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 13 Office in San Antonio, 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
Open Detonation Area (TCEQ Unit No. 1, NOR No. 002) within the OB/OD Unit	Blast craters in the ground left after a demolition.	After each training event/ permitted disposal
Open Burn Pans (TCEQ Unit No. 2/ NOR No. 015, TCEQ Unit No. 3/NOR No. 016, TCEQ Unit No. 4/NOR No. 017) within the OB/OD Unit	Rusted holes in pans	Quarterly
Security measures (fences, locks, warning signs, etc.)	Rusted, broken, unreadable	Quarterly
Inspection of EOD vehicles	Mechanical conditions and safety. Oil and motor pans under engines are clean.	Monthly
Inspection of EOD vehicles	1) Electric wiring is in good condition and properly attached. 2) Fuel tank and piping are secure and not leaking. 3) Brakes, steering, and other equipment are in good condition. 4) The exhaust system is not exposed to accumulation of grease, oil, gasoline, or other fuels, and has ample clearance from fuel lines and other combustible materials.	Before waste PEP and related materials are transported to the OB/OD Unit, or before vehicle being allowed to enter Camp Bullis.
Safety equipment	Fire extinguishers are present on vehicles, charged, and serviceable.	Daily
Communication equipment	Radios are operational and batteries are charged.	Daily

Table III.D. – Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Support vehicles (i.e., water truck, fire truck, bulldozer)	1) Electric wiring is in good condition and properly attached. 2) Fuel tank and piping are secure and not leaking. 3) Brakes, steering, and other equipment are in good condition. 4) The exhaust system is not exposed to accumulation of grease, oil, gasoline, or other fuels, and has ample clearance from fuel lines and other combustible materials.	Before being allowed to enter Camp Bullis.

Table III.E.3. – Emergency Equipment

Equipment	Location	Physical Description	Capabilities
Water truck (1)	JBSA-BUL Fire Department	Truck with 1,500-gal water tank with auxiliary pump	Refill fire trucks, deliver water to support field activities.
Fire truck (3)	JBSA-BUL Fire Department	Vehicle equipped with firefighting capabilities	Putting out fires
Bulldozer (3)	Integrated Training Management Area (ITAM)	Heavy equipment machinery	Aid in firefighting, filling in craters from open detonation activities
Safety equipment	On vehicles	ABC fire extinguisher	Putting out/controlling small fires
Communication equipment	One per unit member, checked out from Range Control	Handheld radio	Communication between the personnel in the unit, Range Control, and Emergency Responders (JBSA-BUL Fire Department and medics)
Decontamination equipment	JBSA-BUL Fire Department	Pools, tubs, cleaners, eye wash	Decontaminate personnel exposed to harmful substances.

Part B, Section III.E, Fig 3-1 - Base Emergency Equipment

Table IV.B. – Wastes Managed In Permitted Units

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
1.	Waste propellants[1] as described in40 CFR §266.202(b)	D001, D005, D006, D008	1001405H
	Waste explosives[1] as described in 40 CFR §266.202(b)	D003, D009, P065	1001405H
	Waste pyrotechnics[1] as described in 40 CFR §266.202(b)	D003	1001405H
2.	OB/OD Unit residue (e.g., ash, scrap, shrapnel, etc.) as described in 40 CFR §266.202(a)(2), §266.202(b)(1), or §266.202(c)(1-2)	D005, D006, D008, D009, or P065 [2, 3]	1001405H, 10023191

Note:

1 Waste PEP as described in 40 CFR §266.202(b) treated in the OB/OD Unit at JBSA-BUL are only generated and received from on-site military and training sources. If during an emergency situation, waste PEP is received from an off-site source. the waste PEP will be classified, handled, and managed by EOD trained personnel until it is processed at the OB/OD Unit and determined to be “explosive free”.

2 OB/OD Unit Residue (e.g., ash, scrap, shrapnel, etc.) will be classified as characteristically hazardous waste (40 CFR §261.3(a)(2)(i)) if laboratory analytical results of a single composite sample indicate that the material is reactive, ignitable, or exceeds the exceeds the maximum allowable concentration for TCLP leachability.

3 OB/OD Unit Residue (e.g., ash, scrap, shrapnel, etc.) will be classified as listed hazardous waste (P065) when 1) Fulmic acid (C.A.S. No. 628-86-4) is a component of the explosives being processed at the OB/OD Unit and 2) laboratory analytical results indicate that Fulmic acid (C.A.S. No. 628-86-4) is detected in the OB/OD Unit Residue.

Table IV.C. – Sampling and Analytical Methods

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2, 3]	Desired Accuracy Level[4]
1	Waste propellants, explosives, and pyrotechnics as described in 40 CFR §266.202(b)	Process knowledge and visual inspection by qualified waste management personnel in consultation with EOD personnel				
2	Drummed OB/OD Unit residue (e.g., ash, scrap, shrapnel, etc.) as described in 40 CFR §266.202(a)(2), §266.202(b)(1), or §266.202(c)(1-2)	EPA Guidance SW846	When drum is full	Explosives TCLP Metals	8095, 1311/6010 (Metals), 1331/7470 (Hg)	PQL PQL PQL

1. from Table IV.B, first column
2. Sampling and Test/Analysis methods should be specified in enough detail to allow determination of whether they are suitable and correct for the purpose indicated while allowing flexibility in selection and future updates to the specified method. Standard methods, such as those from SW-846, will generally require no further submittal. Non-standard and proprietary methods may require additional information to determine suitability. ASTM methods may require submittal of a copy of the specified method.
3. SW846 current methods, updated method, or an approved equivalent method.
4. Desired Accuracy Level should provide a specified numeric minimum performance level (maximum acceptable reporting limit) for method detection and quantitation limits that will be accepted from the laboratory performing the analysis and must ensure that reported data will allow determinations of compliance with regulatory limits for the parameter tested.

Table V.K. - Miscellaneous Units

Permit Unit No.*	Miscellaneous Unit	N.O.R. No.	Storage, Processing, and/or Disposal	Waste Nos.[1]	Rated Capacity	Dimensions	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
1	Open Detonation Area within the OB/OD Unit	002	Processing	1	200 lbs. Net Explosive Weight of hazardous material as described in 40 CFR §265.382	<0.5 Acres	Ignitable and reactive
2	Open Burn Pan #1 within the OB/OD Unit	015	Processing	1, 2	200 lbs. Net Explosive Weight of hazardous material as described in 40 CFR §265.382	50” x 50” x 26”	Ignitable and reactive
3	Open Burn Pan #2 within the OB/OD Unit	016	Processing	1, 2	200 lbs. Net Explosive Weight of hazardous material as described in 40 CFR §265.382	50” x 50” x 26”	Ignitable and reactive
4	Open Burn Pan #3 within the OB/OD Unit	017	Processing	1, 2	200 lbs. Net Explosive Weight of hazardous material as described in 40 CFR §265.382	50” x 50” x 26”	Ignitable and reactive

1from Table IV.B, first column

*If the unit is already permitted, use the established "Permit Unit No." If the unit is not yet permitted, the number given here for the unit will become the "Permit Unit No." The numbers should be in an order that will be convenient for the facility operator.

Table VII.G. - Post-Closure Period

Unit Name	Date Certified Closed	Permitted Post Closure Period (Yrs)	Earliest Date Post Closure Ends (See Note 1)
Open Detonation Area within the OB/OD Unit*** (Permit Unit No. 1)	TBD	30 years	TBD
Open Burn Pan #1 within the OB/OD Unit*** (Permit Unit No. 2)	TBD	30 years	TBD
Open Burn Pan #2 within the OB/OD Unit*** (Permit Unit No. 3)	TBD	30 years	TBD
Open Burn Pan #3 within the OB/OD Unit*** (Permit Unit No. 4)	TBD	30 years	TBD

*** If the units cannot be clean closed and the area is subject to post-closure care.

Note 1 – Post-Closure Care shall continue beyond the specified date until the Executive Director has approved the permittee's request to reduce or terminate the post-closure period, consistent with 40 CFR Section 264.117 and 30 TAC Section 335.152(a)(5).

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

A. Corrective Action[1] (30 TAC Section 335.166)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed[4]
1.OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)	002, 015, 016 and 017	Long term groundwater monitoring ongoing.

B. Compliance Monitoring[1] (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 Action[2] (30 TAC Section 335.167)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed[4]
1.Site 8 (Landfill Site 8)	N/A	Groundwater remediation ongoing.

D. Alternative Corrective Action[3] (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 Note:

1. Program applies to RCRA-regulated units only.
2. Program applies to releases from solid waste management units (SWMUs) and/or areas of concern (AOCs).
3. Program applies to commingled releases from RCRA-regulated unit and from one or more SWMUs and/or AOCs.
4. For the purpose of maintaining a historical record to verify the units/areas have met the program requirements in accordance with Permit Provisions XI.A.2, XI.A.3., XI.A.4. and/or XI.A.5., the permittee shall update CP Table I to reflect the new status of the unit/area to include the remedy standard achieved for all media of concern and the date of the Commission's No Further Action (NFA) approval letter. The units/area shall not be deleted from CP Table I until the program objectives have been completed and no further action has been approved through modification or amendment to the Permit. Put "N/A" if a specific program or column item is not applicable.

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

Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media[1]	Date Program Requirement and Remedy Standard Completed [2]
1.OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)	002, 015, 016 and 017	SWMU1	Soil and GW	SWMU 1 consists of affected soil and groundwater surrounding the RCRA-permitted OB/OD Unit. Interim measures performed for soils only were based on the results presented in the APAR and limited to the immediate vicinity of the OB/OD Unit. The interim measures, which included soil removal action and replacement of the storm water diversion berm required by Permit Provision XI.H.8. to address HSWA corrective action obligations. Completion of the soil response action are documented in the *01/17/2011 Interim Completion Report OB/OD Berm Removal and Replacement* and the *10/2011 Interim Measures Completion Report OB/OD Unit Interim Soil Removal* shall be approved upon issuance of this 11/13/2017 Permit Renewal application. [(3)]
2.Drainage System & OWS	018	SWMU 3	Soil and GW	Soil and GW closed to RRS1 and approved with NFA on 05/09/2000.
3.TANG Motor Pool	N/A	SWMU 4	N/A	Sampling showed no evidence of release and site was approved with NFA on 04/19/2001.
4.Hunting Headquarters Storage Area	N/A	SWMU 7	Soil only	Soils closed to TRRP Res PCLs in 2002.NFA approved on 08/05/2003.
5.Landfill 1	N/A	SWMU 10	Soil only	Soils closed to RRS2 Res in 2005 with NFA approved on 08/30/2005.
6.Landfills 10, 12 &13	NA	SWMU 10	Soil only	No groundwater monitoring is required for the SWMUs, and no response action is required for Landfills 10 & 13. The response action for the lead affected soils at Landfill 12 are institutional controls/ physical controls and mitigation for ecological services under Remedy Standard B in accordance with the RAP for SWMU 10, Landfill 12 approved upon issuance of this 11/13/2017 Permit Renewal application.
7. Site 8 (Landfill Site 8)	N/A	AOC	Soil and GW	Remedy Standard B in accordance with Response Action Plan for Site 8 (Landfill Site 8) approved upon issuance of the 11/13/2017 Permit Renewal application.
8.SWMU 003 Building 6104 Motor Pool (Site TU003)	N/A	AOC	Soil only	Soils closed to TRRP Res PCLs in 2017 with NFA approved on 08/02/2017.

Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media[1]	Date Program Requirement and Remedy Standard Completed [2]
9.AOC in the vicinity of outfall near site TU003-SB45	N/A	AOC	Soil	This area will be remediated at the time of Site TU003 demolition (estimated 2020).

Foot Note: SWMU= Solid Waste Management Units, AOC= Area of Concern; APAR= Affected Property Assessment Report; OWS=Oil/Water Separator; RRS=Risk Reduction Standards; TRRP=Texas Risk Reduction Program; Res= Residential; PCLs=Protective Concentration Levels; RAP=Response Action Plan.

1. Specify media affected [i.e. soil, groundwater (GW), surface water (SW), sediment (SED)].
2. Specify the date of Commission's No Further Action (NFA) approval letter for program requirement and remedy standard completed for all media of concern.

3. Since the OB/OD Unit is going to remain active RCRA permitted unit, the TCEQ shall require further investigation of the OB/OD unit and surrounding area SWMU1 at the time of unit closure.

Note: CP Table II lists SWMUs and/or AOC which have been identified in the RFA Report as having a release(s) or potential releases of hazardous waste, hazardous constituents or other constituents of concern. The permittee is thus required to meet corrective action objectives in accordance with Permit Section XI.H. and 30 TAC Section 335.167 consisting of further investigation, and necessary corrective. For the purpose of maintaining a historical record to verify the SWMUs and/or AOC have met the RCRA Corrective Action Objectives in accordance with Permit Section XI.H., the permittee shall update the CP Table II list of SWMUs and/or AOC to reflect the addition of new units and/or areas new status of the units and/or areas which include the Unit Number, the remedy standard achieved for all media of concern and the date of the Commissions NFA approval letter. SWMUs and/or AOC shall not be deleted from this table even though the Corrective Action Objectives have been completed or no further action determination has been approved for the SWMU and/or AOC.

There may be cases in which the permittee fulfills the corrective action active objectives for soils at SWMUs and/or AOC, however, long term monitoring and necessary corrective action maybe required for groundwater to verify remedy standards are met. In such instances individual SWMU and/or AOC would be listed in CP Table I, Items C and be subject to all applicable provisions of this Compliance Plan, or if the release occurred from one or more SWMU and/or AOC and is commingled with RCRA unit then units/areas would be listed in CP Table I, Item D. Upon completion of the corrective action objectives for groundwater in accordance with Permit Section XI.H., then the permittee shall modify or amend the Compliance Plan to reassign the SWMUs and/or AOC in CP Table I, Item C, or Item D to CP Table II as appropriate. CP Table II would reflect the new status of the SWMU and/or AOC to include the remedy standard achieved for all media of concern and the date of the Commissions NFA approval letter.

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

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) [1,2]
1.OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)	Perchlorate	0.017 $^{GW}GW_{Ing}$
	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	0.24 $^{GW}GW_{Ing}$
	Copper	1.3 $^{GW}GW_{Ing}$
	Lead	0.015 $^{GW}GW_{Ing}$
	Mercury	0.002 $^{GW}GW_{Ing}$
	Nickel	0.49 $^{GW}GW_{Ing}$
	Selenium	0.05 $^{GW}GW_{Ing}$
	Thallium	0.002 $^{GW}GW_{Ing}$
	Vanadium	0.044 $^{GW}GW_{Ing}$
	Zinc	7.3 $^{GW}GW_{Ing}$
	2,6-Dinitrotoluene	0.0013 $^{GW}GW_{Ing}$
	Cyclotetramethylenetetranitramine (HMX)	1.2 $^{GW}GW_{Ing}$
	Nitrobenzene	0.049 $^{GW}GW_{Ing}$
	Cyclotrimethylenetrinitramine (RDX)	0.0083 $^{GW}GW_{Ing}$
	4-4'DDE	0.0027 $^{GW}GW_{Ing}$
	delta-BHC	0.00051 $^{GW}GW_{Ing}$
	Endrin	0.002 $^{GW}GW_{Ing}$
	Endrin aldehyde	0.0073 $^{GW}GW_{Ing}$
	Benzene	0.005 $^{GW}GW_{Ing}$
	Bromodichloromethane	0.015 $^{GW}GW_{Ing}$
	Bromoform	0.12 $^{GW}GW_{Ing}$
	Carbon tetrachloride	0.005 $^{GW}GW_{Ing}$
	Chlorodibromomethane	0.011 $^{GW}GW_{Ing}$
	Chloroform	0.24 $^{GW}GW_{Ing}$
	Chloromethane (Methylene chloride)	0.07 $^{GW}GW_{Ing}$
	Dibromomethane	0.12 $^{GW}GW_{Ing}$
	Styrene	0.1 $^{GW}GW_{Ing}$
	Tetrachloroethylene	0.005 $^{GW}GW_{Ing}$
	Toluene	1.0 $^{GW}GW_{Ing}$
	2-Chlorophenol	0.12 $^{GW}GW_{Ing}$
	2-Methylphenol (o-Cresol)	1.2 $^{GW}GW_{Ing}$
	3-Nitroaniline	0.0073 $^{GW}GW_{Ing}$
	3,4-Methylphenol (p-Cresol)	0.12 $^{GW}GW_{Ing}$
	4-Chloroaniline	0.0046 $^{GW}GW_{Ing}$
	4-Nirtoaniline	0.046 $^{GW}GW_{Ing}$

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) [1,2]
1.OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3) cont.	4-Nitrophenol	0.049 $^{GW}GW_{Ing}$
	Benzoic acid	98.0 $^{GW}GW_{Ing}$
	Benzyl alcohol	2.4 $^{GW}GW_{Ing}$
	Phenol	7.3 $^{GW}GW_{Ing}$
	1-Methylnaphthalene	0.031 $^{GW}GW_{Ing}$
	2-Methylnaphthalene	0.098 $^{GW}GW_{Ing}$
	Acenaphthene	1.5 $^{GW}GW_{Ing}$
	Benzo(a)pyrene	0.0002 $^{GW}GW_{Ing}$
	Benzo(b)fluoranthene	0.0091 $^{GW}GW_{Ing}$
	Benzo(g,h,i)perylene	0.73 $^{GW}GW_{Ing}$
	Dibenzo(a,h)anthracene	0.0002 $^{GW}GW_{Ing}$
	Naphthalene	0.49 $^{GW}GW_{Ing}$
	Phenanthrene	0.73 $^{GW}GW_{Ing}$
	2,4,6-Trinitrotoluene	0.012 $^{GW}GW_{Ing}$
	2-Amino-4,6-Dinitrotoleuen	0.0041 $^{GW}GW_{Ing}$
	3-Nitrobenzene	0.24 $^{GW}GW_{Ing}$
	4-Nitrobenzene	0.057 $^{GW}GW_{Ing}$

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards, $^{GW}GW_{Ing}$ (mg/l) [1,2]	Column C Surface Water Protection Standard, ^{SW}GW (mg/l) [1,2]	Column D Sediment Protection Standards, ^{SED}GW (mg/kg) [1,2]
2. Site 8 (Landfill Site 8)	RDX	0.0083	0.18	130
	1,3,5-Trinitrobenzene	0.73	NE	4600
	2,4,6-Trinitrotoluene	0.012	0.05	77
	Barium	2.0	2.0	2300
	Cadmium	0.005	0.0006	1100
	Lead	0.015	0.00104	500
	Manganese	1.1	0.05	14000
	4-Methylphenol (p-Cresol)	0.12	0.272	770
	Acetophenone	2.4	NE	15000
	Benzo(k)fluoranthene	0.091	0.000038	160
	Fluoranthene	0.98	0.00616	4900
	Isophorone	0.96	0.35	15000
	Naphthalene	0.49	0.25	2500
	Benzene	0.005	0.005	990
	Bromodichloromethane	0.015	0.0055	880
	Bromoform	0.12	0.043	6900
	Bromomethane (methyl bromide)	0.034	0.047	1000
	Chloroform	0.24	0.1	7300
	Chloromethane (Methylene chloride)	0.07	28	4200

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards, $^{GW}GW_{Ing}$ (mg/l) [1,2]	Column C Surface Water Protection Standard, ^{SW}GW (mg/l) [1,2]	Column D Sediment Protection Standards, ^{SED}GW (mg/kg) [1,2]
2. Site 8 (Landfill Site 8) cont.	1,2-Dichloroethylene	0.007	0.00163	37000
	2,2-Dichloropropane	0.0134	NE	800
	Dibromochloromethane	0.011	0.0092	650
	cis-1,2-Dichloroethylene	0.07	14	7300
	trans-1,2-Dichloroethylene	0.1	0.1	15000
	Ethylbenzene	0.7	0.53	73000
	Methylene chloride	0.005	0.005	7300
	1,1,2,2-Tetrachloroethane	0.0046	0.0017	270
	Tetrachloroethylene	0.005	0.005	1000
	1,1,1-Trichloroethane	0.2	0.2	150000
	1,1,2-Trichloroethane	0.005	0.005	960
	Trichloroethylene	0.005	0.005	4400
	Trichlorofluoromethane	7.3	0.871	220000
	1,2,4-Trimethylbenzene	0.83	0.077	37000
	Vinyl chloride	0.002	0.002	36
	m,p-Xylene	10	1.34	150000

Note: NE=Not established

1. Specify the groundwater protection standard (GWPS) assigned at a POE or APOE (i.e. for sites with MNA proposals as applicable under Texas Risk Reduction Program [(TRRP) i.e. modify Table and Footnotes to support the establishment of GWPS at POC, POE or APOE monitoring points, as appropriate]. Put "N/A" if a specific program or column item is not applicable.

2. For each COC, select the appropriate GWPS designation and include the applicable definition that applies to verify the program objectives are being achieved either under Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or TRRP pursuant to 30 TAC Chapter 350. The GWPS designation and definitions specified in this table either under 30 TAC Chapter 335 (regarding RRR) or 30 TAC Chapter 350 (regarding TRRP) may not be combined pursuant to 30 TAC Section 350.2(m).

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 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 30 TAC 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.

^{SW}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater-to-surface water PCL established in the ecological risk assessment of 30 TAC Chapter 350. The PCL value, Column C, 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.

^{SED}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for Groundwater- to-sediment PCL established in the ecological risk assessment of 30 TAC Chapter 350. The PCL value, Column D, 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.

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

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards (mg/l) [1,2]
1.OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)	Perchlorate	0.017 $^{GW}GW_{Ing}$
	Antimony	0.006 $^{GW}GW_{Ing}$
	Arsenic	0.01 $^{GW}GW_{Ing}$
	Beryllium	0.004 $^{GW}GW_{Ing}$
	Chromium	0.1 $^{GW}GW_{Ing}$
	Lead	0.015 $^{GW}GW_{Ing}$
	Mercury	0.002 $^{GW}GW_{Ing}$
	Selenium	0.05 $^{GW}GW_{Ing}$
	Thallium	0.002 $^{GW}GW_{Ing}$
	Cyclotetramethylenetetranitramine (HMX)	1.2 $^{GW}GW_{Ing}$
	Cyclotrimethylenetrinitramine (RDX)	0.0083 $^{GW}GW_{Ing}$
	Benzene	0.005 $^{GW}GW_{Ing}$
	Carbon tetrachloride	0.005 $^{GW}GW_{Ing}$

Unit Name	Column A Hazardous Constituents	Column B Groundwater Protection Standards, $^{GW}GW_{Ing}$ (mg/l) [1,2]	Column C Surface Water Protection Standard, ^{SW}GW (mg/l) [1,2]	Column D Sediment Protection Standards, ^{SED}GW (mg/kg)) [1,2]
2. Site 8 (Landfill Site 8)	Tetrachloroethylene	0.005	0.005	1000
	1,1,2,2-Tetrachloroethane	0.0046	0.0017	270
	Trichloroethylene	0.005	0.005	4400
	1,1-Dichloroethylene	0.007	0.00163	37000
	cis-1,2-Dichloroethylene	0.07	14	7300
	trans-1,2-Dichloroethylene	0.1	0.1	15000
	Vinyl chloride	0.002	0.002	36

Note:

1. Specify the groundwater protection standard (GWPS) assigned at a POE or APOE (i.e. for sites with MNA proposals as applicable under Texas Risk Reduction Program [(TRRP) i.e. modify Table and Footnotes to support the establishment of GWPS at POC, POE or APOE monitoring points, as appropriate]. Put "N/A" if a specific program or column item is not applicable.

2. For each COC, select the appropriate GWPS designation and include the applicable definition that applies to verify the program objectives are being achieved either under Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or TRRP pursuant to 30 TAC Chapter 350. The GWPS designation and definitions specified in this table either under 30 TAC Chapter 335 (regarding RRR) or 30 TAC Chapter 350 (regarding TRRP) may not be combined pursuant to 30 TAC Section 350.2(m).

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 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 30 TAC 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.

^{SW}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater-to-surface water 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.

^{SED}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for Groundwater- to-sediment 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.

^{ECO}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for Groundwater- based on ecological receptor(s) 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.

AAL ACL derived pursuant to 30 TAC Section 335.160(b) based upon the Protective Concentration level (PCL) established as an Attenuation Action Level as defined in 30 TAC Section 350(a)(4).

BKG Background as determined in accordance with Provision XI.F.1.

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) 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 - Reserved

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

CP Table V: Designation of Wells

Point of Compliance Wells

1. OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)

   First GWBU: W-1, W-2a, W-3, W-4, W-8, W-12, W-15, W-16 and
   Springs 2 and 7 (when flowing).

   Second GWBU: MW-1, MW-2, MW-4, MW-5, MW-7, MW-11, MW12, MW-13, MW-14, MW-15, MW-16, MW-17, and MW-18.

Point of Exposure Wells

1. Site 8 (Landfill Site 8)
   LF8-2D, LF8-3D, LF8-4D, LF8-5S, LF8-5D, LF8-6D, LF8-7D, LF8-8S, LF8-8I, LF8-8-D, LF8-9S, LF8-9D, LF8-10S, LF8-10D, LF8-11S, LF8-16S, LF8-19S, LF8-20S, LF8-20D, LF8-21S, LF8-21I, LF8-LVC, WSW-53, WSW-64, and WSW-75.

   surface water/springs and seep monitoring points: Karst 4C-18, LF8-SW01, LF8-SW02, LF8-SW03, LF8SW04, LF8-SW05, LF8-SW05b, LF8-SW05c, LF8-SW06, LF8-SW08, LF8-SWS-G07, Cannonball Cave, Sharon Spring, and Stealth Cave.

Alternate Point of Exposure Wells - None

Background Wells

1. OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)

   First GWBU: W-11

2. Site 8 (Landfill Site 8) - None

Note:

GWBU= Groundwater Bearing Unit

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.

CP Table VI: Compliance Period for RCRA-Regulated Units

OB/OD Unit (consisting of Open Detonation Area, and Burn Pan Nos. 1, 2 and 3)	Year or Number of Years
Year Waste Management Activities Initiated	1995
Year Closed	Active
Compliance Period	30 Years
Compliance Period Began	2009

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	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	Annually by January 21	A summary of any activity within an area subject to institutional control.
4.	Corrective Action	Annually by January 21	Tabulation of well casing elevations in accordance with CP Attachment C;
5.	Corrective Action	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	Annually by January 21	Recommendation for any changes to the program;
7.	Corrective Action	Annually by January 21	Any other items requested by the Executive Director;
8.	Corrective Action	Annually by January 21	Water table maps shall be prepared from the groundwater data collected pursuant to Permit Provision XI.G. and shall be evaluated by the permittee with regard to the following parameters: a. Direction and gradient of groundwater flow; And, b. Estimation of the rate and direction of groundwater contamination migration.
9.	Corrective Action	Annually by January 21	The permittee shall submit a report to each recipient listed in Provision XI.J.3., which includes the information in items 3 through 25 determined since the previously submitted report, if those items are applicable.
10.	Corrective Action	Annually by January 21	The Corrective Action System(s) authorized under Provision XI.B.3. in operation during the reporting period and a narrative summary of the evaluations made in accordance with Permit Sections XI.E., XI.F., and XI.G. for the preceding reporting period. The reporting periods shall be January 1 through December 31 for Corrective Action Monitoring, unless an alternative semiannual schedule is approved by the Commission.

Item	Program	Reporting Frequency	Requirements
11.	Corrective Action	Annually by January 21	The method(s) utilized for management of recovered/purged groundwater shall be identified in accordance with Provision XI.B.8. The permittee shall maintain this list as part of the facility operating record and make it available for inspection upon request.
12.	Corrective Action	Annually by January 21	An updated table and map of all monitoring and corrective action system wells, and sediment and surface water sample locations. The wells, sediment and surface water sampling point locations to be sampled shall be those wells and sampling points proposed in the Compliance Plan Application referenced in Section I.B. and any changes subsequently approved by the Executive Director pursuant to Provision XI.B.3. Provide in chronological order, a list of those wells and sample point locations 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	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	Annually by January 21	The sediment and surface water results of the chemical analyses, submitted in a tabulated format acceptable to the Executive Director which clearly indicates each parameter that exceeds its respective sediment and surface water protection standard. 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.
15.	Corrective Action	Annually by January 21	Tabulation of all water level elevations required in Provision XI.F.3.d.(1), depth to water measurements, and total depth of well measurements collected since the data that was submitted in the previous monitoring report;
16.	Corrective Action	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 outside any radius of influence. The maps should also include the direction of surface water flow in each creek or stream;

Item	Program	Reporting Frequency	Requirements
17.	Corrective Action	Annually by January 21	Tabulation of all data evaluation results pursuant to Provision XI.F.4. and status of each well with regard to compliance with the Corrective Action objectives and compliance with the GWPS;
18.	Corrective Action	Annually by January 21	An updated summary as required by CP Table VIII;
19.	Corrective Action	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	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/or 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 recovered or mass remediated by the corrective action system for each reporting period;
23.	Corrective Action only	Semiannual or Annually by January 21	Maps of the contaminated area where GWPSs, sediment and surface water protection standards 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, sediment and surface water protection standards should be clearly delineated.
24.	Corrective Action only	Semiannual or Annually by January 21	Maps and tables indicating the extent and thickness of the NAPLs both light and dense phases, if detected;
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 Provision XI.H.6., 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 Provision XI.H.7. are being met.

Item	Program	Reporting Frequency	Requirements
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 Section XI.H. and ICM Program for a SWMU and/or AOC which documents that the objectives of Provision XI.H.8.b. are being achieved. This summary shall be included as a section of the Compliance Plan groundwater monitoring report.

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 days	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 groundwater monitoring report required by Provision XI.G.3. and CP Table VII. The schedule shall list the activity or report, the Compliance Plan Section and CP Tables which requires the activity or report and the calendar date the activity or report is to be completed or submitted (if this date can be determined.)
B.	60 days	30 TAC §335.163(4) and Provision XI.F.2.	Submit to the Executive Director a schedule for the submittal of an updated generic Sampling & Analysis Plan for the OB/OD Unit and Site 8 (Landfill Site 8) in accordance with Provision XI.F.2, and include items listed in Comment No. CPT16 of the TCEQ June 8, 2018 Technical Notice of Deficiency.
C.1	60 days	30 TAC §335.167 and Provision XI.H.1	For AOC 9 listed in CP Table II, the Permittee shall submit a schedule for the completion of corrective action requirements in accordance with Provision XI.H.
C.2	Annually in accordance with CP Table VII	30 TAC §335.167	For AOC 9, the Permittee shall provide a summary on the progress of the corrective action program required by Section XI.H. The summary shall be included as a section of the Groundwater Report required by CP Table VII.
D.1	90 days	30 TAC §335.167 and §350	For SWMU 10, Landfill 12, listed in CP Table II submit to the Executive Director for review and approval a revised draft deed notice language (contained in RAP, Appendix 4) and to include Exhibit C. The draft deed notice language should be revised to reference Exhibit C, and Exhibit C should describe the inspection and maintenance requirements for this SWMU as outlined in the RAP.
D.2	90 days	30 TAC §335.167 and §350.31(g)	Upon approval of the revised draft deed notice for SWMU 10, Landfill 12, the Permittee shall submit to the Executive Director proof of filing to comply with institutional control (IC) requirements.

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
D.3.	Quarterly	30 TAC §335.167	For SWMU 10, Landfill 12 listed in CP Table II, the Permittee shall implement the following response action for the lead affected soils as specified in the Response Action Plan (RAP) approved upon issuance of this Permit Renewal application dated November 13, 2017 and as revised January 26 and September 24, 2018. The RAP includes implementation of institutional controls/ physical controls and mitigation for ecological services under Remedy Standard B. • Maintenance of cowbird trap(s) in accordance with the Ecological Services Analysis (ESA) contained in the RAP. • Quarterly Inspection and necessary maintenance of the erosion control matting to prevent ecological exposure to COCs shall be performed in accordance with the RAP. A summary of activities performed as part of the response action, results of the inspection and any necessary maintenance shall be included as section of the Groundwater Report required by CP Table VII.
E.1.		30 TAC §335.167	For Site 8 (Landfill Site 8) listed in CP Table II, the Permittee shall implement the following response action for the affected media as specified in the RAP approved upon issuance of this Permit Renewal application dated November 13, 2017 and as revised January 26 and September 24, 2018. The RAP includes implementation of institutional controls/ physical controls under Remedy Standard B. • Quarterly Inspection and necessary maintenance of the, signs, fencing, and run-off diversion structure used for erosion control to prevent exposure to COCs shall be performed in accordance with the RAP. A summary of activities performed as part of the response action, results of the inspection and any necessary maintenance shall be included as section of the Groundwater Report required by CP Table VII.

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
E.2	Implement as necessary	30 TAC §335.167 and 350	The Site 8 (Landfill Site 8) RAP shall be approved upon issuance of this Permit Renewal application dated November 13, 2017 and as revised January 26 and September 24, 2018. The Permittee shall implement the following in-situ enhanced bioremediation (ISEB) response action as necessary to remediate affected groundwater in accordance with the approved RAP: If the results of Site 8 (Landfill Site 8) monitoring indicate increasing trend(s) in concentration of any constituent listed in CP Tables III and/or IIIA, the Permittee shall schedule and conduct additional round(s) of injection of the ISEB solution as necessary. The ISEB solution consists of potable water mixed with emulsified vegetable oil (EVO) and Dechlorinating Culture (SDC-9) to replenish the carbon source and re-augment the bacteria populations near the SWMU source area. The ISEB solution is injected through a series five horizontal wells extending underneath the landfill as depicted in CP Attachment A, Sheet 5 of 7, and Sheet 6 of 7. The activities performed, the evaluation of the response action effectiveness and injection summaries shall be included as section of the Groundwater Report required by CP Table VII.
E.3	Stage Based sampling frequency	30 TAC §335.167, Chapter 350 and Provision XI.F.3.b.	Site 8 (Landfill Site 8): Stage based sampling shall be conducted at each POE well listed in CP Table V, and POE and CAO wells depicted CP Attachment A, Sheet 7 of 7 in accordance with Provision XI.F.3.b. The stage-based sampling will also include analysis of additional water quality parameters (i.e ORP, etc.,) referenced in the Site 8 (Landfill Site 8) RAP Worksheet 3.1.

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
E.4.	Stage based sampling frequency	30 TAC §335.167 and 350 and Provision XI.F.3.b.	The Permittee shall continue with monthly gauging of surface water flow and sampling on a stage-based schedule. Lewis Creek sediment and surface water sampling shall be conducted to evaluate sediment and water quality in accordance with Provision XI.F.3.b. Sampling locations are depicted in CP Attachment A, Sheet 7 of 7. Sampling shall coincide with Site 8 (Landfill Site 8) stage-based sampling events. Samples shall be analyzed for the constituents listed in CP Table IIIA until the sediment and surface water protection standard is achieved at each location. Samples shall then be analyzed for the constituents listed in CP Table III until the concentrations for each constituent is below their respective protection standard at all sample locations in accordance with Provision XI.D.6. Results will be reported in accordance with CP Table VII.
E.5.	90 days	30 TAC §335.167 and §350	Since intrusive activities were prohibited within the Site 8 (Landfill Site 8) boundary due to the health and safety logistics associated with chemical warfare agents, and potential hazards of the Landfill the natural cover was used. Also, to prevent further erosion of the cover a run-off diversion structure was constructed as a physical control to divert storm runoff as an interim measure. In order to document use of the physical and IC under Remedy B, the Permittee shall submit to the Executive Director for review and approval draft deed notice as referenced in RAP Worksheet 2.4. Since no example deed notice was provided in the RAP, then the draft deed notice should describe and include: plat maps on the meets and bounds of the facility, meets and bounds of the landfill cover, PCLE zones, location of the run-off diversion structure, list of constituents of concern, description of prohibitions on intrusive activity, access restrictions, maintenance and inspection of fencing and signs, O&M for the run-off diversion structure and groundwater monitoring requirements, etc. For preparing the deed notice please refer to RG366/TRRP-16 *Institutional Control* for further guidance.

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
E.6	90 days	30 TAC §335.167 and §350.31(g)	Upon approval of the revised draft deed notice for Site 8 (Landfill Site 8), the Permittee shall submit to the Executive Director proof of filing to comply with IC requirements.
F.1.	During the first thirty (30) days of each second and fourth quarter.	30 TAC §335.166 and Provision XI.F.3.b	The Permittee shall continue with monthly gauging of surface water flow and sampling on a stage-based schedule in accordance with Provision XI.F.3.b. For the OB/OD Unit, background well, POC wells and springs listed in CP Table V and as depicted in CP Attachment A, Sheet 2 of 7 shall sampled and analyzed in accordance with the following frequency: • Stage based (semiannual) for wells screened in 1st GWBU, and springs. • annually for the wells screened in 2nd GWBU. The groundwater samples will also include analysis of additional water quality parameters: Nitrate, Nitrite, Sulfate, Alkalinity Bicarbonate, Alkalinity Carbonate and Sulfide for the purpose of monitoring the effectiveness of monitored natural attenuation (MNA).
F.2.	90 days	30 TAC §335.166 and §350	For the OB/OD unit, the Permittee shall submit to the Executive Director for review and approval draft deed notice. Since no example deed notice was provided in the RAP, then the draft deed notice should describe and include: plat maps on the meets and bounds of the facility, meets and bounds of the OB/OD Unit/Area, groundwater PCLE zone, the location stormwater diversion berm, a list of constituents of concern, access restrictions, maintenance and inspection of fencing and signs, any O&M for the berm and long term groundwater monitoring, etc. For preparing the deed notice please refer to RG366/TRRP-16 *Institutional Control* for further guidance. Please be advised that the draft deed notice should not reference a plume management zone (PMZ), since the Executive Director denied the proposed PMZ in Comment No. CP-T3 of the June 8, 2018 NOD, because the uppermost aquifer is designated as a Class 1 resource pursuant 30 TAC §350.33(b).

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
F.3	90 days	30 TAC §335.166 and §350.31(g)	Upon approval of the revised draft deed notice for the OB/OD Unit, the Permittee shall submit to the Executive Director proof of filing to comply with IC requirements.
F.4	Within 90 days of demonstrating the corrective action objectives and requirements of Provision XI.D., XI.E.1 and XI.F.4 are met.	30 TAC §335.166	For the OB/OD Unit, the Permittee may submit a Permit Modification or Amendment application in accordance with Provisions XI.D.6.d and XI.J.4 to cease corrective action pursuant to 30 TAC §335.166 and establish a compliance monitoring program in accordance with 30 TAC §335.165. The Permittee shall need to demonstrate in the application that all the requirements of Permit Provisions XI.D., XI.E.1 and XI.F.4 have been met and provide the analytical results as supporting documentation.
G.	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.

Attachment A – Legal Description

LEGAL DESCRIPTION
CAMP BULLIS MILITARY RESERVATION

BEXAR AND COMAL COUNTIES, TEXAS

FOR
27986.99 ACRES

HEREBY a description of 27986.99 acres of land in Bexar and Comal Counties, Texas and known as Camp Bullis Military Reservation, and being all or part of the following original surveys: A. Schasse No. 4, H. Haberman No. 388, F.A. Sandovval NO. 60, Nat Lewis No. 4, Wm. Langenhein No. 378, R. Schultz No. 103, S.A. & M.G. RR Co. No. 104, Guadalupe College No. 426, P. Gallagher No. 250, Socorro Farming Co., Maria de La Cruz No. 172, L. Enriquez No. 299, A. Gayeton No. 231, Guadalupe College No. 424, F.F. Morales No. 380, M. Garcia No. 74, M. Garcia No. 73, Anto. Cruz No. 72, Anto. Cruz No. 71, S. Casanova No. 70, F. Rivas No. 379, N. Montoya No. 5, F.A. Sundval No. 65, Antonio Pacillas No. 66, J.H. Givson No. 5, August Liebe No. 6, Simona Fisk No. 390, E. Rivas No. 392, city of San Antonio No. 2/23, W. P. Gerfers No. 1, M. James No. 2, M. James No.3, Jnd. C. Packard No. 75, F. Logan No. 383, J.J. Wells No. 67, S. Casanova No. 68, Anto. Pacillas No. 69, E. D No. 106, A.B. & M. No. 1, Rafael Herrera No. 382, Nat. Lewis No. 381, C. Heinemer, A. Reuss No. 920, S.I. & A. Co. No. 13, S.A. Irrigation Co. No 8, C.C.I. Co. No. 7, C.C.I. Co. No. 8, L.C. Grothaus No. 2, P. Schultz No. 115, A. Rhodes No. 114, A. Rhodes No. 113, Guadalupe College No. 419, W.P. Gerfers No. 1, Juan Rivas No. 191, Guadalupe College No. 420, E. Wahrmond No. 802, Guadalupe College No. 421, A. Montez No. 232 G.
Serno No. 233, O. Pevoteans No. 234, and being more particularly described as follows:

BEGINNING: At a found U.S. Government concrete monument having Texas State Plane Coordinates of N-13,790,840.66, and E-2,090,470.42, South Central Zone, and being the same as described in the third to last call in a Deed from Conrad and Ida Schasse in the USA and recorded in Volume 279 Page 26 of the Bexar Country Deed Records and also being the POINT OF BEGINNING of the Leon Springs Military Reservation Metes and Bounds Description published by the War Department and dated February 29, 1939;

I THENCE: N 00º 10' 44" E, along the west line of this Military Reservation and the east line of Hidden Springs Estates according to Plat recorded in Volume 9504, Page 3 of the Bexar County Plat Records, a distance 2998.83 feet to a found Corps of Engineers Disc in concrete at a fence corner;

Attachment A – Legal Description

THENCE:	Along the division line between Camp Bullis and Camp Stanley according to said Was Department Description the following nine courses:
3	N 00º 07' 01" W, a distance of 135.20 feet to a Corps of Engineers disk in concrete;
4	N 71º 32' 00" E, a distance of 1190.99 feet to a Corps of Engineers disk in concrete;
5	N 69º 14' 00" E, a distance of 1146.10 feet to a Corps of Engineers disk in concrete;
6	N 77º 39' 00" E, a distance of 549.40 feet to a Corps of Engineers disk in concrete;
7	N 60º 31' 00" E, a distance of 713.48 feet to a Corps of Engineers disk in concrete;
8	N 46º 35' 00" E, a distance of 1117.71 feet to a Corps of Engineers disk in concrete;
9	N 34º 39' 00" E, a distance of 232.46 feet to a Corps of Engineers disk in concrete;
10	N 15º 33' 52" E, a distance of 1311.90 feet to a concrete monument;
11	N 85º 35' 17" E, a distance of 258.60 feet to a concrete monument at the original southeast corner of Camp Stanley;
12 THENCE:	N 00º 11' 02" W, along the original east line of Camp Stanley, a distance of 194.41 feet to a Corps of Engineers disk in concrete on the Mercator Grid Line No. 3284 as described in a transfer of a 2040 acre tract to Camp Stanley dated January 27, 1953 and by Army G. O. No. 66 effective June 19, 1953;
13 THENCE:	S 89º 59' 52" E, along Mercator Grid Line No. 3284, a distance of 4067.99 feet to a Corps of Engineers disk set in concrete on Mercator Grid Line No. 539 as described in said transfers;
14 THENCE:	N 00º 00' 08" E, along said Grid Line No. 539, a distance of 15870.90 feet to a disk set in concrete on the south line of old Dietz Elkhorn Road, and from which a concrete monument bears N 86º 57' 41" E, 1030.86 feet;

Attachment A – Legal Description

15 THENCE: S 89° 35' 53" W, along the old south line of Dietz-Elkhorn Road (approximately 60.00 right-of-way) a distance of 4640.80 feet to a Corps of Engineers disk set in concrete and from which a concrete monument bears N 89° 35' 53" W, 5.0 feet and another bears N 00° 09' 32" E, 5.0 feet;

16 THENCE: N 00° 09' 32" E, at 60.12 feet pass on old cedar post at the southeast corner of a tract conveyed to Harriet Meredith by deed recorded in Volume 424 Page 594 of the Bexar Country deed Records (BC DR), at 3242.4 feet the centerline of Cibolo Creek, a total distance of 6363.75 feet to a 30" Oak Tree at a 4-way fence corner being the northeast corner of a 320 acre tract described in Volume 356, Page 327, Bexar County Deed Records from which a Corps of Engineers monument bears S 00° 09' 32" W, 5.0 feet and another bears N 89° 52' 06" E, 5.0 feet;

17 THENCE: N 89° 52' 06" E, along the southerly line of a tract conveyed to Emmaline Whitworth and recorded in Volume 283 Page 379 of the Comal County Deed Records, a distance of 1041.39 feet to a cedar fence corner post from which a Corps of Engineers monument bears S 89° 52' 06" W, 8.00 feet and another bears N 00° 13' 24" W, 8.00 feet;

18 THENCE: N 00° 13' 24" W, with said Whitworth Tract, a distance of 2193.52 feet to a Corps of Engineers monument;

19 THENCE: N 89° 59' 43" E, with said Whitworth Tract and a tract conveyed to Ruben Klar by deed recorded in Volume 283 Page 379 Comal County Deed Records, a distance of 3167.79 feet to a Corps of Engineers monument in the west line of a 40 foot strip conveyed to Harold George and recorded in Volume 143, Page 97 of Comal County Deed Records;

20 THENCE: S 01° 44' 46" E, along said 40 foot strip, a distance of 1816.81 feet to a Corps of Engineers monument;

21 THENCE: S 88° 15' 14" W, a distance of 111.12 feet to a Corps of engineers monument set on the northerly high bank of Cibolo Creek;

22 THENCE: N 58° 29' 49" W, along said northerly high bank, a distance of 657.44 feet to a Corps of Engineers monument;

23 THENCE: S 32° 53' 52" W, crossing Cibolo Creek, a distance of 191.68 feet to a Corps of Engineers monument;

24 THENCE: S 50° 06' 08" E, along the southerly bank of Cibolo Creek, a distance of 383.36 feet to a cedar fence corner post, from which a Corps of Engineers monument bears N 50° 06' 08" W, 5.00 feet, and another bears N 89° 53' 52" E, 5.00 feet;

Attachment A – Legal Description

25 THENCE: N 89° 53' 52" E, a distance of 523.62 feet to a rock mound at the southwest corner of the W.D. Babcock Survey No. 228, Abstract No. 69, with a Corps of Engineers monument set in concrete on said rock mound;

26 THENCE: S 88° 55' 27" E, along the south line of said Babcock Survey, a distance of 6387.69 feet to a Corps of Engineers monument set at a fence corner at a southerly corner of a 76.095 acre tract conveyed to Charles George et al by deed recorded in volume 424, Page 580, Comal County Deed Records;

27 THENCE: N 00° 30' 56" W, a distance of 579.22 feet to a Corps of Engineers monument;

28 THENCE: S 89° 07' 53" E, a distance of 747.36 feet to a Corps of Engineers monument;

29 THENCE: S 21° 04' 53" W, a distance of 619.06 feet to a Corps of Engineers monument in the south line of said Babcock Survey;

30 THENCE: S 88° 55' 27" E, with the south line of said Babcock Survey crossing Cibolo Creek, a distance of 369.10 feet to a fence post in a large rock mound for the southeast corner of the D.W. Babcock Survey, with a Corps of Engineers monument set in concrete in the rock mound;

31 THENCE: N 01° 42' 10" W, along the west line of the Edward Schaultz Survey No. 232, a distance of 2390.82 feet to a standard Corps of Engineers monument, said point being in the south line of Amman Oaks Unit 3 as recorded in Volume 9, Page 374 of the Plat Records of Comal County, Texas;

32 THENCE: N 89° 44' 36" E, along the occupied north line of said Schaultz Survey, a distance of 5360.76 feet to a 3 way fence corner post at the occupied northeast corner of said Schaultz Survey, from which a Corps of Engineers monument bears S 89° 44' 58" W, 8.00 feet and another bears S 01° 90' 57" E, 8.00 feet;

33 THENCE: S 01° 09' 57" E, a distance of 1215.62 feet to a stone bolt in the center of Cibolo Creek, said bolt being the same as call No. 21 of said War Department description;

34 THENCE: N 45° 00' 44" E, downstream with Cibolo Creek, a distance of 778.36 feet to a stone bolt in the center of Cibolo Creek, said bolt being the same as call No. 22 of said War Department description;

Attachment A – Legal Description

35 THENCE:	N 31° 23' 48" E, downstream with Cibolo Creek, a distance of 770.41 feet to a concrete monument, said monument being the same as call No. 23 of said War Department description and the most northerly northwest corner of 11840 acre tract conveyed by Daniel Oppenheimer et al to the USA by Deed recorded in Volume 279, Page 65 Bexar County Deed Records;
36 THENCE:	S 88° 32' 12" E, cutting across along bend in Cibolo Creek, a distance of 2366.79 feet to a Corps of Engineers monument in the center of Cibolo Creek;
37 THENCE:	S 88° 32' 48" E, a distance of 1983.22 feet to a corner for the occupied northwest corner of the O. Pevoteaux Survey No. 234 and a Corps of Engineers monument;
38 THENCE:	S 89° 44' 23" E, a distance of 1873.32 feet to a fence corner post in the occupied north line of said Pevoteans Survey, from which a Corps of Engineers monument bears N 89° 44' 23" W, 10.00 feet and another bears S 46° 5' 51" E, 10.00 feet;
THENCE:	Along the southeasterly line of the estate of Vance and Edna Dietz according to deed recorded in Volume 148, Page 061 and Volume 168, Page 31, Comal County Deed Records, the following nine courses;
39	S 46° 59' 51" E, a distance of 723.43 feet to a Corps of Engineers monument;
40	S 10° 14' 26" E, a distance of 336.11 feet to a Corps of Engineers monument;
41	S 13° 00' 26" E, a distance of 498.61 feet to a Corps of Engineers monument;
42	S 04° 05' 26" E, a distance of 336.94 feet to a Corps of Engineers monument;
43	S 04° 39' 34" W, a distance of 548.61 feet to a Corps of Engineers monument;
44	S 37° 49' 40" E, a distance of 553.27 feet to a fence corner post, from which a Corps of Engineers monument bears N 37° 49' 40" W, 10.00 feet and another bears 47° 52' 26" E, 10.00 feet;

Attachment A – Legal Description

45	S 47º 52' 26" E, a distance of 448.09 feet to an old live oak stump called a 9" Live Oak tree in a deed to Vance & Edna Dietz recorded in Volume 168, Page 31, Coma Country Deed Records, from which a Corps of Engineers monument bears N 47º 52' 26" W, 10.00 feet and another bears N 89º 52' 15" E, 10.00 feet;
46	S 44º 22' 55" E, a distance 1001.29 feet to a fence corner post, from which a Corps of Engineers monument bears N 44º 22' 55" W, 10.00 feet and another bears N 89º 52' 15" E, 10.00 feet;
47 THENCE:	N 89º 52' 15" E, a distance of 1355.61 feet to a railroad spike set in a 20" Oak tree for fence corner, the center of tree bears N 36º 53' 33" W, 0.70 feet and a Corps of Engineers monument bears S 89º 52' 15" W, 10.00 feet, and another bears N 57º 03' 14" E, 10.00 feet;
48 THENCE:	N 57º 03' 14" E, a distance of 645.05 feet to an old cedar fence corner post from which a Corps of Engineers monument bears S 57º 03' 14" W, 10.00 feet and another bears S 82º 32' 46" E, 10.00 feet;
49 THENCE:	S 82º 32' 46" E, a distance of 618.05 feet to a Corps of Engineers monument;
50 THENCE:	S 10º 42' 21" E, crossing Cibolo Creek, a distance of 376.78 feet to an old fence corner post from which a Corps of Engineers monument bears N 10º 42' 12" W, 10.00 feet and another bears S 68º 57' 30" E, 10.00 feet;
51 THENCE:	S 68º 57' 30" E, a distance of 1309.96 feet to a Corps of Engineers monument;
52 THENCE:	S 50º 12' 30" E, a distance of 557.82 feet to a fence corner post from which a Corps of Engineers monument bears N 50º 12' 30" W, 10.00 feet and another bears S 77º 35' 31" E, 10.00 feet;
53 THENCE:	S 77º 35' 31" E, a distance of 447.28 feet to a Corps of Engineers monument in the westerly right-of-way line of Blanco Road as shown on map B-492-4 Sheet 4 of 4 of the Bexar County Highway Department and as conveyed from Herman J. Schmidt to Bexar County;
54 THENCE:	S 18º 56' 19" E, along said right-of-way line, a distance of 39.70 feet to a Corps of Engineers monument;

Attachment A – Legal Description

THENCE:	Along the westerly right-of-way line of blanco Road (F.M. Highway 2636) the following 112 courses;
56	S 20º 42' 46" E, a distance of 158.27 feet to a Corps of Engineers monument;
57	S 00º 13' 51" W, a distance of 1808.75 feet to a Corps of Engineers monument;
58	S 00º 08' 57" E, a distance of 3165.72 feet to a Texas Department of Transportation concrete monument;
59	S 02º 41' 24" W, a distance of 199.90 feet to a Texas Department of Transportation concrete monument;
60	S 00º 10' 19" E, a distance of 1999.73 feet to a Corps of Engineers monument;
61	S 02º 50' 47" E, a distance of 200.12 feet to a Texas Department of Transportation concrete monument;
62	S 00º 12' 33" E, a distance of 987.75 feet to a Corps of Engineers monument;
63	S 00º 25' 49" E, a distance of 863.91 feet to a Texas Department of Transportation concrete monument;
64	S 02º 47' 27" W, a distance of 192.25 feet to a Texas Department of Transportation concrete monument;
65	S 09º 22' 45" W, a distance of 241.83 feet to a Texas Department of Transportation concrete monument;
66	S 16º 49' 13" W, a distance of 241.54 feet to a Texas Department of Transportation concrete monument;
67	S 24º 21' 16" W, a distance of 242.26 feet to a Texas Department of Transportation concrete monument;
68	S 30º 18' 10" W, a distance of 145.21 feet to a Texas Department of Transportation concrete monument;
69	S 41º 03' 30" W, a distance of 337.25 feet to a Corps of Engineers monument;
70	S 51º 39' 40" W, a distance of 281.88 feet to a Texas Department of Transportation concrete monument;

Attachment A – Legal Description

71	S 51º 52' 33" W, a distance of 704.78 feet to a Texas Department of Transportation concrete monument;
72	S 49º 00' 49" W, a distance of 600.93 feet to a Texas Department of Transportation concrete monument;
73	S 51º 55' 28" W, a distance of 578.78 feet to a Texas Department of Transportation concrete monument;
74	S 50º 00' 20" W, a distance of 107.26 feet to a Texas Department of Transportation concrete monument;
75	S 46º 27' 12" W, a distance of 209.93 feet to a Texas Department of Transportation concrete monument;
76	S 34º 50' 21" W, a distance of 263.45 feet to a Corps of Engineers monument;
77	S 24º 50' 15" W, a distance of 263.47 feet to a Corps of Engineers monument;
78	S 14º 54' 33" W, a distance of 263.51 feet to a Corps of Engineers monument;
79	S 04º 45' 58" W, a distance of 263.49 feet to a Corps of Engineers monument;
80	S 03º 39' 41" E, a distance of 184.55 feet to a Texas Department of Transportation concrete monument;
81	S 11º 38' 09" E, a distance of 235.74 feet to a Corps of Engineers monument;
82	S 16º 07' 29" E, a distance of 593.53 feet to a Texas Department of Transportation concrete monument;
83	S 14º 12' 56" E, a distance of 122.27 feet to a Corps of Engineers monument;
84	S 09º 17' 38" E, a distance of 191.46 feet to a Corps of Engineers monument;
85	S 03º 17' 54" E, a distance of 191.45 feet to a Corps of Engineers monument;
86	S 03º 45' 49" W, a distance of 593.53 feet to a Texas Department of Transportation concrete monument;

Attachment A – Legal Description

87	S 04º 25' 56" W, a distance of 332.91 feet to a Corps of Engineers monument;
88	S 07º 49' 28" W, a distance of 1111.61 feet to a Corps of Engineers monument;
89	S 12º 35' 02" W, a distance of 361.40 feet to a Corps of Engineers monument;
90	S 07º 49' 28" W, a distance of 7345.89 feet to a Corps of Engineers monument;
91	S 01º 49' 04" W, a distance of 191.02 feet to a Corps of Engineers monument;
92	S 07º 49' 28" W, a distance of 882.30 feet to a Texas Department of Transportation concrete monument;
93	S 06º 39' 25" W, a distance of 120.42 feet to a Corps of Engineers monument;
94	S 05º 50' 36" W, a distance of 153.83 feet to a standard Corps of Engineers monument;
95	S 00º 54'" E, a distance of 153.60 feet to a Corps of Engineers monument;
96	S 02º 25' 46" E, a distance of 198.98 feet to a Corps of Engineers monument;
97	S 01º 35' 23" E, a distance of 406.32 feet to a Corps of Engineers monument;
98	S 04º 24' 50" E, a distance of 599.84 feet to a Corps of Engineers monument;
99	S 06º 42' 12" E, a distance of 500.26 feet to a Corps of Engineers monument;
100	S 04º 24' 45" E, a distance of 290.32 feet to a Texas Department of Transportation concrete monument;
101	S 02º 18' 43" E, a distance of 204.38 feet to a found ½" pin and stamped 102;
102	S 02º 17' 18" W, a distance of 243.77 feet to a Corps of Engineers monument;

Attachment A – Legal Description

103	S 07º 17'" W, a distance of 243.77 feet to a Corps of Engineers monument;
104	S 12º 16' 31" W, a distance of 242.53 feet to a Texas Department of Transportation concrete monument;
105	S 14º 49' 22" W, a distance of 319.22 feet to a Texas Department of Transportation concrete monument;
106	S 12º 41' 33" W, a distance of 211.78 feet to a Corps of Engineers monument;
107	S 10º 51' 10" W, a distance of 231.06 feet to a Corps of Engineers monument;
108	S 03º 37' 27" W, a distance of 256.94 feet to a Corps of Engineers monument;
109	S 03º 46' 43" W, a distance of 318.90 feet to a Texas Department of Transportation concrete monument;
110	S 06º 56' 51" E, a distance of 309.36 feet to a Corps of Engineers monument;
111	S 05º 05' 48" E, a distance of 1509.60 feet to a Texas Department of Transportation concrete monument;
112	S 04º 46' 19" E, a distance of 225.21 feet to a Corps of Engineers monument;
113	S 10º 07' 04" E, a distance of 205.08 feet to a Corps of Engineers monument;
114	S 14º 07' 25" E, a distance of 205.43 feet to a Corps of Engineers monument;
115	S 20º 54' 50" E, a distance of 205.43 feet to a Corps of Engineers monument;
116	S 25º 11'" E, a distance of 265.63 feet to a Texas Department of Transportation concrete monument;
117	S 26º 35' 33" E, a distance of 409.78 feet to a Texas Department of Transportation concrete monument;
118	S 25º 48' 52" E, a distance of 127.41 feet to a Texas Department of Transportation concrete monument;

Attachment A – Legal Description

135	S 12º 01' 57" E, a distance of 254.37 feet to a Texas Department of Transportation concrete monument;
136	S 15º 41' 43" E, a distance of 254.71 feet to a Texas Department of Transportation concrete monument;
137	S 19º 31' 44" E, a distance of 254.67 feet to a Texas Department of Transportation concrete monument;
138	S 23º 15' 25" E, a distance of 254.19 feet to a Texas Department of Transportation concrete monument;
139	S 27º 25' 49" E, a distance of 278.65 feet to a Texas Department of Transportation concrete monument;
140	S 29º 24' 47" E, a distance of 332.51 feet to a Texas Department of Transportation concrete monument;
141	S 27º 05' 28" E, a distance of 138.36 feet to a Texas Department of Transportation concrete monument;
142	S 21º 15' 58" E, a distance of 240.62 feet to a Texas Department of Transportation concrete monument;
143	S 16º 36' 41" E, a distance of 168.92 feet to a Texas Department of Transportation concrete monument;
144	S 10º 55'" E, a distance of 191.33 feet to a Corps of Engineers monument;
145	S 06º 28' 12" E, a distance of 377.39 feet to a Texas Department of Transportation concrete monument;
146	S 03º 48' 32" E, a distance of 450.33 feet to a Texas Department of Transportation concrete monument;
147	S 06º 24' 02" E, a distance of 219.42 feet to a Texas Department of Transportation concrete monument;
148	S 04º 20' 44" E, a distance of 124.70 feet to a Texas Department of Transportation concrete monument;
149	S 00º 32' 43" W, a distance of 191.88 feet to a Corps of Engineers monument;
150	S 04º 53' 41" W, a distance of 239.86 feet to a Texas Department of Transportation concrete monument;

Attachment A – Legal Description

151 S 11° 19' 12" W, a distance of 208.07 feet to a Texas Department of Transportation concrete monument;

152 S 17° 28' 33" W, a distance of 1149.94 feet to a Texas Department of Transportation concrete monument;

153 S 17° 30' 11" W, a distance of 190.67 feet to a Texas Department of Transportation concrete monument;

154 S 09° 00' 03" W, a distance of 206.96 feet to a Texas Department of Transportation concrete monument;

155 S 03° 00' 19" W, a distance of 208.32 feet to a Texas Department of Transportation concrete monument;

156 S 05° 56' 22" E, a distance of 232.40 feet to a Texas Department of Transportation concrete monument;

157 S 06° 51' 57" E, a distance of 574.41 feet to a Corps of Engineers monument;

158 S 06° 51' 57" W, a distance of 947.78 feet to a Corps of Engineers monument;

159 S 04° 05' 38" W, a distance of 224.62 feet to a Corps of Engineers monument;

160 S 09° 57' 38" E, a distance of 569.62 feet to a railroad spike;

161 S 01° 10' 26" E, a distance of 313.00 feet to a railroad spike;

162 S 17° 28' 34" W, a distance of 229.50 feet to a railroad spike;

163 S 12° 41' 26" E, a distance of 540.80 feet to a Corps of Engineers monument;

164 S 08° 15' 26" E, a distance of 44.10 feet to a railroad spike;

165 S 04° 12' 26" E, a distance of 100.00 feet to a railroad spike;

166 S 00° 14' 34" W, a distance of 485.60 feet to a railroad spike;

167 S 03° 06' 31" W, a distance of 298.73 feet to a Corps of Engineers monument at the southeast corner of Camp Bullis Military Reservation;

Attachment A – Legal Description

168 THENCE: S 89º 51' 18" W, along the south line of Camp Bullis and the south line of Tract I conveyed from James A. Chapman to the USA by Civil Action No. 195 and recorded in Volume 1831, Page 413, Bexar County Deed Records, a distance of 3502.08 feet to a concrete monument, being the same monument in call No. 41 of the said War Department description;

169 THENCE: S 89º 51' 18" W, continuing along the sound line of Camp Bullis, a distance of 6645.50 feet to a concrete monument being the same monument in call No. 42 of said War Department description;

170 THENCE: N 00º 16' 44" E, a distance of 875.44 feet to a concrete monument, being the same monument in call No. 43 of the said War Department description;

171 THENCE: N 89º 41' 36" W, a distance of 3165.06 feet to a concrete monument beside a 30" Oak tree;

172 THENCE: S 45º 15' 33" W, a distance of 1992.16 feet to a concrete monument, being the same monument in call No. 44 of said War Department description;

173 THENCE: S 58º 56' 36" W, a distance of 2677.67 feet to a Corps of Engineers monument I the westerly right-of-way line of F.M. Highway 1535 (N.W. Military Drive) and in the easterly line of said 323 acre tract conveyed by the USA to the City of San Antonio and recorded in Volume 7053, Page 85, Bexar County Deed Records;

174 THENCE: N 32º 47' 56" E, along the extended west right-of-way of F.M. Highway 1535 and the east line of said City of San Antonio tract, a distance of 1743.67 feet to a Corps of Engineers monument;

175 THENCE: S 89º 44' 23" W, along the north line of said City of San Antonio tract, a distance of 4295.81 feet to a Corps of Engineers monument;

176 THENCE: N 68º 46' 29" W, a distance of 1572.03 feet to a concrete monument being the same monument in call No. 47 of the said War Department description;

177 THENCE: S 89º 55' 31" W, a distance of 1177.45 feet to a concrete monument being the same monument in call No. 48 of the said War Department description;

178 THENCE: N 00º 34' 03" W, a distance of 41.64 feet to a concrete monument;

Attachment A – Legal Description

179 THENCE: N 04° 03' 23" W, along a west line of Camp Bullis at 1273.62 feet a standard Corps of Engineers monument in the south line of Old Camp Bullis Road as conveyed to the USA by Deed recorded in Volume 165, Page 491 and Volume 1343, Page 50, Bexar County Deed Records, at 1316.18 feet a standard Corps of Engineers monument set in the north line of said road, at 1501.69 feet the south right-of-way line of Camp Bullis Road, at 1647.51 feet the north right-of-way line of Camp Bullis Road, a total distance of 2230.55 feet to a found concrete monument being the same monument in call No. 50 of the said War Department description;

180 THENCE: N 00° 31' 45" W, a distance of 3503.20 feet to a found 1/2" iron pin reset with a standard Corps of Engineers monument;

181 THENCE: S 89° 42' 30" W, a distance of 2085.02 feet to a set standard Corps of Engineers monument, being the same monument in call No. 52 of said War Department description;

182 THENCE: N 00° 13' 59" W, a distance of 2129.98 feet to a found concrete monument, being the same monument in call No. 53 of said War Department description;

183 THENCE: S 89° 53' 20" W, a distance of 3133.62 feet to a found concrete monument, being the same monument in call No. 54 of said War Department description and the point of beginning of a 1135.33 acre tract conveyed to the USA by Petition in Condemnation No. 1503 and recorded in Volume 1345, Page 549, Bexar County Deed Records, at the most southerly southwest corner of the John H. Gibson Survey No. 5;

184 THENCE: N 00° 33' 07" W, with the west line of said 1135.33 acre tract and said War Department description, a distance of 831.18 feet to a found broken concrete monument at the northeast corer of the L. Calghoun Survey No. 24;

185 THENCE: N 01° 38' 17" E, a distance of 3387.79 feet to a found concrete monument in the west line of the A. Pacillas Survey No 66 at the northwest corner of said 1135.33 acre tract and the most southerly southwest corner of said Conrad Schasse tract;

186 THENCE: N 01° 20' 49" W, with the westerly line of said Schasse tract, a distance of 2800.47 feet to a found 5/8" iron pin reset with a standard Corps of Engineers monument;

187 THENCE: N 89° 59' 29" W, continuing with said Schasse tract, a distance of 2411.92 feet to the POINT OF BEGINNING and containing 27986.99 acres of land.

Attachment A – Legal Description

This legal description was prepared from an on the ground survey by George W. Muery Services, Inc. of San Antonio, Texas, and were made to accompany plat of said survey prepared in December, 1993. All bearings and distances cited herein are based on the Texas State Plane Coordinate System, South Central Zone as observed by GPS methods from Triangulation Stations Redland, Lockhill and Hunt.

Attachment A – Legal Description

LEGAL DESCRIPTION
CAMP BULLIS MILITARY RESERVATION
OLD CAMP BULLIS ROAD

BEXAR COUNTY, TEXAS

FOR
6.32 ACRES

HEREBY a description of 6.32 acres of land in Bexar County, Texas and known as Old Camp Bullis Road, and being more particularly described as follows:

BEGINNING:	At a concrete monument having Texas State Plan Coordinates of N-13,777,210.12, E-2,098,186.26, South Central Zone:
194 THENCE:	South 65º 58' 28" West 496.30 feet to a concrete monument;
195 THENCE:	South 20º 45' 7" West 1,143.44 feet to a concrete monument;
196 THENCE:	South 26º 18' 6" West 93.38 feet to a concrete monument;
197 THENCE:	South 40º 0' 6" West 93.40 feet to a concrete monument;
198 THENCE:	South 47º 16' 15" West 900.15 feet to a concrete monument;
199 THENCE:	South 12º 50' 23" West 185.52 feet to a concrete monument;
200 THENCE:	South 13º 56' 12" West 527.75 feet to a concrete monument;
201 THENCE:	South 25º 9' 41" West 330.43 feet to a concrete monument;
202 THENCE:	South 32º 17' 38" West 112.32 feet to a concrete monument;
203 THENCE:	South 44º 44' 13" West 261.78 feet to a concrete monument;
204 THENCE:	South 55º 55' 37" West 191.35 feet to a concrete monument;
205 THENCE:	South 83º 0' 44" West 83.02 feet to a concrete monument;
206 THENCE:	North 69º 43' 16" West 393.71 feet to a concrete monument;
207 THENCE:	South 83º 43' 26" West 74.46 feet to a concrete monument;
208 THENCE:	South 59º 31' 16" West 892.53 feet to a concrete monument;
209 THENCE:	South 74º 25' 16" West 729.50 feet to a concrete monument;

Attachment A – Legal Description

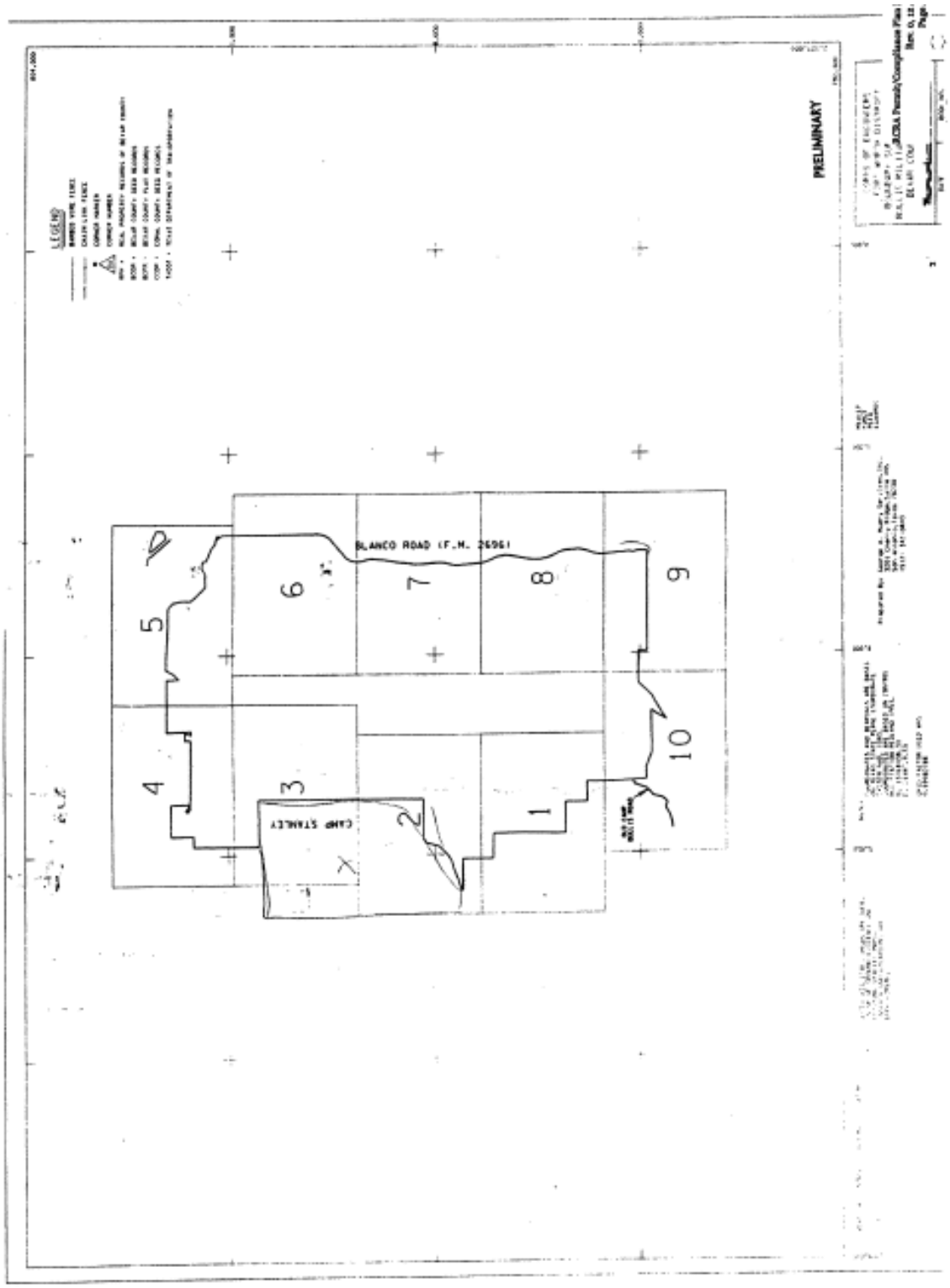
210 THENCE:	South 86º 30' 16" West 254.80 feet to a concrete monument;
211 THENCE:	South 83º 37' 16" West 136.60 feet to a concrete monument;
212 THENCE:	South 82º 45' 29" West 112.86 feet to a concrete monument;
213 THENCE:	North 16º 14' 27" West 40.00 feet to a concrete monument;
214 THENCE:	North 79º 4' 30" East 78.53 feet to a concrete monument;
215 THENCE:	North 86º 6' 47" East 432.88 feet to a concrete monument;
216 THENCE:	North 74º 34' 50" East 692.52 feet to a concrete monument;
217 THENCE:	North 64º 38' 56" East 33.45 feet to a concrete monument;
218 THENCE:	North 59º 57' 9" East 905.32 feet to a concrete monument;
219 THENCE:	North 83º 43' 26" East 71.12 feet to a concrete monument;
220 THENCE:	South 69º 43' 16" East 398.49 feet to a concrete monument;
221 THENCE:	North 83º 0' 44" West 102.66 feet to a concrete monument;
222 THENCE:	North 55º 55' 37" East 172.46 feet to a concrete monument;
223 THENCE:	North 44º 44' 13" East 253.50 feet to a concrete monument;
224 THENCE:	North 32º 17' 38" East 105.47 feet to a concrete monument;
225 THENCE:	North 25º 9' 41" East 324.01 feet to a concrete monument;
226 THENCE:	North 13º 56' 12" East 523.43 feet to a concrete monument;
227 THENCE:	North 12º 50' 23" East 197.53 feet to a concrete monument;
228 THENCE:	North 47º 16' 15" East 910.00 feet to a concrete monument;
229 THENCE:	North 40º 0' 6" East 86.05 feet to a concrete monument;
230 THENCE:	North 26º 24' 12" East 70.70 feet to a concrete monument;
231 THENCE:	North 20º 50'16"East 1,174.38feet to a concrete monument;
232 THENCE:	North 65º 58' 28" East 527.01 feet to a concrete monument;

Attachment A – Legal Description

233 THENCE: South 4º 3' 23" East 42.56 feet to a concrete monument at the POINT OF BEGINNING (Point 194 of this description).

t:road.dm

Attachment A – Legal Description



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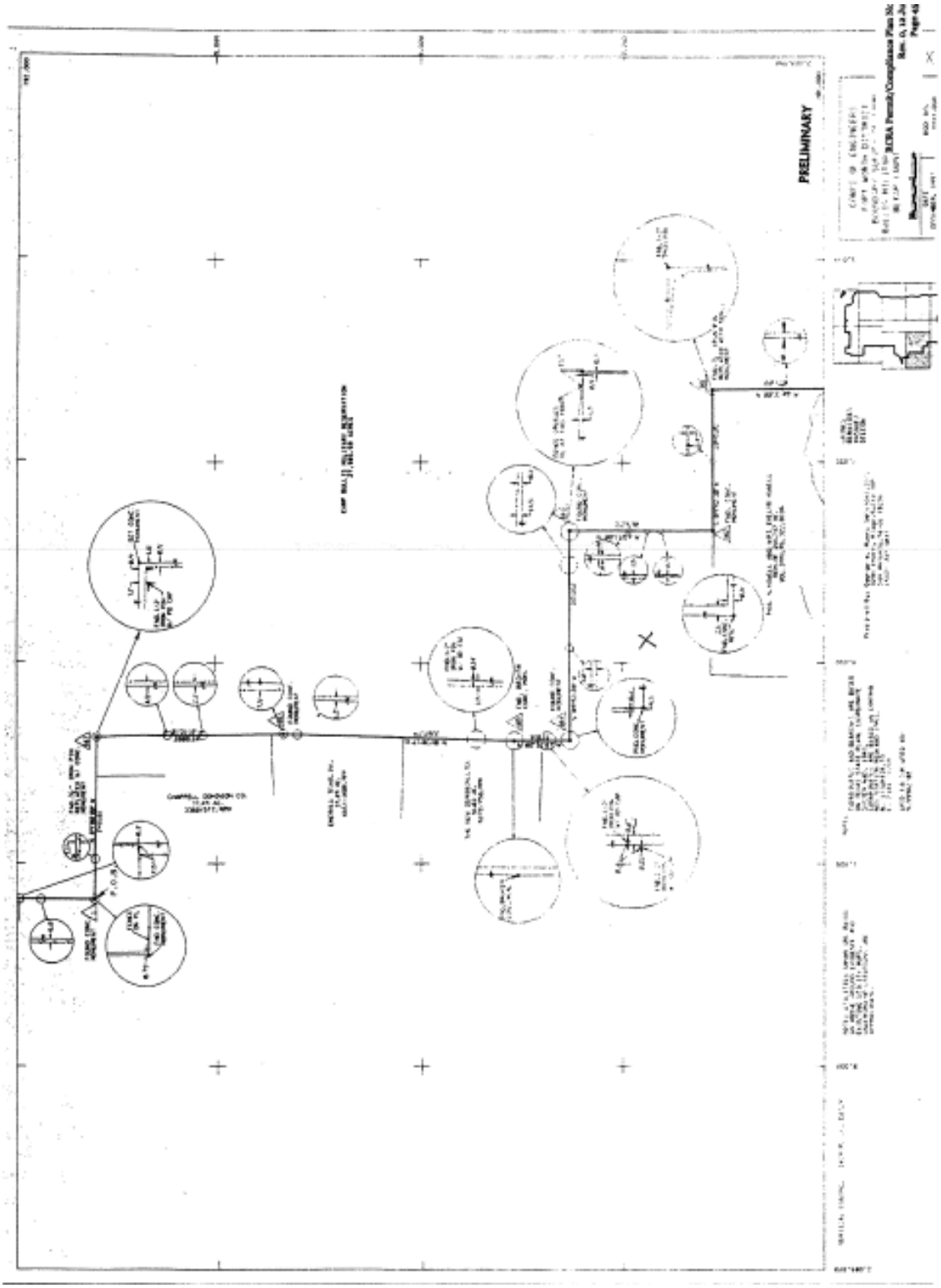

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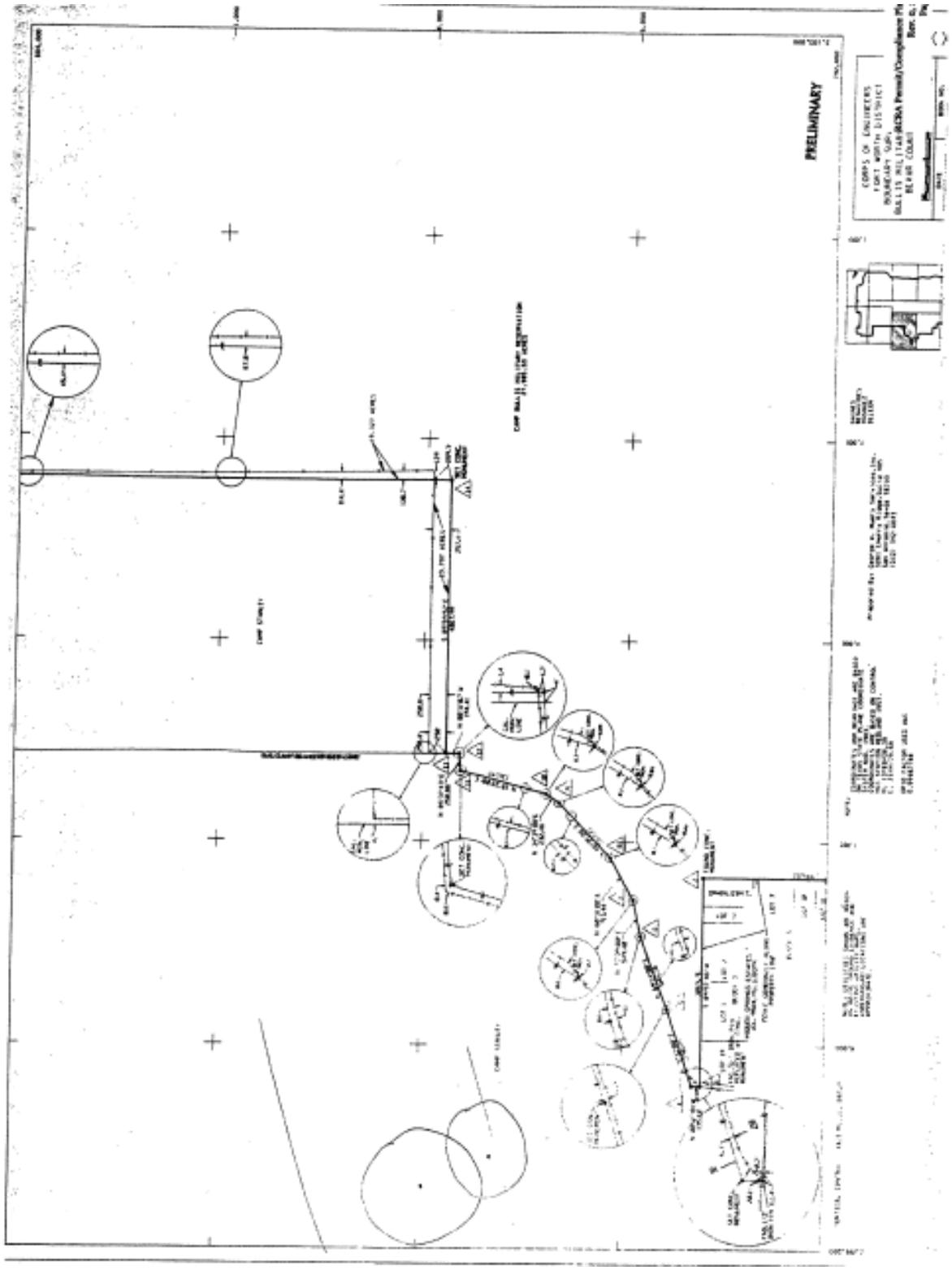

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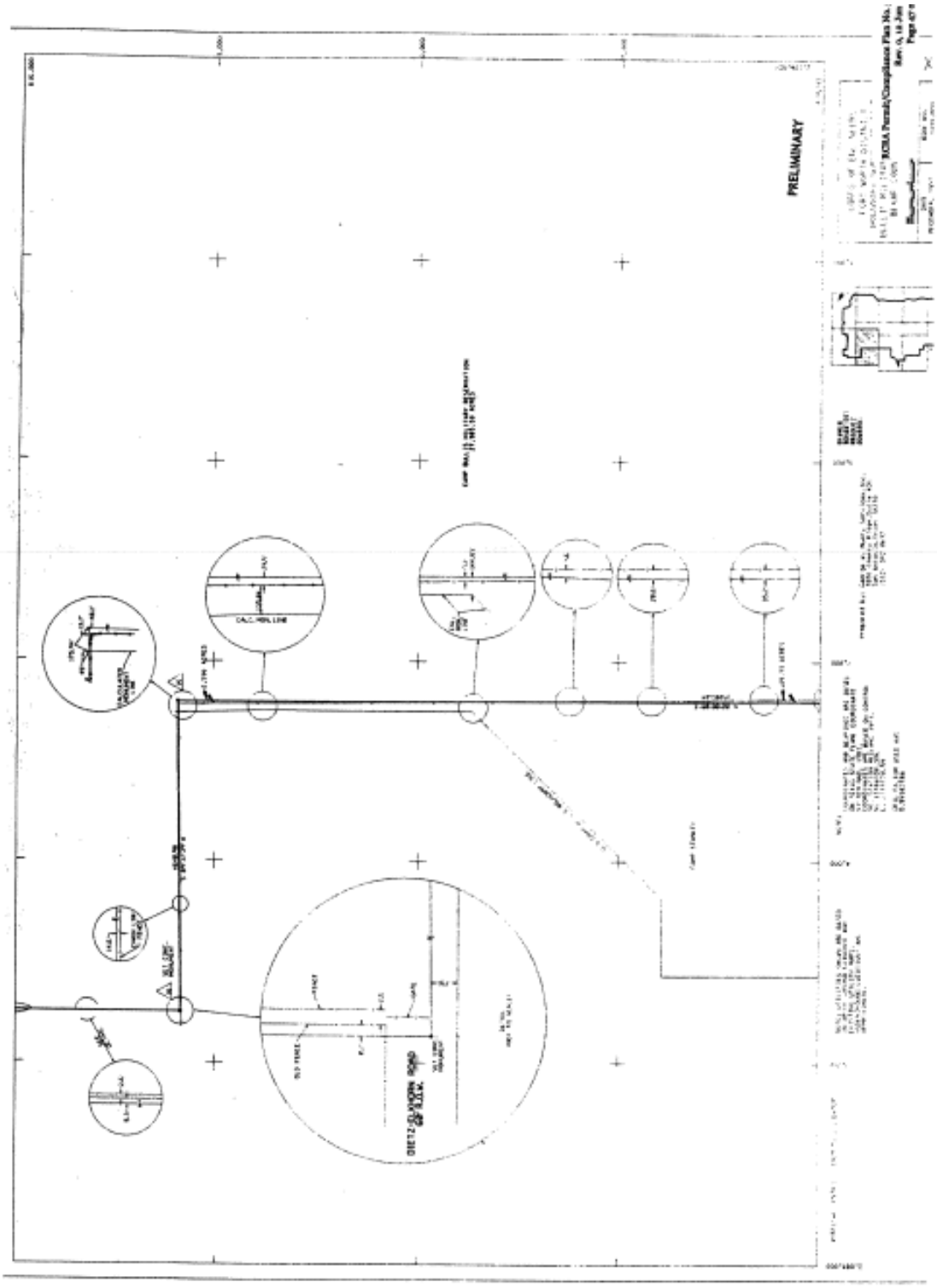

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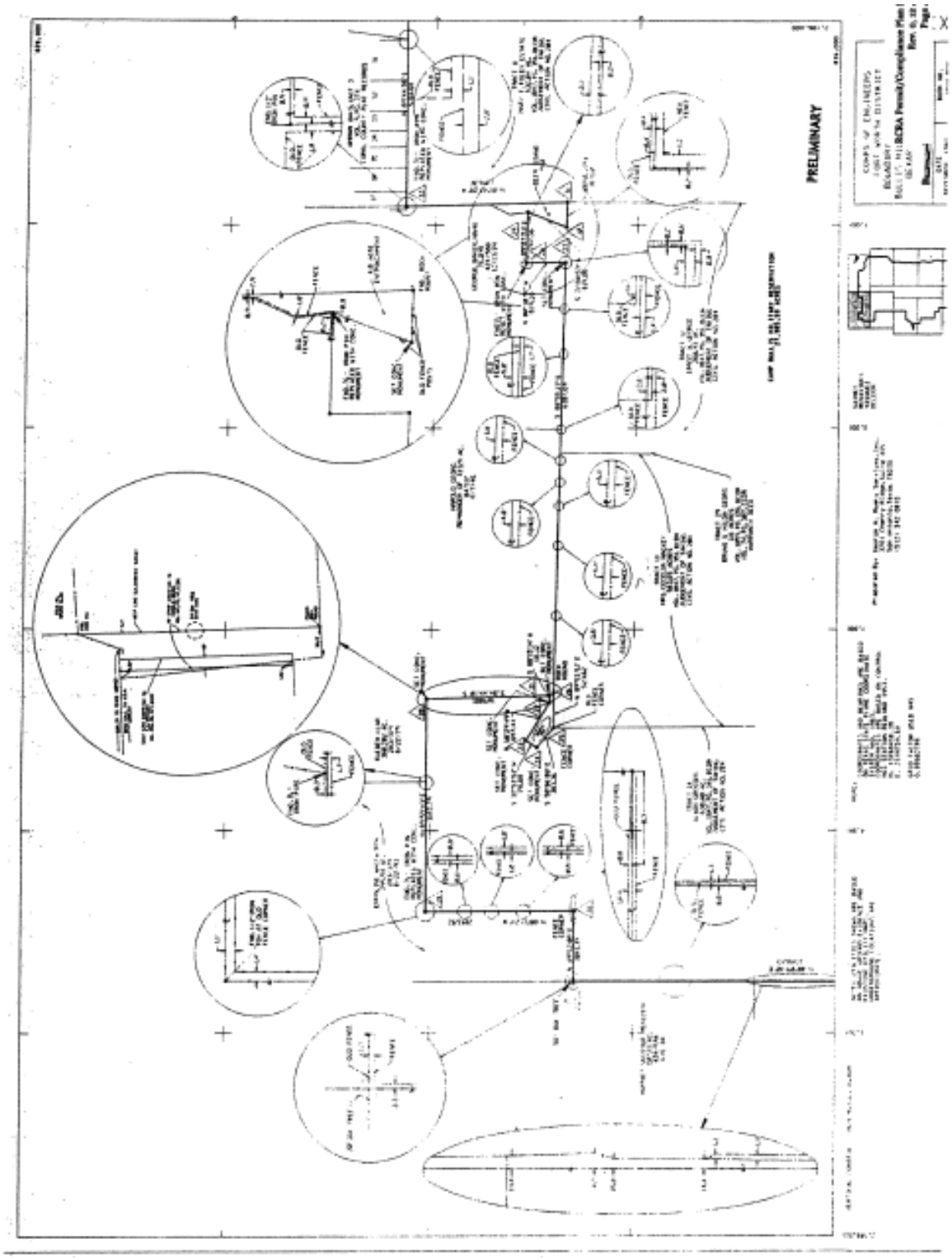

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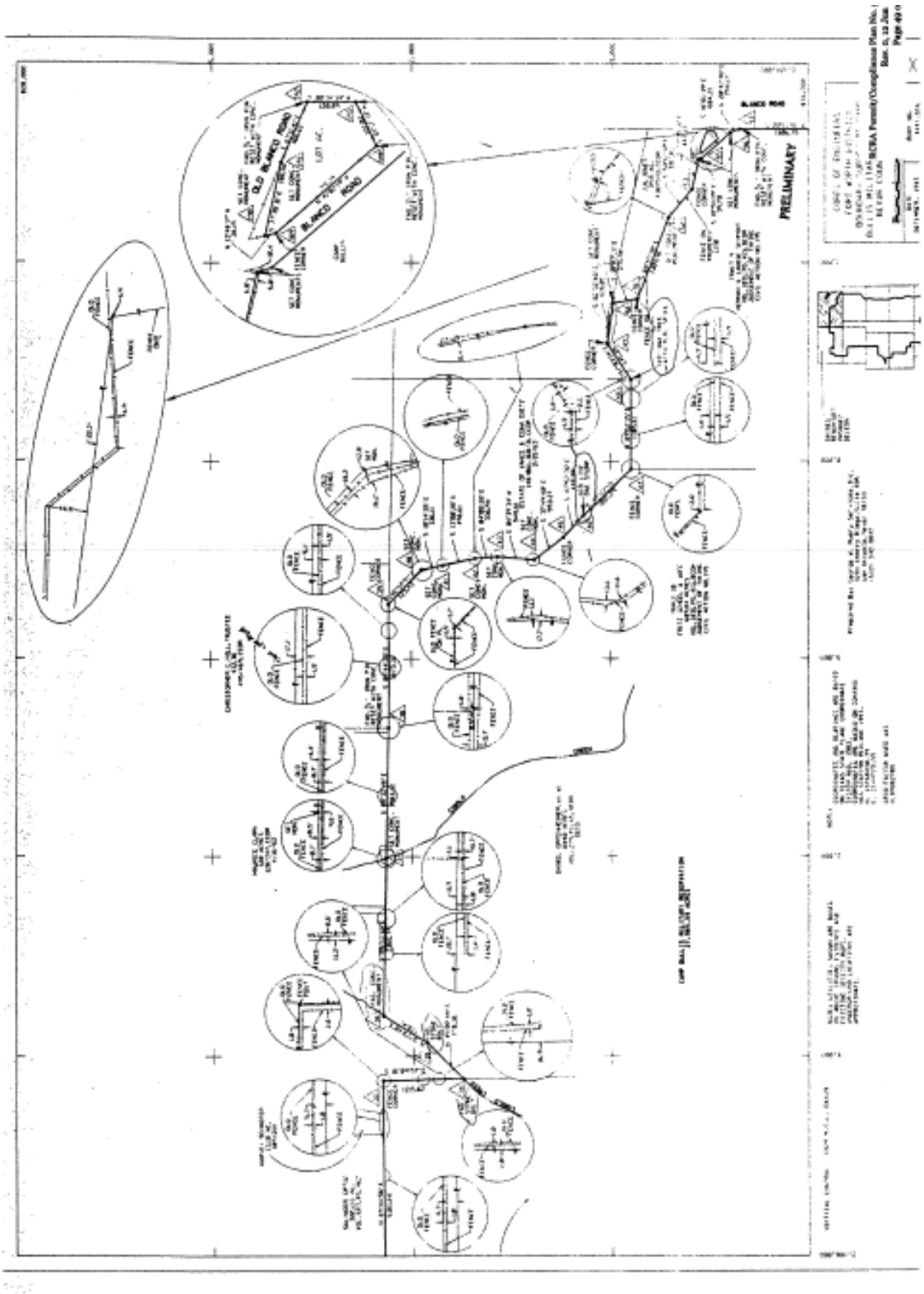

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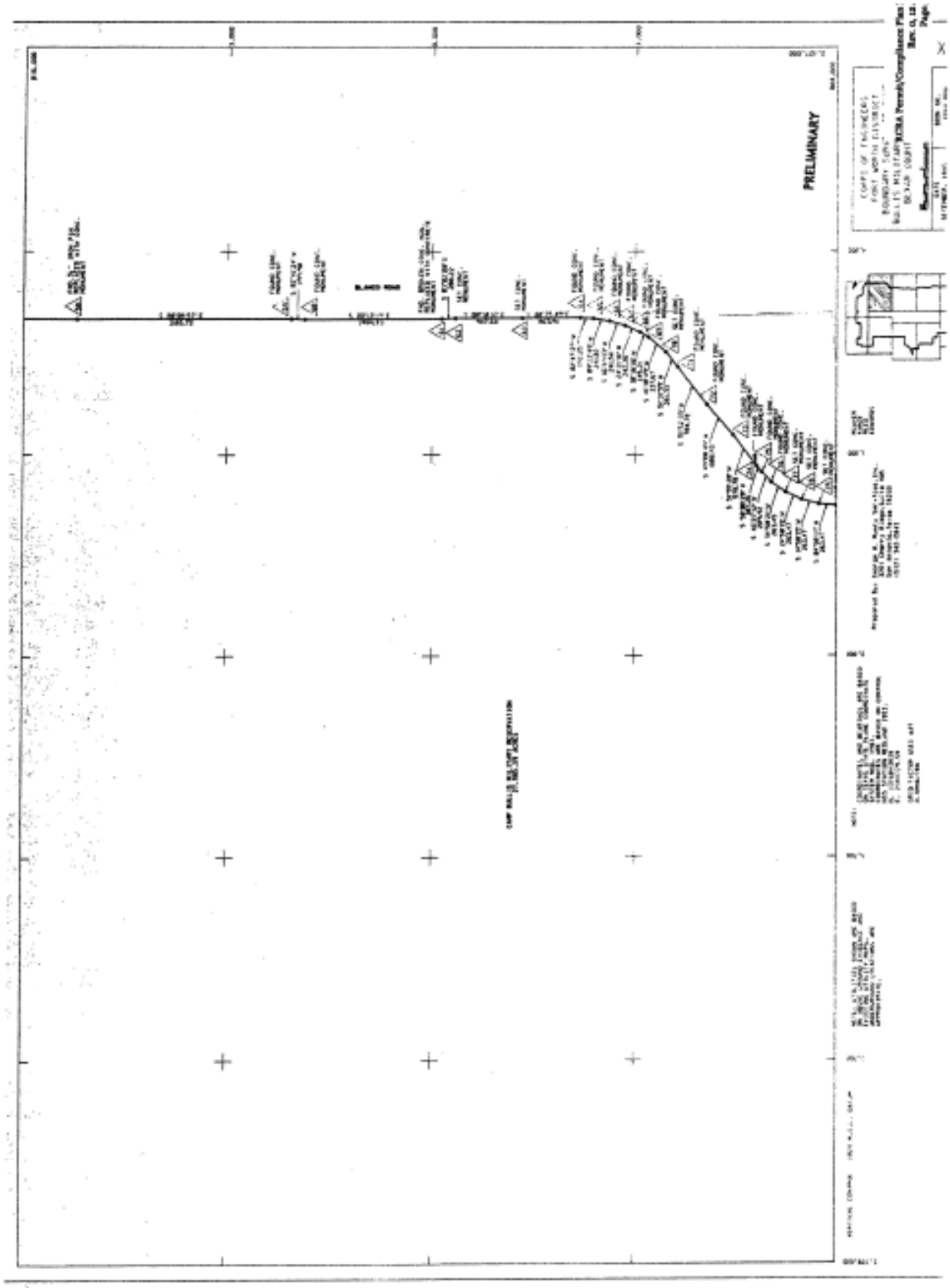

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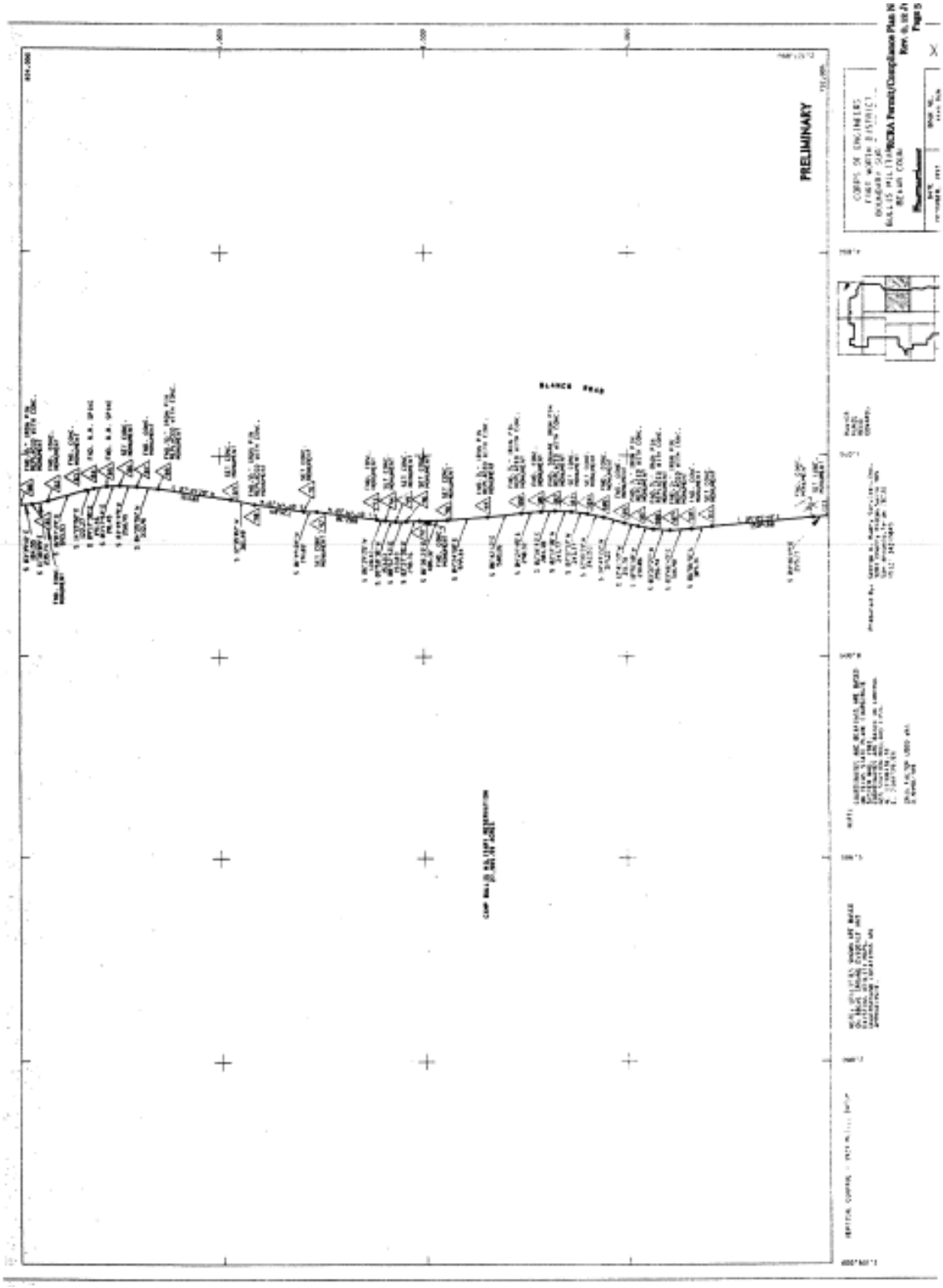

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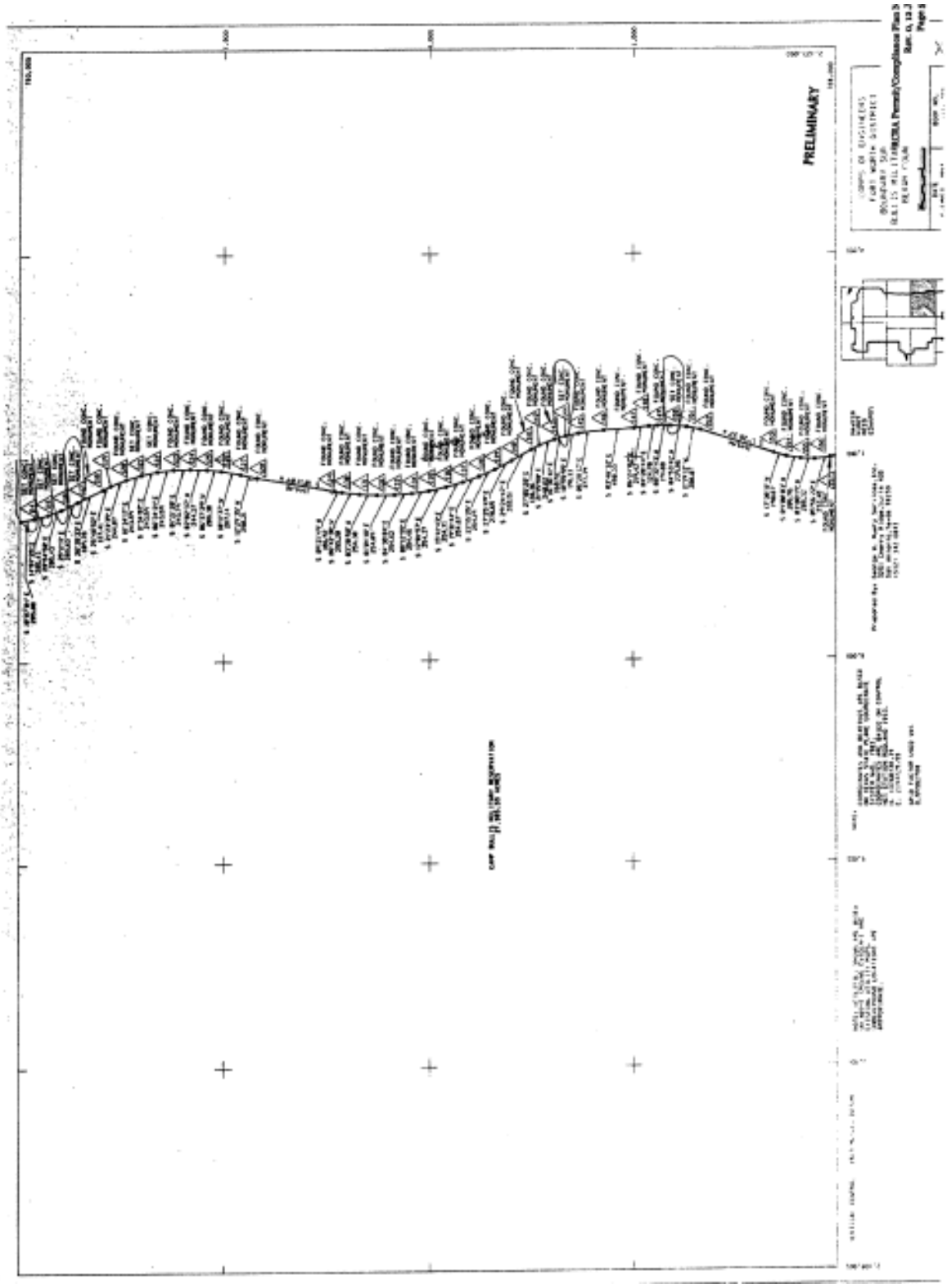

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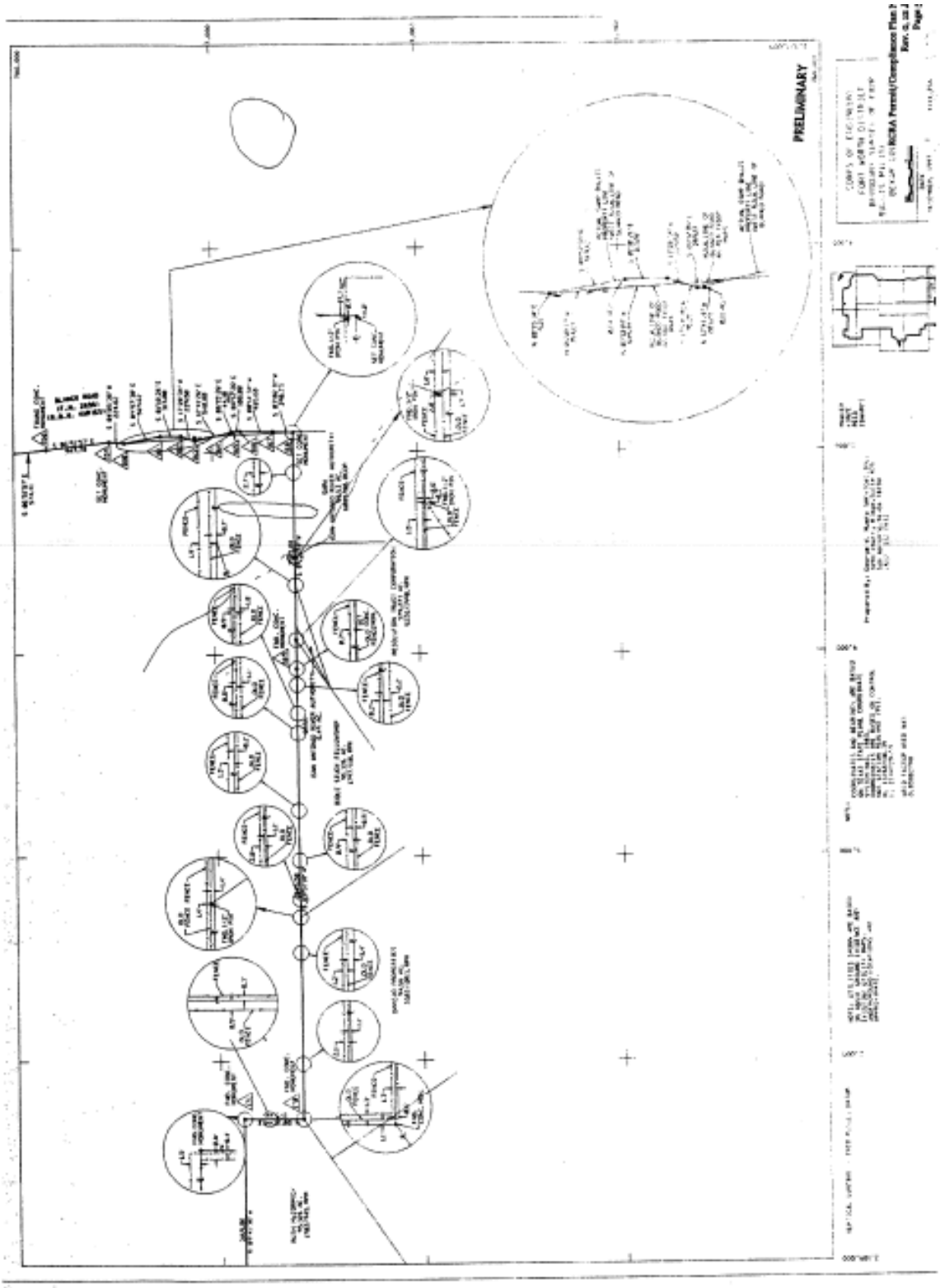

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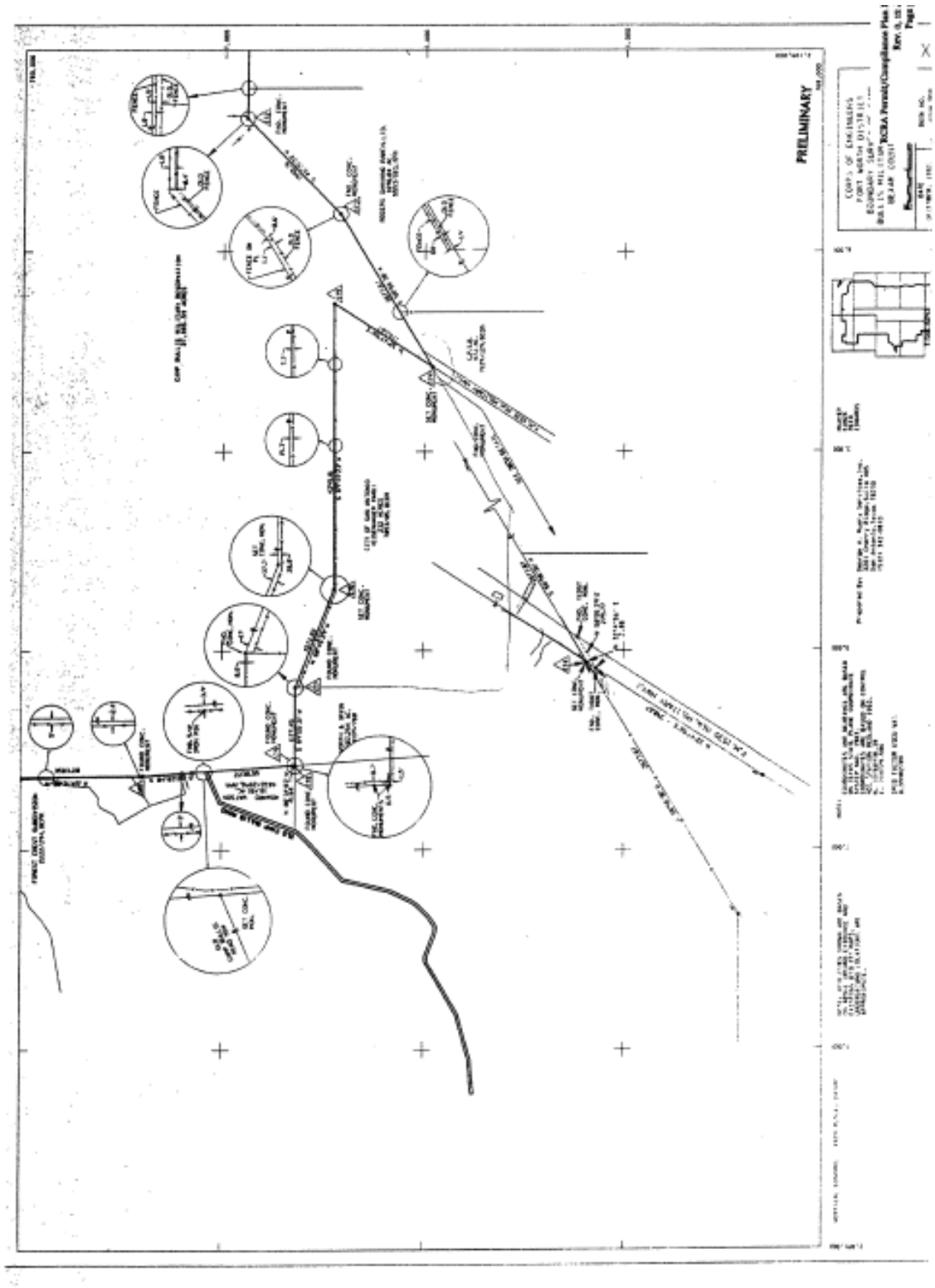

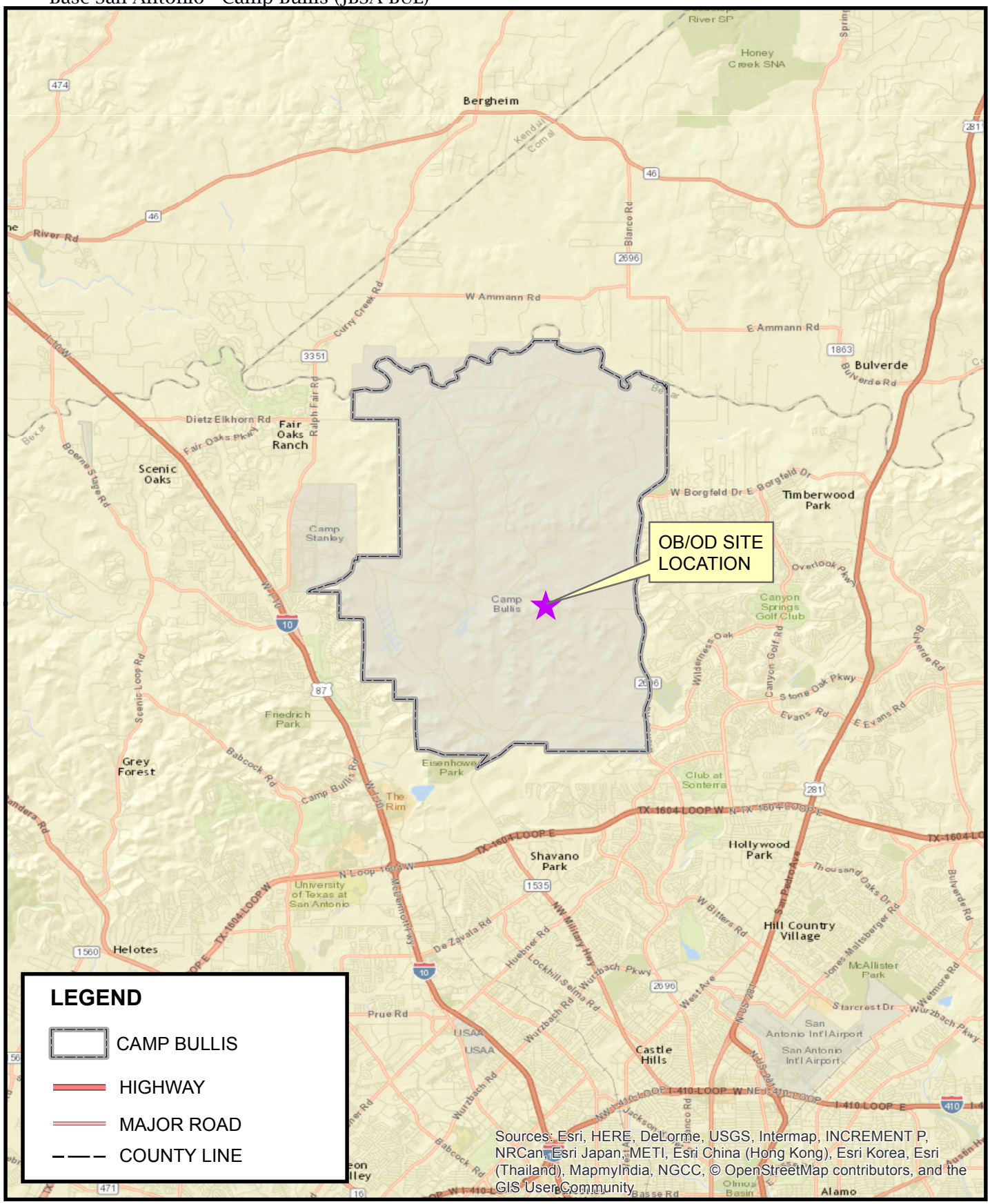

DOCUMENT PATH: G:\XX_RUBENM_GSI_MAPS\CAMPBULLIS\MXD\LOCATION_MAP.MXD

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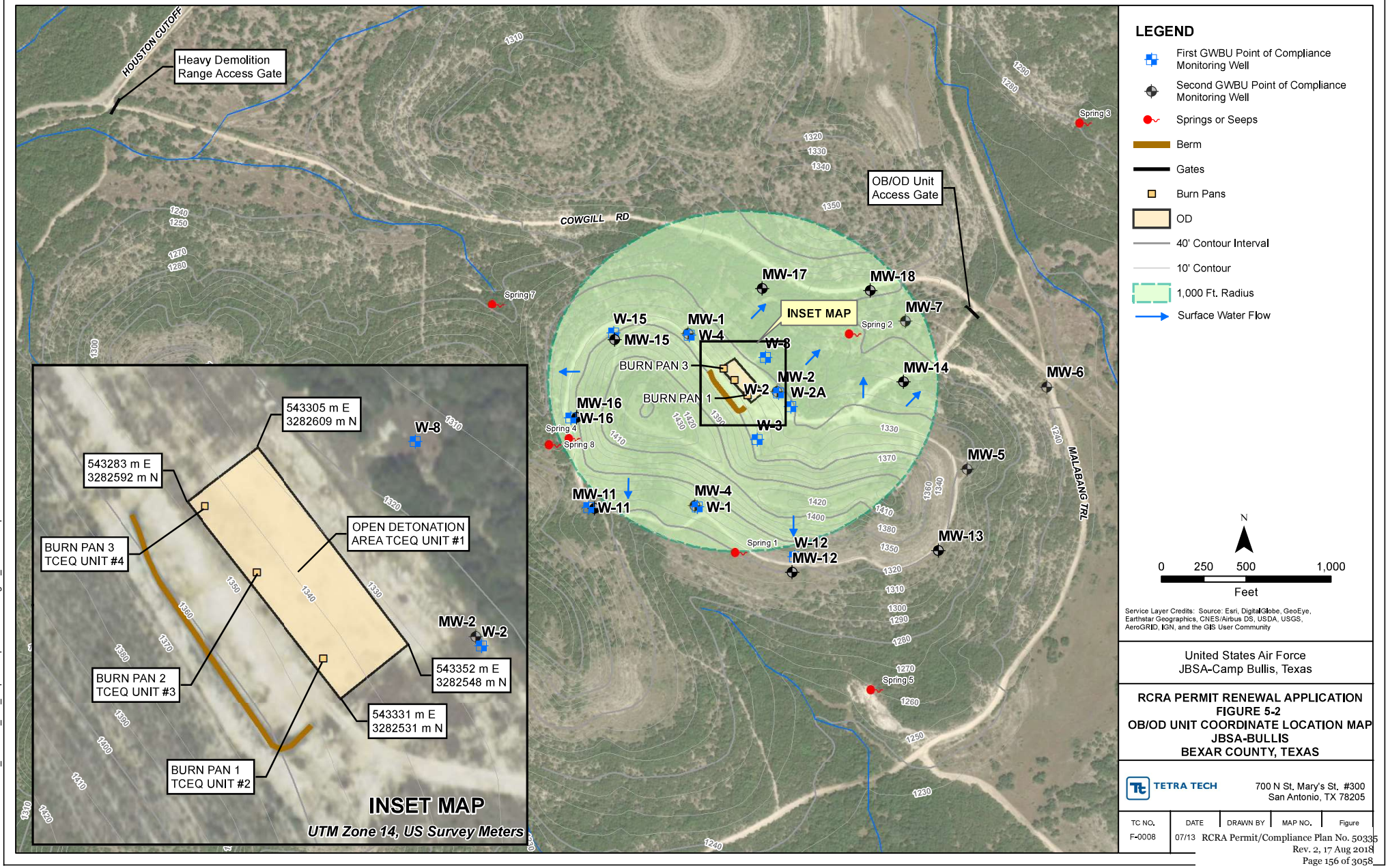
0 6,250 12,500 Feet

N

RCRA PERMIT RENEWAL APPLICATION
FIGURE 5-1
FACILITY LOCATION MAP
JBSA-BULLIS
BEXAR COUNTY, TEXAS

FIGURE
5-1



United States Air Force
JBSA-Camp Bullis, Texas

RCRA PERMIT RENEWAL APPLICATION
FIGURE 5-2
OB/OD UNIT COORDINATE LOCATION MAP
JBSA-BULLIS
BEXAR COUNTY, TEXAS

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700 N St. Mary's St. #300
San Antonio, TX 78205

TC NO.	DATE	DRAWN BY	MAP NO.	Figure
F-0008	07/13			

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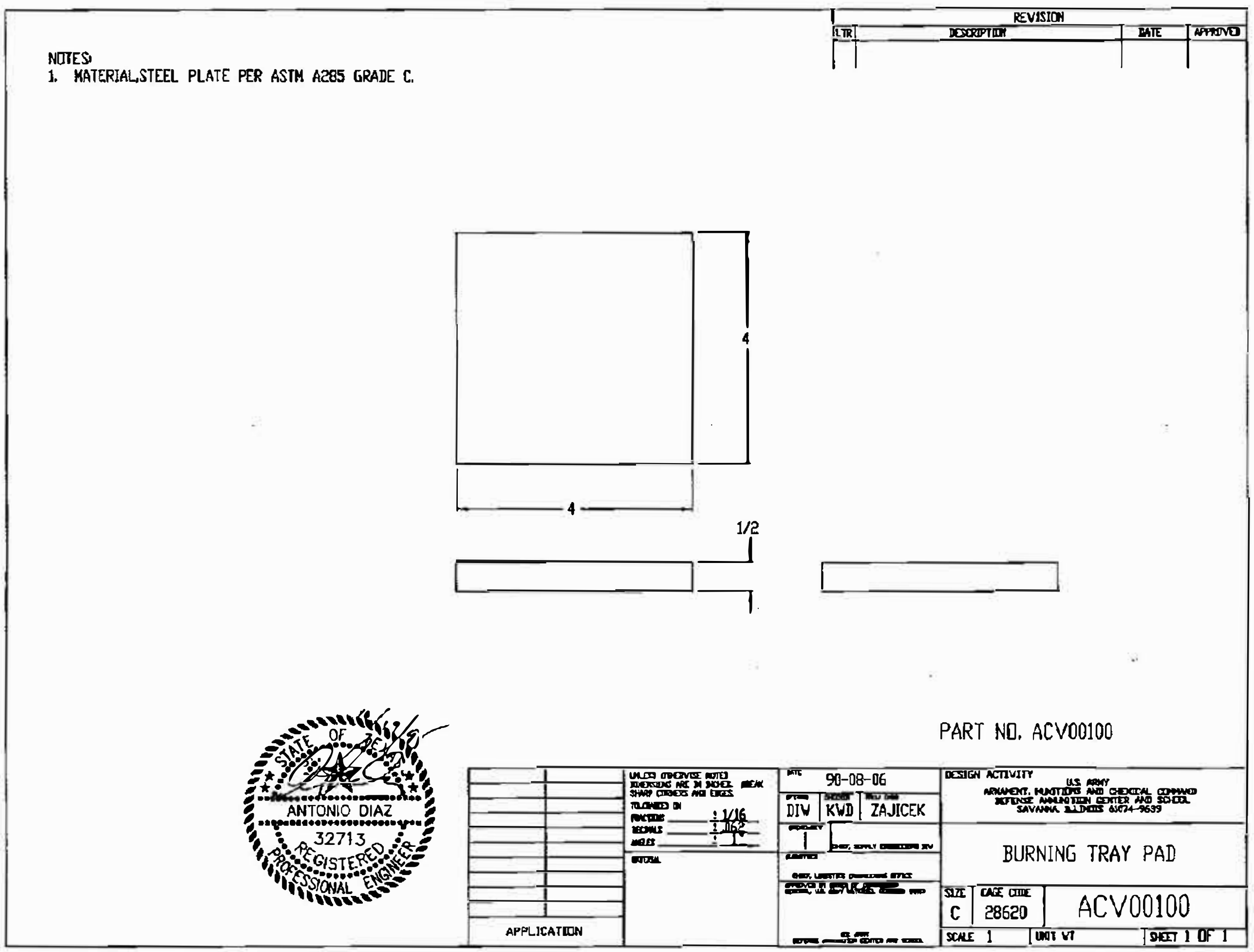
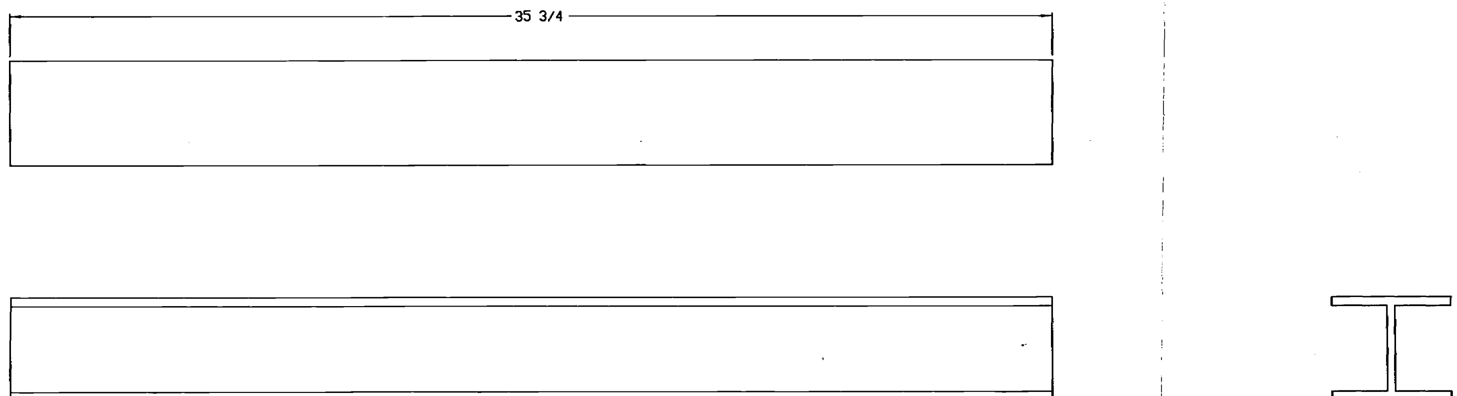

REVISION
LTR
DESCRIPTION
DATE
APPROVED
NOTES:
1. MATERIAL,STEEL PLATE PER ASTM A285 GRADE C.
4
4
1/2
STATE OF TEXAS
ANTONIO DIAZ
32713
REGISTERED
PROFESSIONAL ENGINEER
PART NO. ACV00100
APPLICATION
90-08-06
DIW
KWD
ZAJICEK
DESIGN ACTIVITY
U.S. ARMY
SAVANNA, ILLINOIS
BURNING TRAY PAD
SIZE
C
CAGE CODE
28620
ACV00100
SCALE 1
UNIT WT
SHEET 1 OF 1

REVISION			
LTR	DESCRIPTION	DATE	APPROVED

NOTES:
1. MATERIAL, WIDE FLANGE I BEAM W4 X 13 PER ASTM A36 OR EQUAL.



STATE OF TEXAS
ANTONIO DIAZ
32713
REGISTERED PROFESSIONAL ENGINEER

PART NO. ACV00099

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. BREAK SHARP CORNERS AND EDGES.
TOLERANCES ON
FRACTIONS ± 1/16
DECIMALS ± .062
ANGLES ± 1

MATERIAL

APPLICATION

DATE 90-08-06
DFTSMN DIW | CHECKER KWD | PROJ ENGR ZAJICEK

DESIGN ACTIVITY
U.S. ARMY
ARMAMENT, MUNITIONS AND CHEMICAL COMMAND
DEFENSE AMMUNITION CENTER AND SCHOOL
SAVANNA, ILLINOIS 61074-9639

BURNING TRAY
I BEAM STIFFENER

SIZE	CAGE CODE	
D	28620	ACV00099
SCALE 1/2	UNIT WT	SHEET 1 OF 1

Attachment C - List of Incorporated Application Materials

The following is a list of Part A and Part B Industrial & Hazardous Waste Application elements which are incorporated into all Industrial & Hazardous Waste permits by reference as per 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. Applicant Name
B. Facility Owner
C. Facility Contact
D. Application Type and Facility Status
E. Facility Siting Summary
F. Wastewater and Stormwater Disposition
G. Information Required to Provide Notice
H. TCEQ Core Data Form Requirements
I. Signature on Application

II. Facility Siting Criteria

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

III. Facility Management

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

Table III.D. - Inspection Schedule
Table III.E.1. - Arrangements with Local Authorities
Table III.E.2. - Emergency Coordinators
Table III.E.3. - Emergency Equipment

IV. Wastes And Waste Analysis

A. Waste Management Information

Attachment C - List of Incorporated Application Materials

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 - Reserved
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.A. Facility Waste Management Handling Units
Table V.K. - Miscellaneous Units

VI. Geology Report

A. Geology and Topography
B. Facility Groundwater
C. Exemption from Groundwater Monitoring for an Entire Facility - Reserved
D. Unsaturated Zone Monitoring - Reserved

Table VI.A.1. - Major Geologic Formations
Table VI.A.4. - Waste Management Area Subsurface Conditions
Table VI.B.3.b. - Unit Groundwater Detection Monitoring System - Reserved

VII. Closure And Post-Closure Plans

A. Closure
B. Closure Cost Estimate - Reserved
C. Post-closure
D. Post-closure Cost Estimate – Reserved
Table VII.G. – Post-Closure Period

VIII. Financial Assurance

A. Financial Assurance Information Requirements for all Applicants - Reserved
B. Applicant Financial Disclosure Statements for a new permit, permit amendment, or permit modification, or permit renewal - Reserved
C. Applicants Requesting Facility Expansion, Capacity Expansion, or New Construction - Reserved

IX. Releases From Solid Waste Units And Corrective Action

A. Preliminary Review Checklists

Attachment C - List of Incorporated Application Materials

For Applications for a Renewal/Amendment/Modification of an Existing Hazardous Waste Permit
Instructions for Preliminary Review Facility Checklist
Instructions for Preliminary Review Unit Checklist (Continued)
Preliminary Review Facility Checklist
Preliminary Review Unit Checklist
Appendices to Preliminary Review (PR)

X. Air Emission Standards

A. Process Vents - Reserved
B. Equipment Leaks - Reserved
C. Tanks, Surface Impoundments, and Containers - Reserved
D. "One - Stop" Permits - Reserved

XI. Compliance Plan

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

Table XI.A.1. - Facility History for Waste Management Units
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 t Groundwater Protection Standard
CP Table IV - Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Practical Quantitation Limits
CP Table IVA - Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard
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
Alternate Concentration Limit Demonstration
Required Information for Alternate Concentration Limits

Attachment B

Well Design and Construction Specifications
Table of Well Construction Details

Attachment C

Sampling and Analysis Plan

Attachment C - List of Incorporated Application Materials

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 D - List of Permitted Facility Units

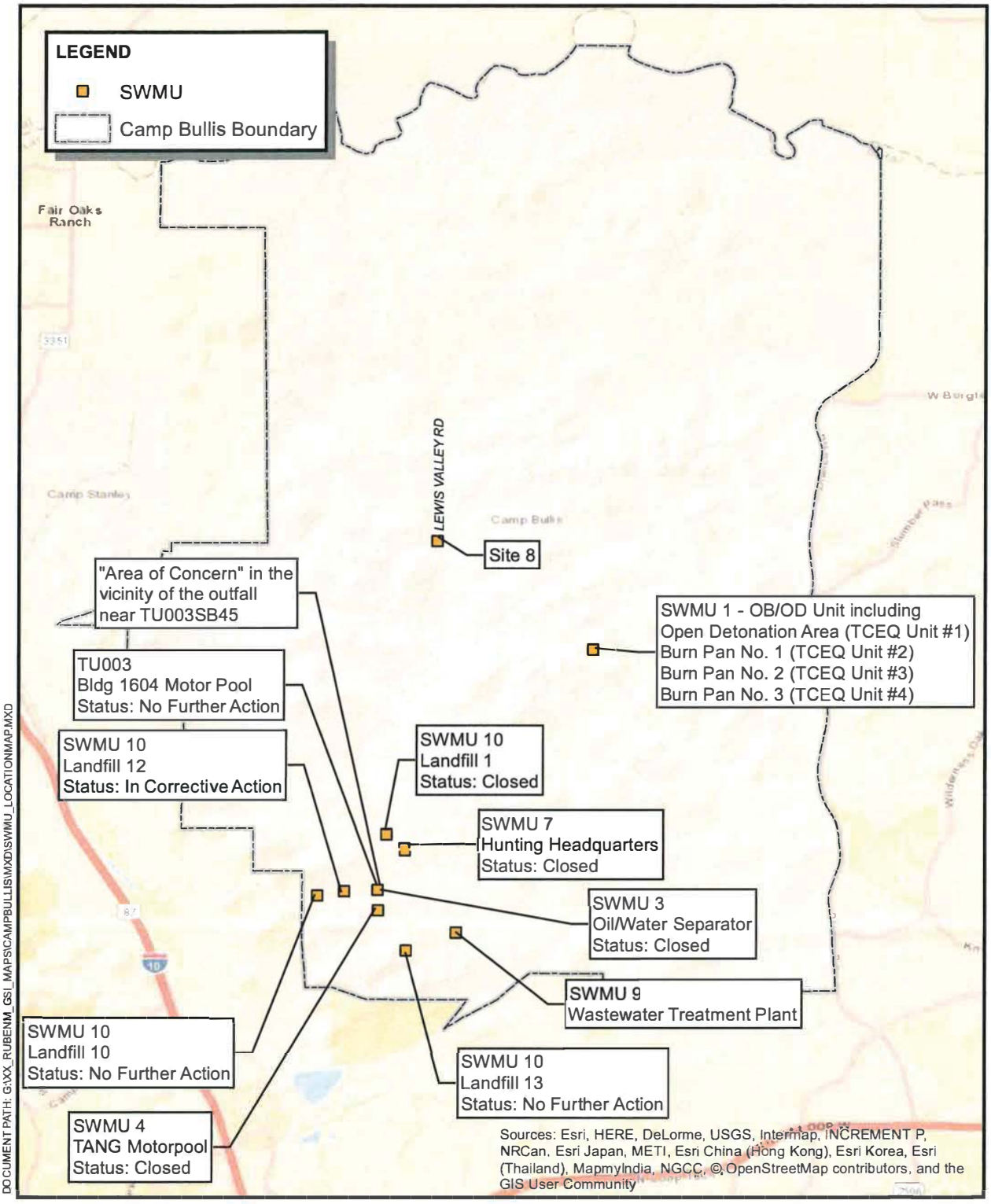
TCEQ Permit Unit No[1]	Unit Name	NOR No.[1]	Unit Description	Capacity	Unit Status[2]
1	Open Detonation Area within the OB/OD Unit	002	Processing Area with Rock, gravel, and soil lined pit.	<0.5 Acres 200 pounds Net Explosive Weight	Active
2	Open Burn Pan #1 within the OB/OD Unit	015	Processing Steel Pan with Cover	50" x 50" x 26" 200 pounds Net Explosive Weight	Active
3	Open Burn Pan #2 within the OB/OD Unit	016	Processing Steel Pan with Cover	50" x 50" x 26" 200 pounds Net Explosive Weight	Active
4	Open Burn Pan #3 within the OB/OD Unit	017	Processing Steel Pan with Cover	50" x 50" x 26" 200 pounds Net Explosive Weight	Active

Historical Permitted Units No Longer Subject to this Permit[4]

TCEQ Permit Unit No.[1]	Unit Name	NOR No.[1]	Unit Description[3]	Capacity	Unit Status[2]
	Reserved.				

[1]Permitted Unit No. and NOR 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]If a unit has been transferred, the applicant should indicate which facility/permit it has been transferred to in the Unit Description column of Table V.A.
[4]The historical units are closed and/or no longer subject to RCRA permit requirements and [is/are] included in this table for informational purposes.

CP Attachment A - Facility Maps



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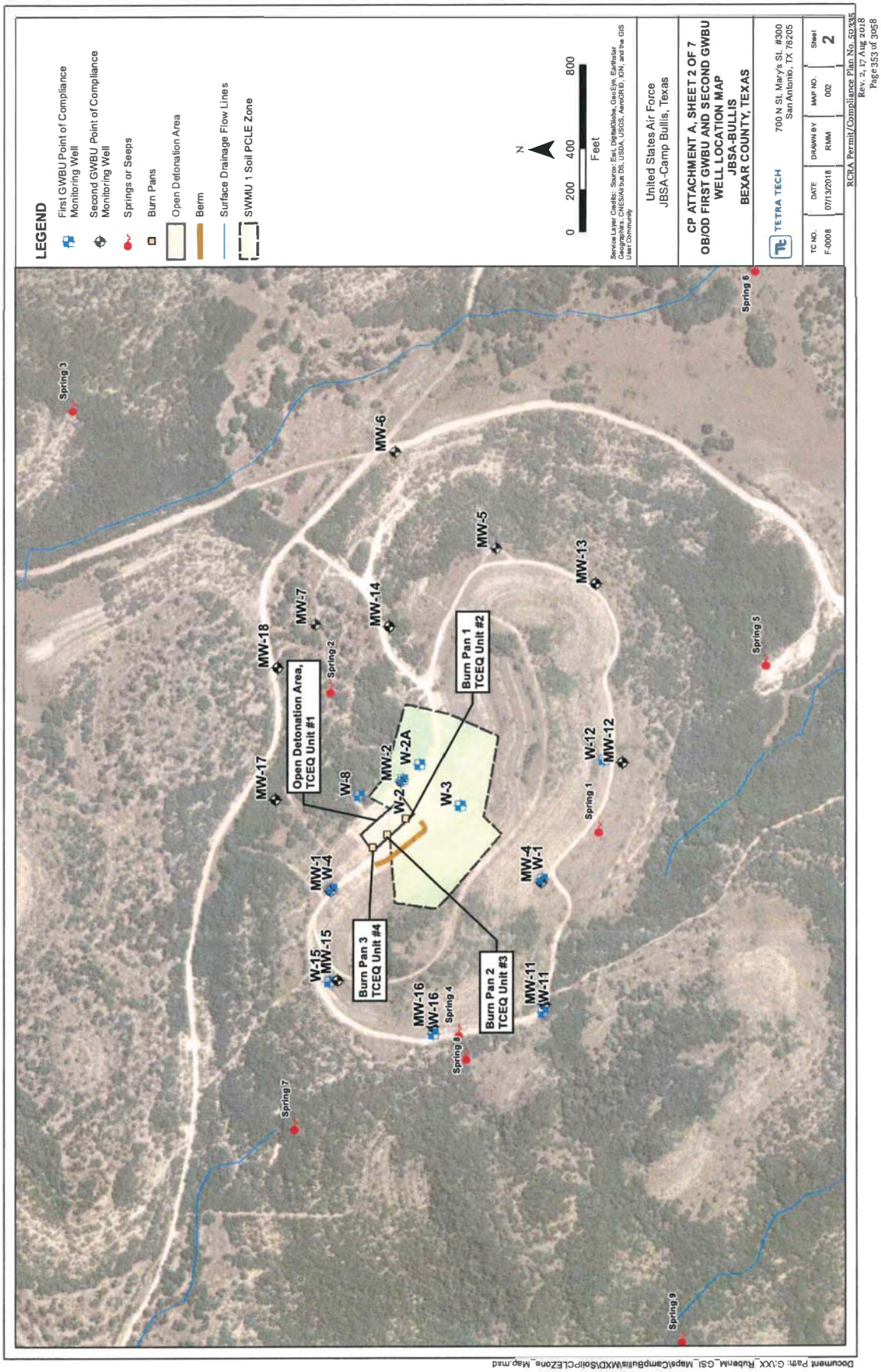
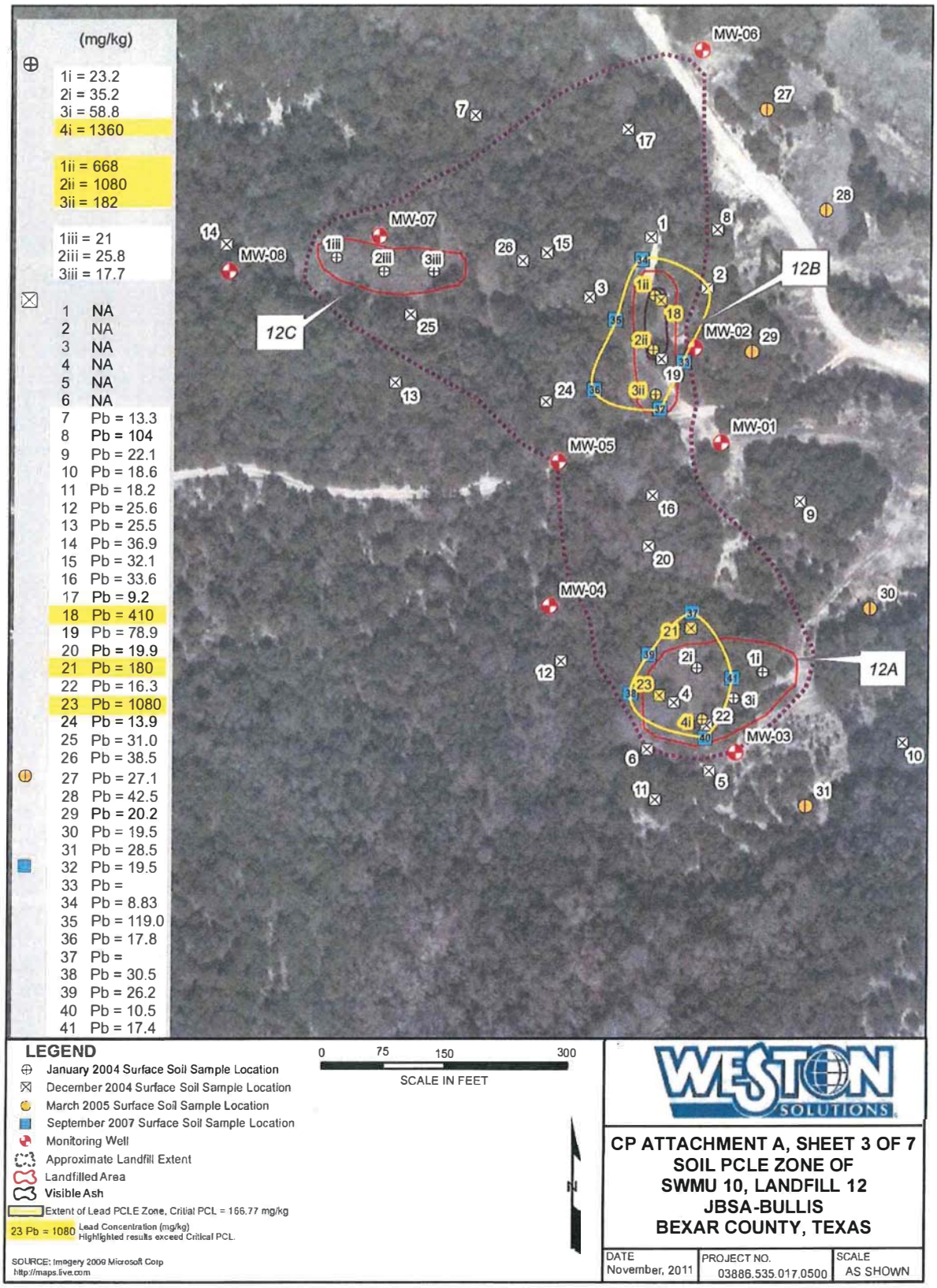
N

CP ATTACHMENT A, SHEET 1 OF 7
FACILITY SITE MAP, LOCATION OF RCRA-REGULATED UNITS, SOLID WASTE MANAGEMENT UNITS (SWMUS) AND AREAS OF CONCERN (AOCS)
JBSA - BULLIS, BEXAR COUNTY, TEXAS

CP Attachment A - Facility Maps

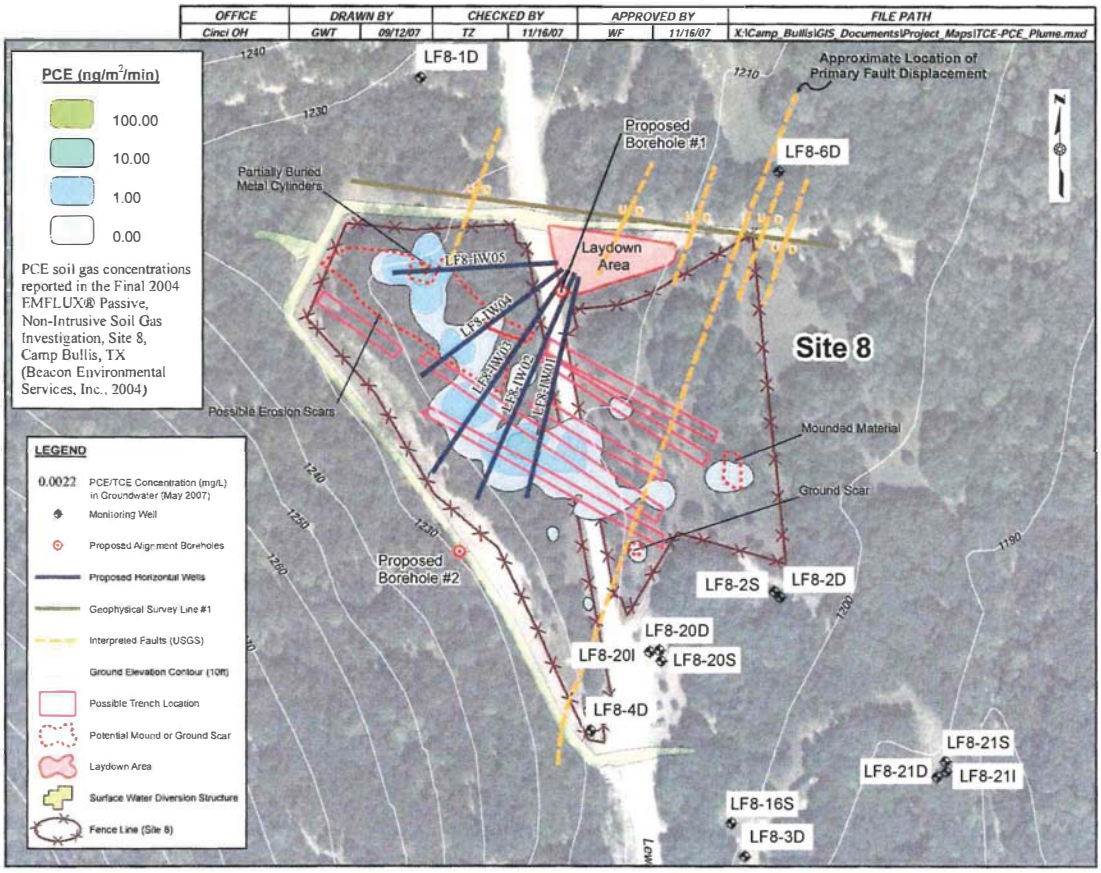


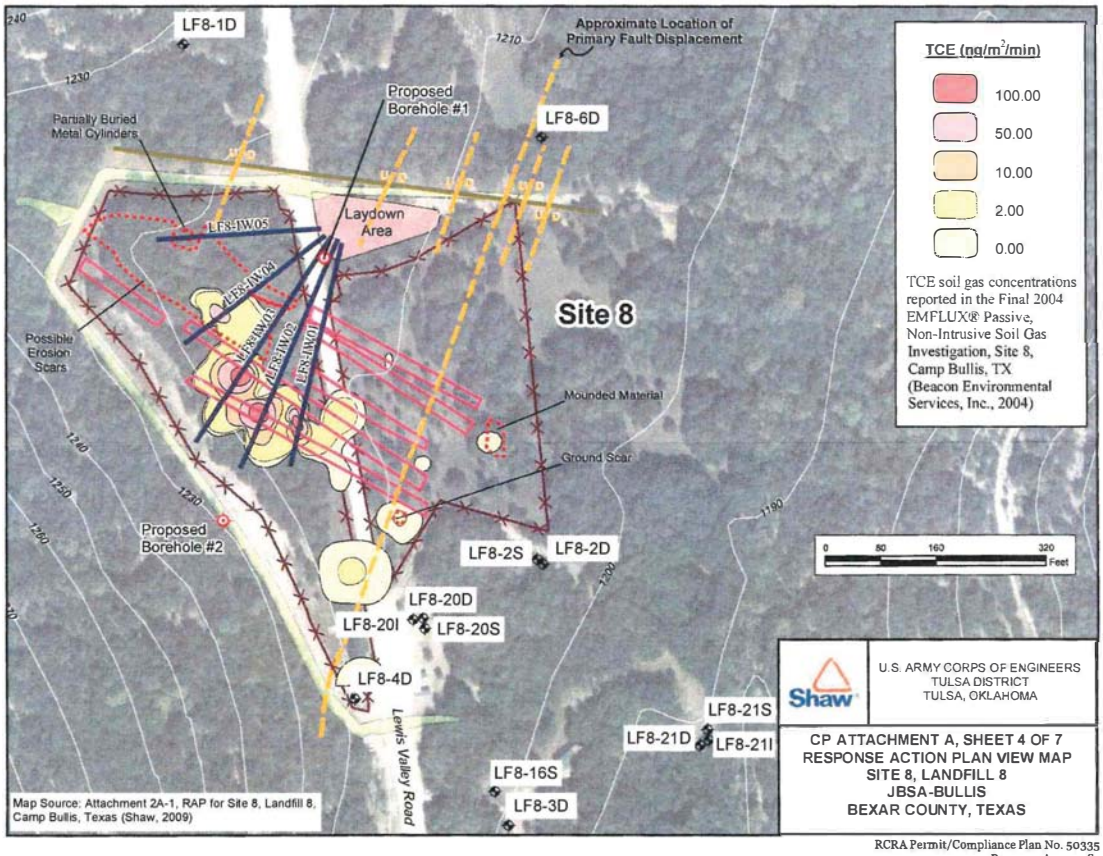
CP Attachment A - Facility Maps



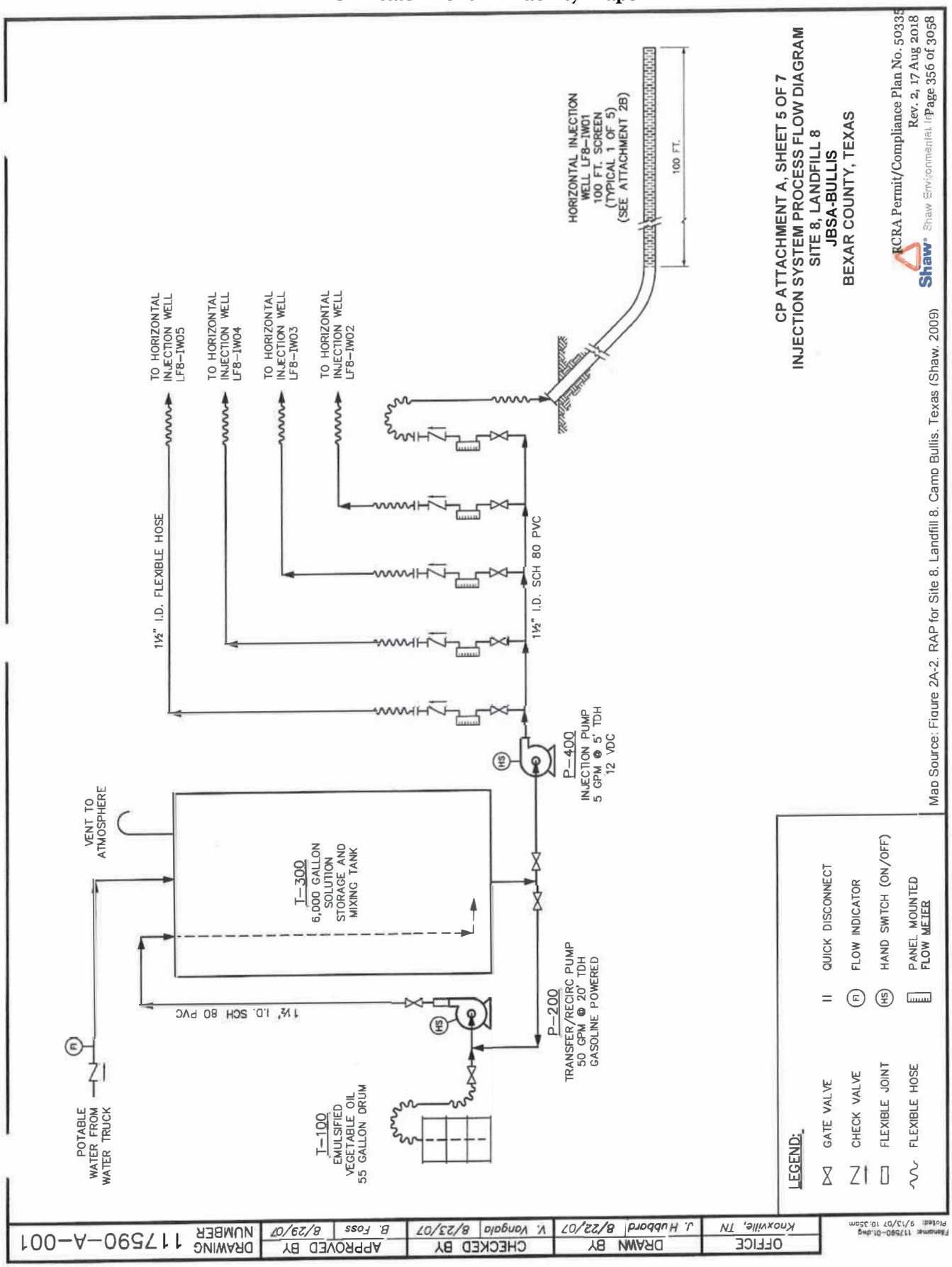
Map Source: Figure 1A-3, RAP for SWMU 10 - Landfill 12, Camp Bullis, Texas (Weston, 2011)

CP Attachment A - Facility Maps

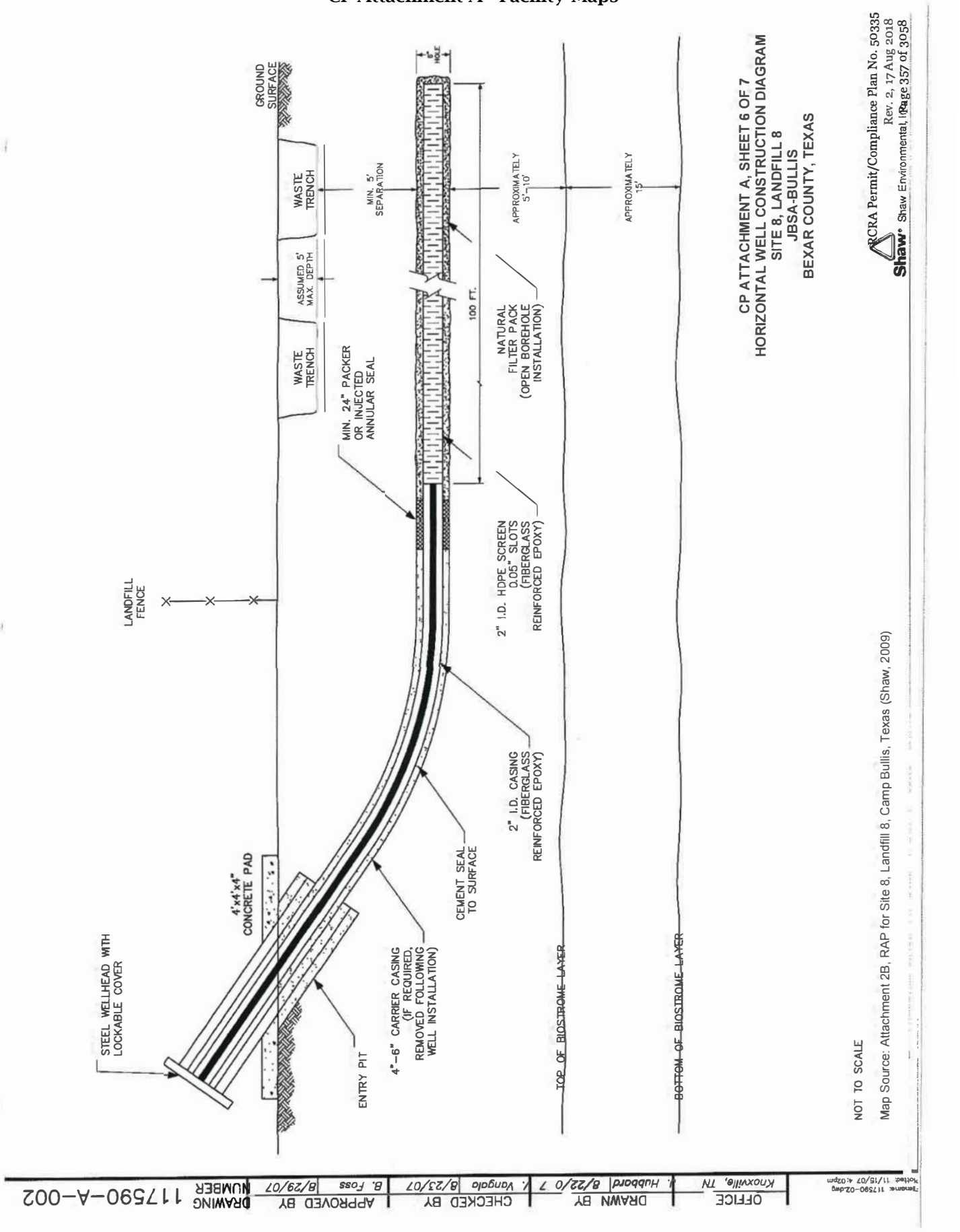


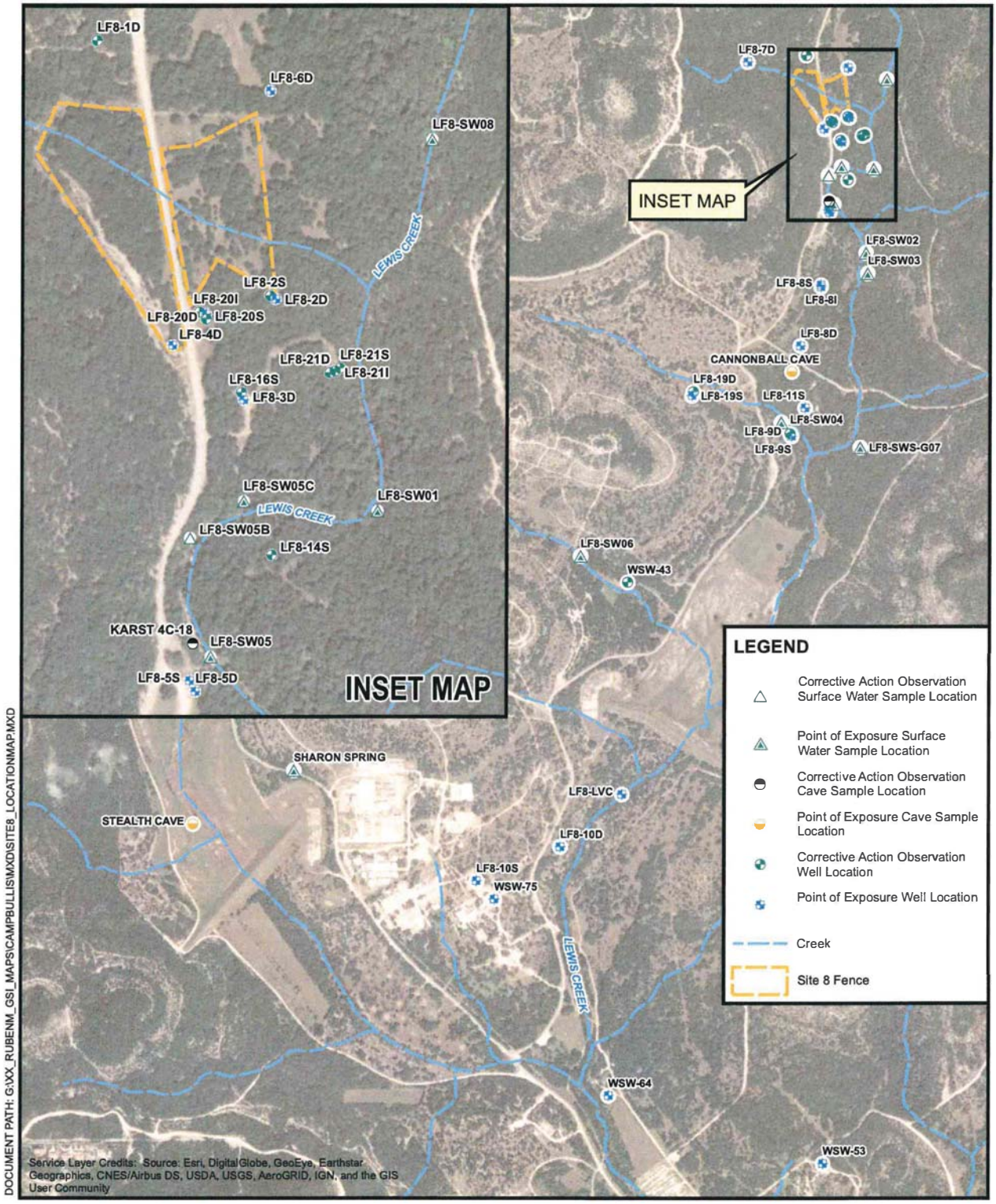


CP Attachment A - Facility Maps



CP Attachment A - Facility Maps





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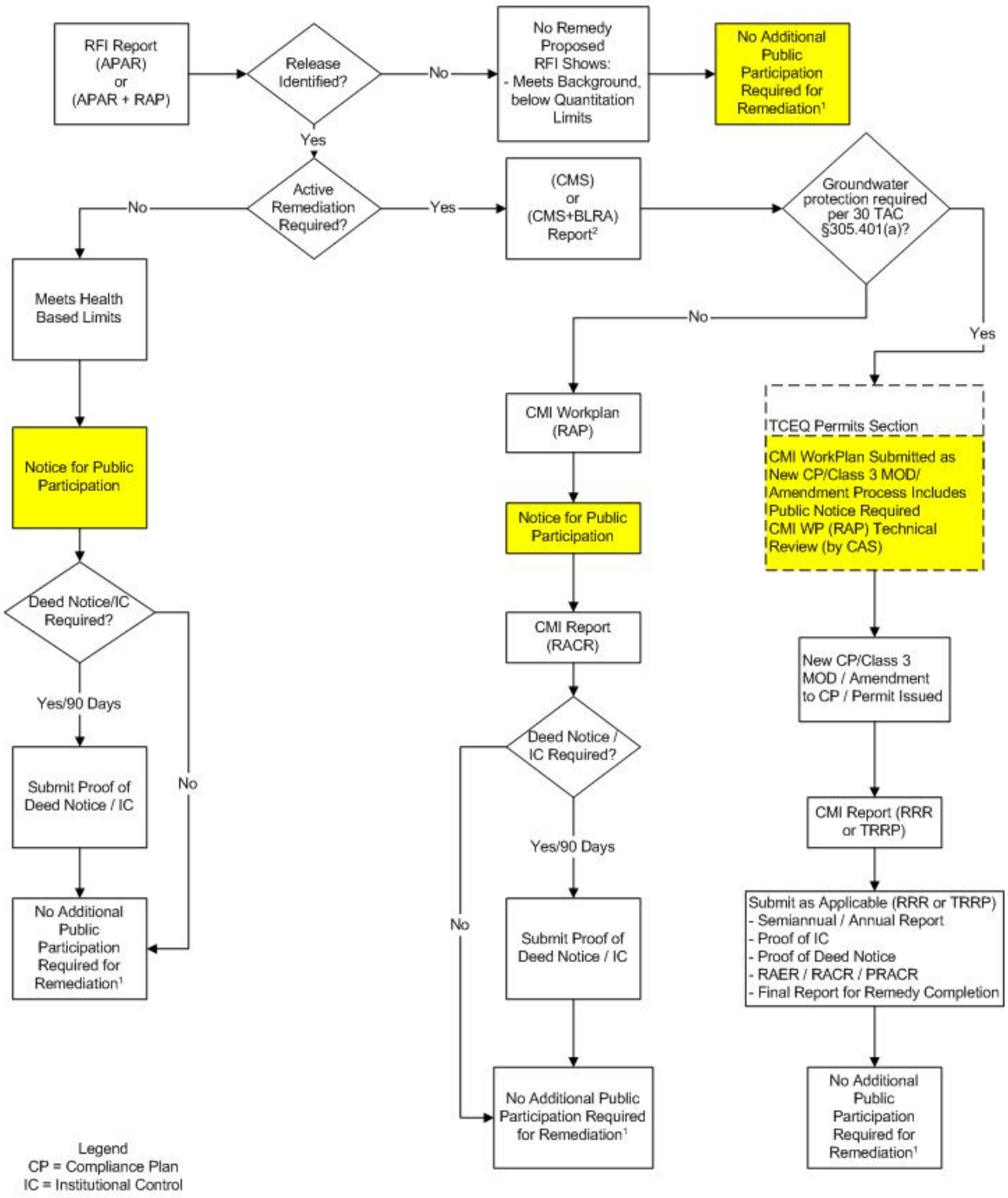
N
0 850 1,700 Feet

CP ATTACHMENT A, SHEET 7 OF 7
SITE 8, LANDFILL 8 WELL LOCATION MAP
JBSA-BULLIS
BEXAR COUNTY, TEXAS

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.

Groundwater recovery and injection wells shall be designed in accordance with standard engineering practice to ensure adequate well production and accommodate ancillary equipment. Silt traps exceeding one (1) foot may be utilized to accommodate ancillary equipment. Well heads shall be fitted with mechanical well seals, or equivalent, to prevent entry of surface water or debris.

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

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

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

9. Water added as a drilling fluid to a well shall contain no bacteriological or chemical constituents that could interfere with the formation or with the chemical constituents being monitored. For groundwater recovery and injection wells, drilling fluids containing freshwater and treatment agents may be utilized in accordance with standard engineering practice to facilitate proper well installation. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent practicable during well development.

10. Upon completion of installation of a well, the well must be developed to remove any fluids used during well drilling and to remove fines from the formation to provide a particulate-free discharge to the extent achievable by accepted completion methods and by commercially available well screens. Development shall be accomplished by reversing flow direction, surging the well or by air lift procedures. No fluids other than formation water shall be added during development of a well unless the aquifer to be screened is a low-yielding water-bearing aquifer. In these cases, the water to be added should be chemically analyzed to evaluate its potential impact on in-situ water quality, and to assess the potential for formation damage.

    For recovery and injection wells, well development methods may be utilized in accordance with standard engineering practice to remove fines and maximize well efficiency and specific capacity. Addition of freshwater and treatment agents may be

utilized during well development or re-development to remove drilling fluids, inorganic scale or bacterial slime. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent practicable during well development.

11. Each well shall be secured and/or designed to maintain the integrity of the well borehole and groundwater.

12. The Permittee shall protect the above-ground portion of the well by bumper guards and/or metal outer casing protection when wells are located in traffic areas or outside the secured plant area.

13. The attached Table of Well Construction Details is to be completed or updated for each well installed and kept on site. Items in the table that require a yes or no answer indicate diagrams, plans, or procedures that shall be kept on site and made available to inspection. The completed table and other records shall include all of the following information:

    - name/number of well (well designation);
    - intended use of the well (sampling, recovery, etc.);
    - date/time of construction;
    - drilling method and drilling fluid used;
    - well location (± 0.5 ft.);
    - borehole diameter and well casing diameter;
    - well depth (± 0.1 ft.);
    - drilling and lithologic logs;
    - depth to first saturated zone;
    - casing materials;
    - screen materials and design;
    - casing and screen joint type;
    - screen slot size/length;
    - filter pack material/size;
    - filter pack volume (how many bags, buckets, etc.);
    - filter pack placement method;
    - sealant materials;
    - sealant volume (how many bags, buckets, etc.);
    - sealant placement method;
    - surface seal design/construction;
    - well development procedure;
    - type of protective well cap;
    - ground surface elevation (± 0.01 ft. MSL);
    - top of casing elevation (± 0.01 ft. MSL); and,
    - detailed drawing of well (include dimensions).

14. The Permittee shall clearly mark and maintain the well number on each well at the site.

15. The Permittee shall measure and keep a record of the elevation of the top of each well casing in feet above mean sea level to the nearest 0.01 foot and permanently mark the measuring point on the well. The Permittee shall compare old and new elevations from previously surveyed wells and determine a frequency of surveying not to exceed five (5) year intervals.

16. A well's screened interval shall be appropriately designed and installed to meet the well's specific objective (i.e., recovery of either DNAPL, LNAPL, or both, or other objective of the well). All wells designed to detect, monitor, or recover DNAPL must be drilled to intercept the bottom confining layer of the aquifer. The screened interval to detect DNAPL should extend from the top of the lower confining layer to above the portion of the aquifer saturated with DNAPL. The screened interval for all wells designed to detect, monitor, or recover LNAPL must extend high enough into the vadose zone to provide for fluctuations in the seasonal water table. In addition, the filter pack for the recovery or monitoring well's screened interval shall be coarser than surrounding media to ensure the movement of NAPL to the well.

Certification, Plugging and Abandonment Procedures

17. Prior to installation of a Point of Compliance (POC), FOA Boundary of Compliance (FBOC), Point of Exposure (POE), Alternate Point of Exposure (APOE) or Background replacement well listed in CP Table V, the Permittee shall submit to the Executive Director for approval, the replacement well specifications and an explanation of why the well is being replaced. For any such well to be considered as a replacement well and not as a new well, the well shall have no substantive design changes from the well being replaced as determined by the Executive Director. The well shall be drilled within fifteen (15) feet of the well being replaced unless an alternate location is authorized by the Executive Director. The Permittee shall submit a replacement well certification to the Executive Director in accordance with CP Table VII and CP Attachment C, Provision 19.

18. Plugging and abandonment of a Corrective Action System Background, POC, FBOC, POE, and/or APOE wells in Provision XI.B.1. shall be subject to the Compliance Plan modification provisions in 30 TAC Chapter 305 Subchapter D. Plugging and abandonment of Corrective Action Observation, Corrective Action System and/or Attenuation Monitoring Point wells in Provision XI.B.2., shall commence upon written approval of the Executive Director. The well shall be plugged and abandoned in accordance with requirements of this Attachment C. The Permittee shall certify proper plugging and abandonment in accordance with CP Table VII and CP Attachment C, Provision 19.

19. The Permittee shall complete construction or plugging and abandonment of each well in accordance with the requirements of this Permit and 16 TAC Chapter 76 and shall certify such proper construction or plugging and abandonment in the first report submitted pursuant to CP Table VII following installation or plugging and abandonment. Copies of the State of Texas Plugging Report filed with the Texas Department of Licensing and Regulation and completion logs for each newly installed or replaced well shall be included with the report. The certification shall be prepared by a qualified geoscientist or engineer. Each well certification shall be accompanied by a certification report, including an accurate log of the soil boring, which thoroughly describes and depicts the location, elevations, material specifications, construction details, and soil conditions encountered in the boring for the well. A copy of the certification and certification report shall be kept on-site, and a second copy shall be submitted to the Executive Director. Required certification shall be in the following format, edited as appropriate, and shall specify the Compliance Plan Number as indicated:

"This is to certify that installation (or plugging and abandonment) of the following facility components authorized or required by TCEQ Permit No. (Insert Permit number) has been completed, and that construction (or plugging) of said components has been performed in accordance with and in compliance with the design and construction

specifications of this Permit No. (Insert Permit number):" (Add description of facility components with reference to applicable Compliance Plan provisions).

20. Wells may be replaced at any time the Permittee or Executive Director determines that the well integrity or materials of construction or well placement no longer enable the well to yield samples representative of groundwater quality.

21. The Permittee shall plug soil test borings and wells removed from service after issuance of the Compliance Plan with a cement/bentonite grout mixture so as to prevent the preferential migration of fluids in the area of the borehole. Certification of each plugging shall be reported in accordance with Provision 19 of CP Attachment C of this Compliance Plan. The plugging of wells shall be in accordance with 16 TAC Chapter 76 dealing with Well Drilling, Completion, Capping and Plugging.

Table of Well Construction Details

Well number					
Borehole diameter (in)					
Well diameter (in)					
Total borehole depth (ft)					
Constructed well depth (ft)					
Well location available (Y/N)					
Intended Use of Well (sampling, recovery, etc.)					
Drilling & lithologic logs available (Y/N)					
Drill method					
Date drilled					
Casing I.D. (in)					
Casing type/materials					
How joined					
Stick-up length					
Top of casing (±0.01 ft. MSL)					
Ground surface elevation (±0.01 ft. MSL)					
Capped/lockable					
Surface pad size (ft)					

Detailed drawing of well (include dimensions) Y/N					
Depth to surface seal (ft)					
Surface seal design & construction available (Y/N)					
Well development procedure available (Y/N)					
Annulus fill					
Depth to annulus seal (ft)					
Depth to filter pack (ft)					
Depth to 1st 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)					