RCRA Permit Application

Permit Number: 50424

EnviroSafe Demil, LLC

401 N Montague Street

Hooks, Texas 75561-0019

December 3, 2024

Texas Commission on Environmental Quality
Attention: Waste Permits Division, MC 126
P.O. Box 13087
Austin, Texas 78711-3087

RE: RCRA PERMIT APPLICATION – ENVIROSAFE DEMIL, LLC IN HOOKS, TEXAS
INDUSTRIAL SOLID WASTE REGISTRATION NUMBER: 98470
PROPOSED HAZARDOUS WASTE PERMIT NUMBER: 50424

Texas Commission on Environmental Quality, Waste Permits Division:

EnviroSafe Demil, LLC (ESD) is resubmitting the attached Industrial and Hazardous Waste Permit Application for the facility in Hooks, Texas to the Texas Commission on Environmental Quality (TCEQ).

History
This application was originally submitted to TCEQ on May 24, 2024. TCEQ issued an Administrative Notice of Deficiency on June 5, 2024 and ESD submitted a response to the NOD on June 19, 2024. An email from Dawn Dollins (TCEQ) to TJ Ogden (ESD) on June 28, 2024 requested that additional information required by TCEQ rule 30 TAC 305.50(a)(7) be submitted in response to NOD #A13 within 15 days from June 27, 2024. ESD was granted a 60 day extension by Dawn Dollins (TCEQ) on July 12, 2024. The process of obtaining the required information to fully address NOD #A13 (certification of engineering plans and specifications by a Texas licensed P.E. as required by the Texas Engineering Practice Act) would have extended past the specified response time, so on September 16, 2024, ESD submitted a withdrawal request for the permit application. A letter from Charly Fritz (TCEQ) dated September 24, 2024 stated that ESD could resubmit the application within 90 days of withdrawal and apply the application fee of $3,666.00 to the new submittal. This submittal includes all of the original information submitted, plus the additional information requested in the June 5, 2024 Notice of Deficiency.

Content of Submittal
The following documents are enclosed in this mailing:

- TCEQ-20714, Waste Permits Division Correspondence Cover Sheet*
- TCEQ-20591, Plain Language Summary*
- TCEQ-20960, Public Involvement Plan Form for Permit and Registration Applications*
- Part A permit application*
- Part B permit application*
- An electronic mailing list of the List of Adjacent Landowners and the RCRA Part B Application Administrative and Technical Evaluation Checklist is included on compact disk (CD)

**The originally signed documents plus 1 paper copy is included. The 3rd copy is submitted on a thumb drive. Additionally, a full copy of the application will be submitted electronically via TCEQ's FTPS.*

The RCRA Part B Application Administrative and Technical Evaluation Checklist will also be submitted electronically via TCEQ's FTPS, in addition to being included on compact disk (CD).

Please contact me at 360-480-9320 or mwentz@envirosafedemil.com with any questions or comments.

Sincerely,

Michael Wentz
President, EnviroSafe Demil, LLC.
401 N Montague Street
Hooks, Texas 75561-0019

Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: December 3, 2024
Facility Name: EnviroSafe Demil, LLC (98470)
Permit or Registration No.: 50424

Nature of Correspondence:
☒ Initial/New
☐ Response/Revision to TCEQ Tracking No.: _____ (from subject line of TCEQ letter regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☐ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☐ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☐ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
☒ New	☐ Annual/Biennial Site Activity Report
☐ Renewal	☐ CPT Plan/Result
☐ Post-Closure Order	☐ Closure Certification/Report
☐ Major Amendment	☐ Construction Certification/Report
☐ Minor Amendment	☐ CPT Plan/Result
☐ CCR Registration	☐ Extension Request
☐ CCR Registration Major Amendment	☐ Groundwater Monitoring Report
☐ CCR Registration Minor Amendment	☐ Interim Status Change
☐ Class 3 Modification	☐ Interim Status Closure Plan
☐ Class 2 Modification	☐ Soil Core Monitoring Report
☐ Class 1 ED Modification	☐ Treatability Study
☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

RCRA Permit Application

Permit Number: 50424

EnviroSafe Demil, LLC

401 N Montague Street

Hooks, Texas 75561-0019

December 3, 2024

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Sincerely,

Michael Wentz
President, EnviroSafe Demil, LLC.
401 N Montague Street
Hooks, Texas 75561-0019

Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: December 3, 2024
Facility Name: EnviroSafe Demil, LLC (98470)
Permit or Registration No.: 50424

Nature of Correspondence:
☒ Initial/New
☐ Response/Revision to TCEQ Tracking No.: _____ (from subject line of TCEQ letter regarding initial submission)

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☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

Texas Commission on Environmental Quality

Plain Language Summary

Industrial and Hazardous Waste Permit Applications

Instructions: Complete this form and submit with any industrial hazardous waste, or industrial solid waste, permit application that is subject to 30 Texas Administrative Code §39.405(k) [applications for a Class 3 permit modification, permit amendment, permit renewals, and for a new permit]. Please be concise.

Application Information

Purpose of application: ☒New ☐Renewal ☐Modification/Amendment	
Date Submitted to TCEQ: December 3, 2024	
Customer Name: EnviroSafe Demil, LLC	
Facility Name: EnviroSafe Demil, LLC	
CN: 606060028	**RN:** 111572442
Permit Number: 50424	**Solid Waste Registration Number:** 98470
Facility Street Address: 401 N Montague Street, Hooks, TX 75561	
Weblink to Street Address: https://earth.google.com/web/search/401+N+Montague+Street,+Hooks,+TX+75561/	

Facility Information *(check all that apply)*

What is the primary type of business?	☐Chemical manufacturing ☐ Oil refinery ☒ Treatment, storage or disposal facility plant ☐Other **If other, enter description:**
What does the facility produce?	☐Chemicals ☐Fuels / lubricants ☒No products ☐Other **If other, enter description:**

Waste Management Information *(check all that apply)*

What types of wastes are managed?	☐Nonhazardous industrial ☒Hazardous ☒Other **If other, enter description:** energetic materials
Where does the waste come from?	☒Off-site source ☒On-site source
How is the waste managed?	☒Storage ☒Process / Treatment ☐Disposal ☒Other **If other, enter description:** Processing unit and APCS waste shipped off-site
What type of units manage the waste?	☒Active ☐Post-Closure **Type and count:** Storage Magazines - 3; Hybrid Burn Chamber (HBC) - 1; Preparation building (Rocket Motor Ops Building) - 1
What happens to waste managed at the facility?	☒Transported off-site ☐Disposed on-site ☒Other **If other, enter description:** Energetic material processed in processing unit

Pollution Control Methods *(check all that apply)*	
How will the facility prevent spills, leaks, and releases?	☒Routine inspections ☐Engineered liner systems ☒Spill containment ☒Proper waste handling ☒Operations in enclosed buildings ☐Groundwater monitoring ☐Other **If other, enter description:**
How will the facility clean up spills, leaks, and releases?	☒Spill clean-up supplies ☒Decontamination equipment ☐Other **If other, enter description:**
How will the facility prevent / minimize air emissions?	☒Air monitoring / control systems ☒Filters / scrubbers ☒Routine inspections ☒Proper waste handling ☒Operations in enclosed buildings ☐Other **If other, enter description:**

Description of Update *(for Class 3 Modifications and Amendments only)*

List and explain any changes this modification or amendment would make to the two sections above—**Waste Management Information** and **Pollution Control Methods**.

Clear Form

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

☐ New Permit or Registration Application
☐ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, a Public Involvement Plan is not necessary. Completion of the remaining sections not required.

Section 2. Secondary Screening

☐ Requires public notice,
☐ Considered to have significant public interest, **and**
☐ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all of the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2.

☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste
☐ Radioactive Materials Licensing ☐ Underground Injection Controls

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit
  - ☐ Class B Biosolids Land Application Permit
  - ☐ Domestic Septage Land Application Registration

Water Rights New Permit

- ☐ New Appropriation of Water
- ☐ New or existing reservoir

Amendment to an Existing Water Right

- ☐ Add a New Appropriation of Water
- ☐ Add a New or Existing Reservoir
- ☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

_____

(City)

_____

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.
☐ City
☐ County
☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office

☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

Texas Commission on Environmental Quality
Instructions and Procedural Information
for Filing a Permit Application for a
Hazardous Waste Storage, Processing, or Disposal Facility

Part A

[**Form Availability**: This form, as well as other Industrial and Hazardous Waste documents, is available on the Internet World Wide Web, Industrial and Hazardous Waste home page at address https://www.tceq.texas.gov/permitting/waste_permits/ihw_permits]

General Instructions

1. A person (individual, corporation or other legal entity) who stores, processes or disposes of hazardous waste (except where such storage and/or processing is excluded from permit requirements in accordance with 30 Texas Administrative Code (TAC) Section 335.2) must obtain a permit pursuant to the Texas Health and Safety Code. In applying to the Texas Commission on Environmental Quality, hereafter referred to as the Commission, the applicant shall follow the procedures outlined below, on the application and in the Rules of the Commission.

2. The application (one original plus three (3) complete copies[1]) should be mailed to:

   Texas Commission on Environmental Quality
   Attention: Waste Permits Division, MC126
   P. O. Box 13087
   Austin, Texas 78711-3087

3. Signature on Application [30 TAC 305.44]. The application shall be signed by the owner and operator or by a duly authorized agent, employee, officer, or representative of the owner or operator and shall be verified before a notary public. When another person signs on behalf of the owner and operator, this person's title or relationship to the owner or operator should be shown. In all cases, the person signing the form should be authorized to do so by the owner or operator (the Commission may require a person signing on behalf of an owner or operator to provide proof of authorization). An application submitted for a corporation must be signed by (or the signatory must be authorized by) a responsible corporate officer such as a president, secretary, treasurer, vice-president, or designated manager; or for a partnership or sole proprietorship, by a general partner or the proprietor, respectively. In the case of a municipal, state, federal, or other public facility, the application shall be signed by either a principal executive

[1] The third copy may optionally consist of paper copies of all plans and maps and a computer diskette of the remaining document. The document should be formatted in Word processing software up to and including version 6.1 or a 100% compatible format. Files may be compressed using PKZIP Ver. 2 or a 100% compatible program.

officer or ranking elected official.

4. An application will not be processed until all information required to properly evaluate the application has been obtained. When an application is severely lacking in detail and/or the applicant fails to submit additionally requested information in a timely manner, the application will not be considered to be "filed in accordance with the rules and regulations of the Commission."

   Please submit any application revisions with a revised date and page numbers at the bottom of the page(s).

5. Fees and Costs

   a. The fee for filing an application is discussed in Section XII of Part B, form number TCEQ-0376.

   b. The applicant for a permit is required to bear the cost of publication of notice of the application in a newspaper as prescribed by 30 TAC Section 39.405(f).

6. A person may not commence operation of a hazardous waste management facility until the Commission has issued a permit to authorize the storage, processing, or disposal of hazardous waste, except with the approval of the Commission.

7. Designation of Material as Confidential

   The designation of material as confidential is frequently carried to excess. The Commission has a responsibility to provide a copy of each application to other review agencies and to interested persons upon request and to safeguard confidential material from becoming public knowledge. Thus, the Commission requests that the applicant (1) be prudent in the designation of material as confidential and (2) submit such material only when it might be essential to the staff in their development of a recommendation.

   The Commission suggests that the applicant NOT submit confidential information as part of the permit application. However, if this cannot be avoided, the confidential information should be described in non-confidential terms throughout the application, and submitted as a document or binder, and conspicuously marked "CONFIDENTIAL."

   Reasons of confidentiality include the concept of trade secrecy and other related legal concepts which give a business the right to preserve confidentiality of business information to obtain or retain advantages from its right in the information. This includes authorizations under 18 U.S.C. 1905 and special rules cited in 40 CFR Chapter I, Part 2, Subpart B.

   Section 361.037 of the Texas Health and Safety Code does not allow an applicant for an industrial and hazardous waste permit to claim as confidential any record pertaining to the characteristics of the industrial solid waste.

   The applicant may elect to withdraw any confidential material submitted with the application. However, the permit cannot be issued, amended, or modified if the application is incomplete.

Part II

Procedural Information

After the submittal of Parts A and B of the application, the TCEQ will provide public notice of receipt of the application. The Executive Director's staff will review the application for completeness of information submitted. During the review, the applicant may be contacted for clarification or additional information. When all pertinent information is present, the application or a summary of its contents will be forwarded for review by other state agencies and local governmental entities interested in water quality control and solid waste management. After technical evaluation, opportunity for public hearing will be afforded.

Note that for facilities which had "commenced on-site storage, processing, or disposal of hazardous waste" [see 30 TAC Section 335.43(b)] on or before the date such waste is identified or listed as hazardous by EPA, the Texas Health and Safety Code provides in Section 361.082(f) that these facilities may continue to manage hazardous waste until such time as the Commission approves or denies the application, provided that the applicant has filed the permit application in accordance with the rules and regulations of the Commission.

The Commission may act upon an application for a permit, permit amendment, permit modification, or renewal of a permit without the necessity of holding a public hearing:

1. (a) When notice of the application has been mailed to persons possibly affected by the proposed permit; and

   (b) When notice has been published at least once in a newspaper regularly published or circulated within each county where the proposed facility is located; and

   (c) Within forty-five (45) days following publication of the Commission's notice, a Commissioner, the Executive Director or an affected person has not requested a public hearing; or

2. For a Class 1 or a Class 2 permit modification or a minor amendment to a permit. The Commission may, in certain cases, hold a public hearing for a Class 2 permit modification or a minor amendment.

A public hearing may be scheduled on an application for a RCRA hazardous waste permit when requested by a Commissioner, the Executive Director, or an affected person within forty-five (45) days following the newspaper publication.

Requirements of Giving Notice of the Application:

1. By the Applicant: Every applicant for a permit, permit amendment, permit modification, or permit renewal shall publish notice (see note below) of the application at least once in a newspaper regularly published or circulated within each county where the proposed facility is located. Where a public hearing has been requested, notice will be mailed to the applicant in ample time for publication, which shall be not less than thirty (30) days prior to the date set for the hearing. Except in the case of a notice of a permit modification request, the Commission will mail the appropriate notice and instructions for publication to the applicant.

   NOTE: Additional publication and direct mail notice to affected persons will result if a public hearing is requested following newspaper publication of the notice of application. The cost of providing this additionally required publication and service of notice to affected persons will be assumed by the applicant.

2. By the Texas Commission on Environmental Quality: The Commission will mail notice of

the application (except for permit modifications) to affected persons and certain governmental entities. The notice will be mailed at the same time instructions for newspaper publications are mailed to the applicant.

3. Bilingual Notice Instructions:

   For certain permit applications, public notice in an alternate language is required. If an elementary school or middle school nearest to the facility offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, requires a bilingual education program for an entire school district should the requisite alternative language speaking student population exist. However, there may not be any bilingual-speaking students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if the nearest elementary or middle school, as part of a larger school district, is required to make a bilingual education program available to qualifying students and either the school has students enrolled at such a program on-site, or has students who attend such a program at another location to satisfy the school's obligation to provide such a program.

   If it is determined that a bilingual notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language. Electronic versions of the Spanish template examples are available from the TCEQ to help the applicant complete the publication in the alternative language.

Bilingual Notice Application Form:

Bilingual notice confirmation for this application:

1. Is the school district of the elementary or middle school nearest to the facility required by the Texas Education Code to have a bilingual program?

   ☐YES ☒ NO **Tracy Cook, Assistant Superintendent of Hooks Independent School District, verified that they are not required to have a bilingual program by TEA and they do not have a bilingual program.**

   (**If NO**, alternative language notice publication not required)

2. **If YES** to question 1, are students enrolled in a bilingual education program at either the elementary school or the middle school nearest to the facility?

   ☐ YES ☐ NO

   (**If YES** to questions 1 and 2, alternative language publication is required; **If NO** to question 2, then consider the next question)

3. **If YES** to question 1, are there students enrolled at either the elementary school or the middle school nearest to the facility who attend a bilingual education program at another location?

   ☐ YES ☐ NO

   (**If Yes** to questions 1 and 3, alternative language publication is required; **If NO** to question 3, then consider the next question)

4. **If YES** to question 1, would either the elementary school or the middle school nearest to the facility be required to provide a bilingual education program but for the fact that it

secured a waiver from this requirement, as available under 19 TAC 89.1205(g)?

☐ YES ☐ NO

(**If Yes** to questions 1 and 4, alternative language publication is required; **If NO** to question 4, alternative language notice publication not required)

If a bilingual education program(s) is provided by either the elementary school or the middle school nearest to the facility, which language(s) is required by the bilingual program? **N/A, See question #1.**

Consideration of the Permit Application by the Commission:

The applicant will be notified by the Commission when the application is set for final consideration. If the Commission issues the permit, the applicant will be mailed a copy of the permit by the TCEQ Office of the Chief Clerk within one (1) month following Commission approval. (NOTE: Only one copy is mailed to the applicant and that copy will be sent to the official mailing address of the applicant as shown on the permit application form.)

Table of Contents

Texas Commission on Environmental Quality Instructions and Procedural Information for Filing a Permit Application for a Hazardous Waste Storage, Processing, or Disposal Facility i

Part A i
General Instructions i
Part II iii
Procedural Information..... iii
Bilingual Notice Application Form: iv

Texas Commission on Environmental Quality Permit Application for a Hazardous Waste Storage/Processing/Disposal Facility Part A - Facility Background Information 1
I. General Information 1

A. Facility Name 1
B. Facility Contact 1
C. Operator 2
D. Owner 2
E. Type of Application Submittal.....3
F. Registration and Permit Information 4
G. Give a brief description of the nature of your business. 5
H. TCEQ Core Data Form.....5

Signature Page 6
II. Facility Background Information 7

A. Location of Facility for which the application is submitted 7
B. Legal Description of Facility.....7
C. SIC Codes.....7

III. Wastes and Waste Management 9

A. Waste Generation and Management Activities.....9
B. Waste Management Units Summary.....9
C. Location of Waste Management Units..... 10
D. Flow Diagram/Description 11

IV. Index Of Attachments 12
Table III-1 – Hazardous Wastes and Management Activities..... 13
Table III-2 – Hazardous Waste Management Unit Checklist..... 14

Texas Commission on Environmental Quality
Permit Application for a Hazardous Waste Storage/Processing/Disposal Facility
Part A - Facility Background Information

I. General Information

A. Facility Name: **EnviroSafe Demil, LLC**

(Individual, Corporation, or Other Legal Entity Name)

TCEQ Solid Waste Registration No: **98470** EPA I.D. No.: **TXR000086289**

Street Address (If Available): **401 N Montague Street**

City: **Hooks**, State: **TX** Zip Code: **75561**

County: **Bowie**

Telephone Number: **(206) 999-8684** Charter Number: **805003546**

If the application is submitted on behalf of a corporation, please identify the Charter Number as recorded with the Office of the Secretary of State for Texas.

B. Facility Contact

1. List those persons or firms who will act as primary contact for the applicant during the processing of the permit application. Also indicate the capacity in which each person may represent the applicant (engineering, legal, etc.). The person listed first will be the primary recipient of correspondence regarding this application. Include the complete mailing addresses and phone numbers.

Contact – Primary, Legal
TJ Ogden
CEO & Founder, EnviroSafe Demil, LLC
401 N Montague Street
Hooks, TX 75561
Phone: 206-999-8684
Email: t[redacted]

Contact – Engineering
Michael Wentz
President, EnviroSafe Demil, LLC
401 N Montague Street
Hooks, TX 75561
Phone: 360-480-9320
Email:[redacted]

2. If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

Agent In Service
Michael Wentz
President, EnviroSafe Demil, LLC
401 N Montague Street
Hooks, TX 75561
Phone: 360-480-9320
Email: [redacted]

C. Operator[1]: Identify the entity who will conduct facility operations.

Operator Name**: EnviroSafe Demil, LLC**

Address: **401 N Montague Street**

City: **Hooks**, State: **TX** Zip Code: **75561**

Telephone Number: **(206) 999-8684** Charter Number: **805003546**

D. Owner

1. Indicate the ownership status of the facility:

   a. Private **X**

      (1) **X** Corporation
      (2) _____Partnership
      (3) _____Proprietorship
      (4) _____Non-profit organization

   b. Public _____

      (1) _____Federal
      (2) _____Military
      (3) _____State
      (4) _____Regional
      (5) _____County
      (6) _____Municipal
      (7) _____Other (specify)

2. Does the operator own the facility units and facility property?

   ☐ Yes ☒ No

   The operator, EnviroSafe Demil, LLC (ESD), owns the facility's processing units. ESD is currently in the middle of

[1] The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

closing on the purchase of the main portion of the facility from the TexAmericas Center and expects that the purchase will be complete by the time the RCRA permit is issued. ESD is leasing the adjacent storage areas from the TexAmericas Center.

If you checked "no",

a. Submit as "Attachment A" a copy of the lease for use of or the option to buy said facility units and/or facility property, as appropriate; and

Attachment A – Lease Information **is included.**

b. Identify the facility units' owner(s) and/or facility property owner(s). Please note that the owner(s) is/are required to sign the application on page 5.

Facility Unit's Owner Name: **EnviroSafe Demil, LLC**
Address: **401 N Montague Street**
City: **Hooks**, State: **TX** Zip Code: **75561**
Telephone Number: **(206) 999-8684**

Facility Property Owner Name*****: **TAC East Holdings Co. No 1**
Address: **107 Chapel Lane**
City: **New Boston ,** State: **TX** Zip Code: **75570**
****See information under Item D.2 above.***

E. Type of Application Submittal:
Initial **X** or Revision _____

F. Registration and Permit Information

Indicate (by listing the permit number(s) in the right-hand column below) all existing or pending State and/or Federal permits or construction approvals which pertain to pollution control or industrial solid waste management activities conducted by your plant or at your location. Complete each blank by entering the *permit number*, or the *date of application*, or *"none"*.

	Relevant Program and/or Law	Permit No.	Agency*
1.	Texas Solid Waste Disposal Act	_____	_____
2.	Wastewater disposal under the Texas Water Code	_____	_____
3.	Underground injection under the Texas Water Code	_____	_____
4.	Texas Clean Air Act	**170884**	**TCEQ**
5.	Texas Uranium Surface Mining & Reclamation Act	_____	_____
6.	Texas Surface Coal Mining & Reclamation Act	_____	_____
7.	Hazardous Waste Management program under the Resource Conservation and Recovery Act	_____	_____
8.	UIC program under the Safe Drinking Water Act	_____	_____
9.	TPDES program under the Clean Water Act	_____	_____
10.	PSD program under the Clean Air Act	_____	_____
11.	Nonattainment program under the Clean Air Act	_____	_____
12.	National Emission Standards for Hazardous Pollutants (NESHAP) Pre-construction approval under the Clean Air Act	_____	_____
13.	Ocean dumping permits under the Marine Protection Research and Sanctuaries Act	_____	_____

14. Dredge or fill permits under section 404 of the Clean Water Act _____ _____

15. Other relevant environmental permits _____ _____

*Use the following acronyms for each agency as shown below:

TCEQ	= Texas Commission on Environmental Quality
TRC	= Texas Railroad Commission
TDH	= Texas Department of Health
TDA	= Texas Department of Agriculture
EPA	= U.S. Environmental Protection Agency
CORPS	= U.S. Army Corps of Engineers

G. Give a brief description of the nature of your business.

Envirosafe Demil, LLC safely and cleanly processes energetic materials. The Hybrid Burn Chamber (HBC) provides a modern and environmentally responsible alternative to open burning.

H. TCEQ Core Data Form

The TCEQ requires that a Core Data Form (Form 10400) be submitted on all incoming applications. For more information regarding the Core Data Form, call (512) 239-1575 or go to the TCEQ website at http://www.tceq.texas.gov/permitting/central_registry/guidance.html.

The Core Data Form (Form 10400) is included following this form.

Signature Page

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator Signature: _____ Date: 12/3/2024

Name and Official Title (type or print): Michael Wentz, President

Operator Signature: _____ Date: _____

Name and Official Title (type or print): _____

Operator Signature: _____ Date: _____

Name and Official Title (type or print): _____

Owner Signature: _____ Date: 12/3/2024

Name and Official Title (type or print): Michael Wentz, President

To be completed by the operator if the application is signed by an authorized representative for the operator

I, _____ hereby designate _____
(operator) (authorized representative)
as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

_____
Printed or Typed Name of Operator or Principal Executive Officer

_____
Signature

(Note: Application Must Bear Signature & Seal of Notary Public)

Subscribed and sworn to before me by the said _____ on this 3rd day of December, 2024

My commission expires of the 31 day of August, 2025

Pamela Ann Richardson
Notary Public in and for Bowie County, Texas

PAMELA ANN RICHARDSON
NOTARY PUBLIC
ID# 1030415-5
State of Texas
Comm. Exp. 08-31-2025

II. Facility Background Information

A. Location of Facility for which the application is submitted

1. Give a description of the location of the facility site with respect to known or easily identifiable landmarks.

The facility is located in Hooks, Texas (Bowie County), north of Pine Street, south of Oak Street, east of N Montague Street, and west of Freedom Way. Hooks, Texas is east of New Boston, Texas and west of Texarkana, Texas.

2. Detail the access routes from the nearest U.S. or State Highway to the facility.

The facility is located south of US-82 (just south of I-30) in Hooks, Texas and can be accessed by driving westward from Texarkana, Texas on US-82, turning left (south) onto Bowie Parkway, turning right (west) onto Oak Street, and turning left (south) onto N Montague Street. The facility can also be accessed by driving eastward from New Boston, Texas on US-82, turning right (south) on Cass Street, left (east) on Oak Street, and right (south) on N Montague Street. Other routes are possible, including access via Interstate 30 (I-30), but these are the most direct routes.

3. Enter the geographical coordinates of the facility:

Latitude: 33°26'56.0"N

Longitude: 94°15'21.9"W

4. Is the facility located on Indian lands?

☐ Yes ☒ No

B. Legal Description of Facility

Submit as "Attachment B" a legal description(s) of the tract or tracts of land upon which the waste management operations referred to in this permit application occur or will occur. Although a legal description is required, a metes and bounds description is not necessary for urban sites with appropriate "lot" description(s). A survey plat or facility plan drawing which shows the specific points referenced in the survey should also be included in Attachment B.

Attachment B – Legal Description of the Facility **is included.**

C. SIC Codes

List, in descending order of significance, the four-digit standard industrial classification (SIC) codes that best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the hazardous wastes.

4-digit SIC Code	Description
4953	**Refuse Systems**

4-digit SIC Code	Description

SIC code numbers are descriptions that may be found in the Standard Industrial Classification Manual prepared by the Executive Officer of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Use the current edition of the manual.

III. Wastes and Waste Management

A. Waste Generation and Management Activities

Is any hazardous waste [see Title 40, Code of Federal Regulations (CFR), Part 261] presently or proposed to be generated or received at your facility?

☒ Yes ☐ No

If no, skip to question Number 2 below.

If yes, answer the following question.

1. Are you presently registered with TCEQ as a solid waste generator?

   ☒ Yes ☐ No ☐ Pending

   If no, contact the Industrial and Hazardous Waste Division of TCEQ in Austin, Texas to obtain registration information. Also, continue with the application form (go to Number 2 below).

   If yes, go to Section I of your TCEQ Notice of Registration, determine which of your wastes are hazardous, and list these wastes (and mixtures) in Table III-1 (see Number 2 below).

2. Complete Table III-1, Hazardous Wastes and Management Activities, below, listing all hazardous wastes, all mixtures containing any hazardous wastes, and hazardous debris which were, are presently, or are proposed to be handled at your facility in interim status or permitted units. See 40 CFR 261 and 268.2, attaching additional copies as necessary.

   Guidelines for the Classification & Coding of Industrial Wastes and Hazardous Wastes, TCEQ publication RG-22, contains guidance on how to properly classify and code industrial waste and hazardous waste in accordance with 30 TAC 335.501-335.515 (Subchapter R).

   If you are not registered with TCEQ, enter "NA" for TCEQ Waste Code Number.

   For the EPA Hazardous Waste Numbers, see 40 CFR 261.20-33. For annual quantity, provide the amount in units of pounds (as generated and/or received) for each waste and/or waste mixture.

Table III-1 has been completed and is included below.

B. Waste Management Units Summary

1. For each waste and waste mixture listed in Table III-1 that is stored, processed, and/or disposed on-site (except where such storage and/or processing is excluded from permit requirements in accordance with Texas Administrative Code (TAC) Section 335), complete Table III-2, Hazardous Waste Management Unit Checklist, and enter the name of each hazardous waste management unit (Note: Please make copies of Table III-2 if necessary).

   Give the design capacity of each hazardous waste management unit in any of the units of measure shown. In the case of inactive or closed units for which design details are unavailable, an estimate of the design capacity is sufficient.

   Please provide a description for each waste management unit described in your own words on the line provided for "Waste Management Unit."

Table III-2 has been completed and is included below.

2. Has the applicant at any time conducted the on-site disposal of industrial solid waste now identified or listed as hazardous waste?

   ☐ Yes ☒ No

   If yes, complete Table III-2 indicating the hazardous waste management units which were once utilized at your plant site but are no longer in service (i.e., inactive or closed facility units).

   If no, and if no hazardous waste is presently or proposed to be stored [for longer than 90 days (see 30 TAC Section 335.53)], processed, or disposed of at your facility, then you need not file this permit application. Otherwise proceed with the application form.

3. Provide an estimate of the total weight (lbs) of hazardous waste material that has been disposed of and/or stored within your site boundaries and not removed to another site.

   No hazardous waste material has been disposed of on-site, nor has it been stored on-site and not removed to another site.

C. Location of Waste Management Units

1. Submit as "Attachment C" a drawn-to-scale topographic map (or other map if a topographic map is unavailable) extending one mile beyond the facility boundaries, depicting the following:

   a. The approximate boundaries of the facility (described in Section II.B) and within these boundaries, the location and boundaries of the areas occupied by each active, inactive, and proposed hazardous waste management unit (see Table III-2). Each depicted area should be labeled to identify the unit(s), unit status (i.e., active, inactive, or proposed), and areal size in acres.

      ***Attachment C – Topographic Maps* includes the requested information. Table III-2 includes the unit status.**

   b. The overall facility and all surface intake and discharge structures;

      Not Applicable

   c. All on-site injection wells where liquids are injected underground;

      Not Applicable

   d. All known monitor wells and boreholes within the property boundaries of the facility; and

      Not Applicable

   e. All wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within the map area and the purpose for which each water well is used (e.g., domestic, livestock, agricultural, industrial, etc.).

      Not Applicable

2. Submit as "Attachment D" photographs which clearly delineate all hazardous waste management storage, processing, and disposal units, as well as sites of future storage, processing and disposal units.

Attachment D – Photographs **is included.**

D. Flow Diagram/Description

Show as "Attachment E" process flow diagrams and step-by-step word descriptions of the process flow, depicting the handling, collection, storage, processing, and/or disposal of each of the hazardous wastes previously listed in this application.

The flow diagrams or descriptions should include the following information:

1. Originating point of each waste and waste classification code;

2. Means of conveyance utilized in every step of the process flow;

3. Name and function of each facility component through which the waste passes;

4. The ultimate disposition of all wastes (if off-site, specify "off-site") and waste residues.

Attachment E– Process Description and Process Flow Diagram **is included.**

IV. Index Of Attachments

List and index below all attachments to this application and indicate if included or not included:

Item	Attachments	Attachment	Included	Not Included
I.D.2.a	Lease/Option to buy	A	Yes	
II.B	Site legal description	B	Yes	
III.C.1	Facility boundaries and adjacent waters map	C	Yes	
III.C.2	Photographs	D	Yes	
III.D	Process flow diagram/description	E	Yes, Additional information is also provided in *Appendix V - Engineering Reports* and in *Appendix XIII – Confidential Material*	

Table III-1 – Hazardous Wastes and Management Activities

Verbal Description of Waste	TCEQ Waste for Code and Classification Code	EPA Hazardous Waste Number	Storage[1] of Wastes Received from Off-Site	Processing[2] of Wastes Received from Off-Site	Disposal of Wastes Received from Off-Site	Storage[1] of Wastes Generated On-Site	Processing2[2] of Wastes Generated On-Site	Disposal of Wastes Generated On-Site	Annual Quantity Generated and/or Received
Materials Shipped to ESD for Processing									
Military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	315H	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030	Above Ground Magazine (AGM) or Earth Covered Magazines (ECMs)	Rocket Motor Ops Building and Hybrid Burn Chamber (HBC)	None	None	None	None	16,500,000 lbs NEW received
Materials Prepared On-Site for Processing									
Prepared military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	315H	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030	None	None	None	Prepared materials are sent directly to the HBC for processing	HBC	None	16,500,000 lbs NEW prepared

[1] "Storage" means the holding of solid waste for a temporary period, at the end of which the waste is processed, disposed of, or stored elsewhere.

[2] "Processing" means the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of hazardous waste, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste non-hazardous or less hazardous; safer for transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The "transfer" of solid waste for reuse or disposal as used above, does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the Executive Director determines that regulation of such activity is necessary to protect human health or the environment, the definition of "processing" does not include activities relating to those materials exempted by the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., as amended.

Table III-2 – Hazardous Waste Management Unit Checklist

Waste Management Unit	TCEQ N.O.R. Unit #	Status [1]	Design Capacity [2,a,b]	Number of Years Utilized	Date in Service
Rocket Motor Ops Building	100	Proposed	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Not yet in service	Not yet in service
Hybrid Burn Chamber (HBC)	101	Proposed	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Not yet in service	Not yet in service
Above Ground Magazine (AGM)	300	Proposed	100,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Not yet in service	Not yet in service
Earth Covered Magazine (ECM) (V-13-1)	301	Proposed	300,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Not yet in service	Not yet in service
Earth Covered Magazine (ECM) (V-13-2)	302	Proposed	200,000 lbs HD 1.1 NEW 150,000 lbs HD 1.2.1 NEW 200,000 lbs HD 1.2.2 NEW 200,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Not yet in service	Not yet in service
Earth Covered Magazine (ECM) (V-13-3)	Reserved for future use [c]	Proposed (reserved for future use)	TBD (reserved for future use)	Not yet in service (reserved for future use)	Not yet in service (reserved for future use)
Earth Covered Magazine (ECM) (V-13-4)	Reserved for future use [c]	Proposed (reserved for future use)	TBD (reserved for future use)	Not yet in service (reserved for future use)	Not yet in service (reserved for future use)

[1] Indicate only one of the following: Active, Inactive, Closed, or Proposed
[2] Cubic yards, gallons, pounds, gallons/minute, pounds/hour, BTUs/hour, etc.

[a] NEW stands for Net Explosive Weight.
[b] Most of these figures are the NEW values that have been approved in relation to ESD's contract with the U.S. Army.
[c] These ECMs are reserved for future use. At the time of this application, there is no planned storage of RCRA waste in these ECMs. If they are added in the future, ESD will revise the Closure Plan and Closure Cost Estimate.

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

u

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 606060028		**RN 111572442**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	9/26/2022

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

EnviroSafe Demil, LLC

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
805003546	32089250859	352318751	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: LLC

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	EnviroSafe Demil, LLC						
	401 N Montague Street						
	City	Hooks	**State**	TX	**ZIP**	75561	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	[redacted]

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(206) 999-8684		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

EnviroSafe Demil, LLC

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	EnviroSafe Demil, LLC							
	401 N Montague Street							
	City	Hooks	**State**	TX	**ZIP**	75561	**ZIP + 4**	
24. County	Bowie							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
New Boston			TX		75570

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
33	27	20	94	16	42

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4953		332993 To thermally neutralize explosives and energetic materials	562211

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

To thermally neutralize explosives and energetic materials

34. Mailing Address:	**EnviroSafe Demil, LLC**							
	401 N Montague Street							
	City	**Hooks**	**State**	**TX**	**ZIP**	**75561**	**ZIP + 4**	
35. E-Mail Address:	[redacted]							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(206) 999-8684		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	TJ Ogden		41. Title:	CEO & Founder
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(206) 999-8684		( ) -	[redacted]	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	EnviroSafe Demil, LLC	Job Title:	President
Name *(In Print)*:	Michael Wentz	Phone:	(430) 200- 2296
Signature:	[signature]	Date:	12/3/2024

Part A Application Form

Attachment A

Lease Information

EnviroSafe Demil, LLC (ESD) has leased the entire F-line of the former Lone Star Army Ammunition Plant (LSAAP). Two separate leases are in place for the F-line, one for the north portion of the F-line (45 acres) and one for south portion of the F-line (130 acres). ESD is currently in the middle of closing the purchase of both of these sections under lease and expects that the purchase will be complete by the time the RCRA permit is issued.

ESD has one above ground magazine (AGM) under lease. ESD has line V-13 under a lease agreement. ESD is currently leasing 2 earth covered magazines (ECMs) on line V-13, but the lease has the option to expand into 2 additional ECMs that are also on line V-13.

The lease information for the facility is included in this attachment. The table below indicates the location of each lease agreement.

Area	Attachment
F-line (45 acres)	Attachment A.1
F-line (130 acres)	Attachment A.2
Above Ground Magazine (AGM)	Attachment A.3
Earth Covered Magazines (ECMs)	Attachment A.4

ATTACHMENT A.1

LEASE INFORMATION

F-LINE (45 ACRES)

FIRST MODIFICATION AND EXTENSION OF LEASE
(45 ACRES)

1. Parties.

The parties to this Agreement are **TAC East Holdings Company No. 1**, hereinafter the Landlord, and **EnviroSafe Demil, LLC**, hereinafter the Tenant.

2. Current Lease.

Landlord and Tenant entered into a Lease Agreement dated the 1st day of August, 2022, for property located at 401 Montague Street Hooks, Texas 75567, and the adjoining 45 acres, more or less, located as part of a property known as F Line upon the TAC East Industrial Park, New Boston, Texas, said Lease having a termination date of October 31, 2022.

3. Modification Terms. The Lease is modified as follows:

A. The Lease Term as set forth in the Lease Summary Page and Section 1.01 of the Lease is extended and will terminate on the 30th day of June, 2037, subject to earlier termination as provided in the Lease and related documents.

B. Section 3.01 is amended to provide that the Tenant's use of the Premises is for operations relating to demilitarization of munitions and explosives and related activities.

C. Section 9.08 is amended to increase the policy coverages amounts to be not less than $5,000,000.00 per loss and not less than $10,000,000.00 in the aggregate. The policy must be in effect prior to the commencement of demilitarization of munitions and explosives.

D. Tenant has advised Landlord that Tenant intends to obtain a Phase II environmental examination and evaluation of the property. In performing the Phase II environmental assessment, Tenant and its contractors must comply with all of the covenants and restrictions set forth in the Deed Without Warranty from the United States of America, Department of the Army, to TexAmericas Center, dated September 1, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records of Bowie County, Texas.

E. If the Phase II environmental assessment indicates that additional remediation of hazardous materials or petroleum products if required, Landlord and Tenant shall negotiate in good faith regarding the individual responsibilities, if any, the parties have to remediate the property. If the parties are unable to agree regarding the responsibility, as well as the terms and time constraints within ninety (90) days after receipt of the Phase II environmental report, either party may terminate this Lease without further obligation of either party.

F. Prior to commencement of operations to demilitarize munitions and explosives, Tenant shall construct a containment facility around the buildings and/or machinery used to demilitarize the munitions and explosives to contain and isolate the escape of hazardous materials during the demilitarization process. Said containment facility must be approved in advance by Landlord, which approval shall not be unreasonably withheld.

4. Continuation of Lease Terms.

Except for the modifications and extensions made in this Modification and Extension Agreement, all provisions of the Lease Agreement will continue in full force and effect.

EXECUTED as of this the 27th day of September, 2022.

LANDLORD:

TAC EAST HOLDINGS COMPANY NO. 1

By: _____
William Scott Norton, President

TENANT:

ENVIROSAFE DEMIL, LLC

By: _____
Name: TJ Cagle
Title: CEO

INDUSTRIAL LEASE
TexAmericas Center - East

LEASE SUMMARY

Lessor: TAC East Holding Co. No. 1
107 Chapel Lane
New Boston, Texas 75570

Lessee: EnviroSafe Demil, LLC
401 Montague Street
Hooks, Texas, 75567

Premises Leased Address: 401 Montague Street, Bldg. 10 (F1) with 11,066SF at $1.75 per/SF, and 401 Montague Street, Bldg. 30 (F2) with 13,841SF at $1.75 per/SF and the adjoining 45 acres at $250.00 per acre more or less, located as part of the property known as F Line upon TAC East Industrial Park, and identified upon Exhibit "A" attached hereto.

Primary Term: 4 months commencing August 1, 2022, to October 31, 2022, subject to earlier termination as provided herein.

Base Rent: $4,569.77 per month for land and buildings including 401 Montague Buildings 10 and 30 and 45 acres.
Rent will be abated until November 1, 2022, or until Lessee commences business operations at 401 Montague Street, Building 10 or 30 upon adjoining property leased by Lessee from Lessor under a separate agreement.

Security Deposit: $5,000.00

PILOT Deposit: $7,500.00

Table of Contents

ARTICLE 1 . TERM

§ 1.01 Term of Lease

§ 1.02 Option to Extend Term (Intentionally Deleted)

§ 1.03 Holdover

ARTICLE 2 . RENT/SECURITY and AD VALOREM TAX DEPOSITS

§ 2.01 Base Rent

§ 2.02 Taxes and Assessments as Additional Rent (A, B, and C Intentionally Deleted)

§ 2.03. Late Charges

§ 2.04. Security-Ad Valorem Tax/PILOT Deposit; Deposit Processing Fee

ARTICLE 3 . USE OF PREMISES

§ 3.01 Tenant's Warranty Regarding Use

§ 3.02 Compliance With Laws

§ 3.03 Rights of Inspection

§ 3.04 Environmental Reporting Requirements

§ 3.05 Condition of Premises

§ 3.06 Delivery of Premises at End of Term

§ 3.07 Blast Arcs

§ 3.08 Information to Be Provided to Landlord

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01 Repairs and Maintenance by Tenant

§ 4.02 Tenant's Failure to Repair or Maintain

§ 4.03 Allocation of Environmental Cleanup Costs

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01 Utility Charges

§ 5.02 Meters and Pretreatment Requirements

§ 5.03 Garbage Removal

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01 Consent of Landlord

§ 6.02 Property of Landlord

§ 6.03 Alterations Required by Accessibility Laws

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01 Trade Fixtures

§ 7.02 Signs

ARTICLE 8 . MECHANIC'S LIEN

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01 Tenant's Property Insurance

§ 9.02 Landlord's Property Insurance

§ 9.03 Tenant's Liability Insurance

§ 9.04 Remedy for Failure to Provide Insurance

§ 9.05 Tenant's Environmental Indemnity

§ 9.06 Hold-Harmless Clause

§ 9.07 Release of Claims/Subrogation

§ 9.08 Pollution Legal Liability Insurance

ARTICLE 10 . DAMAGE OR DESTRUCTION

§ 10.01 Notice to Landlord

§ 10.02 Total Destruction

§ 10.03 Partial Destruction

ARTICLE 11 . CONDEMNATION

§ 11.01 Total Condemnation

§ 11.02 Partial Condemnation

§ 11.03 Condemnation Award

ARTICLE 12 . DEFAULT

§ 12.01 Tenant's Default

§ 12.02 Landlord's Lien (Intentionally Deleted)

§ 12.03 Landlord's Default

§ 12.04 Cumulative Remedies

§ 12.05 Waiver of Breach

§ 12.06 Indemnities in Event of Termination

§ 12.07 Limitation of Landlord's Liability

ARTICLE 13 . INSPECTION BY LANDLORD

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01 Assignment and Subletting by Tenant

§ 14.02 Assignment by Landlord

ARTICLE 15 . MISCELLANEOUS

§ 15.01 Notices and Addresses

§ 15.02 Parties Bound

§ 15.03 Texas Law to Apply

§ 15.04 Legal Construction

§ 15.05 Prior Agreements Superseded

§ 15.06 Amendment

§ 15.07 Rights and Remedies Cumulative

§ 15.08 Attorney's Fees and Costs

§ 15.09 Force Majeure

§ 15.10 Time of Essence

§ 15.11 Alternate Dispute Resolution

§ 15.12 Limitation of Warranties

§ 15.13 Abandoned Property

§ 15.14 Municipal and Emergency Services

§ 15.15 Army Imposed Restrictions

§ 15.16 Reservation of Rights

§ 15.17 Common Area Charges

§ 15.18 License for Access to Premises

§ 15.19 Advertising and Promotions Rights

§ 15.20 Annual Report

§ 15.21 Guarantee (Intentionally Deleted)

§ 15.22 Governmental Immunity

§ 15.23 Option to Purchase

15.22. Expansion Option.

ARTICLE 16. LESSEE AFFIRMATIONS (2-6 Intentionally Deleted)

ARTICLE 17. SMOKE-FREE AND TOBACCO-FREE PREMISES.

Execution

Exhibit "A" – Premises Description
Exhibit "B" – Option to Purchase

LEASE

This Lease is entered into between TAC East Holding Co. No. 1 ("Landlord"), a Texas non-profit corporation, and EnviroSafe Demil, LLC ("Tenant"), a Nevada limited liability company.

In consideration of the mutual covenants and agreements of this lease, and other good and valuable consideration, Landlord demises and leases to Tenant, and Tenant leases from Landlord, the premises consisting of approximately 45 acres situated at TexAmericas Centers East Campus Industrial Park, in Bowie County, Texas, including buildings situated at 401 Montague Building 10 (aka F1, 11,066 sq. ft.), and 401 Montague Street Bldg. 30 (aka F2, 13,841 sq. ft.) described on Exhibit A attached to this lease, and made a part of this lease for all purposes (collectively referred to as "the premises" or "the leased premises" in this lease) and being a portion of property known as F line.

Landlord reserves the right to harvest any and/or all timber located upon the leased premises (outside of the fenced production area) together with the right of ingress and egress to and from the leased premises for said harvesting by Landlord and/or its contractors. Landlord further reserves the right to store railcars upon the rail lines located North of the Production line fence of the Premises ("Permitted Landlord Activities"); provided, however, no such cars may be stored within 200 feet of the exterior of 401 Montague Street Bldgs. 10 and 30 and all such Permitted Landlord Activities shall be at the sole risk of Landlord. The rail lines located upon or adjacent to the Premises are not a part of the leased Premises. The Permitted Landlord Activities shall not interfere with Tenant's use of the leased premises, shall be in full compliance with all laws including but not limited to any laws related to hazardous materials. In the event such Permitted Landlord Activities do interfere with Tenant's use of the leased premises, Landlord shall cease such activities upon written notice of Tenant.

ARTICLE 1 . TERM

§ 1.01. **Term of Lease.**

The term of this lease is four (4) months commencing on July 1, 2022, and ending on October 31, 2022, unless terminated sooner as provided in this lease.

§ 1.02. **Option to Extend Term. (Intentionally Deleted)**

§ 1.03. **Holdover.**

If Tenant holds over and continues in possession of the premises after the lease term (or any extension) expires, other than as provided in § 1.02, Tenant will be considered to be occupying the premises on a month-to-month tenancy, subject to all the terms of this lease; provided, however, the rent shall be 100% of the stated Rent specified in Section 2.01 for the first holdover month and 125% of the stated Rent specified in Section 2.01. Landlord may terminate the tenancy upon ten (10) days written notice to Tenant.

ARTICLE 2 . RENT/SECURITY DEPOSIT AND AD VALOREM TAX/PILOT DEPOSITS

§ 2.01. **Fixed Rent.**

a. Tenant will pay Landlord $4,569.77 per month on or before the first day of each month as a fixed rent for the next month. Rent for any fractional month at the beginning or end of the lease term will be prorated on a per-day basis.

b. Tenant will pay this fixed rent to Landlord at Landlord's office, located at 107 Chapel Lane, New Boston, Texas 75570, or at such other location or locations that Landlord may from time to time designate by written notice to Tenant.

§ 2.02. **Taxes and Assessments as Additional Rent.**

a. (Intentionally Deleted).

b. (Intentionally Deleted).

c. (Intentionally Deleted).

d. Tenant Payment in Lieu of Taxes (PILOT). If Tenant's leasehold interest in the Premises is or hereafter becomes exempt from real property taxes, Tenant shall pay to Landlord annually a payment in lieu of taxes (PILOT) in an amount as agreed by Landlord and Tenant; provided, however, that said PILOT shall not exceed the amount that Tenant would be required to pay in real property taxes if the leasehold interest were not exempt. If Landlord and Tenant are not able to agree upon the amount of the PILOT within ninety (90) days after the leasehold interest becomes exempt from taxes, the amount of the PILOT shall be an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. Landlord and Tenant shall document the agreement regarding the PILOT as an amendment to this Lease Agreement. The agreement may be for a single year, or multiple years, and may, or may not, provide for an adjustment of the PILOT periodically. If at any time the PILOT agreement of the parties lapses, expires or is terminated pursuant to its terms, and the leasehold interest is exempt from real property taxes, Tenant shall pay to Landlord annually a PILOT in an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. PILOT payments shall be payable to Landlord on or before January 31 of each year.

§2.03. **Late Charges.**

Tenant shall pay a late charge of five percent (5%) of any rent not received by Landlord by the tenth day of the month in which said rent is due.

§2.04. **Security and Ad Valorem Tax/PILOT Deposits; Deposit Processing Fee**

A. Security Deposit. Upon execution of this Lease, Tenant shall deposit the sum of $5,000.00 with Landlord as a deposit. Said deposit shall not accrue interest. Landlord may use the deposit to pay arrears of rent, to repair any damage or injury to the Premises, or to pay any expense or liability incurred by Landlord as a result of any default by Tenant under this Lease including but not limited to payment of ad valorem taxes upon the premises or the leasehold interest in the premises. If Landlord uses the deposit, or any portion thereof as authorized above, Tenant shall restore the deposit to its original amount within ten (10)

days after notice from Landlord. Failure to restore the deposit to its original amount within the required time shall constitute a default under the Lease. Subject to the right to withhold to pay ad valorem taxes as provided in 2.04.B, within 30 days after Tenant surrenders the Premises, or completion of repairs or replacement of damaged or destroyed property, whichever is later, Landlord shall return to Tenant any remaining portion of the deposit less the Processing Fee provided in Subsection C. below, after any lawful deductions, provided Tenant has given to Landlord an address specifically for that purpose.

B. Ad Valorem Tax/PILOT Deposit. Upon execution of this Lease Tenant shall deposit the sum of $7,500.00 with Landlord as an Ad Valorem Tax/PILOT Deposit. Said deposit shall not accrue interest. Landlord may upon expiration or termination of this Lease use the deposit to pay the taxes actually due, or hold for payment of, estimated ad valorem taxes due or to become due upon the leased premises and for which Tenant is responsible under the Terms of this Lease. Provided Tenant pays all ad valorem taxes for which Tenant is responsible under this Lease, the deposit shall be refunded to Tenant at the address Tenant has given to Landlord for this specific purpose. If taxes have not been assessed and levied for the year in which this Lease expires or is terminated, Landlord may hold the deposit until said taxes have been determined; and, if Tenant does not pay said taxes at least 30 days before delinquency, Landlord may apply the deposit to the taxes due. Nothing in this subsection shall relieve Tenant of its obligation to pay ad valorem taxes upon the leased premises prior to delinquency as provided elsewhere in this Lease. In the event the Premises are exempt from real property taxes, the Ad Valorem/PILOT Deposit may be applied to any deficiency or default in payment of the PILOT as provided for in Section 2.02.d of this Lease.

C. Processing Fee. Landlord shall be, and is hereby entitled and authorized to withhold and pay to Landlord a Processing Fee of $100.00 from the refund by Landlord of the Security and/or Ad Valorem Tax Deposits for the purpose of defraying Landlord's lease administration expense, including but not limited to review of documents, tracking payment of the taxes, utilities and miscellaneous fees, coordination processing, and payment of security and Ad Valorem Tax deposits refunds and related expenses.

ARTICLE 3 . USE OF PREMISES

§ 3.01. **Tenant's Warranty Regarding Use.**

Tenant represents and warrants to Landlord that Tenant intends to use the premises for construction and preparation for operations for demilitarization of munitions and explosives and related activities and that Tenant's use of the property is restricted to those purposes specified in this section unless Tenant obtains Landlord's prior written consent to any change in use which shall not be unreasonably withheld, conditioned or delayed. Before the lease term begins, Tenant must give Landlord an affidavit of an officer of Tenant, referred to as the "Officer's Affidavit," setting forth a detailed description of the operations that Tenant will conduct on the premises and stating any applicable permit numbers. The Officer's Affidavit must be organized and prepared in a narrative form, including a description and quantification of all hazardous materials to be generated, manufactured, refined, transported, treated, stored, handled, or disposed of on the premises. After the lease term begins, Tenant must notify Landlord as to any changes in Tenant's operation or use or generation of hazardous materials by way of a supplemental Officer's Affidavit. Tenant must also supplement and update the Officer's Affidavit on each anniversary of the commencement of the lease term. Tenant may not begin or alter any operations on the

property before (a) obtaining all required operating and discharge permits or approvals, including but not limited to air pollution control permits and pollution discharge elimination system permits, from all governmental or public authorities having jurisdiction over the Tenant's operations or the property, and (b) providing copies of such permits and approvals to the Landlord. The Premises may not be used for hunting of any kind.

ACTUAL DEMILITARIZATION OF MUNITIONS AND EXPLOSIVES MAY NOT BE COMMENCED DURING THE TERM OF THIS LEASE; SAID OPERATIONS MAY ONLY BE COMMENCED IF AND AFTER TENANT PURCHASES THE PROPERTY SUBJECT TO THIS LEASE.

§ 3.02. **Compliance With Laws.**

a. Tenant may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Tenant, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials Laws, fire and safety regulations and explosives regulations, including but not limited to Title 27, Chapter 11, Subchapter C, Part 555 of the Code of Federal Regulations regarding commerce in explosives. Landlord may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Landlord, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials Laws and safety regulations.

b. Tenant, at its sole cost, must comply with all Hazardous Materials Laws in connection with Tenant's use of the premises. Landlord, at its sole cost, must comply with all Hazardous Materials Laws in connection with Landlord's use of the premises.

c. "Hazardous Materials" means any substance, material, or waste that is or becomes regulated by any local governmental agency, the State of Texas, or the federal government, including, but not limited to, any material or substance that is upon commencement of the term or at any time during the term, (1) designated as a "hazardous substance" pursuant to Section 311 of the Clean Water Act, 33 U.S.C. § 1251 et seq., or listed pursuant to Section 307 of the Clean Water Act, 33 U.S.C. § 1317, (2) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq., (3) defined as a "hazardous waste" pursuant to Section 1004 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., (4) petroleum, (5) asbestos, and (6) polychlorinated biphenyls.

d. "Hazardous Materials Laws" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type relating to the storage, handling, use, or disposal of any Hazardous Materials, the contamination of the environment, or any removal of such contamination, including, without limitation, those statutes referred to in subparagraph c.

e. Tenant shall coordinate with Landlord and the U.S. Army regarding environmental issues related to the leased premises as provided in Section 15.15.

f. Tenant shall obtain any and all permits and/or licenses required to conduct its business on the Premises and provide a copy of same to Landlord prior to beginning operations.

g. Tenant shall provide a monthly report to Landlord of all materials manufactured and/or stored in the Premises which constitute hazardous materials, explosives, petrochemicals, alcohols and any other materials which constitute a danger due to their fire, explosive or environmental hazard.

h. Tenant shall clearly indicate on the outside of each Building and warehouse the type of materials manufac6tured or stored therein.

i. Tenant shall furnish, install, and maintain during the term such safety devices, such as fire suppression systems, spark arresters, lightning rods and static electricity suppressors, as are required or are customarily installed in facilities manufacturing or storing explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosives or fire.

j. Tenant shall construct a secure perimeter fence around the Leased Premises sufficient to deter persons not affiliated with Tenant from gaining access to storage facilities in which explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosions or fire are kept or stored.

k. Tenant shall not store any hazardous materials, explosives, explosive constituents, petro chemicals, alcohols, or any other materials which constitute a danger due to their fire, explosive or environmental hazard on the Premises other than inside the igloo bunkers secured by a locked door, except in accordance with all applicable rules and regulations.

§ 3.03. **Rights of Inspection.**

Tenant must permit Landlord and Landlord's agents, servants, and employees, including but not limited to legal counsel and environmental consultants and engineers, access to the premises upon at least 24 hours' prior written notice for the purpose of conducting environmental inspections and sampling during regular business hours, and during other hours either by agreement of the parties or in the event of an environmental emergency. Tenant may not restrict access to any part of the premises, and Tenant may not impose any conditions to access. If Landlord's environmental inspection includes sampling and testing of the premises, Landlord must use its best efforts to avoid interfering with Tenant's use of the premises, and on completion of sampling and testing must repair and restore the affected areas of the premises as made necessary by any sampling and testing.

§ 3.04. **Environmental Reporting Requirements.**

a. Tenant must promptly supply Landlord with copies of all notices, reports, correspondence, and submissions made by Tenant to the Texas Commission on Environmental Quality, the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or any other local, state, or federal authority that requires submission of any information concerning environmental matters or hazardous materials pursuant to hazardous materials laws. Tenant shall provide to Landlord copies of all permits and/or licenses issued to Tenant for operation of its business on the leased premises and all modifications, amendments and other changes within 30 days after issuance of same.

b. Tenant must promptly notify Landlord in advance of any scheduled meeting between Tenant and any of the agencies specified in subparagraph a. In the case of regulatory

inspections for which the Tenant has not received advance notice, Tenant shall notify Landlord within 48 hours of the visit and the corrective actions, if any, required by the Agency.

c. Tenant must promptly notify Landlord as to any liens threatened or attached against the premises pursuant to any environmental law. If an environmental lien is filed against the premises due to Tenant's use, Tenant must, within 30 days from the date on which the lien is placed against the premises, and at any rate before the date on which any governmental authority begins proceedings to sell the premises pursuant to a lien, either: (1) pay the claim and remove the lien from the premises; or (2) furnish either (a) a bond satisfactory to the Landlord in the amount of the claim on which the lien is based, or (b) other security satisfactory to the Landlord in an amount sufficient to discharge the claim on which the lien is based.

§ 3.05. **Condition of Premises.**

Tenant accepts the Premises in their present condition "AS IS" and acknowledges that the Premises are, or will be repaired by Tenant to be, suitable for Tenant's intended use.

§ 3.06. **Delivery of Premises at End of Term.**

Tenant shall remove all personal property, Tenant owned equipment and stored items from the leased premises at the end of the term or extended term of this Lease. The leased premises shall be returned to Landlord in clean, empty and good condition reasonable wear and tear excepted. Under no circumstances shall stored items be left on or in the premises.

§ 3.07. **Blast Arcs.**

Except as provided in this Section 3.07, Tenant shall not use the leased premises for any purpose or in a way that allows or requires that blast safety arcs (or inhabited building restrictions) as required by applicable regulatory authorities to extend outside the leased premises or encroach upon or overlap on or across the adjoining roadways known as Oak Street, Cyprus Street, Titus Street or Montague Street, or extend outside the Leased Premises.
§ 3.08.

Information to Be Provided to Landlord. On or before the tenth day of each month during the Lease Term, Tenant shall provide to Landlord a report verifying that munitions on site in storage bunkers do not exceed the blast arcs.

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01. **Repairs and Maintenance by Tenant.**

Tenant will except as provided in paragraph 4.04, throughout the lease term and any extensions of it, at its own expense and risk, maintain the premises and all improvements on them in good order and condition, including but not limited to making all repairs and replacements necessary to keep the premises and improvements in that condition. All maintenance, repairs, and replacements required by this section must be performed promptly when required.

§ 4.02. **Tenant's Failure to Repair or Maintain.**

If Tenant fails to perform its obligation to repair, replace, or maintain, as set forth in § 4.01, within a reasonable time after notice from Landlord of the need for the repair, replacement, or maintenance, Landlord may enter the premises and make the repairs or replacements, or perform the maintenance, or have the repairs or replacements made or maintenance performed, at its own expense. On Landlord's notice to Tenant of the performance and cost of any maintenance, repairs, or replacements under this section, Tenant must immediately reimburse Landlord for any reasonable costs incurred by Landlord under this section, together with interest on the sum at the rate of 8% per annum from the date of the notice until the date paid by Tenant to Landlord.

§ 4.03. **Allocation of Environmental Cleanup Costs.**

Tenant is responsible only for the payment of that portion of any cleanup costs necessary for compliance with Hazardous Materials Laws that arise as a result of Tenant's discharge of hazardous materials on the premises during the Tenant's occupancy of the premises and/or as a result of Tenant's violation of any restrictive covenants relating to the Premises which are of Record in Bowie County, Texas, including but not limited to those set forth in Section 15.15 of this Lease.

§ 4.04. **Repairs and Maintenance by Landlord.**

Landlord has no obligation to repair, replace and maintain any part of the Premises including but not limited to buildings. Landlord shall promptly remove any timber being harvested by Landlord. If Tenant exercises its option to purchase, any timber that has been cut but not removed at the end of the lease shall be removed by Landlord at Landlord's expense within 90 days after receipt of notice of exercise of the Option to Purchase.

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01. **Utility Charges.**

Tenant will pay all utility and connection charges for water, sewer, electricity, heat, gas, cable, fiber optic and telephone service used in and about the premises during the lease term. Tenant will pay the charges directly to the utility company or governmental agency furnishing the service before the charges are delinquent. In the event Landlord uses any utilities in connection with the harvesting of timber or storage or passage of railcars on the leases premises, Landlord shall be solely responsible for such utilities (either by separate metering or by reimbursement or credit to Tenant's Rent.

§ 5.02. **Meters and Pretreatment Requirements.**

Tenant shall pay for the cost for individual meters for utility services and installation of them if individual meters to the Premises are not in place at the time of execution of this Lease. Tenant agrees to pretreat at its cost any waste streams which require pretreatment as determined by the respective utility provider prior to discharge of such waste into the sanitary sewer system.

§ 5.03. **Garbage Removal.**

Tenant will pay for all garbage removal related to Tenant's use of the premises during the lease term. Landlord will pay for all garbage removal related to Landlord's use of the premises during the lease terms.

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01. **Consent of Landlord.**

Tenant may not make any alterations, additions, or improvements to the premises without Landlord's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

§ 6.02. **Property of Landlord.**

All alterations, additions, or improvements made by Tenant which are not removed by Tenant a the end of the lease term will become Landlord's property when the lease terminates. However, Landlord may, when the lease terminates, remove any alterations, additions, and improvements made by Tenant which have not been removed by Tenant and any other property Tenant placed in the premises, and charge Tenant the cost of removal which amount shall be paid within 50 days of Landlord's notice to Tenant of the amount due. Landlord must notify Tenant of Landlord's intent of removal within 60 days after the termination of the Lease and complete such removal within 180 days after the termination of the Lease or the costs of such removal shall be borne solely by Landlord and Tenant shall have no obligations with respect to the same. If Tenant removes any of its alterations, additions or improvements, Tenant must repair all damage caused by said removal and restore the Premises to its original, or better, condition.

§ 6.03. **Alterations Required by Accessibility Laws.** If any alterations, additions, or improvements to the premises are mandated by legal requirements related to accessibility by persons with disabilities ("accessibility alterations"), Tenant is responsible for making them. This allocation of responsibility for compliance with such legal requirements is a material inducement for the parties to enter this lease.

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01. **Trade Fixtures.**

Tenant may, at all times, erect or install shelves, bins, machinery, equipment, or other trade fixtures, in, on, or about the premises, if Tenant complies with all applicable governmental laws, ordinances, and regulations regarding the fixtures. Tenant may remove all trade fixtures when this lease terminates, if Tenant is not in default under the lease and the fixtures can be removed without structural damage to the building. Tenant must repair any damage to the premises caused by removing trade fixtures, and all the repairs must be completed before the lease terminates. Any trade fixtures not removed by Tenant when this lease terminates are considered abandoned by Tenant and will automatically become Landlord's property. If any trade fixture installed by Tenant is abandoned when the lease terminates, Tenant must pay Landlord any reasonable expense actually incurred by Landlord to remove the fixture from the premises, which amount shall be paid within 15 days of Landlord's notice to Tenant of the amount due.

§ 7.02. **Signs.**

Tenant may erect signs on any portion of the premises, including but not limited to the exterior walls, subject to applicable laws, ordinances, and regulations, and after approval of the proposed signage by Landlord. Tenant must remove all signs when this lease terminates and repair any damage resulting from erecting or removing the signs.

ARTICLE 8 . MECHANIC'S LIEN

Tenant will not permit any mechanic's lien to be placed on the premises or improvements on the premises. Tenant will promptly pay or bond over any mechanic's lien that is filed on the premises or on improvements located on the premises due to Tenant's use of the leased premises. If default in payment of the lien continues for 20 days after Landlord's written notice to Tenant, Landlord may, at its option, pay the lien or any portion of it without inquiring into its validity. Any amounts Landlord pays to remove a mechanic's lien caused by Tenant to be filed against the premises or improvements on them, including expenses and interest, are due from Tenant to Landlord and must be repaid to Landlord immediately on rendition of notice, together with interest at eight (8%) percent annually until repaid. Landlord will not permit any mechanic's lien to be placed on the premises and shall promptly pay any mechanic's lien that is filed on the premises or improvements due to Landlord's use of the premises.

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01. **Tenant's Property Insurance.**

Tenant must, at its own expense during the lease term, maintain insurance on Tenant's personal property, furniture, fixtures and equipment in such amounts as Tenant deems necessary.

§ 9.02. **Landlord's Property Insurance.**

Landlord has no obligation to keep buildings on the Premises insured against loss or damage in any form. Tenant may insure the buildings and improvements to the extent it so desires.

§ 9.03. **Tenant's Liability Insurance.**

Tenant, at its own expense, must provide and maintain in force during the lease term (a) a policy of commercial liability insurance with a single limit each occurrence of not less than $1,000,000.00 and general aggregate of not less than $2,000,000.00, and (b) a policy of Worker's Compensation Insurance as required by applicable law. This insurance is to be carried by one or more insurance companies authorized or admitted to transact business in Texas. The liability policy must cover Landlord as well as Tenant, for any liability for property damage or personal injury arising from Tenant's occupying or Landlord's owning the premises. Landlord shall require its contractors and subcontracts harvesting timber upon the leased premises to carry during the timber contract term insurance of the same type, coverage amounts as required by Tenant under this section.

§ 9.04. **Remedy for Failure to Provide Insurance.**

Tenant must furnish Landlord with certificates of all insurance required by this article. If Tenant does not provide the certificates when Landlord delivers possession to Tenant and within ten days prior to any renewal date, or if Tenant allows any insurance required under this article to lapse, Landlord may, at its option, take out and pay the premiums on the necessary insurance to comply with Tenant's obligations under this article. Landlord is entitled to reimbursement from Tenant for all amounts spent to procure and maintain the insurance, with interest at the rate of eight (8%) percent annually from the date Tenant receives Landlord's notice of payment until reimbursement.

§ 9.05. **Tenant's Environmental Indemnity.**

Tenant agrees to indemnify, defend, and hold harmless Landlord from and against all claims, liabilities, losses, damages, remediation expenses, fines and penalties, and costs, foreseen or unforeseen, including without limitation counsel, engineering, and other professional or expert fees, that Landlord may incur by reason of Tenant's action or inaction with regard to Tenant's obligations under Articles 3 and 4 and Section 15.15 of this lease. This section survives the expiration or earlier termination of this lease.

§ 9.06. **Hold-Harmless Clause**

Tenant will indemnify and hold Landlord harmless against any claims, demands, damages, costs, and expenses, including reasonable attorney's fees for defending claims and demands, arising from the conduct or management of Tenant's business on the premises or its use of them; from any breach by Tenant of any conditions of this lease; or from any act of negligence of Tenant, its agents, contractors, employees, subtenants, concessionaires, or licensees in or about the premises. If any action or proceeding is brought against Landlord by reason of any such claim, Tenant, on notice from Landlord, will defend the action or proceeding by counsel acceptable to Landlord.

§ 9.07. **Release of Claims/Subrogation.**

Landlord and Tenant release each other from any claim, by subrogation or otherwise, for any damage to the Premises, the building, or personal property within the building, regardless of cause, including negligence of Landlord or Tenant, however, the release applies only to the extent it is permitted by law, the damage is covered by insurance proceeds, and the release does not adversely affect any insurance coverage. Landlord and Tenant will notify their insurance companies of the release set forth herein and will have the insurance policies, endorsed, if necessary, to prevent invalidation of the insurance coverage.

§ 9.08. **Pollution Legal Liability Insurance.**

Upon the commencement of receipt of munitions from the Department of the Army or other entities, Tenant shall carry and provide during the term of this Lease Pollution Legal Liability insurance providing the following coverages:

a. On-site cleanup of new conditions arising after the commencement of this Lease triggered by first-party discovery or third-party claim

b. Third-party claims for on-site bodily injury, property damage or cleanup costs arising from new conditions arising after the commencement of this Lease;

c. Pollution conditions resulting from transported cargo (third-party carrier or owned vehicle) while on TAC properties or adjacent entrances or exits;

d. Coverage for punitive damages, fines and penalties, if insurable in this jurisdiction

The policy shall provide coverages of not less than $2,000,000.00 per loss and not less than $5,000,000.00 in the aggregate.

The deductible on the policy shall not be greater than $25,000.00 per occurrence.

ARTICLE 10 . DAMAGE OR DESTRUCTION OF PREMISES

§ 10.01. **Notice to Landlord.**

If the premises, or any structures or improvements on them, are damaged or destroyed by fire, tornado, or other casualty in excess of $50,000.00 or if such damage puts any munitions at risk, Tenant must immediately give Landlord written notice of the damage or destruction, including a general description of the damage and, as far as known to Tenant, the cause of the damage.

§ 10.02. **Total Destruction.**

If the building on the premises is totally destroyed by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, or if it is so damaged that rebuilding or repairs cannot reasonably be completed within ninety (90) working days at a cost not to exceed the available insurance recovery proceeds, this lease will terminate, and rent will be abated for the unexpired portion of this lease, effective as of the date of written notification as provided in § 10.01.

§ 10.03. **Partial Destruction.**

If the building or other improvements on the premises are partially damaged by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, but not to such an extent that rebuilding or repairs cannot reasonably be completed within ninety (90) working days and at a cost not to exceed the insurance recovery proceeds, this lease will not terminate. In such case, rent shall be partially abated with respect to the portion of the premises that are not usable by Tenant until such time as they are repaired or replaced.

ARTICLE 11 . CONDEMNATION

§ 11.01. **Total Condemnation.**

If, during the lease term or any extension or renewal of it, all of the premises are taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or are sold to the condemning authority under threat of

condemnation, this lease will terminate, and the rent will be abated during the unexpired portion of this lease, effective as of the date the condemning authority takes the premises.

§ 11.02. **Partial Condemnation.**

If less than all, but more than twenty-five percent (25%), of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation takes possession of the condemned portion. In addition, if twenty-five percent (25%) of the parking area, or all of the signage, of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation makes the condemnation determination.

If the premises are partially condemned and Tenant fails to exercise the option to terminate the lease under this section, or if less than twenty five percent (25%) of the premises is condemned, this lease will not terminate, but Tenant may, at its sole expense, restore and reconstruct the building and other improvements situated on the premises to make them reasonably tenantable and suitable for the uses for which the premises are leased. The fixed rent payable under § 2.01 of this lease will be adjusted equitably during the unexpired portion of this lease.

§ 11.03. **Condemnation Award.**

Landlord is entitled to receive and retain the entire award in any condemnation proceedings, except for any portion attributable to trade fixtures or improvements constructed by Tenant , which Tenant is entitled to receive and retain. The termination of this lease will not affect the right to this award.

ARTICLE 12 . DEFAULT

§ 12.01. **Tenant's Default.**

If Tenant allows the rent to be in arrears more than fifteen (15) days after its due date, or remains in default under any other condition of this lease for thirty (30) days after written notice from Landlord, Landlord may, at its option, without notice to Tenant, terminate this lease, or, in the alternative, Landlord may reenter and take possession of the premises and remove all persons and property without being considered guilty of any manner of trespass and may (but is not required to) relet the premises (or any part of them) for all or any part of the remainder of the lease term, to a party satisfactory to Landlord and at the monthly rental as Landlord can secure with reasonable diligence. If Landlord cannot relet after reasonable efforts to do so or if the monthly rental is less than the rental Tenant was obligated to pay under this lease (or any renewal of it) plus the expense of reletting, then Tenant must pay Landlord the amount of the deficiency.

§ 12.02. **Landlord's Lien.** (Intentionally Deleted).

§ 12.03. **Landlord's Default.**

If Landlord defaults in performing any term or covenant that Landlord must perform under this agreement, Tenant may, after not fewer than thirty (30) days' notice to Landlord, remedy the default by any necessary action and, in connection with the remedy, may pay expenses and employ counsel. Landlord must, on demand, pay Tenant all sums expended, or obligations incurred, by Tenant in connection with remedying Landlord's default. It is agreed, however, that if Landlord commences action within 30 days after receipt of notice to remedy any default and diligently pursue such action to conclusion, Tenant's rights under this section shall not apply. In the event Landlord does not cure such default within thirty (30) days after commencing such attempted cure, Tenant may terminate this Lease.

§ 12.04. **Cumulative Remedies.**

All Landlord's and Tenant's rights and remedies under this Article are cumulative, and none will exclude any other right or remedy provided by law or any other provision of this lease. All the consistent rights and remedies may be exercised and enforced concurrently and whenever occasion for their exercise arises.

§ 12.05. **Waiver of Breach.**

All Landlord's or Tenant's waiving a breach of this lease by the other party does not constitute a continuing waiver or a waiver of any subsequent breach.

§ 12.06. **Indemnities in Event of Termination.**

In the event that this Lease Agreement is terminated by either party as provided in this Agreement, and upon expiration of the Term, or extended term of this Lease Agreement, the Tenant's obligations to indemnify and hold harmless Landlord shall not terminate or expire and shall survive such termination and/or expiration and shall be fully binding upon Tenant.

§ 12.07. **Limitation of Landlord's Liability.**

Notwithstanding anything to the contrary contained herein, no personal or individual liability of any kind or character whatsoever shall now or at any time hereafter attach to Landlord or its property other than leased premises for the payment of any amount payable under this Lease. The exclusive remedy of Tenant for the failure of Landlord to perform any of its obligations under this Lease shall be to proceed against the interest of Landlord in and to the leased premises.

ARTICLE 13 . INSPECTION BY LANDLORD

Tenant will permit Landlord and its agents, representatives, and employees to enter the premises upon at least 24 hours' prior written notice at all reasonable times for the purpose of inspection or any other purpose necessary to protect Landlord's interest in the premises or to perform Landlord's duties under this lease, or to show the Premises to prospective purchasers or future tenants.

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01. **Assignment and Subletting by Tenant.**

a. Tenant may not sublet, assign, encumber, or otherwise transfer this lease, or any right or interest in it or in the premises or the improvements on them, without Landlord's written consent. If Tenant sublets, assigns, encumbers, or otherwise transfers its rights or interests in this lease or in the premises or the improvements on them without Landlord's written consent which shall not be unreasonably withheld, conditioned or delayed, Landlord may, at its option, declare this lease terminated. If Landlord consents in writing to an assignment, sublease, or other transfer of all or any of Tenant's rights under this lease, the assignee or subtenant must assume all of Tenant's obligations under this lease, and Tenant will remain liable for every obligation under the lease. Landlord may not arbitrarily or unreasonably withhold consent under this section.

b. As a condition precedent to the Tenant's right to sublease the property or to assign this lease, the Tenant must, at the Tenant's own expense, fulfill all of the Tenant's environmental obligations under Article 3 of this lease. If this condition is not satisfied, the Landlord has the right to withhold consent to any proposed sublease or assignment.

§ 14.02. **Assignment by Landlord.**

Landlord may assign or transfer any of its interests under this lease. On transfer, and on the transferee's assumption of its obligations, Landlord is relieved of its obligations under the lease.

ARTICLE 15 . MISCELLANEOUS

§ 15.01. **Notices and Addresses.**

a. All notices required under this lease may be given by the following methods:

b. By hand delivery to the President or Landlord;

c. By certified mail, return receipt requested, addressed to the proper party, at the following addresses:

Landlord: TAC East Holding Company Number 1
107 Chapel Lane
New Boston, Texas 75570
Attn: Executive Director

Tenant: EnviroSafe Demil
401 Montague Street
Hooks, Texas 75567

d. By fax transmission, to the proper party, at the following fax numbers:

Landlord: 903-223-8742 Attn: President

Tenant: N/A Guarantor: N/A

Notices are effective when received. Either party may change the address or fax number to which notices are to be sent by sending written notice of the new address or number to the other party in accordance with the provisions of this section.

§ 15.02. **Parties Bound.**

This agreement binds, and inures to the benefit of, the parties to the lease and their respective heirs, executors, administrators, legal representatives, successors, and assigns when this agreement permits.

§ 15.03. **Texas Law to Apply.**

This agreement is to be construed under Texas law, and all obligations of the parties created by this lease are performable in Bowie County, Texas.

§ 15.04. **Legal Construction.**

If one or more of the provisions contained in this agreement are for any reason held by a court of competent jurisdiction to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability will not affect any other provision of the agreement, which will be construed as if it had not included the invalid, illegal, or unenforceable provision.

§ 15.05. **Prior Agreements Superseded.**

This agreement constitutes the parties' sole agreement and supersedes any prior understandings or written or oral agreements between the parties with respect to the subject matter.

§ 15.06. **Amendment.**

No amendment, modification, or alteration of this agreement is binding unless in writing, dated subsequent to the date of this agreement, and duly executed by the parties.

§ 15.07. **Rights and Remedies Cumulative.**

The rights and remedies provided by this lease are cumulative, and either party's using any right or remedy will not preclude or waive its right to use any other remedy. These rights and remedies are in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

§ 15.08. **Attorney's Fees and Costs.**

If, as a result of either party's breaching this agreement, the other party employs an attorney to enforce its rights under this lease, then the breaching or defaulting party will pay the other party the reasonable attorney's fees and costs incurred to enforce the lease.

§ 15.09. **Force Majeure.** Neither Landlord nor Tenant is required to perform any term or covenant in this lease so long as performance is delayed or prevented by *force majeure,* which includes acts of God, strikes, lockouts, material or labor restrictions by any

governmental authority, civil riot, floods, and any other cause not reasonably within Landlord's or Tenant's control and that Landlord or Tenant cannot, by exercising due diligence and paying money, prevent or overcome, in whole or part.

§ 15.10. **Time of Essence.**

Time is of the essence of this agreement.

§ 15.11. **Alternate Dispute Resolution.**

Landlord and Tenant shall submit in good faith to mediation any and all disputes before filing suit. Each party shall pay its own counsel fees in such mediations and shall each pay one-half of the mediator's charges. The parties shall mutually agree upon the mediator, and upon failure to agree within 30 days of a request by either party to mediation, shall request the County Judge of Bowie County to select a mediator whose selection shall be binding on the parties. All mediations shall take place in Bowie County, Texas.

§ 15.12. **LIMITATION OF WARRANTIES.**

THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER KIND ARISING OUT OF THIS LEASE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE, IF ANY, EXPRESSLY STATED IN THIS LEASE.

§ 15.13. **Abandoned Property.**

Landlord may retain, destroy or dispose of any property left on the Premises at the end of the Term without liability to Tenant for loss or damage.

§ 15.14. **Municipal and Emergency Services.**

Tenant shall pay for all municipal services (Police, Hazardous Spill Response, Emergency Medical Response and Fire Protection) used by Tenant, its employees, guests, invitees, and any and all persons while upon the Premises. Said services may be furnished by local law enforcement agencies and by the U.S. Department of the Army as provided in that certain Municipal Services Agreement between Red River Army Depot and Red River Redevelopment Authority dated the 4th day of February, 1998, as it may be amended from time to time. Tenant shall pay to, or reimburse, Landlord for all municipal services furnished to Tenant or to persons on the Premises within ten (10) days after receipt of an invoice for said services from Landlord. Tenant shall be entitled to receive and shall handle all documentation for reimbursement by insurance companies or other third party benefit plan providers.

§ 15.15. **Army Imposed Restrictions.**

a. Notwithstanding any other provision of this Lease, this Lease Agreement is made subject to, and Tenant agrees to be bound by those certain exceptions, limitations, covenants, conditions and reservations set forth in the Deed Without Warranty conveying the Premises from the United States of America, acting by and through the Secretary of the

Army to Red River Redevelopment Authority dated September 1, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records, Bowie County, Texas, to the extent said provisions apply to the Premises. A copy of the Deed Without Warranty is available at the offices of Landlord.

b. Tenant specifically acknowledges that the Deed Without Warranty contains the following language regarding Post Transfer Discovery of Contamination:

A. If an actual or threatened release of a hazardous substance or petroleum product is discovered by the GRANTEE, its successors or assigns on the Property after the date of conveyance, GRANTEE, its successors or assigns, shall be responsible for the investigation and/or remediation of such release or newly discovered substance unless GRANTEE is able to demonstrate that such release or such newly discovered substance was due to GRANTOR's activities, use, or ownership of the Property. If the GRANTEE, its successors or assigns believe the discovered hazardous substance is due to GRANTOR's activities, use or ownership of the Property, GRANTEE will immediately secure the site and notify the GRANTOR of the existence of the hazardous substances, and GRANTEE will not further disturb such hazardous substances without the written permission of the GRANTOR.

B. GRANTEE, its successors and assigns, as consideration for the conveyance of the Property, agree to release GRANTOR from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the delivery and acceptance of this Deed, where such substance or product was placed on the Property by the GRANTEE, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the GRANTOR's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the GRANTOR's indemnification obligations under applicable laws."

c. Tenant agrees to comply with the provisions of this subsection and will be responsible for all claims, damages, remediation expenses, fines and penalties related to violation of Hazardous Materials Laws, as defined in Section 3.02, and/or violation or breach of the restrictions and covenants set forth in this Section 15 after the commencement date of this Lease, including but not limited to such claims, damages, remediation expenses, fines and penalties related to the release, disturbance, spreading, extension, expansion or exacerbation of a release or substance by Tenant or those on the Premises with the consent or for the benefit of Tenant, unless such are caused by the Landlord, Landlord's employees, agents, contractors, invitees or licensees.

§ 15.16. **Reservation of Rights.**

Landlord reserves the right to include the Premises including the easement locations, if any, together with other adjoining property owned by Landlord in a subdivision plat and subject the property described in said platted subdivision to utility easements and common

restrictive covenants; provided, however, that said restrictive covenants and easements shall not interfere unreasonably with Tenant's use and related uses. Landlord shall provide a copy of any such proposed activities to Tenant and Tenant shall have at least 10 days to review and determine that such do not interfere with Tenant's current and prospective uses of the premises. It shall not be necessary or required that Tenant join in the execution of any such plat dedication or declaration of restrictive covenants and easements. Such rights of Landlord shall terminate upon purchase of the property by Tenant.

§ 15.17. **Common Area Charges.**

Tenant acknowledges and agrees that it shall be responsible for and pay its proportionate share of the "TexAmericas Center-East common area charges" based upon the square footage of the Premises as a percentage of the total area of the TexAmericas Center-East development area (excluding the "common areas"). The "common areas" are those areas of TexAmericas Center-East used by and/or for the benefit of all property owners or tenants within TexAmericas Center-East, including but not limited to parks, recreational facilities, walkways, roadways and public parking areas. "Common area charges" are those property taxes, user charges, payments in lieu of taxes, maintenance, improvement, and betterment charges, and other local, county, TexAmericas Center, or other governmental assessments on or against the Commerce Park common areas. The common area charges, other than taxes, shall not exceed ten cents ($0.10) per $100.00 valuation of the Premises based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made. Landlord shall notify Tenant of the amount of the assessment, and Tenant shall pay said assessment within thirty (30) days.

§ 15.18. **License for Access to Premises.**

Landlord grants Tenant a license to use the roadways of Landlord for access to and from the Premises, said roadways being identified as follows (select only one by placing an X in the applicable option):

_____ All roadways including paved and unpaved roads;
_____ Only the paved roadways; or
__X__ The following specific streets:

Cass Street
Oak Street
Cypress Street
Montague Street

This is a non-exclusive license to use said roadways which shall terminate upon the termination of this lease.

§ 15.19. **Advertising and Promotions Rights.**

Tenant, by entering into this Lease Agreement, authorizes Landlord to use in its advertising and promotion of TAC East Holdings Company Number 1 and its properties the fact that Tenant has leased property from Landlord including but not limited to photographs of the leased premises, Tenant signage, Tenant equipment and vehicles, and Tenant employees;

inclusion of Tenant's name and any "doing business as" names in Landlord's client/customer listings; and quotations of Tenant and Tenant's representatives. This authorized use includes all forms of media including but not limited to print, radio and other audio media, television and other video media, internet and other telecommunications media, and social media such as Facebook, Twitter, Linkedin and others. This section constitutes a license from Tenant to Landlord to use for the limited purposes set forth herein any and all trademarks, trade names and related intellectual property generally available and visible to the general public. Notwithstanding the foregoing, due to the nature of Tenant's business, any and each such use or actions by Landlord must be approved by Tenant, whose approval shall not be unreasonably withheld.

§ 15.20. **Annual Reports.**

Tenant agrees to annually, on or about, June 30 of each year during the Term and all extensions of the Term, and at such other times as Landlord may request, to provide to Landlord a report setting forth the following information for the prior calendar year:

1. Maximum number of Full Time Equivalent jobs;
2. Minimum number of Full Time Equivalent jobs;
3. Total Payroll for jobs on the Premises;
4. An employee census by position (no names);
5. Number of employees making above the average wage for Bowie County as determined by the Texas Workforce Commission;
6. Average wage for all employees;
7. Such other information as Landlord may reasonably request to support its redevelopment efforts, including but not limited to information required by authorities issuing grants for which Landlord may apply.

§ 15.21. **Guarantee.** (Intentionally Deleted).

§ 15.22 **Governmental Immunity.**

By execution of this Agreement, TAC East Holdings does not waive its governmental immunity except to the extent it is contractually liable for damages for failure to perform its responsibilities under this Agreement. This limited waiver of governmental immunity shall not extend to, or for the benefit of, any third parties.

§ 15.23. **Option to Purchase.**

Provided Tenant is not in default under the terms of this Lease at the time of its exercise, Tenant shall have an option to purchase the leased premises and adjoining property upon the terms stated in the Option to Purchase attached hereto as Exhibit B.

ARTICLE 16. TENANT AFFIRMATIONS

1. **FALSE STATEMENTS.** Tenant represents and warrants that all statements and information prepared and submitted in response to the solicitation are current, complete, true and accurate. Signing the solicitation with a false statement is a material breach of this Purchase Order and shall void the submitted response or any

resulting Purchase Orders and may result in removal of the Lessee from the Centralized Master Bidder List.

2. (Intentionally Deleted)

3. (Intentionally Deleted)

4. (Intentionally Deleted)

5. (Intentionally Deleted)

6. (Intentionally Deleted)

7. **PROHIBITION AGAINST BOYCOTTING ISRAEL.** Pursuant to Section 2271.002 of the Texas Government Code, Tenant certifies that either (i) it meets an exemption criteria under Section 2271.002; or (ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. Tenant shall state any facts that make it exempt from the boycott certification in its Response.

8. **PROHIBITION AGAINST CONTRACTING WITH COMPANIES ENGAGED IN BUSINESS WITH IRAN, SUDAN, OR FOREIGN TERRORIST ORGANIZATIONS.** In accordance with Section 2252.152 of the Texas Government Code, Landlord is prohibited from entering into a governmental contract (as defined in Texas Government Code Section 2252.151(3)) with a company that is identified on a list prepared and maintained under Texas Government Code Section 806.051, 807,051, or 2252.153. If Tenant is on the above referenced list the Contract will be considered void or voidable and Landlord will not be responsible to pay Tenant for any work performed.

9. **EXCLUDED PARTIES.** Tenant certifies that it is not listed in the prohibited vendors list authorized by Executive Order No. 13224, "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism", published by the United States Department of the Treasury, Office of Foreign Assets Control.

10. **SUSPENSION AND DEBARMENT.** Tenant certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration.

11. **PROHIBITION AGAINST ENERGY COMPANY BOYCOTTS.** Pursuant to Texas Government Code Chapter 2274, Tenant certifies that either (1) it meets an exemption criteria under said Chapter; or (2) it does not boycott energy companies and will not boycott energy companies during the term of this contract.

12. **PROHIBITION AGAINST DISCRIMINATION AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS.** Pursuant to Texas Government Code Chapter 2274, Tenant certifies that (1) it meets an exemption criteria under said Chapter, or (2) it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association, and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

13. **PROHIBITION AGAINST CONTRACTING WITH CERTAIN FOREIGN ENTITIES RELATING TO CRITICAL INFRASTRUCTURE.** Pursuant to the provision of Chapter 113 of the Texas Business and Commerce Code, Lessee certifies that (1) this contract does not relate to critical infrastructure, or if it does relate to critical infrastructure, (2) it is not a company owned by or the majority stock or other ownership interest of the Company is held or controlled by (a) individuals who are citizens of China, Iran, North Korea, Russia or other countries designated by the Governor of Texas, or (b) a company or other entity including a governmental entity that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or other country designated by the Governor of the State of Texas.

ARTICLE 17. SMOKE-FREE AND TOBACCO-FREE PREMISES.

A. Landlord desires to mitigate (1) the irritation and known health effects of second-hand smoke and use of tobacco products; (2) the increased maintenance, cleaning and redecorating cost due to smoking and/or use of tobacco products; (3) the increased risk of fire from smoking; and (4) the higher cost of fire insurance for a non-smoke-free building.

B. Tenant agrees and acknowledges that the leased premises to be occupied by Tenant, its employees, customers, visitors and invitees have been designated by Landlord as a smoke-free/tobacco- free environment. "Smoking" means inhaling, exhaling, burning, vaping, or carrying any lighted cigar, cigarette, pipe or any other device containing any tobacco product, or any other leaf, weed, plant or other products. "Use of tobacco products" includes smoking, chewing or otherwise using or ingesting any leaf, weed, plant, or tobacco containing product. Tenant, its employees, customers and invitees shall not smoke or use any tobacco products anywhere in the buildings located upon the Leased Premises or adjoining grounds of such buildings other than in a designated area. Tenant may designate an area for smoking and otherwise using tobacco products outdoors provided that the designated area is not less than twenty (20) feet from any and all entrances into the building or buildings located upon the leased premises.

C. Tenant shall inform Tenant's employees, customers, visitors and invitees of the no smoking/no use of tobacco policy.

D. Tenant acknowledges that Landlord's adoption of a smoke-free/use of tobacco free environment, and the efforts to designate the leased premises as smoke-free/tobacco-free do not make the Landlord or any of its directors, officers or employees the guarantor of Tenant's health or of the smoke-free/tobacco-free condition of the leased premises. Landlord shall, however, take reasonable steps to enforce the smoke-free/tobacco-free terms of its leases and to make the leased premises smoke-free/tobacco-free. Landlord is not required to take steps in response to violations of the smoke-free/tobacco-free policy unless the Landlord knows of said smoking or tobacco use and has been given written notice of said smoking or tobacco use.

E. Violation of the smoke-free/tobacco use free policy shall constitute a breach of the lease if said violations exceed two (2) times in any calendar year during the lease term. The third violation shall constitute a material breach of the lease and grounds for immediate termination of the lease by the Landlord.

F. Landlord cannot and does not warranty or promise that the leased premises will be free from second hand smoke or residuals of other tobacco use. Tenant acknowledges that Landlord's ability to police, monitor, or enforce the smoke-free/tobacco-free policy is dependent in significant part on voluntary compliance by Tenant and Tenant's employees, customers, visitors and invitees. Tenant and Tenant's employees, customers, visitors and invitees with respiratory ailments, allergies, or other physical or mental conditions relating to smoke and/or tobacco use are hereby put on notice that Landlord does not assume any higher duty of care to enforce the no smoking/no tobacco use policy than any other Landlord obligation under the lease.

G. Tenant acknowledges that current Tenants leasing and/or occupying buildings in the complex of property in which the leased premises are located under a prior lease will not be immediately subject to the no smoking/no tobacco use policy. As current Tenants move out, or enter into new leases, the smoke free/tobacco free policy will become effective for their leased premises.

LANDLORD
TAC EAST HOLDING CO. NO. 1

By: _____
Name: William Scott Norton
Title: President

TENANT
EnviroSafe Demil, LLC

By: _____
Name: Thomas Ogden
Title: Chief Executive Officer

EXHIBIT A
PROJECT ERUPTION
MONTAGUE STREET



N

TexAmericas CENTER
Texarkana USA

0 250 500 1000 1500

PROPOSED LEASE AREA
43.492 ACRES (1,894,498.41 SF)

PROPOSED 100' WIDE ACCESS EASEMENT
0.172 ACRES (7,497.98 SF)

EXHIBIT "B"
OPTION TO PURCHASE
OPTION TO PURCHASE

STATE OF TEXAS §

§ KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF BOWIE §

TAC East Holdings Company No. 1, Texas non-profit corporation, hereinafter called Seller, and EnviroSafe Demil, LLC, a Nevada limited liability company, hereinafter called Purchaser, have entered into the following agreement, to-wit:

1.

OPTION PRICE AND PROPERTY

Seller, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) to it cash in hand paid by Purchaser (the Option Price), the receipt of which is hereby acknowledged, does hereby grant, sell and convey to Purchaser the exclusive right, privilege and option to purchase the following described property located in Bowie County, Texas, to-wit:

> Approximately 45 acres and all improvements located thereon, being a part of the property known as F Line on the TexAmericas Center TAC East Campus as outlined in Exhibit "A" attached hereto, which shall be surveyed and the full legal description attached hereto as Exhibit A-1.

2.

PURCHASE PRICE

The purchase price for the above described property upon the exercise of this option is $7,750.00 per surveyed acre and, in the event said Option to Purchase is exercised by Purchaser, said purchase price shall be paid to Seller at the time of closing of said sale as provided herein.

3.

OPTION PERIOD

This option shall be enforceable through October 31, 2022 (the Exercise Period). This option shall be exercised by Purchaser giving written notice by certified mail of its intention to exercise said option, and said written notice shall be mailed to Seller at the following address, to-wit: 107 Chapel Lane, Attn: President, New Boston, Texas 75570. Said written notice shall be mailed during the Exercise Period herein granted and upon the exercise of said option then the Option Price this day paid by Purchaser to Seller shall be credited on said purchase price.

4.

TITLE POLICY, SURVEY AND CLOSING

Upon exercise of this Option by Purchaser, the following terms shall apply:

4.01 Within twenty (20) days after the exercise of the Option, Seller, at Seller's sole cost and expense, shall have caused the title company to issue a preliminary title report accompanied by copies of all recorded documents relating to the easements, rights-of-way, liens, and other filings affecting the property. If the condition of title as set forth in such title binder is not satisfactory to Purchaser for any

reason, Purchaser may terminate this Agreement for all purposes and the option price shall be forthwith returned by Seller to Purchaser; otherwise, said condition shall be deemed to be acceptable and any objection thereto shall be deemed to have been waived for all purposes. Any exceptions to title not objected to are "Permitted Exceptions".

4.02 Within twenty (20) days after the exercise of the Option, Seller shall cause to be delivered, at Seller's sole cost and expense, a current plat of survey of the property, prepared by a land surveyor licensed by the state in which the property is located acceptable to Purchaser. The survey shall be staked on the ground, and the plat shall show the location of all improvements, highways, streets, roads, water courses, fences, easements and rights-of-way on or adjacent to the property, if any, and shall contain the surveyor's certification that there are no encroachments on the property. In the event any portion of such survey is unacceptable to Purchaser, Purchaser may terminate this Agreement and the Agreement shall thereupon be null and void for all purposes and the option price shall be returned by Seller to Purchaser. Purchaser's failure to give Seller such written notice shall be deemed to be Purchaser's acceptance of the survey.

4.03 At Closing, said property shall be conveyed by Seller to Purchaser by Special Warranty Deed; and good and indefeasible title shall be conveyed to Purchaser free and clear of any liens or encumbrances other than existing easements, restrictions, including but not limited to those set forth in the Deed Without Warranty from the United States of America to Red River Redevelopment Authority (now TexAmericas Center) dated September 1, 2010 recorded in Volume 5898, Page 1 of the Real Property Records of Bowie County, Texas, previously recorded mineral reservations affecting said property, and all other matters affecting the property as recorded in the Real Property/Deed Records of Bowie County, Texas.

4.04 The Deed Without Warranty shall also contain the Restrictions and Right of Reverter set forth in Exhibits B and C respectively as attached hereto.

4.05 The Closing shall be held at the office of a mutually acceptable Title Company, within sixty (60) days from the exercise of the Option to Purchase by Purchaser.

4.06 Closing costs other than the Seller's attorney's fees, shall be paid by Purchaser. Notwithstanding the foregoing, Seller shall pay the cost of an Owner's Title Policy for Purchaser (Purchaser shall be responsible for any requested endorsements thereto); transfer and recording taxes and fees shall be paid by the party as is customary in the county in which the property is located.

4.07 Taxes for all prior years after commencement of the Lease between Seller and Purchaser and for the year of Closing shall be paid by Purchaser. Rollback taxes, if any, shall be the responsibility of Purchaser.

5.

ENGINEERING STUDIES

Seller agrees that Purchaser shall have the right at any time after date hereof and before the exercise of the option to purchase to make engineering and other studies, including soil tests and borings, on the premises to determine the suitability of the premises for Purchaser's proposed use of the property. Purchaser shall be responsible for any damage to third parties resulting from any engineering or other studies made by Purchaser upon the property prior to the closing.

6.

POSSESSION AND LIABILITY

Possession of the property shall be delivered at the time of Closing.

7.

FAILURE TO EXERCISE

If Purchaser fails to exercise the option to purchase within the Exercise Period hereinabove provided, then all rights of Purchaser hereunder shall cease and the money paid for this option shall be retained by Seller.

8.

FAILURE TO PERFORM

In the event Seller fails to close the sale of the above-described property as herein provided after Purchaser has exercised its option to purchase then Purchaser may enforce specific performance of this agreement or require the return of the amount paid to Seller under the terms hereof. In the event the Purchaser fails to close its purchase of the above-described property as herein provided after exercising its option to purchase for reasons other than as provided in paragraphs 5.01 and 5.02, then Seller may either retain all amounts previously paid to it by Purchaser or enforce specific performance of this agreement.

9.

BINDING EFFECT

The provisions of this instrument shall be binding upon and inure to the benefit of Seller and Purchaser, their heirs, successors and assigns.

10.

TERMINATION OF OPTION

This Option to Purchase is executed in conjunction with and ancillary to that certain Lease Agreement between the parties hereto regarding the property dated simultaneously with this Option to Purchase. Should the Lease Agreement terminate before its expiration date for any reason, this Option to Purchase shall automatically terminate without any further action being required of either party.

11.

REPRESENTATIONS AND WARRANTIES OF SELLER

(a) Authority. Seller is a Texas non-profit validly existing and in good standing in the State of Texas and has the legal power, right and authority to enter into this Agreement and the instruments referenced herein and to consummate the transaction contemplated hereby. All requisite company action has been taken by Seller in connection with entering into this Agreement and the instruments referenced herein and the consummation of the transaction contemplated hereby. No consent of any partner, shareholder, member, creditor, investor, and, to the best of Seller's knowledge, judicial or administrative body, authority or other party is required which has not been obtained to permit Seller to enter into this Agreement and consummate the transaction contemplated hereby. This Agreement and all documents to be executed pursuant to it by Seller are and shall be binding upon and enforceable against Seller in accordance with their respective terms, and the transaction contemplated by this Agreement will not result in a breach of, or constitute a default or permit acceleration of maturity under, any indenture, mortgage, deed of trust, loan agreement or other agreement to which Seller or the property are subject or by which Seller or the property are bound. Seller has the right and power to transfer and convey the Property without violating any contract, lease, mortgage, law, code or regulation,

including, but limited to, any fraudulent conveyances law. The individuals executing this Agreement and the instruments referenced herein on behalf of Seller have the legal power, right and actual authority to bind Seller to the terms and conditions hereof and thereof.

(b) Title to Property. Seller owns absolute fee title to the property, and will deliver good, fee simple, indefeasible and insurable title to the Property, subject only to the Permitted Exceptions. To the best of Seller's knowledge there are no matters encumbering title to the Property, other than those matters that will be disclosed on the Title Commitment.

(c) Options, Rights of First Refusal. No third party possesses any option, right of first refusal or other right to purchase the Property. Seller has not made any agreement to sell any of the property to any person other than Purchaser that remains in force or effect as of the Effective Date.

(d) Environmental. Except for the information disclosed to Purchaser (i) Seller has not since the property was removed from the U.S. Department of the Army's RCRA permit on January 16, 2021 (the Texas Commission on Environmental Quality issued its "no further action" letter dated February 28, 2017), received written notice of any violations of Environmental Laws pertaining to the property; (ii) Seller has not used, stored, manufactured, or disposed of any Hazardous Substance on, from, or affecting the property in any manner violating any Environmental Laws; and, to the best of Seller's knowledge, (iii) there are no underground storage tanks located upon the Property nor have any such underground storage tanks been removed previously from the Property. "**Environmental Laws**" means any applicable federal, state, and local environmental, health, safety, and sanitation statutes, laws, regulations, ordinances, judgments, and rulings, interpretations, and orders of regulatory and administrative authorities with respect thereto, including, but without limiting the generality of the foregoing, all requirements of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 USC 9601 et seq. "**Hazardous Substance**" means any material or substance defined as a

hazardous substance, hazardous material, toxic material, or hazardous waste under any Environmental Laws.

(e) Compliance with Laws. Seller has not received notice, and has no knowledge, of any uncorrected violations of any laws, ordinances, statutes, rules or regulations with respect to the Property.

(f) No Litigation. There are no claims, litigation or proceedings pending, or to Seller's knowledge, threatened against Seller or the Property, or that could otherwise adversely affect the transaction contemplated by this Agreement.

(g) No Leases. There are no leases, licenses, use, rental or occupancy agreements pertaining to the Property or any part thereof to which Seller is a party.

(h) No Improvements. No improvements, repairs or construction have occurred on the Property within one hundred twenty (120) days prior to the Effective Date of this Agreement, or Seller shall provide evidence to Purchaser that all such work has been paid for prior to the Closing.

(i) Condemnation. To the best of Seller's knowledge, no condemnation proceedings or eminent domain proceedings are now pending or contemplated against the Property.

(j) No Assessments. To the best of Seller's knowledge, no improvements have been installed the cost of which is to be assessed in whole or in part against any part of the Property in the future, and Seller has no knowledge of any future improvements whose cost is proposed to be assessed against the Property.

(k) No Changes. Seller will not transfer, lease or otherwise encumber the Property prior to closing.

(l) No Contracts. There are no other oral or written agreements pertaining to the maintenance, administration, operation, or servicing of any portion of the Property that will be binding

upon Purchaser after Closing except as reflected in the Title Commitment and the Deed Without Warranty from the United States of America to Red River Redevelopment Authority dated September 1, 2010, recorded in Volume 5898, Page 1, Real Property Records of Bowie County, Texas.

(m) Tax Cases. There are no pending tax valuation cases pending with respect to the Property filed by Seller, and Seller shall not file any tax valuation complaint with respect to the Property without the prior written consent of Purchaser, which consent may be withheld in Purchaser's sole discretion. There are no tax appeals pending with respect to the Property filed by Seller.

(n) Personal Property. Seller owns all personal property free and clear of all liens and encumbrances.

(o) Employees. There are no employees of Seller at the Property for which Purchaser will be responsible after Closing.

The Seller's representations and warranties shall be true and correct as of the date of this Agreement, the date of closing of the sale of the Property and for one year thereafter.

12.

MISCELLANEOUS

12.01. Change of Street Name. Seller shall cooperate with Purchaser, after Closing, to rename Montague Street to a street name of Purchaser's choice subject to approval by the Ark-Tex Council of Governments which is responsible for implementation of the 911 emergency access notifications.

12.02. Easements. Seller shall provide a non-exclusive permanent easement for ingress and egress to Purchaser across Cass Street, Oak Street, Cypress Street and Montague Street (as renamed) which easements shall run with the land and be recorded at the same time as closing on the sale of the Property to Purchaser; provided, however, Seller may dedicate one or more, or all, of said streets as public streets without the joinder of Purchaser or its successors or assigns at which time said easements shall terminate as to the streets which are dedicated as public streets.

EXECUTED as of July 1, 2022.

Sign when ready to purchase

SELLER:

TAC EAST HOLDINGS COMPANY NO. 1

By: _____

Name: William Scott Norton

Title: President

STATE OF TEXAS §

§

COUNTY OF BOWIE §

This instrument was acknowledged before me on the ____ day of _____, 2022, by William Scott Norton, President of TAC East Holdings Company No. 1.

_____

Notary Public, State of Texas

STATE OF _____ §

§

COUNTY OF _____ §

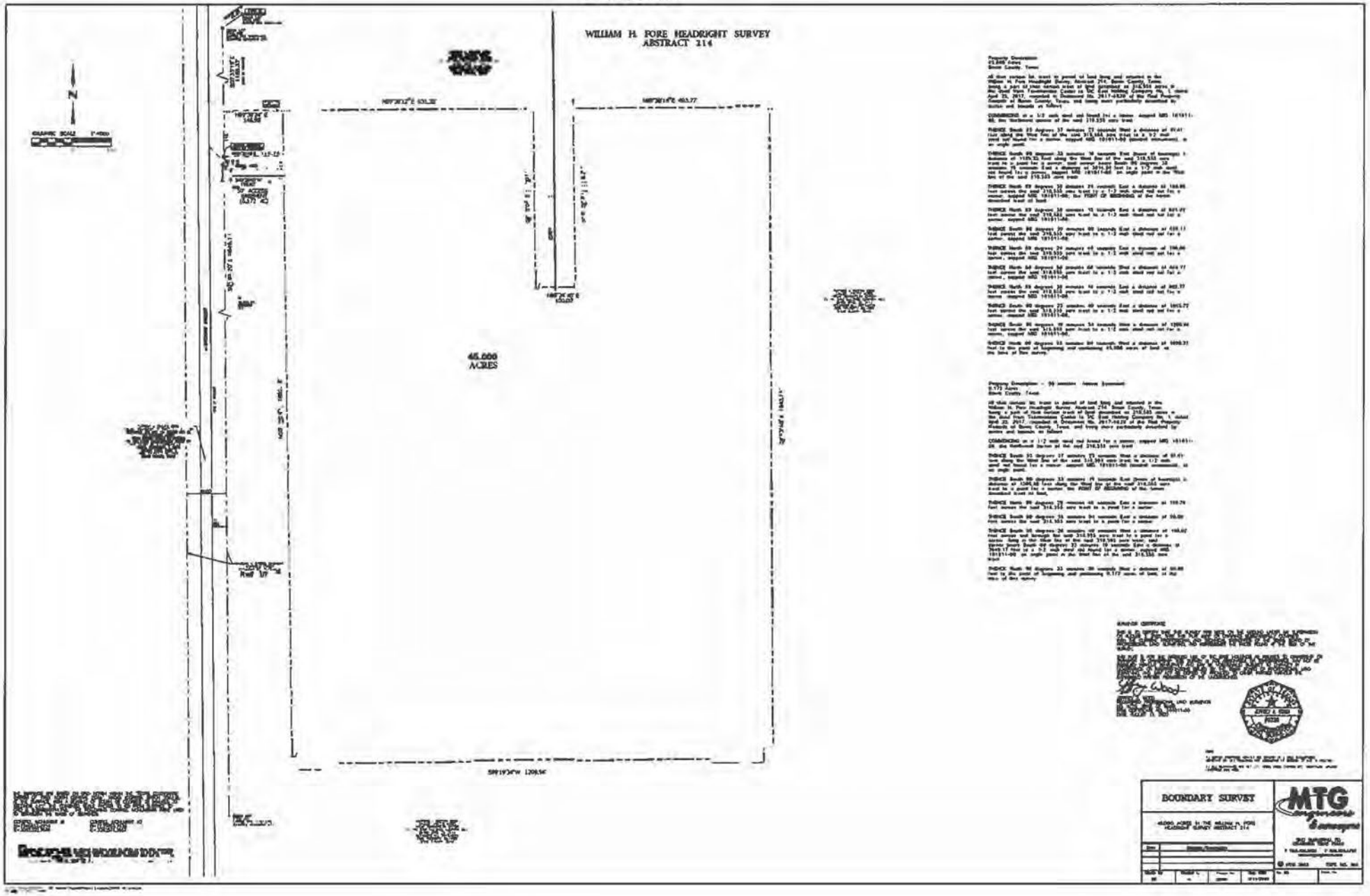
BEFORE ME, the undersigned authority, on this day personally appeared _____, as the _____ of EnviroSafe Demil, LLC, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity therein stated and as the act and deed of said limited liability company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2022.

_____

Notary Public, State of _____

EXHIBIT A-1



EnviroSafe Demil, LLC Part A Application - Attachment A

ATTACHMENT A.2

LEASE INFORMATION

F-LINE (130 ACRES)

INDUSTRIAL LEASE
TAC EAST HOLDINGS COMPANY NUMBER 1 - East

LEASE SUMMARY

Lessor: TAC East Holding Co. No. 1
107 Chapel Lane
New Boston, Texas 75570

Lessee: EnviroSafe Demil, LLC
401 Montague
Hooks, Texas 75567

Premises Leased Address: Building F28 (15,500sf) and 130 Acres, more or less, located as part of Property known as F line upon TAC East Industrial Park, and identified upon Exhibit A attached hereto.

Primary Term: Two (2) years commencing November 1, 2022, to October 31, 2024, subject to earlier termination as provided herein.

Optional Term: One (1) option of One (1) year with 3% increase in rent each year. This option would commence at the end of the second Primary Term on November 1, 2024 through October 31, 2025.

Base Rent:

Year one (1) $4,968.75 per month commencing November 1, 2022, and extending through October 31, 2023.

Year two (2) $5,117.82 per month commencing November 1, 2023, and extending through October 31, 2024

Option Rent:

Option year one (1) $5,271.35 per month during November 1, 2024, and extending through October 31, 2025

Security Deposit: $5,000.00 (transferred from 45 acres lease)

Ad Valorem Tax/PILOT Deposit: $7,500.00 (transferred from 45 acres lease)

Table of Contents

ARTICLE 1 . TERM

§ 1.01 Term of Lease

§ 1.02 Option to Extend Term

§ 1.03 Holdover

ARTICLE 2 . RENT/SECURITY and AD VALOREM TAX DEPOSITS

§ 2.01 Base Rent

§ 2.02 Taxes and Assessments as Additional Rent

§ 2.03. Late Charges

§ 2.04. Security-Ad Valorem Tax/PILOT Deposit; Deposit Processing Fee

ARTICLE 3 . USE OF PREMISES

§ 3.01 Tenant's Warranty Regarding Use

§ 3.02 Compliance With Laws

§ 3.03 Rights of Inspection

§ 3.04 Environmental Reporting Requirements

§ 3.05 Condition of Premises

§ 3.06 Delivery of Premises at End of Term

§ 3.07 Blast Arcs

§ 3.08 Information to Be Provided to Landlord

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01 Repairs and Maintenance by Tenant

§ 4.02 Tenant's Failure to Repair or Maintain

§ 4.03 Allocation of Environmental Cleanup Costs

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01 Utility Charges

§ 5.02 Meters and Pretreatment Requirements

§ 5.03 Garbage Removal

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01 Consent of Landlord

§ 6.02 Property of Landlord

§ 6.03 Alterations Required by Accessibility Laws

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01 Trade Fixtures

§ 7.02 Signs

ARTICLE 8 . MECHANIC'S LIEN

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01 Tenant's Property Insurance

§ 9.02 Landlord's Property Insurance

§ 9.03 Tenant's Liability Insurance

§ 9.04 Remedy for Failure to Provide Insurance

§ 9.05 Tenant's Environmental Indemnity

§ 9.06 Hold-Harmless Clause

§ 9.07 Release of Claims/Subrogation

§ 9.08 Pollution Legal Liability Insurance

ARTICLE 10 . DAMAGE OR DESTRUCTION

§ 10.01 Notice to Landlord

§ 10.02 Total Destruction

§ 10.03 Partial Destruction

ARTICLE 11 . CONDEMNATION

§ 11.01 Total Condemnation

§ 11.02 Partial Condemnation

§ 11.03 Condemnation Award

ARTICLE 12 . DEFAULT

§ 12.01 Tenant's Default

§ 12.02 Landlord's Lien

§ 12.03 Landlord's Default

§ 12.04 Cumulative Remedies

§ 12.05 Waiver of Breach

§ 12.06 Indemnities in Event of Termination

§ 12.07 Limitation of Landlord's Liability

ARTICLE 13 . INSPECTION BY LANDLORD

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01 Assignment and Subletting by Tenant

§ 14.02 Assignment by Landlord

ARTICLE 15 . MISCELLANEOUS

§ 15.01 Notices and Addresses

§ 15.02 Parties Bound

§ 15.03 Texas Law to Apply

§ 15.04 Legal Construction

§ 15.05 Prior Agreements Superseded

§ 15.06 Amendment

§ 15.07 Rights and Remedies Cumulative

§ 15.08 Attorney's Fees and Costs

§ 15.09 Force Majeure

§ 15.10 Time of Essence

§ 15.11 Alternate Dispute Resolution

§ 15.12 Limitation of Warranties

§ 15.13 Abandoned Property

§ 15.14 Municipal and Emergency Services

§ 15.15 Army Imposed Restrictions

§ 15.16 Reservation of Rights

§ 15.17 Common Area Charges

§ 15.18 License for Access to Premises

§ 15.19 Advertising and Promotions Rights

§ 15.20 Annual Report

§ 15.21 Guarantee

§ 15.22 Governmental Immunity

§ 15.23 Option to Purchase

15.22. Expansion Option.

ARTICLE 16. LESSEE AFFIRMATIONS

ARTICLE 17. SMOKE-FREE AND TOBACCO-FREE PREMISES.

Execution

Exhibit "A" – Premises Description
Exhibit "B" – Option to Purchase

LEASE

This Lease is entered into between TAC East Holding Co. No. 1 ("Landlord"), a Texas non-profit corporation, and EnviroSafe Demil, LLC ("Tenant"), a Nevada limited liability company.

In consideration of the mutual covenants and agreements of this lease, and other good and valuable consideration, Landlord demises and leases to Tenant, and Tenant leases from Landlord, the premises consisting of Building F28 and approximately 130 acres situated at TexAmericas Centers East Campus Industrial Park, in Bowie County, Texas, including all buildings described on Exhibit A attached to this lease, and made a part of this lease for all purposes (collectively referred to as "the premises" or "the leased premises" in this lease) and being a portion of property known as F line.

Landlord reserves the right to harvest any and/or all timber located upon the leased premises (outside of the fenced production area) together with the right of ingress and egress to and from the leased premises for said harvesting by Landlord and/or its contractors. Landlord further reserves the right to store railcars upon the rail lines located North of the Production line fence of the Premises ("Permitted Landlord Activities"); provided, however, no such cars may be stored within 200 feet of the exterior of Bldg. F1 and all such Permitted Landlord Activities shall be at the sole risk of Landlord. The rail lines located upon or adjacent to the Premises are not a part of the leased Premises. The Permitted Landlord Activities shall not interfere with Tenant's use of the leased premises, shall be in full compliance with all laws including but not limited to any laws related to hazardous materials. In the event such Permitted Landlord Activities do interfere with Tenant's use of the leased premises, Landlord shall cease such activities upon written notice of Tenant.

ARTICLE 1 . TERM

§ 1.01. **Term of Lease.**

The term of this lease is two (2) years commencing on November 1, 2022, and ending on October 31, 2024, unless terminated sooner as provided in this lease.

§ 1.02. **Option to Extend Term.**

The one (1) optional term of this lease is one (1) year commencing on the day after the Primary Lease Term ends, November 1, 2024 until October 31, 2025.

§ 1.03. **Holdover.**

If Tenant holds over and continues in possession of the premises after the lease term (or any extension) expires, other than as provided in § 1.02, Tenant will be considered to be occupying the premises on a month-to-month tenancy, subject to all the terms of this lease; provided, however, the rent shall be 110% of the stated Rent specified in Section 2.01 for the first holdover month and 125% of the stated Rent specified in Section 2.01. Landlord may terminate the tenancy upon ten (10) days written notice to Tenant.

ARTICLE 2 . RENT/SECURITY DEPOSIT AND AD VALOREM TAX/PILOT DEPOSITS

§ 2.01. **Fixed Rent.**

a. Tenant will pay Landlord $4,968.75 per month on or before the first day of each month as a fixed rent for the next month. Rent for each following term will increase by 3%, to include option term(s). Rent for any fractional month at the beginning or end of the lease term will be prorated on a per-day basis.

b. Tenant will pay this fixed rent to Landlord at Landlord's office, located at 107 Chapel Lane, New Boston, Texas 75570, or at such other location or locations that Landlord may from time to time designate by written notice to Tenant.

§ 2.02. **Taxes and Assessments as Additional Rent.**

a. (Intentionally Deleted).

b. (Intentionally Deleted).

c. (Intentionally Deleted).

d. Tenant Payment in Lieu of Taxes (PILOT). If Tenant's leasehold interest in the Premises is or hereafter becomes exempt from real property taxes, Tenant shall pay to Landlord annually a payment in lieu of taxes (PILOT) in an amount as agreed by Landlord and Tenant; provided, however, that said PILOT shall not exceed the amount that Tenant would be required to pay in real property taxes if the leasehold interest were not exempt. If Landlord and Tenant are not able to agree upon the amount of the PILOT within ninety (90) days after the leasehold interest becomes exempt from taxes, the amount of the PILOT shall be an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. Landlord and Tenant shall document the agreement regarding the PILOT as an amendment to this Lease Agreement. The agreement may be for a single year, or multiple years, and may, or may not, provide for an adjustment of the PILOT periodically. If at any time the PILOT agreement of the parties lapses, expires or is terminated pursuant to its terms, and the leasehold interest is exempt from real property taxes, Tenant shall pay to Landlord annually a PILOT in an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. PILOT payments shall be payable to Landlord on or before January 31 of each year.

§2.03. **Late Charges.**

Tenant shall pay a late charge of five percent (5%) of any rent not received by Landlord by the tenth day of the month in which said rent is due.

§2.04. **Security and Ad Valorem Tax/PILOT Deposits; Deposit Processing Fee**

A. Security Deposit. Upon execution of this Lease, Tenant shall deposit the sum of $5,000.00 (transferred from the 45-acre lease) with Landlord as a deposit. Said deposit shall not accrue interest. Landlord may use the deposit to pay arrears of rent, to repair any damage or injury to the Premises, or to pay any expense or liability incurred by Landlord as a result of any default by Tenant under this Lease including but not limited to payment of ad valorem taxes upon the premises or the leasehold interest in the premises. If Landlord uses

the deposit, or any portion thereof as authorized above, Tenant shall restore the deposit to its original amount within ten (10) days after notice from Landlord. Failure to restore the deposit to its original amount within the required time shall constitute a default under the Lease. Subject to the right to withhold to pay ad valorem taxes as provided in 2.04.B, within 30 days after Tenant surrenders the Premises, or completion of repairs or replacement of damaged or destroyed property, whichever is later, Landlord shall return to Tenant any remaining portion of the deposit less the Processing Fee provided in Subsection C. below, after any lawful deductions, provided Tenant has given to Landlord an address specifically for that purpose.

B. Ad Valorem Tax/PILOT Deposit. Upon execution of this Lease Tenant shall deposit the sum of $7,500.00 (transferred from the 45-acre lease) with Landlord as an Ad Valorem Tax/PILOT Deposit. Said deposit shall not accrue interest. Landlord may upon expiration or termination of this Lease use the deposit to pay the taxes actually due, or hold for payment of, estimated ad valorem taxes due or to become due upon the leased premises and for which Tenant is responsible under the Terms of this Lease. Provided Tenant pays all ad valorem taxes for which Tenant is responsible under this Lease, the deposit shall be refunded to Tenant at the address Tenant has given to Landlord for this specific purpose. If taxes have not been assessed and levied for the year in which this Lease expires or is terminated, Landlord may hold the deposit until said taxes have been determined; and, if Tenant does not pay said taxes at least 30 days before delinquency, Landlord may apply the deposit to the taxes due. Nothing in this subsection shall relieve Tenant of its obligation to pay ad valorem taxes upon the leased premises prior to delinquency as provided elsewhere in this Lease. In the event the Premises are exempt from real property taxes, the Ad Valorem/PILOT Deposit may be applied to any deficiency or default in payment of the PILOT as provided for in Section 2.02.d of this Lease.

C. Processing Fee. Landlord shall be, and is hereby entitled and authorized to withhold and pay to Landlord a Processing Fee of $100.00 from the refund by Landlord of the Security and/or Ad Valorem Tax Deposits for the purpose of defraying Landlord's lease administration expense, including but not limited to review of documents, tracking payment of the taxes, utilities and miscellaneous fees, coordination processing, and payment of security and Ad Valorem Tax deposits refunds and related expenses.

ARTICLE 3 . USE OF PREMISES

§ 3.01. **Tenant's Warranty Regarding Use.**

Tenant represents and warrants to Landlord that Tenant intends to use the premises for construction and preparation for operations for demilitarization of munitions and explosives and related activities and that Tenant's use of the property is restricted to those purposes specified in this section unless Tenant obtains Landlord's prior written consent to any change in use which shall not be unreasonably withheld, conditioned or delayed. Before the lease term begins, Tenant must give Landlord an affidavit of an officer of Tenant, referred to as the "Officer's Affidavit," setting forth a detailed description of the operations that Tenant will conduct on the premises and stating any applicable permit numbers. The Officer's Affidavit must be organized and prepared in a narrative form, including a description and quantification of all hazardous materials to be generated, manufactured, refined, transported, treated, stored, handled, or disposed of on the premises. After the lease term begins, Tenant must notify Landlord as to any changes in Tenant's operation or use or generation of hazardous materials by way of a supplemental Officer's Affidavit. Tenant must

also supplement and update the Officer's Affidavit on each anniversary of the commencement of the lease term. Tenant may not begin or alter any operations on the property before (a) obtaining all required operating and discharge permits or approvals, including but not limited to air pollution control permits and pollution discharge elimination system permits, from all governmental or public authorities having jurisdiction over the Tenant's operations or the property, and (b) providing copies of such permits and approvals to the Landlord. The Premises may not be used for hunting of any kind.

ACTUAL DEMILITARIZATION OF MUNITIONS AND EXPLOSIVES MAY NOT BE COMMENCED DURING THE TERM OF THIS LEASE; SAID OPERATIONS MAY ONLY BE COMMENCED IF AND AFTER TENANT PURCHASES THE PROPERTY SUBJECT TO THIS LEASE.

§ 3.02. **Compliance With Laws.**

a. Tenant may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Tenant, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials Laws, fire and safety regulations and explosives regulations, including but not limited to Title 27, Chapter 11, Subchapter C, Part 555 of the Code of Federal Regulations regarding commerce in explosives. Landlord may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Landlord, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials Laws and safety regulations.

b. Tenant, at its sole cost, must comply with all Hazardous Materials Laws in connection with Tenant's use of the premises. Landlord, at its sole cost, must comply with all Hazardous Materials Laws in connection with Landlord's use of the premises.

c. "Hazardous Materials" means any substance, material, or waste that is or becomes regulated by any local governmental agency, the State of Texas, or the federal government, including, but not limited to, any material or substance that is upon commencement of the term or at any time during the term, (1) designated as a "hazardous substance" pursuant to Section 311 of the Clean Water Act, 33 U.S.C. § 1251 et seq., or listed pursuant to Section 307 of the Clean Water Act, 33 U.S.C. § 1317, (2) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq., (3) defined as a "hazardous waste" pursuant to Section 1004 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., (4) petroleum, (5) asbestos, and (6) polychlorinated biphenyls.

d. "Hazardous Materials Laws" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type relating to the storage, handling, use, or disposal of any Hazardous Materials, the contamination of the environment, or any removal of such contamination, including, without limitation, those statutes referred to in subparagraph c.

e. Tenant shall coordinate with Landlord and the U.S. Army regarding environmental issues related to the leased premises as provided in Section 15.15.

f. Tenant shall obtain any and all permits and/or licenses required to conduct its business on the Premises and provide a copy of same to Landlord prior to beginning operations.

g. Tenant shall provide a monthly report to Landlord of all materials manufactured and/or stored in the Premises which constitute hazardous materials, explosives, petrochemicals, alcohols and any other materials which constitute a danger due to their fire, explosive or environmental hazard.

h. Tenant shall clearly indicate on the outside of each Building and warehouse the type of materials manufac6tured or stored therein.

i. Tenant shall furnish, install, and maintain during the term such safety devices, such as fire suppression systems, spark arresters, lightning rods and static electricity suppressors, as are required or are customarily installed in facilities manufacturing or storing explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosives or fire.

j. Tenant shall construct a secure perimeter fence around the Leased Premises sufficient to deter persons not affiliated with Tenant from gaining access to storage facilities in which explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosions or fire are kept or stored.

k. Tenant shall not store any hazardous materials, explosives, explosive constituents, petro chemicals, alcohols, or any other materials which constitute a danger due to their fire, explosive or environmental hazard on the Premises other than inside the igloo bunkers secured by a locked door, except in accordance with all applicable rules and regulations.

§ 3.03. **Rights of Inspection.**

Tenant must permit Landlord and Landlord's agents, servants, and employees, including but not limited to legal counsel and environmental consultants and engineers, access to the premises upon at least 24 hours' prior written notice for the purpose of conducting environmental inspections and sampling during regular business hours, and during other hours either by agreement of the parties or in the event of an environmental emergency. Tenant may not restrict access to any part of the premises, and Tenant may not impose any conditions to access. If Landlord's environmental inspection includes sampling and testing of the premises, Landlord must use its best efforts to avoid interfering with Tenant's use of the premises, and on completion of sampling and testing must repair and restore the affected areas of the premises as made necessary by any sampling and testing.

§ 3.04. **Environmental Reporting Requirements.**

a. Tenant must promptly supply Landlord with copies of all notices, reports, correspondence, and submissions made by Tenant to the Texas Commission on Environmental Quality, the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or any other local, state, or federal authority that requires submission of any information concerning environmental matters or hazardous materials pursuant to hazardous materials laws. Tenant shall provide to Landlord copies of all permits and/or licenses issued to Tenant for operation of its business on the leased premises and all modifications, amendments and other changes within 30 days after issuance of same.

b. Tenant must promptly notify Landlord in advance of any scheduled meeting between Tenant and any of the agencies specified in subparagraph a. In the case of regulatory inspections for which the Tenant has not received advance notice, Tenant shall notify Landlord within 48 hours of the visit and the corrective actions, if any, required by the Agency.

c. Tenant must promptly notify Landlord as to any liens threatened or attached against the premises pursuant to any environmental law. If an environmental lien is filed against the premises due to Tenant's use, Tenant must, within 30 days from the date on which the lien is placed against the premises, and at any rate before the date on which any governmental authority begins proceedings to sell the premises pursuant to a lien, either: (1) pay the claim and remove the lien from the premises; or (2) furnish either (a) a bond satisfactory to the Landlord in the amount of the claim on which the lien is based, or (b) other security satisfactory to the Landlord in an amount sufficient to discharge the claim on which the lien is based.

§ 3.05. **Condition of Premises.**

Tenant accepts the Premises in their present condition "AS IS" and acknowledges that the Premises are, or will be repaired by Tenant to be, suitable for Tenant's intended use.

§ 3.06. **Delivery of Premises at End of Term.**

Tenant shall remove all personal property, Tenant owned equipment and stored items from the leased premises at the end of the term or extended term of this Lease. The leased premises shall be returned to Landlord in clean, empty and good condition reasonable wear and tear excepted. Under no circumstances shall stored items be left on or in the premises.

§ 3.07. **Blast Arcs.**

Except as provided in this Section 3.07, Tenant shall not use the leased premises for any purpose or in a way that allows or requires that blast safety arcs (or inhabited building restrictions) as required by applicable regulatory authorities to extend outside the leased premises or encroach upon or overlap on or across the adjoining roadways known as Oak Street, Cyprus Street, Titus Street or Montague Street, or extend outside the Leased Premises.

§ 3.08. **Information to Be Provided to Landlord.**

On or before the tenth day of each month during the Lease Term, Tenant shall provide to Landlord a report verifying that munitions on site in storage bunkers do not exceed the blast arcs.

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01. **Repairs and Maintenance by Tenant.**

Tenant will except as provided in paragraph 4.04, throughout the lease term and any extensions of it, at its own expense and risk, maintain the premises and all improvements

on them in good order and condition, including but not limited to making all repairs and replacements necessary to keep the premises and improvements in that condition. All maintenance, repairs, and replacements required by this section must be performed promptly when required.

§ 4.02. **Tenant's Failure to Repair or Maintain.**

If Tenant fails to perform its obligation to repair, replace, or maintain, as set forth in § 4.01, within a reasonable time after notice from Landlord of the need for the repair, replacement, or maintenance, Landlord may enter the premises and make the repairs or replacements, or perform the maintenance, or have the repairs or replacements made or maintenance performed, at its own expense. On Landlord's notice to Tenant of the performance and cost of any maintenance, repairs, or replacements under this section, Tenant must immediately reimburse Landlord for any reasonable costs incurred by Landlord under this section, together with interest on the sum at the rate of 8% per annum from the date of the notice until the date paid by Tenant to Landlord.

§ 4.03. **Allocation of Environmental Cleanup Costs.**

Tenant is responsible only for the payment of that portion of any cleanup costs necessary for compliance with Hazardous Materials Laws that arise as a result of Tenant's discharge of hazardous materials on the premises during the Tenant's occupancy of the premises and/or as a result of Tenant's violation of any restrictive covenants relating to the Premises which are of Record in Bowie County, Texas, including but not limited to those set forth in Section 15.15 of this Lease.

§ 4.04. **Repairs and Maintenance by Landlord.**

Landlord has no obligation to repair, replace and maintain any part of the Premises including but not limited to buildings. Landlord shall promptly remove any timber being harvested by Landlord. If Tenant exercises its option to purchase, any timber that has been cut but not removed at the end of the lease shall be removed by Landlord at Landlord's expense within 90 days after receipt of notice of exercise of the Option to Purchase.

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01. **Utility Charges.**

Tenant will pay all utility and connection charges for water, sewer, electricity, heat, gas, cable, fiber optic and telephone service used in and about the premises during the lease term. Tenant will pay the charges directly to the utility company or governmental agency furnishing the service before the charges are delinquent. In the event Landlord uses any utilities in connection with the harvesting of timber or storage or passage of railcars on the leases premises, Landlord shall be solely responsible for such utilities (either by separate metering or by reimbursement or credit to Tenant's Rent.

§ 5.02. **Meters and Pretreatment Requirements.**

Tenant shall pay for the cost for individual meters for utility services and installation of them if individual meters to the Premises are not in place at the time of execution of this Lease. Tenant agrees to pretreat at its cost any waste streams which require pretreatment as

determined by the respective utility provider prior to discharge of such waste into the sanitary sewer system.

§ 5.03. **Garbage Removal.**

Tenant will pay for all garbage removal related to Tenant's use of the premises during the lease term. Landlord will pay for all garbage removal related to Landlord's use of the premises during the lease terms.

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01. **Consent of Landlord.**

Tenant may not make any alterations, additions, or improvements to the premises without Landlord's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

§ 6.02. **Property of Landlord.**

All alterations, additions, or improvements made by Tenant which are not removed by Tenant a the end of the lease term will become Landlord's property when the lease terminates. However, Landlord may, when the lease terminates, remove any alterations, additions, and improvements made by Tenant which have not been removed by Tenant and any other property Tenant placed in the premises, and charge Tenant the cost of removal which amount shall be paid within 50 days of Landlord's notice to Tenant of the amount due. Landlord must notify Tenant of Landlord's intent of removal within 60 days after the termination of the Lease and complete such removal within 180 days after the termination of the Lease or the costs of such removal shall be borne solely by Landlord and Tenant shall have no obligations with respect to the same. If Tenant removes any of its alterations, additions or improvements, Tenant must repair all damage caused by said removal and restore the Premises to its original, or better, condition.

§ 6.03. **Alterations Required by Accessibility Laws.**

If any alterations, additions, or improvements to the premises are mandated by legal requirements related to accessibility by persons with disabilities ("accessibility alterations"), Tenant is responsible for making them. This allocation of responsibility for compliance with such legal requirements is a material inducement for the parties to enter this lease.

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01. **Trade Fixtures.**

Tenant may, at all times, erect or install shelves, bins, machinery, equipment, or other trade fixtures, in, on, or about the premises, if Tenant complies with all applicable governmental laws, ordinances, and regulations regarding the fixtures. Tenant may remove all trade fixtures when this lease terminates, if Tenant is not in default under the lease and the fixtures can be removed without structural damage to the building. Tenant must repair any damage to the premises caused by removing trade fixtures, and all the repairs must be completed before the lease terminates. Any trade fixtures not removed by Tenant when this lease terminates are considered abandoned by Tenant and will automatically become

Landlord's property. If any trade fixture installed by Tenant is abandoned when the lease terminates, Tenant must pay Landlord any reasonable expense actually incurred by Landlord to remove the fixture from the premises, which amount shall be paid within 15 days of Landlord's notice to Tenant of the amount due.

§ 7.02. **Signs.**

Tenant may erect signs on any portion of the premises, including but not limited to the exterior walls, subject to applicable laws, ordinances, and regulations, and after approval of the proposed signage by Landlord. Tenant must remove all signs when this lease terminates and repair any damage resulting from erecting or removing the signs.

ARTICLE 8 . MECHANIC'S LIEN

Tenant will not permit any mechanic's lien to be placed on the premises or improvements on the premises. Tenant will promptly pay or bond over any mechanic's lien that is filed on the premises or on improvements located on the premises due to Tenant's use of the leased premises. If default in payment of the lien continues for 20 days after Landlord's written notice to Tenant, Landlord may, at its option, pay the lien or any portion of it without inquiring into its validity. Any amounts Landlord pays to remove a mechanic's lien caused by Tenant to be filed against the premises or improvements on them, including expenses and interest, are due from Tenant to Landlord and must be repaid to Landlord immediately on rendition of notice, together with interest at eight (8%) percent annually until repaid. Landlord will not permit any mechanic's lien to be placed on the premises and shall promptly pay any mechanic's lien that is filed on the premises or improvements due to Landlord's use of the premises.

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01. **Tenant's Property Insurance.**

Tenant must, at its own expense during the lease term, maintain insurance on Tenant's personal property, furniture, fixtures and equipment in such amounts as Tenant deems necessary.

§ 9.02. **Landlord's Property Insurance.**

Landlord has no obligation to keep buildings on the Premises insured against loss or damage in any form. Tenant may insure the buildings and improvements to the extent it so desires.

§ 9.03. **Tenant's Liability Insurance.**

Tenant, at its own expense, must provide and maintain in force during the lease term (a) a policy of commercial liability insurance with a single limit each occurrence of not less than $1,000,000.00 and general aggregate of not less than $2,000,000.00, and (b) a policy of Worker's Compensation Insurance as required by applicable law. This insurance is to be carried by one or more insurance companies authorized or admitted to transact business in Texas. The liability policy must cover Landlord as well as Tenant, for any liability for property damage or personal injury arising from Tenant's occupying or Landlord's owning the premises. Landlord shall require its contractors and subcontracts harvesting timber

upon the leased premises to carry during the timber contract term insurance of the same type, coverage amounts as required by Tenant under this section.

§ 9.04. **Remedy for Failure to Provide Insurance.**

Tenant must furnish Landlord with certificates of all insurance required by this article. If Tenant does not provide the certificates when Landlord delivers possession to Tenant and within ten days prior to any renewal date, or if Tenant allows any insurance required under this article to lapse, Landlord may, at its option, take out and pay the premiums on the necessary insurance to comply with Tenant's obligations under this article. Landlord is entitled to reimbursement from Tenant for all amounts spent to procure and maintain the insurance, with interest at the rate of eight (8%) percent annually from the date Tenant receives Landlord's notice of payment until reimbursement.

§ 9.05. **Tenant's Environmental Indemnity.**

Tenant agrees to indemnify, defend, and hold harmless Landlord from and against all claims, liabilities, losses, damages, remediation expenses, fines and penalties, and costs, foreseen or unforeseen, including without limitation counsel, engineering, and other professional or expert fees, that Landlord may incur by reason of Tenant's action or inaction with regard to Tenant's obligations under Articles 3 and 4 and Section 15.15 of this lease. This section survives the expiration or earlier termination of this lease.

§ 9.06. **Hold-Harmless Clause**

Tenant will indemnify and hold Landlord harmless against any claims, demands, damages, costs, and expenses, including reasonable attorney's fees for defending claims and demands, arising from the conduct or management of Tenant's business on the premises or its use of them; from any breach by Tenant of any conditions of this lease; or from any act of negligence of Tenant, its agents, contractors, employees, subtenants, concessionaires, or licensees in or about the premises. If any action or proceeding is brought against Landlord by reason of any such claim, Tenant, on notice from Landlord, will defend the action or proceeding by counsel acceptable to Landlord.

§ 9.07. **Release of Claims/Subrogation.**

Landlord and Tenant release each other from any claim, by subrogation or otherwise, for any damage to the Premises, the building, or personal property within the building, regardless of cause, including negligence of Landlord or Tenant, however, the release applies only to the extent it is permitted by law, the damage is covered by insurance proceeds, and the release does not adversely affect any insurance coverage. Landlord and Tenant will notify their insurance companies of the release set forth herein and will have the insurance policies, endorsed, if necessary, to prevent invalidation of the insurance coverage.

§ 9.08. **Pollution Legal Liability Insurance.**

Upon the commencement of receipt of munitions from the Department of the Army or other entities, Tenant shall carry and provide during the term of this Lease Pollution Legal Liability insurance providing the following coverages:

a. On-site cleanup of new conditions arising after the commencement of this Lease triggered by first-party discovery or third-party claim

b. Third-party claims for on-site bodily injury, property damage or cleanup costs arising from new conditions arising after the commencement of this Lease;

c. Pollution conditions resulting from transported cargo (third-party carrier or owned vehicle) while on TAC properties or adjacent entrances or exits;

d. Coverage for punitive damages, fines and penalties, if insurable in this jurisdiction

The policy shall provide coverages of not less than $2,000,000.00 per loss and not less than $5,000,000.00 in the aggregate.

The deductible on the policy shall not be greater than $25,000.00 per occurrence.

ARTICLE 10 . DAMAGE OR DESTRUCTION OF PREMISES

§ 10.01. **Notice to Landlord.**

If the premises, or any structures or improvements on them, are damaged or destroyed by fire, tornado, or other casualty in excess of $50,000.00 or if such damage puts any munitions at risk, Tenant must immediately give Landlord written notice of the damage or destruction, including a general description of the damage and, as far as known to Tenant, the cause of the damage.

§ 10.02. **Total Destruction.**

If the building on the premises is totally destroyed by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, or if it is so damaged that rebuilding or repairs cannot reasonably be completed within ninety (90) working days at a cost not to exceed the available insurance recovery proceeds, this lease will terminate, and rent will be abated for the unexpired portion of this lease, effective as of the date of written notification as provided in § 10.01.

§ 10.03. **Partial Destruction.**

If the building or other improvements on the premises are partially damaged by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, but not to such an extent that rebuilding or repairs cannot reasonably be completed within ninety (90) working days and at a cost not to exceed the insurance recovery proceeds, this lease will not terminate. In such case, rent shall be partially abated with respect to the portion of the premises that are not usable by Tenant until such time as they are repaired or replaced.

ARTICLE 11 . CONDEMNATION

§ 11.01. **Total Condemnation.**

If, during the lease term or any extension or renewal of it, all of the premises are taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or are sold to the condemning authority under threat of condemnation, this lease will terminate, and the rent will be abated during the unexpired portion of this lease, effective as of the date the condemning authority takes the premises.

§ 11.02. **Partial Condemnation.**

If less than all, but more than twenty-five percent (25%), of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation takes possession of the condemned portion. In addition, if twenty-five percent (25%) of the parking area, or all of the signage, of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation makes the condemnation determination.

If the premises are partially condemned and Tenant fails to exercise the option to terminate the lease under this section, or if less than twenty five percent (25%) of the premises is condemned, this lease will not terminate, but Tenant may, at its sole expense, restore and reconstruct the building and other improvements situated on the premises to make them reasonably tenantable and suitable for the uses for which the premises are leased. The fixed rent payable under § 2.01 of this lease will be adjusted equitably during the unexpired portion of this lease.

§ 11.03. **Condemnation Award.**

Landlord is entitled to receive and retain the entire award in any condemnation proceedings, except for any portion attributable to trade fixtures or improvements constructed by Tenant , which Tenant is entitled to receive and retain. The termination of this lease will not affect the right to this award.

ARTICLE 12 . DEFAULT

§ 12.01. **Tenant's Default.**

If Tenant allows the rent to be in arrears more than fifteen (15) days after its due date, or remains in default under any other condition of this lease for thirty (30) days after written notice from Landlord, Landlord may, at its option, without notice to Tenant, terminate this lease, or, in the alternative, Landlord may reenter and take possession of the premises and remove all persons and property without being considered guilty of any manner of trespass and may (but is not required to) relet the premises (or any part of them) for all or any part of the remainder of the lease term, to a party satisfactory to Landlord and at the monthly rental as Landlord can secure with reasonable diligence. If Landlord cannot relet after reasonable efforts to do so or if the monthly rental is less than the rental Tenant was obligated to pay under this lease (or any renewal of it) plus the expense of reletting, then Tenant must pay Landlord the amount of the deficiency.

§ 12.03. **Landlord's Default.**

If Landlord defaults in performing any term or covenant that Landlord must perform under this agreement, Tenant may, after not fewer than thirty (30) days' notice to Landlord, remedy the default by any necessary action and, in connection with the remedy, may pay expenses and employ counsel. Landlord must, on demand, pay Tenant all sums expended, or obligations incurred, by Tenant in connection with remedying Landlord's default. It is agreed, however, that if Landlord commences action within 30 days after receipt of notice to remedy any default and diligently pursue such action to conclusion, Tenant's rights under this section shall not apply. In the event Landlord does not cure such default within thirty (30) days after commencing such attempted cure, Tenant may terminate this Lease.

§ 12.04. **Cumulative Remedies.**

All Landlord's and Tenant's rights and remedies under this Article are cumulative, and none will exclude any other right or remedy provided by law or any other provision of this lease. All the consistent rights and remedies may be exercised and enforced concurrently and whenever occasion for their exercise arises.

§ 12.05. **Waiver of Breach.**

All Landlord's or Tenant's waiving a breach of this lease by the other party does not constitute a continuing waiver or a waiver of any subsequent breach.

§ 12.06. **Indemnities in Event of Termination.**

In the event that this Lease Agreement is terminated by either party as provided in this Agreement, and upon expiration of the Term, or extended term of this Lease Agreement, the Tenant's obligations to indemnify and hold harmless Landlord shall not terminate or expire and shall survive such termination and/or expiration and shall be fully binding upon Tenant.

§ 12.07. **Limitation of Landlord's Liability.**

Notwithstanding anything to the contrary contained herein, no personal or individual liability of any kind or character whatsoever shall now or at any time hereafter attach to Landlord or its property other than leased premises for the payment of any amount payable under this Lease. The exclusive remedy of Tenant for the failure of Landlord to perform any of its obligations under this Lease shall be to proceed against the interest of Landlord in and to the leased premises.

ARTICLE 13 . INSPECTION BY LANDLORD

Tenant will permit Landlord and its agents, representatives, and employees to enter the premises upon at least 24 hours' prior written notice at all reasonable times for the purpose of inspection or any other purpose necessary to protect Landlord's interest in the premises or to perform Landlord's duties under this lease, or to show the Premises to prospective purchasers or future tenants.

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01. **Assignment and Subletting by Tenant.**

a. Tenant may not sublet, assign, encumber, or otherwise transfer this lease, or any right or interest in it or in the premises or the improvements on them, without Landlord's written consent. If Tenant sublets, assigns, encumbers, or otherwise transfers its rights or interests in this lease or in the premises or the improvements on them without Landlord's written consent which shall not be unreasonably withheld, conditioned or delayed, Landlord may, at its option, declare this lease terminated. If Landlord consents in writing to an assignment, sublease, or other transfer of all or any of Tenant's rights under this lease, the assignee or subtenant must assume all of Tenant's obligations under this lease, and Tenant will remain liable for every obligation under the lease. Landlord may not arbitrarily or unreasonably withhold consent under this section.
b. As a condition precedent to the Tenant's right to sublease the property or to assign this lease, the Tenant must, at the Tenant's own expense, fulfill all of the Tenant's environmental obligations under Article 3 of this lease. If this condition is not satisfied, the Landlord has the right to withhold consent to any proposed sublease or assignment.

§ 14.02. **Assignment by Landlord.**

Landlord may assign or transfer any of its interests under this lease. On transfer, and on the transferee's assumption of its obligations, Landlord is relieved of its obligations under the lease.

ARTICLE 15 . MISCELLANEOUS

§ 15.01. **Notices and Addresses.** All notices required under this lease may be given by the following methods:

a. By hand delivery to the President or Landlord;

b. By certified mail, return receipt requested, addressed to the proper party, at the following addresses:

Landlord: TAC East Holdings Company 1
107 Chapel Lane
New Boston, Texas 75570
Attn: President

Tenant: EnviroSafe Demil
401 Montague
Hooks, Texas 75567

c. By fax transmission, to the proper party, at the following fax numbers:

Landlord: 903-223-8742 Attn: President

Tenant: N/A Guarantor: N/A

Notices are effective when received. Either party may change the address or fax number to which notices are to be sent by sending written notice of the new address or number to the other party in accordance with the provisions of this section.

§ 15.02. **Parties Bound.**

This agreement binds, and inures to the benefit of, the parties to the lease and their respective heirs, executors, administrators, legal representatives, successors, and assigns when this agreement permits.

§ 15.03. **Texas Law to Apply.**

This agreement is to be construed under Texas law, and all obligations of the parties created by this lease are performable in Bowie County, Texas.

§ 15.04. **Legal Construction.**

If one or more of the provisions contained in this agreement are for any reason held by a court of competent jurisdiction to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability will not affect any other provision of the agreement, which will be construed as if it had not included the invalid, illegal, or unenforceable provision.

§ 15.05. **Prior Agreements Superseded.**

This agreement constitutes the parties' sole agreement and supersedes any prior understandings or written or oral agreements between the parties with respect to the subject matter.

§ 15.06. **Amendment.**

No amendment, modification, or alteration of this agreement is binding unless in writing, dated subsequent to the date of this agreement, and duly executed by the parties.

§ 15.07. **Rights and Remedies Cumulative.**

The rights and remedies provided by this lease are cumulative, and either party's using any right or remedy will not preclude or waive its right to use any other remedy. These rights and remedies are in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

§ 15.08. **Attorney's Fees and Costs.**

If, as a result of either party's breaching this agreement, the other party employs an attorney to enforce its rights under this lease, then the breaching or defaulting party will pay the other party the reasonable attorney's fees and costs incurred to enforce the lease.

§ 15.09. **Force Majeure.**

Neither Landlord nor Tenant is required to perform any term or covenant in this lease so long as performance is delayed or prevented by *force majeure,* which includes acts of God, strikes, lockouts, material or labor restrictions by any governmental authority, civil riot, floods, and any other cause not reasonably within Landlord's or Tenant's control and that Landlord or Tenant cannot, by exercising due diligence and paying money, prevent or overcome, in whole or part.

§ 15.10. **Time of Essence.**

Time is of the essence of this agreement.

§ 15.11. **Alternate Dispute Resolution.**

Landlord and Tenant shall submit in good faith to mediation any and all disputes before filing suit. Each party shall pay its own counsel fees in such mediations and shall each pay one-half of the mediator's charges. The parties shall mutually agree upon the mediator, and upon failure to agree within 30 days of a request by either party to mediation, shall request the County Judge of Bowie County to select a mediator whose selection shall be binding on the parties. All mediations shall take place in Bowie County, Texas.

§ 15.12. **LIMITATION OF WARRANTIES.**

THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER KIND ARISING OUT OF THIS LEASE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE, IF ANY, EXPRESSLY STATED IN THIS LEASE.

§ 15.13. **Abandoned Property.**

Landlord may retain, destroy or dispose of any property left on the Premises at the end of the Term without liability to Tenant for loss or damage.

§ 15.14. **Municipal and Emergency Services.**

Tenant shall pay for all municipal services (Police, Hazardous Spill Response, Emergency Medical Response and Fire Protection) used by Tenant, its employees, guests, invitees, and any and all persons while upon the Premises. Said services may be furnished by local law enforcement agencies and by the U.S. Department of the Army as provided in that certain Municipal Services Agreement between Red River Army Depot and Red River Redevelopment Authority dated the 4th day of February, 1998, as it may be amended from time to time. Tenant shall pay to, or reimburse, Landlord for all municipal services furnished to Tenant or to persons on the Premises within ten (10) days after receipt of an invoice for said services from Landlord. Tenant shall be entitled to receive and shall handle all documentation for reimbursement by insurance companies or other third party benefit plan providers.

§ 15.15. **Army Imposed Restrictions.**

a. Notwithstanding any other provision of this Lease, this Lease Agreement is made subject to, and Tenant agrees to be bound by those certain exceptions, limitations, covenants, conditions and reservations set forth in the Deed Without Warranty conveying the Premises from the United States of America, acting by and through the Secretary of the Army to Red River Redevelopment Authority dated September 1, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records, Bowie County, Texas, to the extent said provisions apply to the Premises. A copy of the Deed Without Warranty is available at the offices of Landlord.

b. Tenant specifically acknowledges that the Deed Without Warranty contains the following language regarding Post Transfer Discovery of Contamination:

> "A. If an actual or threatened release of a hazardous substance or petroleum product is discovered by the GRANTEE, its successors or assigns on the Property after the date of conveyance, GRANTEE, its successors or assigns, shall be responsible for the investigation and/or remediation of such release or newly discovered substance unless GRANTEE is able to demonstrate that such release or such newly discovered substance was due to GRANTOR's activities, use, or ownership of the Property. If the GRANTEE, its successors or assigns believe the discovered hazardous substance is due to GRANTOR's activities, use or ownership of the Property, GRANTEE will immediately secure the site and notify the GRANTOR of the existence of the hazardous substances, and GRANTEE will not further disturb such hazardous substances without the written permission of the GRANTOR.
>
> B. GRANTEE, its successors and assigns, as consideration for the conveyance of the Property, agree to release GRANTOR from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the delivery and acceptance of this Deed, where such substance or product was placed on the Property by the GRANTEE, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the GRANTOR's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the GRANTOR's indemnification obligations under applicable laws."

c. Tenant agrees to comply with the provisions of this subsection and will be responsible for all claims, damages, remediation expenses, fines and penalties related to violation of Hazardous Materials Laws, as defined in Section 3.02, and/or violation or breach of the restrictions and covenants set forth in this Section 15 after the commencement date of this Lease, including but not limited to such claims, damages, remediation expenses, fines and penalties related to the release, disturbance, spreading, extension, expansion or exacerbation of a release or substance by Tenant or those on the Premises with the consent or for the benefit of Tenant, unless such are caused by the Landlord, Landlord's employees, agents, contractors, invitees or licensees.

§ 15.16. **Reservation of Rights.**

Landlord reserves the right to include the Premises including the easement locations, if any, together with other adjoining property owned by Landlord in a subdivision plat and subject the property described in said platted subdivision to utility easements and common restrictive covenants; provided, however, that said restrictive covenants and easements shall not interfere unreasonably with Tenant's use and related uses. Landlord shall provide a copy of any such proposed activities to Tenant and Tenant shall have at least 10 days to review and determine that such do not interfere with Tenant's current and prospective uses of the premises. It shall not be necessary or required that Tenant join in the execution of any such plat dedication or declaration of restrictive covenants and easements. Such rights of Landlord shall terminate upon purchase of the property by Tenant.

§ 15.17. **Common Area Charges.**

Tenant acknowledges and agrees that it shall be responsible for and pay its proportionate share of the "TexAmericas Center-East common area charges" based upon the square footage of the Premises as a percentage of the total area of the TexAmericas Center-East development area (excluding the "common areas"). The "common areas" are those areas of TexAmericas Center-East used by and/or for the benefit of all property owners or tenants within TexAmericas Center-East, including but not limited to parks, recreational facilities, walkways, roadways and public parking areas. "Common area charges" are those property taxes, user charges, payments in lieu of taxes, maintenance, improvement, and betterment charges, and other local, county, TexAmericas Center, or other governmental assessments on or against the Commerce Park common areas. The common area charges, other than taxes, shall not exceed ten cents ($0.10) per $100.00 valuation of the Premises based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made. Landlord shall notify Tenant of the amount of the assessment, and Tenant shall pay said assessment within thirty (30) days.

§ 15.18. **License for Access to Premises.**

Landlord grants Tenant a license to use the roadways of Landlord for access to and from the Premises, said roadways being identified as follows (select only one by placing an X in the applicable option):

_____ All roadways including paved and unpaved roads;
_____ Only the paved roadways; or
__X__ The following specific streets:

Cass Street
Oak Street
Cypress Street
Montague Street

This is a non-exclusive license to use said roadways which shall terminate upon the termination of this lease.

§ 15.19. **Advertising and Promotions Rights.**

Tenant, by entering into this Lease Agreement, authorizes Landlord to use in its advertising and promotion of TexAmericas Center and its properties the fact that Tenant has leased property from Landlord including but not limited to photographs of the leased premises, Tenant signage, Tenant equipment and vehicles, and Tenant employees; inclusion of Tenant's name and any "doing business as" names in Landlord's client/customer listings; and quotations of Tenant and Tenant's representatives. This authorized use includes all forms of media including but not limited to print, radio and other audio media, television and other video media, internet and other telecommunications media, and social media such as Facebook, Twitter, Linkedin and others. This section constitutes a license from Tenant to Landlord to use for the limited purposes set forth herein any and all trademarks, trade names and related intellectual property generally available and visible to the general public. Notwithstanding the foregoing, due to the nature of Tenant's business, any and each such use or actions by Landlord must be approved by Tenant, whose approval shall not be unreasonably withheld.

§ 15.20. **Annual Reports.**

Tenant agrees to annually, on or about, June 30 of each year during the Term and all extensions of the Term, and at such other times as Landlord may request, to provide to Landlord a report setting forth the following information for the prior calendar year:

1. Maximum number of Full Time Equivalent jobs;
2. Minimum number of Full Time Equivalent jobs;
3. Total Payroll for jobs on the Premises;
4. An employee census by position (no names);
5. Number of employees making above the average wage for Bowie County as determined by the Texas Workforce Commission;
6. Average wage for all employees;
7. Such other information as Landlord may reasonably request to support its redevelopment efforts, including but not limited to information required by authorities issuing grants for which Landlord may apply.

§ 15.21. **Guarantee.** (Intentionally Deleted).

§ 15.22 **Governmental Immunity.**

By execution of this Agreement, TexAmericas Center does not waive its governmental immunity except to the extent it is contractually liable for damages for failure to perform its responsibilities under this Agreement. This limited waiver of governmental immunity shall not extend to, or for the benefit of, any third parties.

§ 15.23. **Option to Purchase.**

Provided Tenant is not in default under the terms of this Lease at the time of its exercise, Tenant shall have an option to purchase the leased premises and adjoining property upon the terms stated in the Option to Purchase attached hereto as Exhibit B.

ARTICLE 16. TENANT AFFIRMATIONS

1. **FALSE STATEMENTS.** Tenant represents and warrants that all statements and information prepared and submitted in response to the solicitation are current, complete, true and accurate. Signing the solicitation with a false statement is a material breach of this Purchase Order and shall void the submitted response or any resulting Purchase Orders, and may result in removal of the Lessee from the Centralized Master Bidder List.

2. (Intentionally Deleted)

3. (Intentionally Deleted)

4. (Intentionally Deleted)

5. (Intentionally Deleted)

6. (Intentionally Deleted)

7. **PROHIBITION AGAINST BOYCOTTING ISRAEL.** Pursuant to Section 2271.002 of the Texas Government Code, Tenant certifies that either (i) it meets an exemption criteria under Section 2271.002; or (ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. Tenant shall state any facts that make it exempt from the boycott certification in its Response.

8. **PROHIBITION AGAINST CONTRACTING WITH COMPANIES ENGAGED IN BUSINESS WITH IRAN, SUDAN, OR FOREIGN TERRORIST ORGANIZATIONS.** In accordance with Section 2252.152 of the Texas Government Code, Landlord is prohibited from entering into a governmental contract (as defined in Texas Government Code Section 2252.151(3)) with a company that is identified on a list prepared and maintained under Texas Government Code Section 806.051, 807,051, or 2252.153. If Tenant is on the above referenced list the Contract will be considered void or voidable and Landlord will not be responsible to pay Tenant for any work performed.

9. **EXCLUDED PARTIES.** Tenant certifies that it is not listed in the prohibited vendors list authorized by Executive Order No. 13224, "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism", published by the United States Department of the Treasury, Office of Foreign Assets Control.

10. **SUSPENSION AND DEBARMENT.** Tenant certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration.

11. **PROHIBITION AGAINST ENERGY COMPANY BOYCOTTS.** Pursuant to Texas Government Code Chapter 2274, Tenant certifies that either (1) it meets an exemption criteria under said Chapter; or (2) it does not boycott energy companies and will not boycott energy companies during the term of this contract.

12. **PROHIBITION AGAINST DISCRIMINATION AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS.** Pursuant to Texas Government Code Chapter 2274, Tenant certifies that (1) it meets an exemption criteria under said Chapter, or (2) it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association, and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

13. **PROHIBITION AGAINST CONTRACTING WITH CERTAIN FOREIGN ENTITIES RELATING TO CRITICAL INFRASTRUCTURE.** Pursuant to the provision of Chapter 113 of the Texas Business and Commerce Code, Lessee certifies that (1) this contract does not relate to critical infrastructure, or if it does relate to critical infrastructure, (2) it is not a company owned by or the majority stock or other ownership interest of the Company is held or controlled by (a) individuals who are citizens of China, Iran, North Korea, Russia or other countries designated by the Governor of Texas, or (b) a company or other entity including a governmental entity that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or other country designated by the Governor of the State of Texas.

ARTICLE 17. SMOKE-FREE AND TOBACCO-FREE PREMISES.

A. Landlord desires to mitigate (1) the irritation and known health effects of second-hand smoke and use of tobacco products; (2) the increased maintenance, cleaning and redecorating cost due to smoking and/or use of tobacco products; (3) the increased risk of fire from smoking; and (4) the higher cost of fire insurance for a non-smoke-free building.

B. Tenant agrees and acknowledges that the leased premises to be occupied by Tenant, its employees, customers, visitors and invitees have been designated by Landlord as a smoke-free/tobacco- free environment. "Smoking" means inhaling, exhaling, burning, vaping, or carrying any lighted cigar, cigarette, pipe or any other device containing any tobacco product, or any other leaf, weed, plant or other products. "Use of tobacco products" includes smoking, chewing or otherwise using or ingesting any leaf, weed, plant, or tobacco containing product. Tenant, its employees, customers and invitees shall not smoke or use any tobacco products anywhere in the buildings located upon the Leased Premises or adjoining grounds of such buildings other than in a designated area. Tenant may designate an area for smoking and otherwise using tobacco products outdoors provided that the designated area is not less than twenty (20) feet from any and all entrances into the building or buildings located upon the leased premises.

C. Tenant shall inform Tenant's employees, customers, visitors and invitees of the no smoking/no use of tobacco policy.

D. Tenant acknowledges that Landlord's adoption of a smoke-free/use of tobacco free environment, and the efforts to designate the leased premises as smoke-free/tobacco-free do not make the Landlord or any of its directors, officers or employees the guarantor of Tenant's health or of the smoke-free/tobacco-free condition of the leased premises. Landlord shall, however, take reasonable steps to enforce the smoke-free/tobacco-free terms of its leases and to make the leased premises smoke-free/tobacco-free. Landlord is not required to take steps in response to violations of the smoke-free/tobacco-free policy unless the Landlord knows of said smoking or tobacco use and has been given written notice of said smoking or tobacco use.

E. Violation of the smoke-free/tobacco use free policy shall constitute a breach of the lease if said violations exceed two (2) times in any calendar year during the lease term. The third violation shall constitute a material breach of the lease and grounds for immediate termination of the lease by the Landlord.

F. Landlord cannot and does not warranty or promise that the leased premises will be free from second hand smoke or residuals of other tobacco use. Tenant acknowledges that Landlord's ability to police, monitor, or enforce the smoke-free/tobacco-free policy is dependent in significant part on voluntary compliance by Tenant and Tenant's employees, customers, visitors and invitees. Tenant and Tenant's employees, customers, visitors and invitees with respiratory ailments, allergies, or other physical or mental conditions relating to smoke and/or tobacco use are hereby put on notice that Landlord does not assume any higher duty of care to enforce the no smoking/no tobacco use policy than any other Landlord obligation under the lease.

G. Tenant acknowledges that current Tenants leasing and/or occupying buildings in the complex of property in which the leased premises are located under a prior lease will not be immediately subject to the no smoking/no tobacco use policy. As current Tenants move out, or enter into new leases, the smoke free/tobacco free policy will become effective for their leased premises.

LANDLORD
TAC EAST HOLDING CO. NO. 1

By: _____
Name: William Scott Norton
Title: President

TENANT
EnviroSafe Demil, LLC

By: _____
Name: Thomas Ogden
Title: Chief Executive Officer

EXHIBIT A
PROJECT ERUPTION
MONTAGUE STREET



N

TexAmericas CENTER
Texarkana USA

0 250 500 1000 1500

PROPOSED LEASE AREA
43.492 ACRES (1,894,498.41 SF)

PROPOSED 100' WIDE ACCESS EASEMENT
0.172 ACRES (7,497.98 SF)

EXHIBIT "B"
OPTION TO PURCHASE

STATE OF TEXAS §

§ KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF BOWIE §

TAC East Holdings Company No. 1, Texas non-profit corporation, hereinafter called Seller, and EnviroSafe Demil, LLC, a Nevada limited liability company, hereinafter called Purchaser, have entered into the following agreement, to-wit:

1.

OPTION PRICE AND PROPERTY

Seller, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) to it cash in hand paid by Purchaser (the Option Price), the receipt of which is hereby acknowledged, does hereby grant, sell and convey to Purchaser the exclusive right, privilege and option to purchase the following described property located in Bowie County, Texas, to-wit:

Approximately 130 acres and all improvements located thereon, being a part of the property known as F Line on the TexAmericas Center TAC East Campus as outlined in Exhibit "A" attached hereto, which shall be surveyed and the full legal description attached hereto as Exhibit A-1.

2.

PURCHASE PRICE

The purchase price for the above described property upon the exercise of this option is $7,750.00 per surveyed acre and, in the event said Option to Purchase is exercised by Purchaser, said purchase price shall be paid to Seller at the time of closing of said sale as provided herein.

3.

OPTION PERIOD

This option shall be enforceable through October 31, 2024 (the Exercise Period). This option shall be exercised by Purchaser giving written notice by certified mail of its intention to exercise said option, and said written notice shall be mailed to Seller at the following address, to-wit: 107 Chapel Lane, Attn: President, New Boston, Texas 75570. Said written notice shall be mailed during the Exercise Period herein granted and upon the exercise of said option then the Option Price this day paid by Purchaser to Seller shall be credited on said purchase price. This Option to Purchase may only be exercised by Purchaser if Purchaser has previously closed on the purchase of the approximate 45 acre tract from Seller, which 45 acre tract adjoins the 130 acre tract.

4.

TITLE POLICY, SURVEY AND CLOSING

Upon exercise of this Option by Purchaser, the following terms shall apply:

4.01 Within twenty (20) days after the exercise of the Option, Seller, at Seller's sole cost and expense, shall have caused the title company to issue a preliminary title report accompanied by copies of all recorded documents relating to the easements, rights-of-way, liens, and other filings affecting the property. If the condition of title as set forth in such title binder is not satisfactory to Purchaser for any reason, Purchaser may terminate this Agreement for all purposes and the option price shall be forthwith returned by Seller to Purchaser; otherwise, said condition shall be deemed to be acceptable and any objection thereto shall be deemed to have been waived for all purposes. Any exceptions to title not objected to are "Permitted Exceptions".

4.02 Within twenty (20) days after the exercise of the Option, Seller shall cause to be delivered, at Seller's sole cost and expense, a current plat of survey of the property, prepared by a land surveyor

licensed by the state in which the property is located acceptable to Purchaser. The survey shall be staked on the ground, and the plat shall show the location of all improvements, highways, streets, roads, water courses, fences, easements and rights-of-way on or adjacent to the property, if any, and shall contain the surveyor's certification that there are no encroachments on the property. In the event any portion of such survey is unacceptable to Purchaser, Purchaser may terminate this Agreement and the Agreement shall thereupon be null and void for all purposes and the option price shall be returned by Seller to Purchaser. Purchaser's failure to give Seller such written notice shall be deemed to be Purchaser's acceptance of the survey.

4.03 At Closing, said property shall be conveyed by Seller to Purchaser by Special Warranty Deed; and good and indefeasible title shall be conveyed to Purchaser free and clear of any liens or encumbrances other than existing easements, restrictions, including but not limited to those set forth in the Deed Without Warranty from the United States of America to Red River Redevelopment Authority (now TexAmericas Center) dated September 1, 2010 recorded in Volume 5898, Page 1 of the Real Property Records of Bowie County, Texas, previously recorded mineral reservations affecting said property, and all other matters affecting the property as recorded in the Real Property/Deed Records of Bowie County, Texas.

4.04 The Deed Without Warranty shall also contain the Restrictions and Right of Reverter set forth in Exhibits B and C respectively as attached hereto.

4.05 The Closing shall be held at the office of a mutually acceptable Title Company, within sixty (60) days from the exercise of the Option to Purchase by Purchaser.

4.06 Closing costs other than the Seller's attorney's fees, shall be paid by Purchaser. Notwithstanding the foregoing, Seller shall pay the cost of an Owner's Title Policy for Purchaser (Purchaser shall be responsible for any requested endorsements thereto); transfer and recording taxes and fees shall be paid by the party as is customary in the county in which the property is located.

4.07 Taxes for all prior years after commencement of the Lease between Seller and Purchaser and for the year of Closing shall be paid by Purchaser. Rollback taxes, if any, shall be the responsibility of Purchaser.

5.

ENGINEERING STUDIES

Seller agrees that Purchaser shall have the right at any time after date hereof and before the exercise of the option to purchase to make engineering and other studies, including soil tests and borings, on the premises to determine the suitability of the premises for Purchaser's proposed use of the property. Purchaser shall be responsible for any damage to third parties resulting from any engineering or other studies made by Purchaser upon the property prior to the closing.

6.

POSSESSION AND LIABILITY

Possession of the property shall be delivered at the time of Closing.

7.

FAILURE TO EXERCISE

If Purchaser fails to exercise the option to purchase within the Exercise Period hereinabove provided, then all rights of Purchaser hereunder shall cease and the money paid for this option shall be retained by Seller.

8.

FAILURE TO PERFORM

In the event Seller fails to close the sale of the above-described property as herein provided after Purchaser has exercised its option to purchase then Purchaser may enforce specific performance of this agreement or require the return of the amount paid to Seller under the terms hereof. In the event the Purchaser fails to close its purchase of the above-described property as herein provided after exercising its option to purchase for reasons other than as provided in paragraphs 5.01 and 5.02, then Seller may either retain all amounts previously paid to it by Purchaser or enforce specific performance of this agreement.

9.

BINDING EFFECT

The provisions of this instrument shall be binding upon and inure to the benefit of Seller and Purchaser, their heirs, successors and assigns.

10.

TERMINATION OF OPTION

This Option to Purchase is executed in conjunction with and ancillary to that certain Lease Agreement between the parties hereto regarding the property dated simultaneously with this Option to Purchase. Should the Lease Agreement terminate before its expiration date for any reason, this Option to Purchase shall automatically terminate without any further action being required of either party.

11.

REPRESENTATIONS AND WARRANTIES OF SELLER

(a) Authority. Seller is a Texas non-profit validly existing and in good standing in the State of Texas and has the legal power, right and authority to enter into this Agreement and the instruments referenced herein and to consummate the transaction contemplated hereby. All requisite company action has been taken by Seller in connection with entering into this Agreement and the instruments referenced herein and the consummation of the transaction contemplated hereby. No consent of any partner, shareholder, member, creditor, investor, and, to the best of Seller's knowledge, judicial or administrative body, authority or other party is required which has not been obtained to permit Seller to enter into this Agreement and consummate the transaction contemplated hereby. This Agreement and all documents to be executed pursuant to it by Seller are and shall be binding upon and enforceable against Seller in accordance with their respective terms, and the transaction contemplated by this Agreement will not result in a breach of, or constitute a default or permit acceleration of maturity under, any indenture, mortgage, deed of trust, loan agreement or other agreement to which Seller or the property are subject or by which Seller or the property are bound. Seller has the right and power to transfer and convey the Property without violating any contract, lease, mortgage, law, code or regulation, including, but limited to, any fraudulent conveyances law. The individuals executing this Agreement and the instruments referenced herein on behalf of Seller have the legal power, right and actual authority to bind Seller to the terms and conditions hereof and thereof.

(b) Title to Property. Seller owns absolute fee title to the property, and will deliver good, fee simple, indefeasible and insurable title to the Property, subject only to the Permitted Exceptions. To the best of Seller's knowledge there are no matters encumbering title to the Property, other than those matters that will be disclosed on the Title Commitment.

(c) Options, Rights of First Refusal. No third party possesses any option, right of first refusal or other right to purchase the Property. Seller has not made any agreement to sell any of the property to any person other than Purchaser that remains in force or effect as of the Effective Date.

(d) Environmental. Except for the information disclosed to Purchaser (i) Seller has not since the property was removed from the U.S. Department of the Army's RCRA permit on January 16, 2021 (the Texas Commission on Environmental Quality issued its "no further action" letter dated February 28, 2017), received written notice of any violations of Environmental Laws pertaining to the property; (ii) Seller has not used, stored, manufactured, or disposed of any Hazardous Substance on, from, or affecting the property in any manner violating any Environmental Laws; and, to the best of Seller's knowledge, (iii) there are no underground storage tanks located upon the Property nor have any such underground storage tanks been removed previously from the Property. "**Environmental Laws**" means any applicable federal, state, and local environmental, health, safety, and sanitation statutes, laws, regulations, ordinances, judgments, and rulings, interpretations, and orders of regulatory and administrative authorities with respect thereto, including, but without limiting the generality of the foregoing, all requirements of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 USC 9601 et seq. "**Hazardous Substance**" means any material or substance defined as a hazardous substance, hazardous material, toxic material, or hazardous waste under any Environmental Laws.

(e) Compliance with Laws. Seller has not received notice, and has no knowledge, of any uncorrected violations of any laws, ordinances, statutes, rules or regulations with respect to the Property.

(f) No Litigation. There are no claims, litigation or proceedings pending, or to Seller's knowledge, threatened against Seller or the Property, or that could otherwise adversely affect the transaction contemplated by this Agreement.

(g) No Leases. There are no leases, licenses, use, rental or occupancy agreements pertaining to the Property or any part thereof to which Seller is a party.

(h) No Improvements. No improvements, repairs or construction have occurred on the Property within one hundred twenty (120) days prior to the Effective Date of this Agreement, or Seller shall provide evidence to Purchaser that all such work has been paid for prior to the Closing.

(i) Condemnation. To the best of Seller's knowledge, no condemnation proceedings or eminent domain proceedings are now pending or contemplated against the Property.

(j) No Assessments. To the best of Seller's knowledge, no improvements have been installed the cost of which is to be assessed in whole or in part against any part of the Property in the future, and Seller has no knowledge of any future improvements whose cost is proposed to be assessed against the Property.

(k) No Changes. Seller will not transfer, lease or otherwise encumber the Property prior to closing.

(l) No Contracts. There are no other oral or written agreements pertaining to the maintenance, administration, operation, or servicing of any portion of the Property that will be binding upon Purchaser after Closing except as reflected in the Title Commitment and the Deed Without Warranty from the United States of America to Red River Redevelopment Authority dated September 1, 2010, recorded in Volume 5898, Page 1, Real Property Records of Bowie County, Texas.

(m) Tax Cases. There are no pending tax valuation cases pending with respect to the Property filed by Seller, and Seller shall not file any tax valuation complaint with respect to the Property without the prior written consent of Purchaser, which consent may be withheld in Purchaser's sole discretion. There are no tax appeals pending with respect to the Property filed by Seller.

(n) Personal Property. Seller owns all personal property free and clear of all liens and encumbrances.

(o) Employees. There are no employees of Seller at the Property for which Purchaser will be responsible after Closing.

The Seller's representations and warranties shall be true and correct as of the date of this Agreement, the date of closing of the sale of the Property and for one year thereafter.

12.

MISCELLANEOUS

12.01. Change of Street Name. Seller shall cooperate with Purchaser, after Closing, to rename Montague Street to a street name of Purchaser's choice subject to approval by the Ark-Tex Council of Governments which is responsible for implementation of the 911 emergency access notifications.

12.02. Easements. Seller shall provide a non-exclusive permanent easement for ingress and egress to Purchaser across Cass Street, Oak Street, Cypress Street and Montague Street (as renamed) which

without the joinder of Purchaser or its successors or assigns at which time said easements shall terminate as to the streets which are dedicated as public streets.

EXECUTED as of August _____, 2022.

Sign when ready to purchase

SELLER:

TAC EAST HOLDINGS COMPANY NO. 1

By: _____

Name: William Scott Norton

Title: President

STATE OF TEXAS §

§

COUNTY OF BOWIE §

This instrument was acknowledged before me on the ____ day of _____, 2022, by William Scott Norton, President of TAC East Holdings Company No. 1.

_____

Notary Public, State of Texas

STATE OF _____ §

§

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this day personally appeared _____, as the _____ of EnviroSafe Demil, LLC, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity therein stated and as the act and deed of said limited liability company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2022.

_____

Notary Public, State of _____

EXHIBIT "B"

EXCEPTIONS AND RESERVATIONS

TEXAMERICAS CENTER EAST CAMPUS

SALE BY TAC EAST HOLDINGS COMPANY NO. 1

TO

ENVIROSAFE DEMIL, LLC

A. This conveyance is made subject to, and Grantee agrees to be bound by, all exceptions, covenants, restrictions, and reservations by the United States of America, acting by and through the Secretary of the Army ("Army"), in that certain Deed Without Warranty dated the 1st day of September, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records of Bowie County, Texas, (the Deed Without Warranty) to the extent said matters affect the Property, including but not limited to the following:

1. Reservation of rights and easements for (a) access; (b) electric, telephone, and other utility service; (c) water, sanitary sewer, industrial wastewater, gas, and storm sewer service; (d) railroad rights-of-way; and (e) line of site clear zone, as set forth in said Deed Without Warranty.

2. CERCLA Covenants and CERCLA Notice as set forth in said Deed Without Warranty.

3. Land Use Restrictions, Residential Use Restriction and Groundwater Restriction and enforcement rights as set forth in Exhibit B, Paragraph 2 of said Deed Without Warranty.

4. Notice of the Presence of Lead-Based Paint and Covenant Against the Use of the Property for Residential Purposes set forth in Paragraph 4, Exhibit B, in said Deed Without Warranty.

5. Notice of the Presence of Asbestos and Covenant as set forth in Exhibit B, Paragraph 3 of said Deed Without Warranty.

6. Notice of the Potential Presence of Munitions and Explosives of Concern (MEC) and Covenant set forth in Exhibit B, Paragraph 6 of said Deed Without Warranty.

B. Grantor reserves the right to include the Property together with other property owned by Grantor and other third parties in a subdivision plat and/or subject the property to reasonable utility easements, and reasonable common restrictive covenants; provided, however, said restrictive covenants and easements shall not interfere unreasonably with Grantee's use of the property and that Grantee shall have the right to participate in the determination of location of any easements upon the Property and the terms of any such restrictive covenants. Grantee shall, upon Grantor's request, join in the dedication of such subdivision, easements and restrictive covenants. This provision shall survive closing and not be merged therein.

C. Pursuant to the requirements of the agreement between the U.S. Department of the Army and TexAmericas Center regarding the transfer of the utility systems which provide service to the Property, TexAmericas Center and its successor and/or assigns which own and/or operate said utility systems are hereby authorized to release and/or disclose to the U.S. Department of the Army information regarding the consumption of utility services and commodities which flow through the meters servicing the Property. This consent to disclosure is specifically limited to the dissemination of the information to the United States Department of the Army.

D. Grantee acknowledges that utility services other than water and sanitary sewer service for the property are currently provided by third party providers. Grantee, its heirs, successors and assigns agree to comply with the rules and regulations adopted by TexAmericas Center for operation of its water and sanitary sewer systems.

E. Grantee acknowledges and agrees that Grantee shall pay all property taxes, user charges, payments in lieu of taxes, betterment charges and other local, county, TexAmericas Center, or state assessments on or against the Property, including but not limited to assessments for road repair, maintenance and construction and common area maintenance within TexAmericas East Campus. To the extent any such taxes, charges and assessments are not assessed against the Property separately, but are assessed against Property located within the TexAmericas East Campus of which the Property is a constituent part and which property is used by and/or for the benefit of all property owners in the TexAmericas East Campus (the common area), Grantee agrees to pay its proportionate share of such taxes or charges, said share to be based on the square footage of the Property as a percentage of the total square footage of the Property in the TexAmericas East Campus, excluding the common area. Such common area charges shall not exceed ten cents ($0.10) per $100.00 value of the Property and improvements thereon based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made.

F. Grantee purchases the Property "AS IS – WHERE IS." Grantee acknowledges that the Property may not currently be fit for occupancy pursuant to applicable building codes, may not be in compliance with the American with Disabilities Act, or the applicable state law and regulations, and may contain lead-based paint and friable and non-friable asbestos or asbestos-containing materials. The Property is conveyed "AS IS – WHERE IS" without any representations, warranties, or guaranties as to quantity, quality, character, condition, size or kind, or that the Property is in a condition or fit to be used for the purpose for which it is

intended, and the conveyance will be without any obligation on the part of the Grantor to make any alterations, repairs, or additions to the Property.

G. Grantee acknowledges and agrees that the Property has been a part of Lone Star Army Ammunition Plant, an installation of the United States of America, Department of the Army, and, as such is conveyed to Grantee, subject to such additional easements, covenants and restrictions as may be referred to and contained in the Memorandum of Agreement and Deed transferring title from the Army to Grantor, or its predecessors in title, including but not limited to, such easements, covenants and restrictions allowing the United States and its agents, employees and contractors access to and over the Property as may be necessary for any investigation, response, or corrective action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. § 9601 et seq. (CERCLA) or any other environmental statute, rule or regulation.

H. Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

I. Grantee agrees to be bound by, comply with and enforce where required the covenants, restrictions and requirements of the Deed Without Warranty as they relate to and are enforceable against the Property described in this Special Warranty Deed. Grantee acknowledges that said covenants, restrictions and requirements run with the land and are enforceable against Grantee, its heirs, successors and assigns. Grantee for itself, its heirs, successors and assigns covenants that it will include and make binding the terms of the covenants, restrictions, and requirements of the Deed Without Warranty in all subsequent transfers, leases, or conveyance documents that include the Property.

J. Grantee agrees to indemnify and hold harmless the U.S.A. Department of the Army, TexAmericas Center, their officers, agents and employees from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorney's fees arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of Grantee's, or Grantee's heirs, successors or assigns having violated the covenants, restrictions and/or requirements set forth in Deed Without Warranty and/or this Special Warranty Deed.

K. Grantor reserves for itself, its successors and assigns forever all oil, gas, and other minerals in and under and that may be produced from the Property. If the mineral estate is subject to existing production or an existing lease, this reservation includes the production, the lease, and all benefits from it.

As used in this Exhibit, the term Grantor also means Seller, and the term Grantee also means Purchaser.

C. Pursuant to the requirements of the agreement between the U.S. Department of the Army and TexAmericas Center regarding the transfer of the utility systems which provide service to the Property, TexAmericas Center and its successor and/or assigns which own and/or operate said utility systems are hereby authorized to release and/or disclose to the U.S. Department of the Army information regarding the consumption of utility services and commodities which flow through the meters servicing the Property. This consent to disclosure is specifically limited to the dissemination of the information to the United States Department of the Army.

D. Grantee acknowledges that utility services other than water and sanitary sewer service for the property are currently provided by third party providers. Grantee, its heirs, successors and assigns agree to comply with the rules and regulations adopted by TexAmericas Center for operation of its water and sanitary sewer systems.

E. Grantee acknowledges and agrees that Grantee shall pay all property taxes, user charges, payments in lieu of taxes, betterment charges and other local, county, TexAmericas Center, or state assessments on or against the Property, including but not limited to assessments for road repair, maintenance and construction and common area maintenance within TexAmericas East Campus. To the extent any such taxes, charges and assessments are not assessed against the Property separately, but are assessed against Property located within the TexAmericas East Campus of which the Property is a constituent part and which property is used by and/or for the benefit of all property owners in the TexAmericas East Campus (the common area), Grantee agrees to pay its proportionate share of such taxes or charges, said share to be based on the square footage of the Property as a percentage of the total square footage of the Property in the TexAmericas East Campus, excluding the common area. Such common area charges shall not exceed ten cents ($0.10) per $100.00 value of the Property and improvements thereon based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made.

F. Grantee purchases the Property "AS IS – WHERE IS." Grantee acknowledges that the Property may not currently be fit for occupancy pursuant to applicable building codes, may not be in compliance with the American with Disabilities Act, or the applicable state law and regulations, and may contain lead-based paint and friable and non-friable asbestos or asbestos-containing materials. The Property is conveyed "AS IS – WHERE IS" without any representations, warranties, or guaranties as to quantity, quality, character, condition, size or kind, or that the Property is in a condition or fit to be used for the purpose for which it is intended, and the conveyance will be without any obligation on the part of the Grantor to make any alterations, repairs, or additions to the Property.

G. Grantee acknowledges and agrees that the Property has been a part of Lone Star Army Ammunition Plant, an installation of the United States of America, Department of the Army, and, as such is conveyed to Grantee, subject to such additional easements, covenants and restrictions as may be referred to and contained in the Memorandum of Agreement and Deed transferring title from the Army to Grantor, or its predecessors in title, including but not limited to, such easements, covenants and restrictions allowing the United States and its

agents, employees and contractors access to and over the Property as may be necessary for any investigation, response, or corrective action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. § 9601 et seq. (CERCLA) or any other environmental statute, rule or regulation.

H. Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

I. Grantee agrees to be bound by, comply with and enforce where required the covenants, restrictions and requirements of the Deed Without Warranty as they relate to and are enforceable against the Property described in this Special Warranty Deed. Grantee acknowledges that said covenants, restrictions and requirements run with the land and are enforceable against Grantee, its heirs, successors and assigns. Grantee for itself, its heirs, successors and assigns covenants that it will include and make binding the terms of the covenants, restrictions, and requirements of the Deed Without Warranty in all subsequent transfers, leases, or conveyance documents that include the Property.

J. Grantee agrees to indemnify and hold harmless the U.S.A. Department of the Army, TexAmericas Center, their officers, agents and employees from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorney's fees arising out of, or in any manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of Grantee's, or Grantee's heirs, successors or assigns having violated the covenants, restrictions and/or requirements set forth in Deed Without Warranty and/or this Special Warranty Deed.

K. Grantor reserves for itself, its successors and assigns forever all oil, gas, and other minerals in and under and that may be produced from the Property. If the mineral estate is subject to existing production or an existing lease, this reservation includes the production, the lease, and all benefits from it.

As used in this Exhibit, the term Grantor also means Seller, and the term Grantee also means Purchaser.

ATTACHMENT A.3

LEASE INFORMATION

ABOVE GROUND MAGAZINE (AGM)

INDUSTRIAL LEASE
TexAmericas Center - East

LEASE SUMMARY

Lessor: TexAmericas Center
107 Chapel Lane
New Boston, Texas 75570

Lessee: **EnviroSafe Demil**
12763 Lovelock Hwy.
Fallon, Nevada 89406, USA

Guarantor: _____
_____
_____

Premises Leased Address: #10 Beech
Hooks, TX 75561

Primary Term: Six (6) years; From July 1, 2023, to June 30, 2029.

Option Terms: Four (4) option(s) of One (1) year each

Base Rent: $1,437.00 per month during year one from July 1,2023 through June 30, 2024
$1,480.63 per month during year two from July 1,2024 through June 30, 2025
$1,525.04 per month during year three from July 1,2025 through June 30, 2026
$1,570.80 per month during year four from July 1,2026 through June 30, 2027
$1,617.92 per month during year five from July 1,2027 through June 30, 2028
$1,666.46 per month during year six from July 1,2028 through June 30, 2029

Option Rent: $1,716.45 per month during year one from July 1, 2029 through June 30, 2030
$1,767.95 per month during year two from July 1, 2030 through June 30, 2031
$1,820.95 per month during year three from July 1, 2031 through June 30, 2032
$1,875.62 per month during year four from July 1, 2032 through June 30, 2033

Security Deposit: $1,500.00

Ad Valorem Tax/PILOT Deposit: $ 2,250.00

Table of Contents

ARTICLE 1 . TERM

§ 1.01 Term of Lease

§ 1.02 Option to Extend Term

§ 1.03 Holdover

ARTICLE 2 . RENT/SECURITY and AD VALOREM TAX DEPOSITS

§ 2.01 Base Rent

§ 2.02 Taxes and Assessments as Additional Rent

§ 2.03. Late Charges

§ 2.04. Security-Ad Valorem Tax/PILOT Deposit; Deposit Processing Fee

ARTICLE 3 . USE OF PREMISES

§ 3.01 Tenant's Warranty Regarding Use

§ 3.02 Compliance With Laws

§ 3.03 Rights of Inspection

§ 3.04 Environmental Reporting Requirements

§ 3.05 Condition of Premises

§ 3.06 Delivery of Premises at End of Term

§ 3.07 Blast Arcs

§ 3.08 Information to Be Provided to Landlord

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01 Repairs and Maintenance by Tenant

§ 4.02 Tenant's Failure to Repair or Maintain

§ 4.03 Allocation of Environmental Cleanup Costs

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01 Utility Charges

§ 5.02 Meters and Pretreatment Requirements

§ 5.03 Garbage Removal

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01 Consent of Landlord

§ 6.02 Property of Landlord

§ 6.03 Alterations Required by Accessibility Laws

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01 Trade Fixtures

§ 7.02 Signs

ARTICLE 8 . MECHANIC'S LIEN

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01 Tenant's Property Insurance

§ 9.02 Landlord's Property Insurance

§ 9.03 Tenant's Liability Insurance

§ 9.04 Remedy for Failure to Provide Insurance

§ 9.05 Tenant's Environmental Indemnity

§ 9.06 Hold-Harmless Clause

§ 9.07 Release of Claims/Subrogation

§ 9.08 Pollution Legal Liability Insurance

ARTICLE 10 . DAMAGE OR DESTRUCTION

§ 10.01 Notice to Landlord

§ 10.02 Total Destruction

§ 10.03 Partial Destruction

ARTICLE 11 . CONDEMNATION

§ 11.01 Total Condemnation

§ 11.02 Partial Condemnation

§ 11.03 Condemnation Award

ARTICLE 12 . DEFAULT

§ 12.01 Tenant's Default

§ 12.02 Landlord's Lien

§ 12.03 Landlord's Default

§ 12.04 Cumulative Remedies

§ 12.05 Waiver of Breach

§ 12.06 Indemnities in Event of Termination

§ 12.07 Limitation of Landlord's Liability

ARTICLE 13 . INSPECTION BY LANDLORD

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01 Assignment and Subletting by Tenant

§ 14.02 Assignment by Landlord

ARTICLE 15 . MISCELLANEOUS

§ 15.01 Notices and Addresses

§ 15.02 Parties Bound

§ 15.03 Texas Law to Apply

§ 15.04 Legal Construction

§ 15.05 Prior Agreements Superseded

§ 15.06 Amendment

§ 15.07 Rights and Remedies Cumulative

§ 15.08 Attorney's Fees and Costs

§ 15.09 Force Majeure

§ 15.10 Time of Essence

§ 15.11 Alternate Dispute Resolution

§ 15.12 Limitation of Warranties

§ 15.13 Abandoned Property

§ 15.14 Municipal and Emergency Services

§ 15.15 Army Imposed Restrictions

§ 15.16 Reservation of Rights

§ 15.17 Common Area Charges

§ 15.18 License for Access to Premises

§ 15.19 Advertising and Promotions Rights

§ 15.20 Annual Report

§ 15.21 Guarantee

§ 15.22 Governmental Immunity

§ 15.23 Option to Purchase Intentionally Deleted

ARTICLE 16. LESSEE AFFIRMATIONS

Execution

Exhibit "A" – Premises Description
Exhibit "B" – Option to Purchase – Intentionally Deleted

LEASE

This Lease is entered into between TexAmericas Center ("Landlord"), a political subdivision of the State of Texas, and EnviroSafe Demil, LLC ("Tenant"), a Nevada Limited liability Company.

In consideration of the mutual covenants and agreements of this lease, and other good and valuable consideration, Landlord demises and leases to Tenant, and Tenant leases from Landlord, the premises situated at 10 Beech Street, in Hooks, Bowie County, Texas, described on Exhibit A attached to this lease, and made a part of this lease for all purposes (collectively referred to as "the premises" or "the leased premises" in this lease).

Landlord reserves the right to harvest any and/or all timber located upon the leased premises together with the right of ingress and egress to and from the leased premises for said harvesting by Landlord and/or its contractors.

ARTICLE 1 . TERM

§ 1.01. **Term of Lease**. The term of this lease is Six (6) years, beginning on July 1, 2023, and ending on June 30, 2029, unless terminated sooner as provided in this lease.

§ 1.02. **Option to Extend Term.** Tenant may extend the term of this lease beyond the expiration date provided in § 1.01 on the following conditions:

a. Tenant may, if it is not in default either on the date required for the notice or on the date such extension commences, extend the lease term for Four (4) additional periods of One(1) year(s) each. The extended term will begin on the day following the expiration date of the lease term specified in § 1.01, or on the day following the expiration date of the immediately preceding extended term, as applicable. If, at the date the original term or any extended term expires, Tenant is in default beyond any grace period provided in this lease in performing any of the terms of this lease, the remaining option or options are void. All of the terms and covenants of this lease apply to all extended lease terms except for the rent which shall be as set forth in paragraph 2.01.

b. Tenant may exercise each option to extend this lease by giving Landlord notice of its intention to do so not later than six (6) months before the then current lease term expires, in the case of the initial option to extend, or the extended lease term, in the case of successive options to extend. Notice of an intention to exercise an option under this lease must, to be effective, be sent by mail or fax to Landlord at the address provided in § 15.01 and must be postmarked no later than the latest date provided in this section for Tenant's exercising the option.

§ 1.03. **Holdover.** If Tenant holds over and continues in possession of the premises after the lease term (or any extension) expires, other than as provided in § 1.02, Tenant will be considered to be occupying the premises on a month-to-month tenancy, subject to all the terms of this lease. Landlord may terminate the tenancy upon ten (10) days written notice to Tenant.

ARTICLE 2 . RENT/SECURITY DEPOSIT AND AD VALOREM TAX/PILOT DEPOSITS

§ 2.01. **Fixed Rent.**

a. Tenant will pay Landlord $ 1,437.00 per month on or before the first day of each month as a fixed rent for the next month. Rent for any fractional month at the beginning or end of the lease term will be prorated on a per-day basis.

b. Tenant will pay this fixed rent to Landlord at Landlord's office, located at 107 Chapel Lane, New Boston, Texas 75570, or at such other location or locations that Landlord may from time to time designate by written notice to Tenant.

c. The fixed rent will increase for each extended lease term, so that the fixed rent during the first extended term will be $ 1,480.63; the fixed rent during the second extended term will be $1,525.04; the fixed rent during the third extended term will be $1,570.80; the fixed rent during the fourth extended term will be $1,617.92; and the fixed rent during the fifth extended term will be $1,666.46.

§ 2.02. **Taxes and Assessments as Additional Rent.**

a. In addition to the fixed rent specified in § 2.01, Tenant will pay in full all real-property taxes, special assessments, and governmental charges of any kind imposed on the premises or leasehold interest in the Premises commencing on the first day of the lease term and continuing through the end of the calendar year in which the term ends, including any special assessments imposed on or against the premises for constructing or improving public works. This additional rent is payable directly to the entity imposing the tax, assessment, or charge at least 30 days before the date payment is due. Tenant will provide Landlord with a receipt or other evidence of payment for each tax, assessment, or charge paid as soon as a receipt or other evidence is available to Tenant, but not later than the date payment is due.

b. Tenant may, at its own expense, contest any tax or assessment for which it is responsible under subparagraph a. Except as provided in subparagraph c, Tenant need not pay the tax, assessment, or charge while the contest is pending. Except as provided in subparagraph c, Tenant may prevent Landlord from paying any tax, assessment, or charge that Tenant is contesting under this subparagraph, pending resolution of the contest, by depositing with Landlord the full amount of the tax or assessment, plus the amount of any penalty that might be imposed for failing to make timely payment and one year of interest at the rate imposed by the entity levying the tax or assessment. When the contest is resolved, Tenant may use the money deposited with Landlord to pay any tax or assessment, plus any penalty or interest, due under the final resolution and keep any balance of the deposit. If the deposit is insufficient to pay these amounts, Tenant must immediately pay the balance due to the entity imposing the tax, assessment, or charge.

c. Notwithstanding subparagraph b, Landlord may pay, or require Tenant to pay, any tax, assessment, or charge for which Tenant is responsible under subparagraph a, pending resolution of Tenant's contest of the tax, assessment, or charge, if payment is demanded by a holder of a mortgage on the premises or if failing to pay will subject all or part of the premises to forfeiture or loss.

d. Tenant Payment in Lieu of Taxes (PILOT). If Tenant's leasehold interest in the Premises is or hereafter becomes exempt from real property taxes, Tenant shall pay to Landlord annually a payment in lieu of taxes (PILOT) in an amount as agreed by Landlord and Tenant; provided, however, that said PILOT shall not exceed the amount that Tenant would be required to pay in real property taxes if the leasehold interest were not exempt. If Landlord and Tenant are not able to agree upon the amount of the PILOT within ninety (90) days after the leasehold interest becomes exempt from taxes, the amount of the PILOT shall be an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. Landlord and Tenant shall document the agreement regarding the PILOT as an amendment to this Lease Agreement. The agreement may be for a single year, or multiple years, and may, or may not, provide for an adjustment of the PILOT periodically. If at any time the PILOT agreement of the parties lapses, expires or is terminated pursuant to its terms, and the leasehold interest is exempt from real property taxes, Tenant shall pay to Landlord annually a PILOT in an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. PILOT payments shall be payable to Landlord on or before January 31 of each year.

§2.03. **Late Charges.** Tenant shall pay a late charge of five percent (5%) of any rent not received by Landlord by the tenth day of the month in which said rent is due.

§2.04. **Security and Ad Valorem Tax/PILOT Deposits; Deposit Processing Fee**

A. Security Deposit. Upon execution of this Lease, Tenant shall deposit the sum of $1,500.00 with Landlord as a deposit. Said deposit shall not accrue interest. Landlord may use the deposit to pay arrears of rent, to repair any damage or injury to the Premises, or to pay any expense or liability incurred by Landlord as a result of any default by Tenant under this Lease including but not limited to payment of ad valorem taxes upon the premises or the leasehold interest in the premises. If Landlord uses the deposit, or any portion thereof as authorized above, Tenant shall restore the deposit to its original amount within ten (10) days after notice from Landlord. Failure to restore the deposit to its original amount within the required time shall constitute a default under the Lease. Subject to the right to withhold to pay ad valorem taxes as provided in 2.04.B, within 30 days after Tenant surrenders the Premises, or completion of repairs or replacement of damaged or destroyed property, whichever is later, Landlord shall return to Tenant any remaining portion of the deposit less the Processing Fee provided in Subsection C. below, after any lawful deductions, provided Tenant has given to Landlord an address specifically for that purpose. IT IS SPECIFICALLY PROVIDED, HOWEVER, THAT TENANT SHALL NOT BE ENTITLED TO ANY PORTION OF THE SECURITY DEPOSIT AS A REFUND UNLESS TENANT GIVES LANDLORD SIXTY (60) DAYS NOTICE OF SURRENDERING THE PREMISES.

B. Ad Valorem Tax/PILOT Deposit. Upon execution of this Lease Tenant shall deposit the sum of $2,250.00 with Landlord as an Ad Valorem Tax/PILOT Deposit. Said deposit shall not accrue interest. Landlord may upon expiration or termination of this Lease use the deposit to pay the taxes actually due, or hold for payment of, estimated ad valorem taxes due or to become due upon the leased premises and for which Tenant is responsible under the Terms of this Lease. Provided Tenant pays all ad valorem taxes for which Tenant is responsible under this Lease, the deposit shall be refunded to Tenant at the address Tenant has given to Landlord for this specific purpose. If taxes have not been assessed and levied for the year in which this Lease expires or is terminated, Landlord may hold the deposit until said taxes have been determined; and, if Tenant does not pay said taxes at least 30 days before delinquency, Landlord may apply the deposit to the taxes due. Nothing in this

subsection shall relieve Tenant of its obligation to pay ad valorem taxes upon the leased premises prior to delinquency as provided elsewhere in this Lease. In the event the Premises are exempt from real property taxes, the Ad Valorem/PILOT Deposit may be applied to any deficiency or default in payment of the PILOT as provided for in Section 2.02.d of this Lease.

C. Processing Fee. Landlord shall be, and is hereby entitled and authorized to withhold and pay to Landlord a Processing Fee of $100.00 from the refund by Landlord of the Security and/or Ad Valorem Tax Deposits for the purpose of defraying Landlord's lease administration expense, including but not limited to review of documents, tracking payment of the taxes, utilities and miscellaneous fees, coordination processing, and payment of security and Ad Valorem Tax deposits refunds and related expenses.

ARTICLE 3 . USE OF PREMISES

§ 3.01. **Tenant's Warranty Regarding Use.** Tenant represents and warrants to Landlord that Tenant intends to use the premises for Warehousing and Storage , and that Tenant's use of the property is restricted to those purposes specified in this section unless Tenant obtains Landlord's prior written consent to any change in use. Before the lease term begins, Tenant must give Landlord an affidavit of an officer of Tenant, referred to as the "Officer's Affidavit," setting forth a detailed description of the operations that Tenant will conduct on the premises and stating any applicable permit numbers. The Officer's Affidavit must be organized and prepared in a narrative form, including a description and quantification of all hazardous materials to be generated, manufactured, refined, transported, treated, stored, handled, or disposed of on the premises. After the lease term begins, Tenant must notify Landlord as to any changes in Tenant's operation or use or generation of hazardous materials by way of a supplemental Officer's Affidavit. Tenant must also supplement and update the Officer's Affidavit on each anniversary of the commencement of the lease term. Tenant may not begin or alter any operations on the property before (a) obtaining all required operating and discharge permits or approvals, including but not limited to air pollution control permits and pollution discharge elimination system permits, from all governmental or public authorities having jurisdiction over the Tenant's operations or the property, and (b) providing copies of such permits and approvals to the Landlord.

§ 3.02. **Compliance With Laws.**

a. Tenant may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Tenant, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials Laws, fire and safety regulations and explosives regulations, including but not limited to Title 27, Chapter 11, Subchapter C, Part 555 of the Code of Federal Regulations regarding commerce in explosives.

b. Tenant, at its sole cost, must comply with all Hazardous Materials Laws in connection with Tenant's use of the premises.

c. "Hazardous Materials" means any substance, material, or waste that is or becomes regulated by any local governmental agency, the State of Texas, or the federal government, including, but not limited to, any material or substance that is upon commencement of the

term or at any time during the term, (1) designated as a "hazardous substance" pursuant to Section 311 of the Clean Water Act, 33 U.S.C. § 1251 et seq., or listed pursuant to Section 307 of the Clean Water Act, 33 U.S.C. § 1317, (2) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq., (3) defined as a "hazardous waste" pursuant to Section 1004 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., (4) petroleum, (5) asbestos, and (6) polychlorinated biphenyls.

d. "Hazardous Materials Laws" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type relating to the storage, handling, use, or disposal of any Hazardous Materials, the contamination of the environment, or any removal of such contamination, including, without limitation, those statutes referred to in subparagraph c.

e. Tenant shall coordinate with Landlord and the U.S. Army regarding environmental issues related to the leased premises as provided in Section 15.15.

f. Tenant shall obtain any and all permits and/or licenses required to conduct its business on the Premises and provide a copy of same to Landlord.

g. Tenant shall provide a monthly report to Landlord of all materials manufactured and/or stored in the Premises which constitute hazardous materials, explosives, petrochemicals, alcohols and any other materials which constitute a danger due to their fire, explosive or environmental hazard.

h. Tenant shall clearly indicate on the outside of each igloo/warehouse the type of materials manufac6tured or stored therein.

i. Tenant shall furnish, install, and maintain during the term such safety devices, such as fire suppression systems, spark arresters, lightning rods and static electricity suppressors, as are required or are customarily installed in facilities manufacturing or storing explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosives or fire.

j. Tenant shall construct a secure perimeter fence around the Leased Premises sufficient to deter persons not affiliated with Tenant from gaining access to storage facilities in which explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosions or fire are kept or stored.

k. Tenant shall not store any hazardous materials, explosives, explosive constituents, petro chemicals, alcohols, or any other materials which constitute a danger due to their fire, explosive or environmental hazard on the Premises other than inside the igloo bunkers secured by a locked door.

§ 3.03. **Rights of Inspection.** Tenant must permit Landlord and Landlord's agents, servants, and employees, including but not limited to legal counsel and environmental consultants and engineers, access to the premises upon at least 24 hours' prior written notice for the purpose of conducting environmental inspections and sampling during regular business hours, and during other hours either by agreement of the parties or in the event of an environmental emergency. Tenant may not restrict access to any part of the premises, and Tenant may not impose any conditions to access. If Landlord's environmental inspection includes sampling and testing of the premises, Landlord must use its best efforts to avoid

interfering with Tenant's use of the premises, and on completion of sampling and testing must repair and restore the affected areas of the premises as made necessary by any sampling and testing.

§ 3.04. **Environmental Reporting Requirements.**

a. Tenant must promptly supply Landlord with copies of all notices, reports, correspondence, and submissions made by Tenant to the Texas Commission on Environmental Quality, the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or any other local, state, or federal authority that requires submission of any information concerning environmental matters or hazardous materials pursuant to hazardous materials laws. Tenant shall provide to Landlord copies of all permits and/or licenses issued to Tenant for operation of its business on the leased premises and all modifications, amendments and other changes within 30 days after issuance of same.

b. Tenant must promptly notify Landlord in advance of any scheduled meeting between Tenant and any of the agencies specified in subparagraph a. In the case of regulatory inspections for which the Tenant has not received advance notice, Tenant shall notify Landlord within 48 hours of the visit and the corrective actions, if any, required by the Agency.

c. Tenant must promptly notify Landlord as to any liens threatened or attached against the premises pursuant to any environmental law. If an environmental lien is filed against the premises, Tenant must, within 30 days from the date on which the lien is placed against the premises, and at any rate before the date on which any governmental authority begins proceedings to sell the premises pursuant to a lien, either: (1) pay the claim and remove the lien from the premises; or (2) furnish either (a) a bond satisfactory to the Landlord in the amount of the claim on which the lien is based, or (b) other security satisfactory to the Landlord in an amount sufficient to discharge the claim on which the lien is based.

§ 3.05. **Condition of Premises.** Tenant accepts the Premises in their present condition "AS IS" and acknowledges that the Premises are, or will be repaired by Tenant to be, suitable for Tenant's intended use.

§ 3.06. **Delivery of Premises at End of Term.** Tenant shall remove all personal property, Tenant owned equipment and stored items from the leased premises at the end of the term or extended term of this Lease. The leased premises shall be returned to Landlord in clean, empty and good condition reasonable wear and tear excepted. Under no circumstances shall stored items be left on or in the premises.

§ 3.07. **Blast Arcs.** Except as provided in this Section 3.07, Tenant shall not use the leased premises for any purpose or in a way that allows or requires that blast safety arcs (or inhabited building restrictions) as required by applicable regulatory authorities to extend outside the leased premises or encroach upon or overlap on or across the adjoining roadways known as Oak Street, Cyprus Street and Lamar Street, or extend outside the Leased Premises other than across the street known as Titus Street, which lies West of the Leased Premises. Blast arcs can extend beyond the Leased Premises and interlock (overlap) with the leased premises of another tenant upon written confirmation of permission of both tenants and approval of Landlord. Tenant agrees to allow an interlock (overlap) of Blast Arcs and/or inhabited building restrictions upon the Leased Premises by an adjoining or

nearby third party tenant of Landlord, provided said overlap is permitted by applicable regulations. Every agreement for overlap of Blast Arcs or inhabited building restrictions must be in writing and signed by each tenant whose leased premises are within the overlap.

Except as provided in this Section 3.07, Tenant shall not use the Leased Premises for any purpose or in a way that allows or requires that Blast Safety Arcs (or inhabited building restrictions) as required by applicable regulatory authorities extend outside the Leased Premises or encroach upon or overlap on or across the adjoining roadways known as Oak Street, Cypress Street and Lamar Street or extend outside the Leased Premises other than across the street known as Ellis Street which lies between Tracts One and Two of the Leased Premises. Blast Arcs can extend beyond the Leased Premises and interlock (overlap) with the Leased Premises of another Tenant upon written confirmation of permission of both Tenants and approval of Landlord. Tenant agrees to allow an interlock (overlap) of Blast Arcs and/or inhabited building restrictions upon the Leased Premises by an adjoining or nearby third party Tenant of Landlord provided said overlap is permitted by applicable regulations. Every agreement for overlap of Blast Arcs or inhabited building restrictions must be in writing and signed by each Tenant whose Leased Premises are within the overlap area. The overlap may not include an area in which either Tenant has an occupied building or an useable building which a Tenant desires to place in use at a later date. The agreement of the parties must include a plat or aerial photograph depicting the leased areas of the Tenants and the Blast Arc or inhabited building restriction overlap area.

§ 3.08. **Information to Be Provided to Landlord.** On or before the tenth day of each month during the Lease Term, Tenant shall provide to Landlord a report indicting the type and quantity of each explosive material stored in or one of the leased premises (including individual bunkers/igloos) as of the first day of said month.

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01. **Repairs and Maintenance by Tenant.** Tenant will except as provided in paragraph 4.04, throughout the lease term and any extensions of it, at its own expense and risk, maintain the premises and all improvements on them in good order and condition, including but not limited to making all repairs and replacements necessary to keep the premises and improvements in that condition. All maintenance, repairs, and replacements required by this section must be performed promptly when required.

§ 4.02. **Tenant's Failure to Repair or Maintain.** If Tenant fails to perform its obligation to repair, replace, or maintain, as set forth in § 4.01, within a reasonable time after notice from Landlord of the need for the repair, replacement, or maintenance, Landlord may enter the premises and make the repairs or replacements, or perform the maintenance, or have the repairs or replacements made or maintenance performed, at its own expense. On Landlord's notice to Tenant of the performance and cost of any maintenance, repairs, or replacements under this section, Tenant must immediately reimburse Landlord for any reasonable costs incurred by Landlord under this section, together with interest on the sum at the highest legal rate from the date of the notice until the date paid by Tenant to Landlord.

§ 4.03. **Allocation of Environmental Cleanup Costs.** Tenant is responsible only for the

payment of that portion of any cleanup costs necessary for compliance with Hazardous Materials Laws that arise as a result of Tenant's discharge of hazardous materials on the premises during the Tenant's occupancy of the premises and/or as a result of Tenant's violation of any restrictive covenants relating to the Premises which are of Record in Bowie County, Texas, including but not limited to those set forth in Section 15.15 of this Lease.

§ 4.04. **Repairs and Maintenance by Landlord.** Landlord shall repair, replace and maintain only the (a) roof and (b) the foundation.

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01. **Utility Charges.** Tenant will pay all utility and connection charges for water, sewer, electricity, heat, gas, cable, fiber optic and telephone service used in and about the premises during the lease term. Tenant will pay the charges directly to the utility company or governmental agency furnishing the service before the charges are delinquent.

§ 5.02. **Meters and Pretreatment Requirements.** Tenant shall pay for the cost for individual meters for utility services and installation of them if individual meters to the Premises are not in place at the time of execution of this Lease. Tenant agrees to pretreat at its cost any waste streams which require pretreatment as determined by the respective utility provider prior to discharge of such waste into the sanitary sewer system.

§ 5.03. **Garbage Removal.** Tenant will pay for all garbage removal from the premises during the lease term.

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01. **Consent of Landlord.** Tenant may not make any alterations, additions, or improvements to the premises without Landlord's prior written consent. Landlord may not unreasonably withhold consent for nonstructural alterations, additions, or improvements.

§ 6.02. **Property of Landlord.** All alterations, additions, or improvements made by Tenant will become Landlord's property when the lease terminates. However, Landlord may, when the lease terminates, remove any alterations, additions, and improvements made by Tenant and any other property it placed in the premises, and charge Tenant the cost of removal plus interest which amount shall be paid within 50 days of Landlord's notice to Tenant of the amount due.

§ 6.03. **Alterations Required by Accessibility Laws.** If any alterations, additions, or improvements to the premises are mandated by legal requirements related to accessibility by persons with disabilities ("accessibility alterations"), Tenant is responsible for making them. This allocation of responsibility for compliance with such legal requirements is a material inducement for the parties to enter this lease.

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01. **Trade Fixtures.** Tenant may, at all times, erect or install shelves, bins, machinery, equipment, or other trade fixtures, in, on, or about the premises, if Tenant complies with all applicable governmental laws, ordinances, and regulations regarding the fixtures. Tenant may remove all trade fixtures when this lease terminates, if Tenant is not in default under the lease and the fixtures can be removed without structural damage to the building. Tenant

must repair any damage to the premises caused by removing trade fixtures, and all the repairs must be completed before the lease terminates. Any trade fixtures not removed by Tenant when this lease terminates are considered abandoned by Tenant and will automatically become Landlord's property. If any trade fixture installed by Tenant is abandoned when the lease terminates, Tenant must pay Landlord any reasonable expense actually incurred by Landlord to remove the fixture from the premises, which amount shall be paid within 15 days of Landlord's notice to Tenant of the amount due.

§ 7.02. **Signs.** Tenant may erect signs on any portion of the premises, including but not limited to the exterior walls, subject to applicable laws, ordinances, and regulations, and after approval of the proposed signage by Landlord. Tenant must remove all signs when this lease terminates and repair any damage resulting from erecting or removing the signs.

ARTICLE 8 . MECHANIC'S LIEN

Tenant will not permit any mechanic's lien to be placed on the premises or improvements on the premises. Tenant will promptly pay any mechanic's lien that is filed on the premises or on improvements located on the premises. If default in payment of the lien continues for 20 days after Landlord's written notice to Tenant, Landlord may, at its option, pay the lien or any portion of it without inquiring into its validity. Any amounts Landlord pays to remove a mechanic's lien caused by Tenant to be filed against the premises or improvements on them, including expenses and interest, are due from Tenant to Landlord and must be repaid to Landlord immediately on rendition of notice, together with interest at eighteen (18) percent annually until repaid.

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01. **Tenant's Property Insurance.** Tenant must, at its own expense during the lease term, maintain insurance on Tenant's personal property, furniture, fixtures and equipment in such amounts as Tenant deems necessary.

§ 9.02. **Landlord's Property Insurance.** Landlord shall, at its expense, keep all buildings on the Premises insured against loss or damage in an amount determined by Landlord in its sole discretion. Tenant will have no claim to any proceeds of Landlord's insurance policies.

§ 9.03. **Tenant's Liability Insurance.** Tenant, at its own expense, must provide and maintain in force during the lease term (a) a policy of commercial liability insurance with a single limit each occurrence of not less than $1,000,000.00 and general aggregate of not less than $2,000,000.00, and (b) a policy of Worker's Compensation Insurance as required by applicable law. This insurance is to be carried by one or more insurance companies authorized or admitted to transact business in Texas. The liability policy must cover Landlord as well as Tenant, for any liability for property damage or personal injury arising from Tenant's occupying or Landlord's owning the premises.

§ 9.04. **Remedy for Failure to Provide Insurance.** Tenant must furnish Landlord with certificates of all insurance required by this article. If Tenant does not provide the certificates when Landlord delivers possession to Tenant and within ten days prior to any renewal date, or if Tenant allows any insurance required under this article to lapse, Landlord may, at its option, take out and pay the premiums on the necessary insurance to comply with Tenant's obligations under this article. Landlord is entitled to reimbursement from Tenant for all amounts spent to procure and maintain the insurance, with interest at the

rate of eighteen (18) percent annually from the date Tenant receives Landlord's notice of payment until reimbursement.

§ 9.05. **Tenant's Environmental Indemnity.** Tenant agrees to indemnify, defend, and hold harmless Landlord from and against all claims, liabilities, losses, damages, remediation expenses, fines and penalties, and costs, foreseen or unforeseen, including without limitation counsel, engineering, and other professional or expert fees, that Landlord may incur by reason of Tenant's action or inaction with regard to Tenant's obligations under Articles 3 and 4 and Section 15.15 of this lease. This section survives the expiration or earlier termination of this lease.

§ 9.06. **Hold-Harmless Clause** Tenant will indemnify and hold Landlord harmless against any claims, demands, damages, costs, and expenses, including reasonable attorney's fees for defending claims and demands, arising from the conduct or management of Tenant's business on the premises or its use of them; from any breach by Tenant of any conditions of this lease; or from any act of negligence of Tenant, its agents, contractors, employees, subtenants, concessionaires, or licensees in or about the premises. If any action or proceeding is brought against Landlord by reason of any such claim, Tenant, on notice from Landlord, will defend the action or proceeding by counsel acceptable to Landlord.

§ 9.07. **Release of Claims/Subrogation.** Landlord and Tenant release each other from any claim, by subrogation or otherwise, for any damage to the Premises, the building, or personal property within the building, regardless of cause, including negligence of Landlord or Tenant, however, the release applies only to the extent it is permitted by law, the damage is covered by insurance proceeds, and the release does not adversely affect any insurance coverage. Landlord and Tenant will notify their insurance companies of the release set forth herein and will have the insurance policies, endorsed, if necessary, to prevent invalidation of the insurance coverage.

§ 9.08. **Pollution Legal Liability Insurance.** Tenant shall carry and provide during the term of this Lease Pollution Legal Liability insurance providing the following coverages:

a. On-site cleanup of new conditions arising after the commencement of this Lease triggered by first-party discovery or third-party claim

b. Third-party claims for on-site bodily injury, property damage or cleanup costs arising from new conditions arising after the commencement of this Lease;

c. Pollution conditions resulting from transported cargo (third-party carrier or owned vehicle) while on TAC properties or adjacent entrances or exits;

d. Coverage for punitive damages, fines and penalties, if insurable in this jurisdiction

The policy shall provide coverages of not less than $1,000,000.00 per loss and not less than $2,000,000.00 in the aggregate.

The deductible on the policy shall not be greater than $25,000.00 per occurrence.

ARTICLE 10 . DAMAGE OR DESTRUCTION OF PREMISES

§ 10.01. **Notice to Landlord.** If the premises, or any structures or improvements on them, are damaged or destroyed by fire, tornado, or other casualty, Tenant must immediately give Landlord written notice of the damage or destruction, including a general description of the damage and, as far as known to Tenant, the cause of the damage.

§ 10.02. **Total Destruction.** If the building on the premises is totally destroyed by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, or if it is so damaged that rebuilding or repairs cannot reasonably be completed within ninety (90) working days at a cost not to exceed the insurance recovery proceeds, this lease will terminate, and rent will be abated for the unexpired portion of this lease, effective as of the date of written notification as provided in § 10.01.

§ 10.03. **Partial Destruction.** If the building or other improvements on the premises are partially damaged by fire, tornado, or other casualty by other than the negligence, gross negligence, or intentional tort of Tenant or any person in or about the premises with Tenant's express or implied consent, but not to such an extent that rebuilding or repairs cannot reasonably be completed within ninety (90) working days and at a cost not to exceed the insurance recovery proceeds, this lease will not terminate except as follows:

a. If the premises are partially destroyed before the final twelve (12) months of the lease term, Landlord must, at its sole cost and risk, up to but not exceeding the amount of available insurance proceeds, proceed immediately to rebuild or repair the damaged buildings and improvements to substantially the condition they were in before the damage. If the damage renders the premises untenantable in whole or in part, the rent payable during the period in which they are untenantable will be adjusted equitably. If Landlord fails to complete the rebuilding or repairs within one-hundred twenty (120) working days from the date of Tenant's written notification to Landlord of the damage, Tenant may terminate this lease by written notification to Landlord. On the notification, all rights and obligations under this lease will cease.

b. If the premises are partially destroyed during the final twelve (12) months of the lease term, Landlord need not rebuild or repair them. If Landlord elects not to rebuild or repair and the damage rendered the premises untenantable in whole or in part, Tenant may terminate the lease or continue it with the rent for the remainder of the lease period adjusted equitably.

ARTICLE 11 . CONDEMNATION

§ 11.01. **Total Condemnation.** If, during the lease term or any extension or renewal of it, all of the premises are taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or are sold to the condemning authority under threat of condemnation, this lease will terminate, and the rent will be abated during the unexpired portion of this lease, effective as of the date the condemning authority takes the premises.

§ 11.02. **Partial Condemnation.** If less than all, but more than twenty-five percent (25%), of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or is sold to the condemning

authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation takes possession of the condemned portion. In addition, if twenty-five percent (25%) of the parking area, or all of the signage, of the premises is taken for any public or quasi-public use under any governmental law, ordinance, or regulation or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, Tenant may terminate the lease by giving Landlord written notice within 30 days after the entity exercising the power of condemnation takes possession of the condemned portion.

If the premises are partially condemned and Tenant fails to exercise the option to terminate the lease under this section, or if less than twenty five percent (25%) of the premises is condemned, this lease will not terminate, but Tenant may, at its sole expense, restore and reconstruct the building and other improvements situated on the premises to make them reasonably tenantable and suitable for the uses for which the premises are leased. The fixed rent payable under § 2.01 of this lease will be adjusted equitably during the unexpired portion of this lease.

§ 11.03. **Condemnation Award.** Landlord is entitled to receive and retain the entire award in any condemnation proceedings, except for any portion attributable to trade fixtures, which Tenant is entitled to receive and retain. The termination of this lease will not affect the right to this award.

ARTICLE 12 . DEFAULT

§ 12.01. **Tenant's Default.** If Tenant allows the rent to be in arrears more than fifteen (15) days after its due date, or remains in default under any other condition of this lease for 30 days after written notice from Landlord, Landlord may, at its option, without notice to Tenant, terminate this lease, or, in the alternative, Landlord may reenter and take possession of the premises and remove all persons and property without being considered guilty of any manner of trespass and may (but is not required to) relet the premises (or any part of them) for all or any part of the remainder of the lease term, to a party satisfactory to Landlord and at the monthly rental as Landlord can secure with reasonable diligence. If Landlord cannot relet after reasonable efforts to do so or if the monthly rental is less than the rental Tenant was obligated to pay under this lease (or any renewal of it) plus the expense of reletting, then Tenant must pay Landlord the amount of the deficiency.

§ 12.02. **Landlord's Lien.** If Tenant defaults in paying rent or any other sum due from Tenant to Landlord under this lease, Landlord has a lien on all fixtures, chattels, or other property of any description belonging to Tenant that are placed in, or become a part of, the premises as security for rent due and to become due for the remainder of the current lease term and any other sum Tenant owes Landlord. This lien is not in lieu of, nor in any way affects, the statutory landlord's lien but is in addition to that lien, and Tenant grants Landlord a security interest in all of Tenant's property placed in or on the premises for purposes of this contractual lien. This does not prevent Tenant's selling any merchandise in the ordinary course of business free of such Landlord's lien. If Landlord exercises the option to terminate the leasehold, reenter, and relet the premises as provided in the preceding paragraph and gives Tenant reasonable notice of the intent to take possession and an opportunity for a hearing on the matter, Landlord may take possession of all of Tenant's property on the premises and sell it at public or private sale after giving Tenant reasonable notice of the time and place of any public sale or of the time after which any private sale is to be made, for cash or on credit, for the prices and terms that Landlord considers best,

with or without having the property present at the sale. The proceeds of the sale will be applied first to the necessary and proper expense of removing, storing, and selling the property, then to the payment of any rent due or to become due under this lease; any balance will paid to Tenant. Tenant further grants Landlord a security interest in Tenant's personal property now or subsequently placed in or on the Premises. This Lease is a Security Agreement under the Texas Business and Commerce Code. Landlord may file a Financing Statement to perfect its Security Interest.

§ 12.03. **Landlord's Default.** If Landlord defaults in performing any term or covenant that Landlord must perform under this agreement, Tenant may, after not fewer than thirty (30) days' notice to Landlord, remedy the default by any necessary action and, in connection with the remedy, may pay expenses and employ counsel. Landlord must, on demand, pay Tenant all sums expended, or obligations incurred, by Tenant in connection with remedying Landlord's default. It is agreed, however, that if Landlord commences action within 30 days after receipt of notice to remedy any default and diligently pursue such action to conclusion, Tenant's rights under this section shall not apply.

§ 12.04. **Cumulative Remedies.** All Landlord's and Tenant's rights and remedies under this Article are cumulative, and none will exclude any other right or remedy provided by law or any other provision of this lease. All the consistent rights and remedies may be exercised and enforced concurrently and whenever occasion for their exercise arises.

§ 12.05. **Waiver of Breach.** All Landlord's or Tenant's waiving a breach of this lease by the other party does not constitute a continuing waiver or a waiver of any subsequent breach.

§ 12.06. **Indemnities in Event of Termination.** In the event that this Lease Agreement is terminated by either party as provided in this Agreement, and upon expiration of the Term, or extended term of this Lease Agreement, the Tenant's obligations to indemnify and hold harmless Landlord shall not terminate or expire and shall survive such termination and/or expiration and shall be fully binding upon Tenant.

§ 12.07. **Limitation of Landlord's Liability.** Notwithstanding anything to the contrary contained herein, no personal or individual liability of any kind or character whatsoever shall now or at any time hereafter attach to Landlord or its property other than leased premises for the payment of any amount payable under this Lease. The exclusive remedy of Tenant for the failure of Landlord to perform any of its obligations under this Lease shall be to proceed against the interest of Landlord in and to the leased premises.

ARTICLE 13 . INSPECTION BY LANDLORD

Tenant will permit Landlord and its agents, representatives, and employees to enter the premises upon at least 24 hours' prior written notice at all reasonable times for the purpose of inspection or any other purpose necessary to protect Landlord's interest in the premises or to perform Landlord's duties under this lease, or to show the Premises to prospective purchasers or future tenants.

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01. **Assignment and Subletting by Tenant.**

a. Tenant may not sublet, assign, encumber, or otherwise transfer this lease, or any right or interest in it or in the premises or the improvements on them, without Landlord's written consent. If Tenant sublets, assigns, encumbers, or otherwise transfers its rights or interests in this lease or in the premises or the improvements on them without Landlord's written consent, Landlord may, at its option, declare this lease terminated. If Landlord consents in writing to an assignment, sublease, or other transfer of all or any of Tenant's rights under this lease, the assignee or subtenant must assume all of Tenant's obligations under this lease, and Tenant will remain liable for every obligation under the lease. Landlord may not arbitrarily or unreasonably withhold consent under this section.

b. As a condition precedent to the Tenant's right to sublease the property or to assign this lease, the Tenant must, at the Tenant's own expense, fulfill all of the Tenant's environmental obligations under Article 3 of this lease. If this condition is not satisfied, the Landlord has the right to withhold consent to any proposed sublease or assignment.

§ 14.02. **Assignment by Landlord.** Landlord may assign or transfer any of its interests under this lease. On transfer, and on the transferee's assumption of its obligations, Landlord is relieved of its obligations under the lease.

ARTICLE 15 . MISCELLANEOUS

§ 15.01. **Notices and Addresses.** All notices required under this lease may be given by the following methods:

a. By certified mail, return receipt requested, addressed to the proper party, at the following addresses:

Landlord: TexAmericas Center
107 Chapel Lane
New Boston, Texas 75570
Attn: Executive Director

Guarantor: N/A
N/A
N/A

Tenant: **EnviroSafe Demil**
12763 Lovelock Hwy.
Fallon, Nevada 89406, USA

b. By fax transmission, to the proper party, at the following fax numbers:

Landlord: 903-223-8742 Attn: Executive Director

Notices are effective when received. Either party may change the address or fax number to which notices are to be sent by sending written notice of the new address or number to the other party in accordance with the provisions of this section.

§ 15.02. **Parties Bound.** This agreement binds, and inures to the benefit of, the parties to

the lease and their respective heirs, executors, administrators, legal representatives, successors, and assigns when this agreement permits.

§ 15.03. **Texas Law to Apply.** This agreement is to be construed under Texas law, and all obligations of the parties created by this lease are performable in Bowie County, Texas.

§ 15.04. **Legal Construction.** If one or more of the provisions contained in this agreement are for any reason held by a court of competent jurisdiction to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability will not affect any other provision of the agreement, which will be construed as if it had not included the invalid, illegal, or unenforceable provision.

§ 15.05. **Prior Agreements Superseded.** This agreement constitutes the parties' sole agreement and supersedes any prior understandings or written or oral agreements between the parties with respect to the subject matter.

§ 15.06. **Amendment.** No amendment, modification, or alteration of this agreement is binding unless in writing, dated subsequent to the date of this agreement, and duly executed by the parties.

§ 15.07. **Rights and Remedies Cumulative.** The rights and remedies provided by this lease are cumulative, and either party's using any right or remedy will not preclude or waive its right to use any other remedy. These rights and remedies are in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

§ 15.08. **Attorney's Fees and Costs.** If, as a result of either party's breaching this agreement, the other party employs an attorney to enforce its rights under this lease, then the breaching or defaulting party will pay the other party the reasonable attorney's fees and costs incurred to enforce the lease.

§ 15.09. **Force Majeure.** Neither Landlord nor Tenant is required to perform any term or covenant in this lease so long as performance is delayed or prevented by *force majeure,* which includes acts of God, strikes, lockouts, material or labor restrictions by any governmental authority, civil riot, floods, and any other cause not reasonably within Landlord's or Tenant's control and that Landlord or Tenant cannot, by exercising due diligence and paying money, prevent or overcome, in whole or part.

§ 15.10. **Time of Essence.** Time is of the essence of this agreement.

§ 15.11. **Alternate Dispute Resolution.** Landlord and Tenant shall submit in good faith to mediation any and all disputes before filing suit. Each party shall pay its own counsel fees in such mediations and shall each pay one-half of the mediator's charges. The parties shall mutually agree upon the mediator, and upon failure to agree within 30 days of a request by either party to mediation, shall request the County Judge of Bowie County to select a mediator whose selection shall be binding on the parties. All mediations shall take place in Bowie County, Texas.

§ 15.12. **LIMITATION OF WARRANTIES.** THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER KIND ARISING OUT OF THIS LEASE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE, IF ANY, EXPRESSLY STATED IN THIS LEASE.

§ 15.13. **Abandoned Property.** Landlord may retain, destroy or dispose of any property left on the Premises at the end of the Term without liability to Tenant for loss or damage.

§ 15.14. **Municipal and Emergency Services.** Tenant shall pay for all municipal services (Police, Hazardous Spill Response, Emergency Medical Response and Fire Protection) used by Tenant, its employees, guests, invitees, and any and all persons while upon the Premises. Said services may be furnished by local law enforcement agencies and by the U.S. Department of the Army as provided in that certain Municipal Services Agreement between Red River Army Depot and Red River Redevelopment Authority dated the 4th day of February, 1998, as it may be amended from time to time. Tenant shall pay to, or reimburse, Landlord for all municipal services furnished to Tenant or to persons on the Premises within ten (10) days after receipt of an invoice for said services from Landlord. Tenant shall be entitled to receive and shall handle all documentation for reimbursement by insurance companies or other third-party benefit plan providers.

§ 15.15. **Army Imposed Restrictions.**

a. Notwithstanding any other provision of this Lease, this Lease Agreement is made subject to, and Tenant agrees to be bound by those certain exceptions, limitations, covenants, conditions and reservations set forth in the Deed Without Warranty conveying the Premises from the United States of America, acting by and through the Secretary of the Army to Red River Redevelopment Authority dated September 1, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records, Bowie County, Texas, to the extent said provisions apply to the Premises. A copy of the Deed Without Warranty is available at the offices of Landlord.

b. Lessee specifically acknowledges that the Deed Without Warranty contains the following language regarding Post Transfer Discovery of Contamination:

> "A. If an actual or threatened release of a hazardous substance or petroleum product is discovered by the GRANTEE, its successors or assigns on the Property after the date of conveyance, GRANTEE, its successors or assigns, shall be responsible for the investigation and/or remediation of such release or newly discovered substance unless GRANTEE is able to demonstrate that such release or such newly discovered substance was due to GRANTOR's activities, use, or ownership of the Property. If the GRANTEE, its successors or assigns believe the discovered hazardous substance is due to GRANTOR's activities, use or ownership of the Property, GRANTEE will immediately secure the site and notify the GRANTOR of the existence of the hazardous substances, and GRANTEE will not further disturb such hazardous substances without the written permission of the GRANTOR.
>
> B. GRANTEE, its successors and assigns, as consideration for the conveyance of the Property, agree to release GRANTOR from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the

delivery and acceptance of this Deed, where such substance or product was placed on the Property by the GRANTEE, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the GRANTOR's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the GRANTOR's indemnification obligations under applicable laws."

c. Lessee agrees to comply with the provisions of this subsection and will be responsible for all claims, damages, remediation expenses, fines and penalties related to violation of Hazardous Materials Laws, as defined in Section 3.02, and/or violation or breach of the restrictions and covenants set forth in this Section 15 after the commencement date of this Lease, including but not limited to such claims, damages, remediation expenses, fines and penalties related to the release, disturbance, spreading, extension, expansion or exacerbation of a release or substance by Lessee or those on the Premises with the consent or for the benefit of Lessee.

§ 15.16. **Reservation of Rights.** Landlord reserves the right to include the Premises including the easement locations, if any, together with other adjoining property owned by Landlord in a subdivision plat and subject the property described in said platted subdivision to utility easements and common restrictive covenants; provided, however, that said restrictive covenants and easements shall not interfere unreasonably with Tenant's use and related uses. It shall not be necessary or required that Tenant join in the execution of any such plat dedication or declaration of restrictive covenants and easements.

§ 15.17. **Common Area Charges.** Tenant acknowledges and agrees that it shall be responsible for and pay its proportionate share of the "TexAmericas Center-East common area charges" based upon the square footage of the Premises as a percentage of the total area of the TexAmericas Center-East development area (excluding the "common areas"). The "common areas" are those areas of TexAmericas Center-East used by and/or for the benefit of all property owners or tenants within TexAmericas Center-East, including but not limited to parks, recreational facilities, walkways, roadways and public parking areas. "Common area charges" are those property taxes, user charges, payments in lieu of taxes, maintenance, improvement, and betterment charges, and other local, county, TexAmericas Center, or other governmental assessments on or against the Commerce Park common areas. The common area charges, other than taxes, shall not exceed ten cents ($0.10) per $100.00 valuation of the Premises based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made. Landlord shall notify Tenant of the amount of the assessment, and Tenant shall pay said assessment within thirty (30) days.

§ 15.18. **License for Access to Premises.** Landlord grants Tenant a license to use the roadways of Landlord for access to and from the Premises, said roadways being identified as follows (select only one by placing an X in the applicable option):

_____ All roadways including paved and unpaved roads;
_____ Only the paved roadways; or
__X__ The following specific streets:

Houston	Cass Street	Cherry Street
Montague Street	Oak Street	Beech Street
Cypress Street	Alder Circle	Huckleberry Street

This is a non-exclusive license to use said roadways which shall terminate upon the termination of this lease.

§ 15.19. **Advertising and Promotions Rights**. Tenant, by entering into this Lease Agreement, authorizes Landlord to use in its advertising and promotion of TexAmericas Center and its properties the fact that Tenant has leased property from Landlord including but not limited to photographs of the leased premises, Tenant signage, and vehicles, and Tenant employees; inclusion of Tenant's name and any "doing business as" names in Landlord's client/customer listings; and quotations of Tenant and Tenant's representatives. This authorized use includes all forms of media including but not limited to print, radio and other audio media, television and other video media, internet and other telecommunications media, and social media such as Facebook, Twitter, LinkedIn and others. This section constitutes a license from Tenant to Landlord to use for the limited purposes set forth herein any and all trademarks, trade names and related intellectual property generally available and visible to the general public.

§ 15.20. **Annual Reports.** Tenant agrees to annually, on or about, June 30 of each year during the Term and all extensions of the Term, and at such other times as Landlord may request, to provide to Landlord a report setting forth the following information for the prior calendar year:

1. Maximum number of Full Time Equivalent jobs;
2. Minimum number of Full Time Equivalent jobs;
3. Total Payroll for jobs on the Premises;
4. An employee census by position (no names);
5. Number of employees making above the average wage for Bowie County as determined by the Texas Workforce Commission;
6. Average wage for all employees;
7. Such other information as Landlord may reasonably request to support its redevelopment efforts, including but not limited to information required by authorities issuing grants for which Landlord may apply.

§ 15.21. **Guarantee.** Guarantor agrees to guarantee payment and performance by Tenant of its obligations under this Lease. Guarantor agrees to pay and perform the obligations of Tenant within 15 days of receipt of notice from Landlord of failure of Tenant to pay or perform under the Lease. This is an unconditional guaranty of payment and performance, not of collection, and it is an agreement of guaranty, not of suretyship. Guarantor waives all requirements of law, if any, that any collection efforts be made against Tenant or that any action be commenced against Tenant before resorting to this guaranty. Guarantor acknowledges but that for Guarantor providing this guaranty, Landlord would not have entered into this Lease with Tenant.

§ 15.22 **Governmental Immunity.** By execution of this Agreement, TexAmericas Center does not waive its governmental immunity except to the extent it is contractually liable for

damages for failure to perform its responsibilities under this Agreement. This limited waiver of governmental immunity shall not extend to, or for the benefit of, any third parties.

§ 15.23. **Option to Purchase.** Provided Tenant is not in default under the terms of this Lease, Tenant shall have an option to purchase the leased premises and adjoining property upon the terms stated in the Option to Purchase attached hereto as Exhibit B.

ARTICLE 16. LESSEE AFFIRMATIONS

1. **FALSE STATEMENTS.** Lessee represents and warrants that all statements and information prepared and submitted in response to the solicitation are current, complete, true and accurate. Signing the solicitation with a false statement is a material breach of this Purchase Order and shall void the submitted response or any resulting Purchase Orders, and may result in removal of the Lessee from the Centralized Master Bidder List.

2. (Intentionally Deleted)

3. (Intentionally Deleted)

4. (Intentionally Deleted)

5. (Intentionally Deleted)

6. (Intentionally Deleted)

7. **PROHIBITION AGAINST BOYCOTTING ISRAEL.** Pursuant to Section 2271.002 of the Texas Government Code, Lessee certifies that either (i) it meets an exemption criteria under Section 2271.002; or (ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. Lessee shall state any facts that make it exempt from the boycott certification in its Response.

8. **PROHIBITION AGAINST CONTRACTING WITH COMPANIES ENGAGED IN BUSINESS WITH IRAN, SUDAN, OR FOREIGN TERRORIST ORGANIZATIONS.** In accordance with Section 2252.152 of the Texas Government Code, TFC is prohibited from entering into a governmental contract (as defined in Texas Government Code Section 2252.151(3)) with a company that is identified on a list prepared and maintained under Texas Government Code Section 806.051, 807,051, or 2252.153. If Lessee is on the above referenced list the Contract will be considered void or voidable and TFC will not be responsible to pay Lessee for any work performed.

9. **EXCLUDED PARTIES.** Lessee certifies that it is not listed in the prohibited vendors list authorized by Executive Order No. 13224, "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism", published by the United States Department of the Treasury, Office of Foreign Assets Control.

10. **SUSPENSION AND DEBARMENT.** Lessee certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public

Accounts and the System for Award Management (SAM) maintained by the General Services Administration.

11. **PROHIBITION AGAINST ENERGY COMPANY BOYCOTTS.** Pursuant to Texas Government Code Chapter 2274, Lessee certifies that either (1) it meets an exemption criteria under said Chapter; or (2) it does not boycott energy companies and will not boycott energy companies during the term of this contract.

12. **PROHIBITION AGAINST DISCRIMINATION AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS.** Pursuant to Texas Government Code Chapter 2274, Lessee certifies that (1) it meets an exemption criteria under said Chapter, or (2) it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association, and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

13. **PROHIBITION AGAINST CONTRACTING WITH CERTAIN FOREIGN ENTITIES RELATING TO CRITICAL INFRASTRUCTURE.** Pursuant to the provision of Chapter 113 of the Texas Business and Commerce Code, Lessee certifies that (1) this contract does not relate to critical infrastructure, or if it does relate to critical infrastructure, (2) it is not a company owned by or the majority stock or other ownership interest of the Company is held or controlled by (a) individuals who are citizens of China, Iran, North Korea, Russia or other countries designated by the Governor of Texas, or (b) a company or other entity including a governmental entity that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or other country designated by the Governor of the State of Texas.

The undersigned Landlord and Tenant execute this agreement on the ___day of _____, 2022.

LANDLORD
TEXAMERICAS CENTER

By: _____

Name: Scott Norton
Title: Executive Director, CEO

TENANT
EnviroSafe Demil, LLC

By: _____

Name: Thomas Ogden
Title: CEO

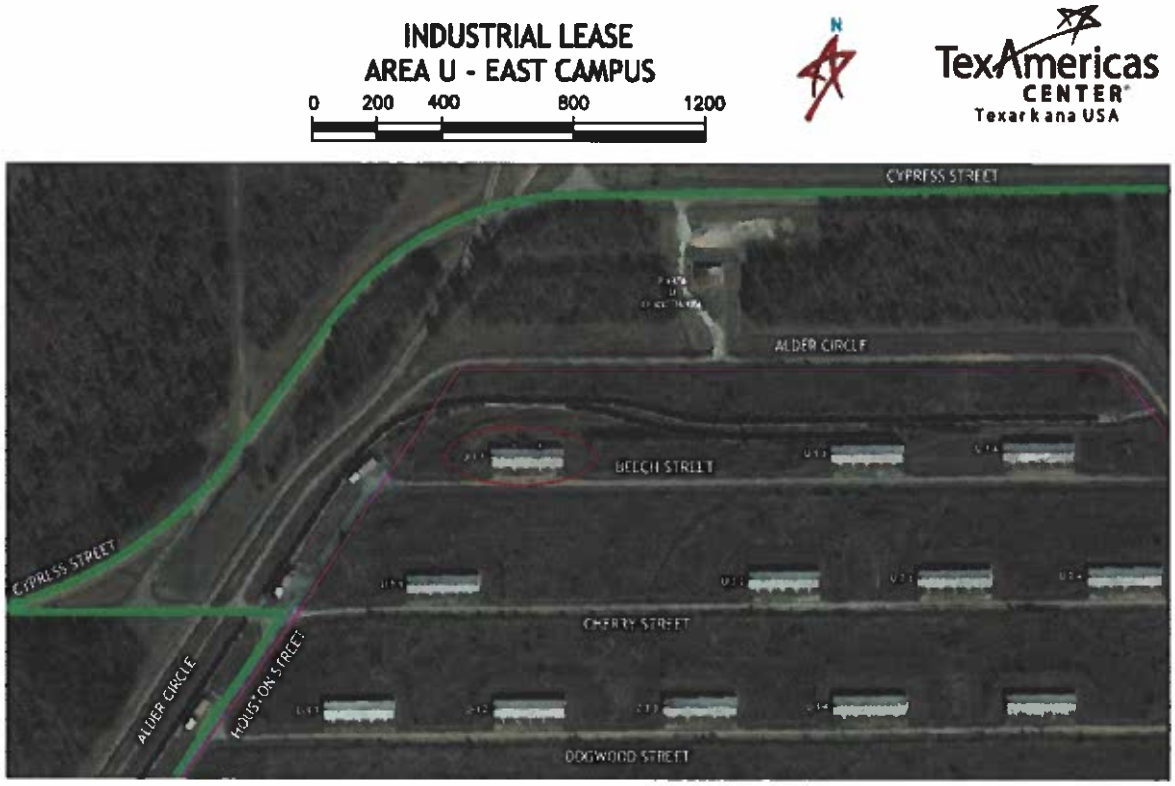
GUARANTOR

By: N/A

Name: N/A
Title: N/A

EXHIBIT "A"

PREMISES DESCRIPTION



The Premises are a portion of the Property conveyed by the United States of America to Red River Redevelopment Authority by that certain Deed Without Warranty dated September 1, 2010, recorded in Volume 5898, Page 1 of the Real Proper

ATTACHMENT A.4

LEASE INFORMATION

EARTH COVERED MAGAZINES (ECMs)

INDUSTRIAL LEASE

TAC East Holdings Company No. 1
A Texas Non-Profit Organization

LEASE SUMMARY

Landlord: TAC EAST HOLDINGS COMPANY NO. 1
107 Chapel Lane
New Boston, Texas 75570

Tenant: EnviroSafe Demil
12763 Lovelock Hwy.
Fallon, Nevada 89406, USA

Guarantor: N/A
N/A
N/A

Premises Leased Address: Two Igloo/Bunkers/Magazines at 1,648 sf each located at # 10 Nacogdoches Street and # 20 Nacogdoches Street in Area V, in Hooks, Texas, together with the safety arc areas as depicted upon Exhibit "A" attached hereto. This lease agreement is to include the option to expand into up to two (2) additional bunkers on the same row, identified on Exhibit A as #30, and #40 Nacogdoches. The monthly rent for the extended term of this Lease shall be $985.58 per month increasing annually by 3%.

Primary Term: Six (6) years; From the First (1st) day of October 2022 to the Thirtieth (30th) day of September 2028.

Option Terms: Four (4) option(s) of One (1) year each, extending to September 30, 2032

Base Rent: Year One $985.58 per month from October 1, 2022, to September 30, 2023, for the lease of two (2) bunkers.

Year Two $1,015.15 per month from October 1, 2023, to September 30, 2024, for the lease of two (2) bunkers.

Year Three $1,045.60 per month from October 1, 2024, to September 30, 2025, for the lease of two (2) bunkers.

Year Four $1,076.97 per month from October 1, 2025, to September 30, 2026, for the lease of two (2) bunkers.

Year Five $1,109.28 per month from October 1, 2026, to September 30, 2027, for the lease of two (2) bunkers.

Year Six $1,142.56 per month from October 1, 2027, to September 30, 2028, for the lease of two (2) bunkers.

Option Rent:

Option Year 1 $1,176.84 per month from October 1, 2028, to September 30, 2029, for the lease of two (2) bunkers.

Option Year 2 $1,212.14 per month from October 1, 2029, to September 30, 2030, for the lease of two (2) bunkers.

Option Year 3 $1,248.51 per month from October 1, 2030, to September 30, 2031, for the lease of two (2) bunkers.

Option Year 4 $1,285.96 per month from October 1, 2031, to September 30, 2032, for the lease of two (2) bunkers.

Security Deposit: $1,500.00

Ad Valorem Tax /PILOT Deposit: $2,000.00

Table of Contents

GRANT OF LEASE

1. Lease of Premises
2. Reservation of Timber Rights
3. Reservation of Right to Lease Areas outside Igloos

ARTICLE 1 . TERM

§ 1.01 Term of Lease

§ 1.02 Option to Extend Term

§ 1.03 Holdover

ARTICLE 2 . RENT/SECURITY and AD VALOREM TAX DEPOSITS

§ 2.01 Base Rent

§ 2.02 Taxes and Assessments as Additional Rent; Payments in Lieu of Taxes

§ 2.03. Late Charges

§ 2.04. Security-Ad Valorem Tax/PILOT Deposits; Deposit Processing Fee

ARTICLE 3 . USE OF PREMISES

§ 3.01 Tenant's Warranty Regarding Use

§ 3.02 Compliance With Laws-Safety Requirements

§ 3.03 Rights of Inspection

§ 3.04 Environmental Reporting Requirements

§ 3.05 Condition of Premises

§ 3.06 Delivery of Premises at End of Term

§ 3.07 Blast Arcs

§ 3.08 Information to Be Provided to Landlord

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01 Repairs and Maintenance by Tenant

§ 4.02 Tenant's Failure to Repair or Maintain

§ 4.03 Allocation of Environmental Cleanup Costs

§ 4.04 Repairs and Maintenance by Landlord

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01 Utility Charges

§ 5.02 Meters and Pretreatment Requirements

§ 5.03 Garbage Removal

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01 Consent of Landlord

§ 6.02 Property of Landlord

§ 6.03 Alterations Required by Accessibility Laws

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01 Trade Fixtures

§ 7.02 Signs

ARTICLE 8 . MECHANIC'S LIEN

ARTICLE 9 . INSURANCE AND INDEMNITY

§ 9.01 Tenant's Property Insurance

§ 9.02 Landlord's Property Insurance

§ 9.03 Tenant's Liability Insurance

§ 9.04 Remedy for Failure to Provide Insurance

§ 9.05 Tenant's Environmental Indemnity

§ 9.06 Hold-Harmless Clause

§ 9.07 Release of Claims/Subrogation

§ 9.08 Pollution Legal Liability Insurance

§ 9.09 Explosives Insurance Requirement

§ 9.10 Performance Bond

ARTICLE 10 . DAMAGE OR DESTRUCTION

§ 10.01 Notice to Landlord

§ 10.02 Destruction

§ 10.03 Clean-up of Premises

§ 10.04 Replacement Bunkers

ARTICLE 11 . CONDEMNATION

§ 11.01 Total Condemnation

§ 11.02 Partial Condemnation

§ 11.03 Replacement Bunkers

§ 11.04 Condemnation Award

ARTICLE 12 . DEFAULT

§ 12.01 Tenant's Default

§ 12.02 Landlord's Lien

§ 12.03 Landlord's Default

§ 12.04 Cumulative Remedies

§ 12.05 Waiver of Breach

§ 12.06 Indemnities in Event of Termination

§ 12.07 Limitation of Landlord's Liability

ARTICLE 13 . INSPECTION BY LANDLORD

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01 Assignment and Subletting by Tenant

§ 14.02 Assignment by Landlord

ARTICLE 15 . MISCELLANEOUS

§ 15.01 Notices and Addresses

§ 15.02 Parties Bound

§ 15.03 Texas Law to Apply

§ 15.04 Legal Construction

§ 15.05 Prior Agreements Superseded

§ 15.06 Amendment

§ 15.07 Rights and Remedies Cumulative

§ 15.08 Attorney's Fees and Costs

§ 15.09 Force Majeure

§ 15.10 Time of Essence

§ 15.11 Alternate Dispute Resolution

§ 15.12 Limitation of Warranties

§ 15.13 Abandoned Property

§ 15.14 Municipal and Emergency Services

§ 15.15 Army Imposed Restrictions

§ 15.16 Reservation of Rights

§ 15.17 Common Area Charges

§ 15.18 Advertising and Promotion Rights

§ 15.19 Annual Reports

§ 15.20 Guarantee

§ 15.21 Governmental Immunity

§ 15.22 Option to Purchase – Intentionally Deleted

§ 15.23 Expansion Option

ARTICLE 16. LESSEE AFFIRMATIONS
Execution

Exhibit "A" – Premises Description
Exhibit "B" – Option to Purchase - Intentionally Deleted

BUNKER LEASE
(EAST CAMPUS)

This Lease is entered into between TAC EAST HOLDINGS COMPANY NO. 1 ("Landlord"), a political subdivision of the State of Texas, and EnviroSafe Demil, LLC ("Tenant"),a Nevada Limited Liability Company.

GRANT OF LEASE

1. In consideration of the mutual covenants and agreements of this lease, and other good and valuable consideration, Landlord demises and leases to Tenant, and Tenant leases from Landlord, the premises situated at Area V, in Hooks, Bowie County, Texas, consisting of igloo storage bunker numbered 10 on Nacogdoches Street, together with the safety arc areas as described on Exhibit A attached to this lease, and made a part of this lease for all purposes (collectively referred to as "the premises" or "the leased premises" in this lease).

2. Landlord reserves the right to harvest any and/or all timber located upon the leased premises together with the right of ingress and egress to and from the leased premises for said harvesting by Landlord and/or its contractors.

3. Landlord reserves the right to lease to third parties, areas within the Premises which are located more than fifty (50) feet from the base perimeter of each leased igloo storage bunker for passive uses including but not limited to solar panels and related accessories and power lines. Said passive uses shall not include residential or other structures capable of habitation by human beings.

ARTICLE 1 . TERM

§ 1.01. **Term of Lease.** The term of this lease is Six (6) years, beginning on October 1, 2022, and ending on September 30, 2028, unless terminated sooner as provided in this lease.

§ 1.02. **Option to Extend Term and Expand.** Tenant may extend the term of this lease beyond the expiration date provided in § 1.01 on the following conditions:

a. Tenant may, if it is not in default either on the date required for the notice or on the date such extension commences, extend the lease term for Four (4) additional periods of One (1) year(s) each. The extended term will begin on the day following the expiration date of the lease term specified in § 1.01, or on the day following the expiration date of the immediately preceding extended term, as applicable. If, at the date the original term or any extended term expires, Tenant is in default beyond any grace period provided in this lease in performing any of the terms of this lease, the remaining option or options are void. All of the terms and covenants of this lease apply to all extended lease terms except for the rent which shall be as set forth in paragraph 2.01.

b. Tenant may exercise each option to extend this lease by giving Landlord notice of its intention to do so not later than six (6) months before the then current lease term expires, in the case of the initial option to extend, or the extended lease term, in the case of successive options to extend. Notice of an intention to exercise an option under this lease must, to be effective, be sent by mail or fax to Landlord at the address provided in § 15.01 and must be postmarked no later than the latest date provided in this section for Tenant's exercising the option.

§ 1.03. **Holdover.** If Tenant holds over and continues in possession of the premises after the lease term (or any extension) expires, other than as provided in § 1.02, Tenant will be considered to be occupying the premises on a month-to-month tenancy, subject to all the terms of this lease. Landlord may terminate the tenancy upon ten (10) days written notice to Tenant.

ARTICLE 2 . RENT/SECURITY DEPOSIT AND AD VALOREM TAX/PILOT DEPOSITS

§ 2.01. **Base Rent.**
a. Tenant will pay Landlord $ 985.58 per month for two (2) 1,648 square foot bunker ($3.07 per square foot of bunker space annually and $245.97 per acre of blast arc space annually) on or before the first day of each month as base rent for the next month. Rent for any fractional month at the beginning or end of the lease term will be prorated on a per-day basis.
b. Tenant will pay this base rent to Landlord at Landlord's office, located at 107 Chapel Lane, New Boston, Texas 75570, or at such other location or locations that Landlord may from time to time designate by written notice to Tenant.
c. The base rent will increase for each extended lease term so that the base rent during the first extended term will be $1,015.15; the base rent during the second extended term will be $1,045.60, and the base rent during the third extended term will be $1,076.97. the base rent during the fourth extended term will be $1,109.28; and the base rent during the fifth extended term will be $1,142.56.
(alt)
c. The base rent will increase on each anniversary of the Lease Commencement Date by three percent (3.0%) of the rent amount payable during the last month prior to the anniversary date.

§ 2.02. **Taxes and Assessments as Additional Rent; Payments in Lieu of Taxes.**

a. In addition to the base rent specified in § 2.01, Tenant will pay in full all real-property taxes, special assessments, and governmental charges of any kind imposed on the premises or leasehold interest in the Premises commencing on the first day of the lease term and continuing through the end of the calendar year in which the term ends, including any special assessments imposed on or against the premises for constructing or improving public works. This additional rent is payable directly to the entity imposing the tax, assessment, or charge at least 30 days before the date payment is due. Tenant will provide Landlord with a receipt or other evidence of payment for each tax, assessment, or charge paid as soon as a receipt or other evidence is available to Tenant, but not later than the date payment is due.

b. Tenant may, at its own expense, contest any tax or assessment for which it is responsible under subparagraph a. Except as provided in subparagraph c, Tenant need not pay the tax, assessment, or charge while the contest is pending. Except as provided in subparagraph c, Tenant may prevent Landlord from paying any tax, assessment, or charge that Tenant is contesting under this subparagraph, pending resolution of the contest, by depositing with Landlord the full amount of the tax or assessment, plus the

amount of any penalty that might be imposed for failing to make timely payment and one year of interest at the rate imposed by the entity levying the tax or assessment. When the contest is resolved, Tenant may use the money deposited with Landlord to pay any tax or assessment, plus any penalty or interest, due under the final resolution and keep any balance of the deposit. If the deposit is insufficient to pay these amounts, Tenant must immediately pay the balance due to the entity imposing the tax, assessment, or charge.

c. Notwithstanding subparagraph b, Landlord may pay, or require Tenant to pay, any tax, assessment, or charge for which Tenant is responsible under subparagraph a, pending resolution of Tenant's contest of the tax, assessment, or charge, if payment is demanded by a holder of a mortgage on the premises or if failing to pay will subject all or part of the premises to forfeiture or loss.

d. Tenant Payment in Lieu of Taxes (PILOT). If Tenant's leasehold interest in the Premises is or hereafter becomes exempt from real property taxes, Tenant shall pay to Landlord annually a payment in lieu of taxes (PILOT) in an amount as agreed by Landlord and Tenant; provided, however, that said PILOT shall not exceed the amount that Tenant would be required to pay in real property taxes if the leasehold interest were not exempt. If Landlord and Tenant are not able to agree upon the amount of the PILOT within ninety (90) days after the leasehold interest becomes exempt from taxes, the amount of the PILOT shall be an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. Landlord and Tenant shall document the agreement regarding the PILOT as an amendment to this Lease Agreement. The agreement may be for a single year, or multiple years, and may, or may not, provide for an adjustment of the PILOT periodically. If at any time the PILOT agreement of the parties lapses, expires or is terminated pursuant to its terms, and the leasehold interest is exempt from real property taxes, Tenant shall pay to Landlord annually a PILOT in an amount equal to ninety percent (90%) of what the real property taxes would be if the leasehold interest were not exempt. PILOT payments shall be payable to Landlord on or before January 31 of each year.

§2.03. **Late Charges.** Tenant shall pay a late charge of five percent (5%) of any rent not received by Landlord by the tenth day of the month in which said rent is due.

§2.04. **Security and Ad Valorem Tax/PILOT Deposits; Deposit Processing Fee.**

A. Security Deposit. Upon execution of this Lease, Tenant shall deposit the sum of $ 1,500.00 with Landlord as a deposit. Said deposit shall not accrue interest. Landlord may use the deposit to pay arrears of rent, to repair any damage or injury to the Premises, or to pay any expense or liability incurred by Landlord as a result of any default by Tenant under this Lease including but not limited to payment of ad valorem taxes upon the premises or the leasehold interest in the premises. If Landlord uses the deposit, or any portion thereof as authorized above, Tenant shall restore the deposit to its original amount within ten (10) days after notice from Landlord. Failure to restore the deposit to its original amount within the required time shall constitute a default under the Lease. Within 30 days after Tenant surrenders the Premises, or completion of repairs or replacement of damaged or destroyed property, whichever is later, Landlord shall return to Tenant any remaining portion of the deposit less the Processing Fee provided in Subsection C. below, after any lawful deductions, provided Tenant has given to Landlord an address specifically for that purpose. IT IS SPECIFICALLY PROVIDED, HOWEVER, THAT TENANT SHALL NOT BE ENTITLED TO ANY PORTION OF THE SECURITY DEPOSIT AS A REFUND UNLESS TENANT GIVES LANDLORD SIXTY (60) DAYS NOTICE OF SURRENDERING THE PREMISES.

B. Ad Valorem Tax/PILOT Deposit. Upon execution of this Lease Tenant shall deposit the sum of $2,000.00 with Landlord as an Ad Valorem Tax/PILOT Deposit. Said deposit shall not accrue interest. Landlord may upon expiration or termination of this Lease use the deposit to pay the taxes actually due, or hold for payment of, estimated ad valorem taxes due or to become due upon the leased premises and for which Tenant is responsible under the Terms of this Lease. Provided Tenant pays all ad valorem taxes for which Tenant is responsible under this Lease, the deposit shall be refunded to Tenant at the address Tenant has given to Landlord for this specific purpose. If taxes have not been assessed and levied for the year in which this Lease expires or is terminated, Landlord may hold the deposit until said taxes have been determined; and, if Tenant does not pay said taxes at least 30 days before delinquency, Landlord may apply the deposit to the taxes due. Nothing in this subsection shall relieve Tenant of its obligation to pay ad valorem taxes upon the leased premises prior to delinquency as provided elsewhere in this Lease. In the event the Premises are exempt from real property taxes, the Ad Valorem/PILOT Deposit may be applied to any deficiency or default in payment of the PILOT as provided for in Section 2.02.d of this Lease.

C. Processing Fee. Landlord shall be and is hereby entitled and authorized to withhold and pay to Landlord a Processing Fee of $100.00 from the refund by Landlord of the Security and/or Ad Valorem Tax Deposits for the purpose of defraying Landlord's lease administration expense, including but not limited to review of documents, tracking payment of the taxes, utilities and miscellaneous fees, coordination processing, and payment of security and Ad Valorem Tax deposits refunds and related expenses.

ARTICLE 3 . USE OF PREMISES

§ 3.01. **Tenant's Warranty Regarding Use.** Tenant represents and warrants to Landlord that Tenant intends to use the premises for storage of ammunition, munitions, equipment, and any related items, and that Tenant's use of the property is restricted to those purposes specified in this section unless Tenant obtains Landlord's prior written consent to any change in use. Before the lease term begins, Tenant must give Landlord an affidavit of an officer of Tenant, referred to as the "Officer's Affidavit," setting forth a detailed description of the operations that Tenant will conduct on the premises and stating any applicable permit numbers. The Officer's Affidavit must be organized and prepared in a narrative form, including a description and quantification of all hazardous materials to be generated, manufactured, refined, transported, treated, stored, handled, or disposed of on the premises. After the lease term begins, Tenant must notify Landlord as to any changes in Tenant's operation or use or generation of hazardous materials by way of a supplemental Officer's Affidavit. Tenant must also supplement and update the Officer's Affidavit on each anniversary of the commencement of the lease term. Tenant may not begin or alter any operations on the property before (a) obtaining all required operating and discharge permits or approvals, including but not limited to air pollution control permits and pollution discharge elimination system permits, from all governmental or public authorities having jurisdiction over the Tenant's operations or the property, and (b) providing copies of such permits and approvals to the Landlord.

§ 3.02. **Compliance With Laws-Safety Requirements.**

a. Tenant may not use, or permit using, the premises in any manner that results in waste of premises or constitutes a nuisance or for any illegal purpose. Tenant, at its own expense, will comply, and will cause its officers, employees, agents, and invitees to comply, with all applicable laws, ordinances, and governmental rules and regulations concerning the use of the premises, including Hazardous Materials

Laws, fire and safety regulations and explosives regulations, including but not limited to Title 27, Chapter 11, Subchapter C, Part 555 of the Code of Federal Regulations regarding commerce in explosives.

b. Tenant, at its sole cost, must comply with all Hazardous Materials Laws in connection with Tenant's use of the premises.

c. "Hazardous Materials" means any substance, material, or waste that is or becomes regulated by any local governmental agency, the State of Texas, or the federal government, including, but not limited to, any material or substance that is upon commencement of the term or at any time during the term, (1) designated as a "hazardous substance" pursuant to Section 311 of the Clean Water Act, 33 U.S.C. § 1251 et seq., or listed pursuant to Section 307 of the Clean Water Act, 33 U.S.C. § 1317, (2) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq., (3) defined as a "hazardous waste" pursuant to Section 1004 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., (4) petroleum, (5) asbestos, and (6) polychlorinated biphenyls.

d. "Hazardous Materials Laws" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type relating to the storage, handling, use, or disposal of any Hazardous Materials, the contamination of the environment, or any removal of such contamination, including, without limitation, those statutes referred to in subparagraph c.

e. Tenant shall coordinate with Landlord and the U.S. Army regarding environmental issues related to the leased premises as provided in Section 15.15.

f. Tenant shall obtain any and all permits and/or licenses required to conduct its business on the Premises and provide a copy of same to Landlord.

g. Tenant shall provide a monthly report to Landlord of all materials manufactured and/or stored in the Premises which constitute hazardous materials, explosives, petrochemicals, alcohols and any other materials which constitute a danger due to their fire, explosive or environmental hazard.

h. Tenant shall clearly indicate on the outside of each igloo/warehouse the type of materials manufactured or stored therein.

i. Tenant shall furnish, install, and maintain during the term such safety devices, such as fire suppression systems, spark arresters, lightning rods and static electricity suppressors, as are required or are customarily installed in facilities manufacturing or storing explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosives or fire.

j. Tenant shall construct a secure perimeter fence around the Leased Premises sufficient to deter persons not affiliated with Tenant from gaining access to storage facilities in which explosives, hazardous materials, petrochemicals, alcohols and other materials constituting a danger due to explosions or fire are kept or stored.

k. Tenant shall not store any hazardous materials, explosives, explosive constituents, petro chemicals, alcohols, or any other materials which constitute a danger due to their fire, explosive or environmental hazard on the Premises other than inside the igloo bunkers secured by a locked door.

§ 3.03. **Rights of Inspection.** Tenant must permit Landlord and Landlord's agents, servants, and employees, including but not limited to legal counsel and environmental consultants and engineers, access to the premises upon at least 24 hours' prior written notice for the purpose of conducting environmental inspections and sampling during regular business hours, and during other hours either by agreement of the parties or in the event of an environmental emergency. Tenant may not restrict access to any part of the premises, and Tenant may not impose any conditions to access. If Landlord's environmental inspection includes sampling and testing of the premises, Landlord must use its best efforts to avoid interfering with Tenant's use of the premises, and on completion of sampling and testing must repair and restore the affected areas of the premises as made necessary by any sampling and testing.

§ 3.04. **Environmental Reporting Requirements.**

a. Tenant must promptly supply Landlord with copies of all notices, reports, correspondence, and submissions made by Tenant to the Texas Commission on Environmental Quality, the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or any other local, state, or federal authority that requires submission of any information concerning environmental matters or hazardous materials pursuant to hazardous materials laws. Tenant shall provide to Landlord copies of all permits and/or licenses issued to Tenant for operation of its business on the leased premises and all modifications, amendments and other changes within 30 days after issuance of same.

b. Tenant must promptly notify Landlord in advance of any scheduled meeting between Tenant and any of the agencies specified in subparagraph a.

c. Tenant must promptly notify Landlord as to any liens threatened or attached against the premises pursuant to any environmental law. If an environmental lien is filed against the premises, Tenant must, within 30 days from the date on which the lien is placed against the premises, and at any rate before the date on which any governmental authority begins proceedings to sell the premises pursuant to a lien, either: (1) pay the claim and remove the lien from the premises; or (2) furnish either (a) a bond satisfactory to the Landlord in the amount of the claim on which the lien is based, or (b) other security satisfactory to the Landlord in an amount sufficient to discharge the claim on which the lien is based.

§ 3.05. **Condition of Premises.** Tenant accepts the Premises in their present condition "AS IS" and acknowledges that the Premises are, or will be modified or repaired by Tenant to be, suitable for Tenant's intended use.

§ 3.06. **Delivery of Premises at End of Term.** Tenant shall remove all personal property, Tenant owned equipment and stored items from the leased premises at the end of the term or extended term of this Lease. The leased premises shall be returned to Landlord in clean, empty and good condition reasonable wear and tear excepted. Under no circumstances shall stored items be left on or in the premises.

§ 3.07. **Blast Arcs.** Tenant shall not use the leased premises for any purpose or in a way that allows or requires that blast safety arcs extend outside the leased premises or encroach upon or overlap on or across the adjoining roadways known as Cypress Street, Maple Street and Freedom Way.

§ 3.08. **Information to Be Provided to Landlord.** On or before the tenth day of each month during the Lease Term, Tenant shall provide to Landlord a report indicting the type and quantity of each explosive material stored in or one of the leased premises (including individual bunkers/igloos) as of the first day of said month.

ARTICLE 4 . REPAIRS AND MAINTENANCE

§ 4.01. **Repairs and Maintenance by Tenant.** Tenant will except as provided in paragraph 4.04, throughout the lease term and any extensions of it, at its own expense and risk, maintain the premises and all improvements on them in good order and condition, including but not limited to making all repairs and replacements necessary to keep the premises and improvements in that condition. All maintenance, repairs, and replacements required by this section must be performed promptly when required.

§ 4.02. **Tenant's Failure to Repair or Maintain.** If Tenant fails to perform its obligation to repair, replace, or maintain, as set forth in § 4.01, within a reasonable time after notice from Landlord of the need for the repair, replacement, or maintenance, Landlord may enter the premises and make the repairs or replacements, or perform the maintenance, or have the repairs or replacements made or maintenance performed, at its own expense. On Landlord's notice to Tenant of the performance and cost of any maintenance, repairs, or replacements under this section, Tenant must immediately reimburse Landlord for any reasonable costs incurred by Landlord under this section, together with interest on the sum at the highest legal rate from the date of the notice until the date paid by Tenant to Landlord.

§ 4.03. **Allocation of Environmental Cleanup Costs.** Tenant is responsible only for the payment of that portion of any cleanup costs necessary for compliance with Hazardous Materials Laws that arise as a result of Tenant's discharge of hazardous materials on the premises during the Tenant's occupancy of the premises and/or as a result of Tenant's violation of any restrictive covenants relating to the Premises which are of Record in Bowie County, Texas. Landlord is responsible for ensuring that any other responsible party participate in the cleanup to the extent of its responsibility for a release.

§ 4.04. **Repairs and Maintenance by Landlord.** Landlord shall not be responsible for any repairs or maintenance of the Premises during the Term of the Lease.

ARTICLE 5 . UTILITIES AND GARBAGE REMOVAL

§ 5.01. **Utility Charges.** Tenant will pay all utility and connection charges for water, sewer, electricity, heat, gas, cable, fiber optic and telephone service used in and about the premises during the lease term. Tenant will pay the charges directly to the utility company or governmental agency furnishing the service before the charges are delinquent.

§ 5.02. **Meters and Pretreatment Requirements.** Tenant shall pay for the cost for individual meters for utility services and installation of them if individual meters to the Premises are not in place at the time of execution of this Lease. Tenant agrees to pretreat at its cost any waste streams which require pretreatment as determined by Landlord or the respective utility provider prior to discharge of such waste into the sanitary sewer system.

§ 5.03. **Garbage Removal.** Tenant will pay for all garbage removal from the premises during the lease term.

ARTICLE 6 . ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

§ 6.01. **Consent of Landlord.** Tenant may not make any alterations, additions, or improvements to the premises without Landlord's prior written consent. Landlord may not unreasonably withhold consent for nonstructural alterations, additions, or improvements.

§ 6.02. **Property of Landlord.** All alterations, additions, or improvements made by Tenant will become Landlord's property when the lease terminates. However, Landlord may, when the lease terminates, remove any alterations, additions, and improvements made by Tenant and any other property it placed in the premises, and charge Tenant the cost of removal plus interest which amount shall be paid within 30 days of Landlord's notice to Tenant of the amount due.

§ 6.03. **Alterations Required by Accessibility Laws.** If any alterations, additions, or improvements to the premises are mandated by legal requirements related to accessibility by persons with disabilities ("accessibility alterations"), Tenant is responsible for making them. This allocation of responsibility for compliance with such legal requirements is a material inducement for the parties to enter this lease.

ARTICLE 7 . TRADE FIXTURES AND SIGNS

§ 7.01. **Trade Fixtures.** Tenant may, at all times, erect or install shelves, bins, machinery, equipment, or other trade fixtures, in, on, or about the premises, if Tenant complies with all applicable governmental laws, ordinances, and regulations regarding the fixtures. Tenant may remove all trade fixtures when this lease terminates, if Tenant is not in default under the lease and the fixtures can be removed without structural damage to the building. Tenant must repair any damage to the premises caused by removing trade fixtures, and all the repairs must be completed before the lease terminates. Any trade fixtures not removed by Tenant when this lease terminates are considered abandoned by Tenant and will automatically become Landlord's property. If any trade fixture installed by Tenant is abandoned when the lease terminates, Tenant must pay Landlord any reasonable expense actually incurred by Landlord to remove the fixture from the premises, which amount shall be paid within 15 days of Landlord's notice to Tenant of the amount due.

§ 7.02. **Signs.** Tenant may erect signs on any portion of the premises, including but not limited to the exterior walls, subject to applicable laws, ordinances, and regulations, and after approval of the proposed signage by Landlord. Tenant must remove all signs when this lease terminates and repair any damage resulting from erecting or removing the signs.

ARTICLE 8 . MECHANIC'S LIEN

Tenant will not permit any mechanic's lien to be placed on the premises or improvements on the premises. Tenant will promptly pay any mechanic's lien that is filed on the premises or on improvements located on the premises. If default in payment of the lien continues for 20 days after Landlord's written notice to Tenant, Landlord may, at its option, pay the lien or any portion of it without inquiring into its validity. Any amounts Landlord pays to remove a mechanic's lien caused by Tenant to be filed against the premises or improvements on them, including expenses and interest, are due from Tenant to Landlord and must be repaid to Landlord immediately on rendition of notice, together with interest at eighteen (18) percent annually until repaid.

ARTICLE 9 . INSURANCE AND INDEMNITY; Performance Bond

§ 9.01. **Tenant's Property Insurance.** Tenant must, at its own expense during the lease term, maintain insurance on Tenant's personal property, furniture, fixtures and equipment in such amounts as Tenant deems necessary.

§ 9.02. **Landlord's Property Insurance.** Landlord may, at its discretion, and, at its expense, keep the bunkers on the Premises insured against loss or damage in an amount determined by Landlord in its sole discretion. Tenant will have no claim to any proceeds of Landlord's insurance policies.
§ 9.03. **Tenant's Liability Insurance.** Tenant, at its own expense, must provide and maintain in force during the lease term (a) a policy of commercial liability insurance with a single limit each occurrence of not less than $1,000,000.00 and general aggregate of not less than $2,000,000.00, and (b) a policy of Worker's Compensation Insurance as required by applicable law. This insurance is to be carried by one or more insurance companies authorized or admitted to transact business in Texas. The liability policy must cover Landlord as well as Tenant, for any liability for property damage or personal injury arising from Tenant's occupying or Landlord's owning the premises. The commercial liability insurance policy, and the Umbrella Liability Policy required below, shall specifically provide coverage for claims arising out of Tenants manufacture, storage, and transportation of explosives and highly flammable materials including but not limited to petrochemicals and derivatives thereof, alcohols and blended fuels. Tenant shall additionally carry an Umbrella Liability Policy in an amount of not less than $5,000,000.00 . Landlord shall be an additional insured under all liability insurance policies.

§ 9.04. **Remedy for Failure to Provide Insurance.** Tenant must furnish Landlord with certificates of all insurance required by this article. If Tenant does not provide the certificates when Landlord delivers possession to Tenant and within ten days prior to any renewal date, or if Tenant allows any insurance required under this article to lapse, Landlord may, at its option, take out and pay the premiums on the necessary insurance to comply with Tenant's obligations under this article. Landlord is entitled to reimbursement from Tenant for all amounts spent to procure and maintain the insurance, with interest at the rate of eighteen (18) percent annually from the date Tenant receives Landlord's notice of payment until reimbursement.

§ 9.05. **Tenant's Environmental Indemnity.** Tenant agrees to indemnify, defend, and hold harmless Landlord from and against all claims, liabilities, losses, damages, and costs, foreseen or unforeseen, including without limitation counsel, engineering, and other professional or expert fees, that Landlord may incur by reason of Tenant's action or inaction with regard to Tenant's obligations under Articles 3

and 4 of this lease. This section survives the expiration or earlier termination of this lease.

§ 9.06. **Hold-Harmless Clause.** Tenant will indemnify and hold Landlord harmless against any claims, demands, damages, costs, and expenses, including reasonable attorney's fees for defending claims and demands, arising from the conduct or management of Tenant's business on the premises or its use of them; from any breach by Tenant of any conditions of this lease; or from any act of negligence of Tenant, its agents, contractors, employees, subtenants, concessionaires, or licensees in or about the premises. If any action or proceeding is brought against Landlord by reason of any such claim, Tenant, on notice from Landlord, will defend the action or proceeding by counsel acceptable to Landlord.

§ 9.07. **Release of Claims/Subrogation.** Landlord and Tenant release each other from any claim, by subrogation or otherwise, for any damage to the Premises, the building, or personal property within the building, regardless of cause, including negligence of Landlord or Tenant, however, the release applies only to the extent it is permitted by law, the damage is covered by insurance proceeds, and the release does not adversely affect any insurance coverage. Landlord and Tenant will notify their insurance companies of the release set forth herein and will have the insurance policies, endorsed, if necessary, to prevent invalidation of the insurance coverage.

§ 9.08. **Pollution Legal Liability Insurance.** Tenant shall carry and provide during the term of this Lease Pollution Legal Liability insurance providing the following coverages:

a. On-site cleanup of new conditions arising after the commencement of this Lease triggered by first-party discovery or third-party claim
b. Third-party claims for on-site bodily injury, property damage or cleanup costs arising from new conditions arising after the commencement of this Lease;
c. Pollution conditions resulting from transported cargo (third-party carrier or owned vehicle) while on TAC properties or adjacent entrances or exits;
d. Coverage for punitive damages, fines and penalties, if insurable in this jurisdiction
The policy shall provide coverages of not less than $1,000,000.00 per loss and not less than $2,000,000.00 in the aggregate.
The deductible on the policy shall not be greater than $25,000.00 per occurrence.

§ 9.09. **Additional Explosives Insurance Requirement.** This Section 9.09 applies only if and when Landlord exercises its right to lease portions of the Premises to third parties as provided in Grant of Lease paragraph 3. In the event that Tenant manufactures, uses, stores, disassembles, transports, renders inert, or otherwise handles explosive materials, and/or highly flammable materials, including but not limited to petrochemicals, derivatives thereof, alcohols and blended fuels, in an igloo storage bunker, or on the Premises, Tenant shall provide liability insurance for personal injury and/or death and property damage arising from Tenant's occupancy and use of the Leased Premises specifically arising out of explosion and/or fire of the explosive and/or highly flammable materials. Said insurance coverage may be provided by an endorsement to its commercial liability policy as provided by Section 9.03 or by a specific Explosives Liability Policy. The policy must provide a single limit for each occurrence and general aggregate in amounts specified by Landlord. Tenant shall be entitled to a reduction of the rent in an amount mutually agreed by the parties.

§ 9.10. **Performance Bond.** Tenant is obligated pursuant to Section 3.06 of the agreement to leave the premises in clean, empty and good condition. All stored items must be removed from the premises at the end of the term or extended term of this lease. In the event Tenant fails to leave the premises in the required condition, Landlord has the right, but not the obligation, to remove and/or destroy any property left in or on the premises pursuant to Section 15.13 of this lease. To ensure that Landlord has the means and funds necessary to remove any property left on the leased premises by Tenant, Tenant shall provide prior to occupancy of the premises a Performance Bond to Landlord in the amount of not less than $500,000 to provide the funds necessary to remove any such property from the premises and restore the premises to a clean and empty condition.

ARTICLE 10 . DAMAGE OR DESTRUCTION OF PREMISES

§ 10.01. **Notice to Landlord.** If the premises, or any structures or improvements on them, are damaged or destroyed by fire, tornado, or other casualty, Tenant must immediately give Landlord written notice of the damage or destruction, including a general description of the damage and, as far as known to Tenant, the cause of the damage.

§ 10.02. **Destruction.** If an igloo bunker or bunkers are totally destroyed or partially damaged by fire, tornado, winds, explosions or other casualty, Landlord shall not be required to repair or rebuild the damaged or destroyed igloo bunker(s), and this lease will terminate as to the damaged or destroyed bunker(s) and the related safety arcs around said bunker(s). In such event, the rent will be reduced proportionately for the unexpired term of this lease, effective as of the date of written notification as provided in §10.01.

§ 10.03. **Clean-up of Premises.** If the damage or destruction of the bunker(s) is due to the negligence, gross negligence or intentional act of Tenant or any person in or about the leased premises with Tenant's express or implied consent, Tenant shall be responsible for all costs and expense to remove the damaged or destroyed bunker(s) and all debris and restore the surface of the ground to a smooth surface and revegetate the same. Tenant shall complete the required work within 180 days after receipt of notice from Landlord to commence the work.

§10.04. **Replacement Bunkers.** In the event of damage or destruction of a bunker as described in this Section 10, Landlord shall lease an equivalent number of bunkers to Tenant upon the same terms as this Lease for the remainder of the lease term, provided Landlord has such unoccupied and unleased bunkers available. If additional bunker(s) are not available, Tenant shall have the option to terminate this lease.

ARTICLE 11 . CONDEMNATION

§ 11.01. **Total Condemnation.** If, during the lease term or any extension or renewal of it, all of the premises are taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or are sold to the condemning authority under threat of condemnation, this lease will terminate, and the rent will be abated during the unexpired portion of this lease, effective as of the date the condemning authority takes the premises.

§11.02. **Partial Condemnation.** If one or more of the igloo bunkers under lease, but not all of said

bunkers under lease, are taken for any public or quasi-public use under any governmental law, ordinance, or regulation, or by right of eminent domain, or is sold to the condemning authority under threat of condemnation, this lease will terminate as to the bunkers and related safety arcs condemned or sold, and the rent shall be reduced proportionately for the unexpired term of this lease effective as of the date the condemning authority takes the premises.

§11.03. **Replacement Bunkers.** In the event of condemnation of one or more bunkers as described in this Section 11, Landlord shall lease an equivalent number of bunkers to Tenant upon the same terms as this lease for the remainder of the lease term provided Landlord has such unoccupied and unleased bunkers available. If replacement bunkers are not available, Tenant shall have the option to terminate this lease.

§ 11.04. **Condemnation Award**. Landlord is entitled to receive and retain the entire award in any condemnation proceedings, except for any portion attributable to trade fixtures, and/or relocation expenses, which Tenant is entitled to receive and retain. The termination of this lease will not affect the right to this award.

ARTICLE 12 . DEFAULT

§ 12.01. **Tenant's Default.** If Tenant allows the rent to be in arrears more than fifteen (15) days after its due date, or remains in default under any other condition of this lease for 30 days after written notice from Landlord, Landlord may, at its option, without notice to Tenant, terminate this lease, or, in the alternative, Landlord may reenter and take possession of the premises and remove all persons and property without being considered guilty of any manner of trespass and may (but is not required to) relet the premises (or any part of them) for all or any part of the remainder of the lease term, to a party satisfactory to Landlord and at the monthly rental as Landlord can secure with reasonable diligence. If Landlord cannot relet after reasonable efforts to do so or if the monthly rental is less than the rental Tenant was obligated to pay under this lease (or any renewal of it) plus the expense of reletting, then Tenant must pay Landlord the amount of the deficiency.

§ 12.02. **Landlord's Lien.** If Tenant defaults in paying rent or any other sum due from Tenant to Landlord under this lease, Landlord has a lien on all fixtures, chattels, or other property of any description belonging to Tenant that are placed in, or become a part of, the premises as security for rent due and to become due for the remainder of the current lease term and any other sum Tenant owes Landlord. This lien is not in lieu of, nor in any way affects, the statutory landlord's lien but is in addition to that lien, and Tenant grants Landlord a security interest in all of Tenant's property placed in or on the premises for purposes of this contractual lien. This does not prevent Tenant's selling any merchandise in the ordinary course of business free of such Landlord's lien. If Landlord exercises the option to terminate the leasehold, reenter, and relet the premises as provided in the preceding paragraph and gives Tenant reasonable notice of the intent to take possession and an opportunity for a hearing on the matter, Landlord may take possession of all of Tenant's property on the premises and sell it at public or private sale after giving Tenant reasonable notice of the time and place of any public sale or of the time after which any private sale is to be made, for cash or on credit, for the prices and terms that Landlord considers best, with or without having the property present at the sale. The proceeds of the sale will be applied first to the necessary and proper expense of removing, storing, and selling the property, then to the payment of any rent due or to become due under this lease; any balance will be paid to Tenant.

Tenant further grants Landlord a security interest in Tenant's personal property now or subsequently placed in or on the Premises. This Lease is a Security Agreement under the Texas Business and Commerce Code. Landlord may file a Financing Statement to perfect its Security Interest.

§ 12.03. **Landlord's Default.** If Landlord defaults in performing any term or covenant that Landlord must perform under this agreement, Tenant may, after not fewer than thirty (30) days' notice to Landlord, remedy the default by any necessary action and, in connection with the remedy, may pay expenses and employ counsel. Landlord must, on demand, pay Tenant all sums expended, or obligations incurred, by Tenant in connection with remedying Landlord's default. It is agreed, however, that if Landlord commences action within 30 days after receipt of notice to remedy any default and diligently pursue such action to conclusion, Tenant's rights under this section shall not apply.

§ 12.04. **Cumulative Remedies.** All Landlord's and Tenant's rights and remedies under this Article are cumulative, and none will exclude any other right or remedy provided by law or any other provision of this lease. All the consistent rights and remedies may be exercised and enforced concurrently and whenever occasion for their exercise arises.

§ 12.05. **Waiver of Breach.** All Landlord's or Tenant's waiving a breach of this lease by the other party does not constitute a continuing waiver or a waiver of any subsequent breach.

§ 12.06. **Indemnities in Event of Termination.** In the event that this Lease Agreement is terminated by either party as provided in this Agreement, and upon expiration of the Term, or extended term of this Lease Agreement, the Tenant's obligations to indemnify and hold harmless Landlord shall not terminate or expire and shall survive such termination and/or expiration and shall be fully binding upon Tenant.

§ 12.07. **Limitation of Landlord's Liability.** Notwithstanding anything to the contrary contained herein, no personal or individual liability of any kind or character whatsoever shall now or at any time hereafter attach to Landlord or its property other than leased premises for the payment of any amount payable under this Lease. The exclusive remedy of Tenant for the failure of Landlord to perform any of its obligations under this Lease shall be to proceed against the interest of Landlord in and to the leased premises.

ARTICLE 13 . INSPECTION BY LANDLORD

Tenant will permit Landlord and its agents, representatives, and employees to enter the premises upon at least 24 hours' prior written notice at all reasonable times for the purpose of inspection or any other purpose necessary to protect Landlord's interest in the premises or to perform Landlord's duties under this lease, or to show the Premises to prospective purchasers or future tenants.

ARTICLE 14 . ASSIGNMENT AND SUBLEASE

§ 14.01. **Assignment and Subletting by Tenant.**

a. Tenant may not sublet, assign, encumber, or otherwise transfer this lease, or any right or interest in it or in the premises or the improvements on them, without Landlord's written consent. If Tenant sublets, assigns, encumbers, or otherwise transfers its rights or interests in this lease or in the premises or the

improvements on them without Landlord's written consent, Landlord may, at its option, declare this lease terminated. If Landlord consents in writing to an assignment, sublease, or other transfer of all or any of Tenant's rights under this lease, the assignee or subtenant must assume all of Tenant's obligations under this lease, and Tenant will remain liable for every obligation under the lease. Landlord may not arbitrarily or unreasonably withhold consent under this section.

b. As a condition precedent to the Tenant's right to sublease the property or to assign this lease, the Tenant must, at the Tenant's own expense, fulfill all of the Tenant's environmental obligations under Article 3 of this lease. If this condition is not satisfied, the Landlord has the right to withhold consent to any proposed sublease or assignment.

§ 14.02. **Assignment by Landlord.** Landlord may assign or transfer any of its interests under this lease. On transfer, and on the transferee's assumption of its obligations, Landlord is relieved of its obligations under the lease.

ARTICLE 15 . MISCELLANEOUS

§ 15.01. **Notices and Addresses.** All notices required under this lease may be given by the following methods:

a. By certified mail, return receipt requested, addressed to the proper party, at the following addresses:

Landlord: TAC East Holdings Company No. 1
107 Chapel Lane
New Boston, Texas 75570
Attn: Executive Director

Tenant: EnviroSafe Demil, LLC
12763 Lovelock Hwy.
Fallon, Nevada 89406

Guarantor: N/A
N/A
N/A

b. By fax transmission, to the proper party, at the following fax numbers:

Landlord: 903-223-8742 Attn: Executive Director

Notices are effective when received. Either party may change the address or fax number to which notices are to be sent by sending written notice of the new address or number to the other party in accordance with the provisions of this section.

§ 15.02. **Parties Bound.** This agreement binds, and inures to the benefit of, the parties to the lease and their respective heirs, executors, administrators, legal representatives, successors, and assigns when this agreement permits.

§ 15.03. **Texas Law to Apply.** This agreement is to be construed under Texas law, and all obligations of the parties created by this lease are performable in Bowie County, Texas.

§ 15.04. **Legal Construction.** If one or more of the provisions contained in this agreement are for any reason held by a court of competent jurisdiction to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability will not affect any other provision of the agreement, which will be construed as if it had not included the invalid, illegal, or unenforceable provision.

§ 15.05. **Prior Agreements Superseded.** This agreement constitutes the parties' sole agreement and supersedes any prior understandings or written or oral agreements between the parties with respect to the subject matter.

§ 15.06. **Amendment.** No amendment, modification, or alteration of this agreement is binding unless in writing, dated subsequent to the date of this agreement, and duly executed by the parties.

§ 15.07. **Rights and Remedies Cumulative.** The rights and remedies provided by this lease are cumulative, and either party's using any right or remedy will not preclude or waive its right to use any other remedy. These rights and remedies are in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

§ 15.08. **Attorney's Fees and Costs.** If, as a result of either party's breaching this agreement, the other party employs an attorney to enforce its rights under this lease, then the breaching or defaulting party will pay the other party the reasonable attorney's fees and costs incurred to enforce the lease.

§ 15.09. **Force Majeure.** Neither Landlord nor Tenant is required to perform any term or covenant in this lease so long as performance is delayed or prevented by *force majeure,* which includes acts of God, strikes, lockouts, material or labor restrictions by any governmental authority, civil riot, floods, and any other cause not reasonably within Landlord's or Tenant's control and that Landlord or Tenant cannot, by exercising due diligence and paying money, prevent or overcome, in whole or part.

§ 15.10. **Time of Essence.** Time is of the essence of this agreement.

§ 15.11. **Alternate Dispute Resolution.** Landlord and Tenant shall submit in good faith to mediation any and all disputes before filing suit. Each party shall pay its own counsel fees in such mediations and shall each pay one-half of the mediator's charges. The parties shall mutually agree upon the mediator, and upon failure to agree within 30 days of a request by either party to mediation, shall request the County Judge of Bowie County to select a mediator whose selection shall be binding on the parties. All mediations shall take place in Bowie County, Texas.

§ 15.12. **LIMITATION OF WARRANTIES.** THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER KIND ARISING OUT OF THIS LEASE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE, IF ANY, EXPRESSLY STATED IN THIS LEASE.

§ 15.13. **Abandoned Property.** Landlord may retain, remove, destroy and/or dispose of any property left on the Premises at the end of the Term without liability to Tenant for loss or damage. Tenant shall

reimburse Landlord for expenses incurred by Landlord to remove, destroy or dispose of such property within 30 days of Landlord's notice to Tenant of the amount due.

§ 15.14. **Municipal and Emergency Services.** Tenant shall pay for all municipal services (Police, Hazardous Spill Response, Emergency Medical Response and Fire Protection) used by Tenant, its employees, guests, invitees, and any and all persons while upon the Premises. Said services may be furnished by local law enforcement agencies and by the U.S. Department of the Army as provided in that certain Municipal Services Agreement between Red River Army Depot and Red River Redevelopment Authority dated the 4th day of February 1998, as it may be amended from time to time. Tenant shall pay to, or reimburse, Landlord for all municipal services furnished to Tenant or to persons on the Premises within ten (10) days after receipt of an invoice for said services from Landlord. Tenant shall be entitled to receive and shall handle all documentation for reimbursement by insurance companies or other third-party benefit plan providers.

§ 15.15. **Army Imposed Restrictions.** Notwithstanding any other provision of this Lease, this Lease Agreement is made subject to, and Tenant agrees to be bound by those certain exceptions, limitations, covenants, conditions and reservations set forth in the Deed Without Warranty conveying the Premises from the United States of America, acting by and through the Secretary of the Army to Red River Redevelopment Authority dated September 1, 2010, and recorded in Volume 5898, Page 1 of the Real Property Records, Bowie County, Texas, to the extent said provisions apply to the Premises. A copy of the Deed Without Warranty is available at the offices of Landlord.

§ 15.16. **Reservation of Rights.** Landlord reserves the right to include the Premises including the easement locations, if any, together with other adjoining property owned by Landlord in a subdivision plat and subject the property described in said platted subdivision to utility easements and common restrictive covenants; provided, however, that said restrictive covenants and easements shall not interfere unreasonably with Tenant's use and related uses. It shall not be necessary or required that Tenant join in the execution of any such plat dedication or declaration of restrictive covenants and easements.

§ 15.17. **Common Area Charges.** Tenant acknowledges and agrees that it shall be responsible for and pay its proportionate share of the "TAC East Holdings Company Co. 1-East common area charges" based upon the square footage of the Premises as a percentage of the total area of the TAC East Holdings Company No. 1-East development area (excluding the "common areas"). The "common areas" are those areas of TAC East Holdings Company No.1 Center-East used by and/or for the benefit of all property owners or tenants within TAC East Holdings Company No.1-East, including but not limited to parks, recreational facilities, walkways, roadways and public parking areas. "Common area charges" are those property taxes, user charges, payments in lieu of taxes, maintenance, improvement, and betterment charges, and other local, county, TAC East Holdings Company No.1, or other governmental assessments on or against the Commerce Park common areas. The common area charges, other than taxes, shall not exceed ten cents ($0.10) per $100.00 valuation of the Premises based upon the fair market value thereof as determined by the Bowie Central Appraisal District for the year in which the assessment is made.

Landlord shall notify Tenant of the amount of the assessment, and Tenant shall pay said assessment within thirty (30) days.

§ 15.18. **Advertising and Promotions Rights.** Tenant, by entering into this Lease Agreement, authorizes Landlord to use in its advertising and promotion of TAC East Holdings Company No.1 and its properties the fact that Tenant has leased property from Landlord including but not limited to photographs of the leased premises, Tenant signage, Tenant equipment and vehicles, and Tenant employees; inclusion of Tenant's name and any "doing business as" names in Landlord's client/customer listings; and quotations of Tenant and Tenant's representatives. This authorized use includes all forms of media including but not limited to print, radio and other audio media, television and other video media, internet and other telecommunications media, and social media such as Facebook, Twitter, LinkedIn and others . This section constitutes a license from Tenant to Landlord to use for the limited purposes set forth herein any and all trademarks, tradenames and related intellectual property generally available and visible to the general public

§ 15.19. **Annual Reports.** Tenant agrees to annually, on or about, June 30 of each year during the Term and all extensions of the Term, and at such other times as Landlord may request, to provide to Landlord a report setting forth the following information for the prior calendar year:

1. Maximum number of Full Time Equivalent jobs;

2. Minimum number of Full Time Equivalent jobs;

3. Total Payroll for jobs on the Premises;

4. An employee census by position (no names);

5. Number of employees making above the average wage for Bowie County as determined by the Texas Workforce Commission;

6. Average wage for all employees;

7. Such other information as Landlord may reasonably request to support its redevelopment efforts, including but not limited to information required by authorities issuing grants for which Landlord may apply.

§ 15.20. **Guarantee.** Guarantor agrees to guarantee payment and performance by Tenant of its obligations under this Lease. Guarantor agrees to pay and perform the obligations of Tenant within 15 days of receipt of notice from Landlord of failure of Tenant to pay or perform under the Lease. This is an unconditional guaranty of payment and performance, not of collection, and it is an agreement of guaranty, not of suretyship. Guarantor waives all requirements of law, if any, that any collection efforts be made against Tenant or that any action be commenced against Tenant before resorting to this guaranty. Guarantor acknowledges but that for Guarantor providing this guaranty, Landlord would not have entered into this Lease with Tenant.

§ 15.21. **Governmental Immunity.** By execution of this Agreement, TAC East Holdings Company No.1 does not waive its governmental immunity except to the extent it is contractually liable for damages for

failure to perform its responsibilities under this Agreement. This limited waiver of governmental immunity shall not extend to, or for the benefit of, any third parties.

§ 15.22. **Option to Purchase.** Intentionally Deleted.

§ 15.23. **Expansion Option.** Tenant shall have the right to expand its leased premises into the contiguous bunkers (Magazines) (Igloos) Numbered 20, 30 & 40 (Expansion Area) on Nacogdoches Street upon the following terms:

1) In the event Landlord receives a bona fide third party written offer for the Expansion Area; Tenant shall have ten (10) business days to exercise its right to lease said space upon the same terms as the third-party offer. Rent payment shall commence as provided in the third-party offer.

2) In the absence of a third-party offer, should Tenant desire to expand its rented premises to include the Expansion Area, Tenant shall notify Landlord of said fact and said space shall be rented upon the same terms of this lease.

3) Expansion Area be leased "AS IS-WHERE IS" and without any obligation of Landlord to repair or modify the Expansion Area.

4) This Option shall expire on the 30th day of September, 2028.

5) Upon exercise of the Option, the parties shall execute a Written Addendum to this lease to document the action of the parties.

ARTICLE 16. LESSEE AFFIRMATIONS

1. **FALSE STATEMENTS.** Lessee represents and warrants that all statements and information prepared and submitted in response to the solicitation are current, complete, true and accurate. Signing the solicitation with a false statement is a material breach of this Purchase Order and shall void the submitted response or any resulting Purchase Orders and may result in removal of the Lessee from the Centralized Master Bidder List.

2. (Intentionally Deleted)

3. (Intentionally Deleted)

4. (Intentionally Deleted)

5. (Intentionally Deleted)

6. (Intentionally Deleted)

7. **PROHIBITION AGAINST BOYCOTTING ISRAEL.** Pursuant to Section 2271.002 of the Texas Government Code, Lessee certifies that either (i) it meets an exemption criteria under Section 2271.002; or (ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. Lessee shall state any facts that make it exempt from the boycott certification in its Response.

8. **PROHIBITION AGAINST CONTRACTING WITH COMPANIES ENGAGED IN BUSINESS WITH IRAN, SUDAN, OR FOREIGN TERRORIST ORGANIZATIONS.** In accordance with Section 2252.152 of the Texas Government Code, TFC is prohibited from entering into a governmental contract (as defined in Texas Government Code Section 2252.151(3)) with a company that is identified on a list prepared and maintained under Texas Government Code Section 806.051, 807,051, or 2252.153. If Lessee is on the above referenced list the Contract will be considered void or voidable and TFC will not be responsible to pay Lessee for any work performed.

9. **EXCLUDED PARTIES.** Lessee certifies that it is not listed in the prohibited vendors list authorized by Executive Order No. 13224, "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism", published by the United States Department of the Treasury, Office of Foreign Assets Control.

10. **SUSPENSION AND DEBARMENT.** Lessee certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration.

11. **PROHIBITION AGAINST ENERGY COMPANY BOYCOTTS.** Pursuant to Texas Government Code Chapter 2274, Lessee certifies that either (1) it meets an exemption criteria under said Chapter; or (2) it does not boycott energy companies and will not boycott energy companies during the term of this contract.

12. **PROHIBITION AGAINST DISCRIMINATION AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS.** Pursuant to Texas Government Code Chapter 2274, Lessee certifies that (1) it meets an exemption criteria under said Chapter, or (2) it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

13. **PROHIBITION AGAINST CONTRACTING WITH CERTAIN FOREIGN ENTITIES RELATING TO CRITICAL INFRASTRUCTURE.** Pursuant to the provision of Chapter 113 of the Texas Business and Commerce Code, Lessee certifies that (1) this contract does not relate to critical infrastructure, or if it does relate to critical infrastructure, (2) it is not a company owned by or the majority stock or other ownership interest of the Company is held or controlled by (a) individuals who are citizens of China, Iran, North Korea, Russia or other countries designated by the Governor of Texas, or (b) a company or other entity including a governmental entity that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or other country designated by the Governor of the State of Texas.

The undersigned Landlord and Tenant execute this agreement on the 27th day of September, 2022.

LANDLORD
TAC EAST HOLDINGS COMPANY No.1

By: William Scott Norton
Name: William Scott Norton
Title: President

TENANT
ENVIROSAFE DEMIL, LLC
By:
Name: Thomas Ogden
Title: CEO

GUARANTOR
N/A
N/A
N/A
N/A

EXHIBIT "A"

PREMISES DESCRIPTION



The Premises are a portion of the Property conveyed by the United States of America to Red River Redevelopment Authority by that certain Deed Without Warranty dated September 1, 2010, recorded in Volume 5898, Page 1 of the Real Property Records of Bowie County, Texas.

Part A Application Form

Attachment B

Legal Description of the Facility

EnviroSafe Demil, LLC (ESD) is a demilitarization facility in Hooks, Texas. The site for ESD is located on the F-Line of the former Lone Star Army Ammunition Plant (LSAAP), which is now part of the east campus of the TexAmericas Center (TAC East Campus). Storage magazines adjacent to the main facility will also be used – the earth covered magazines (ECMs) are located at LSAAP's former line V-13 and an above ground magazine (AGM) is located at LSAAP's Beech #10 location. More information on the siting of the facility can be found in *Appendix II – Facility Siting Criteria* of the Part B Application. Legal descriptions of the facility land can be found in the lease agreements included in *Attachment A – Lease Information* of the Part A Application Form. A facility map showing the boundaries of the facility is included with this attachment.


EnviroSafe Demil
Site Plan
Texas Site
Facility Map
Drawing Number
ENVS-0001-SITE
Sheet
1 of 4
Drawing Size
42" x 60"
Drawing Scale
1 Inch = 150 Feet
Rev.
0
N Montague St
Energetic Activation Unit
PAS
Energetic and Reycling Ops Building
F-Line
Freedom Wy
Rocket Motor Ops Building
PAS
Hybrid Burn Chamber (HBC)
Pine St
Pine St
EnviroSafe Demil, LLC
Part A Application - Attachment B


EnviroSafe Demil
Preliminary Site Plan
Texas Site
Facility Map
Drawing Number
ENVS-0001-OVER
Sheet
1 of 1
Drawing Size
42" x 60"
Drawing Scale
1 Inch = 150 Feet
Rev.
0
F-Line
AGM
ECMs
Future ECM
Future ECM

Part A Application Form

Attachment C

Topographic Maps

This attachment includes topographical maps that extend at least one mile beyond the facility boundaries. The facility boundaries are within one mile of the borders of the Hooks Quadrangle map, so a second map (Leary Quadrangle) is included in order to show at least one mile beyond the facility boundaries. The maps included in this attachment are:

- Facility Plot Plan (2 pages)
- USGS Map; Hooks Quadrangle, Texas – Bowie County, 7.5-Minute Series (Full Resolution Map)
- USGS Map; Leary Quadrangle, Texas – Bowie County, 7.5-Minute Series (Full Resolution Map)
- USGS Map; Hooks Quadrangle, Texas – Bowie County, 7.5-Minute Series (Facility Boundaries Shown)
- USGS Map; Leary Quadrangle, Texas – Bowie County, 7.5-Minute Series (Facility Boundaries Shown)

The facility boundaries indicated on the map encompasses approximately 175 acres for the main portion of the facility. The facility plot plans show the locations proposed for the facility's units.

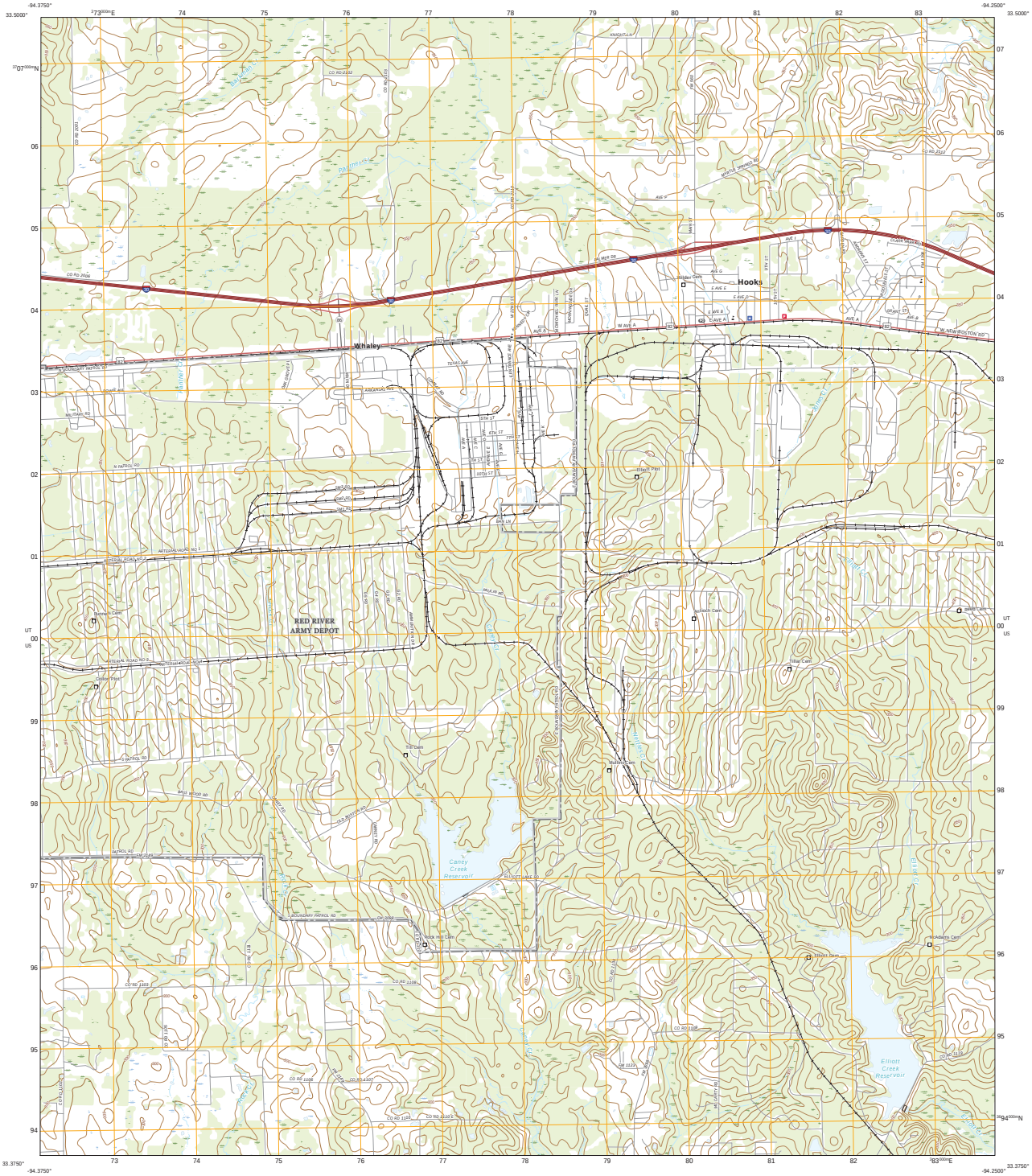
The following items listed in the Part A Application Form do not exist at the facility and are therefore not shown on the topographic map. These items are:

- surface intake and discharge structures
- on-site injection wells where liquids are injected underground
- any known monitor wells and boreholes within the property boundaries of the facility
- wells, springs, other surface water bodies, and drinking water wells

Per §270.14(b)(19)(v), a wind rose (prevailing wind-speed and direction) must also be included with the permit application. The wind rose for the nearest regional airport is included in this attachment.


EnviroSafe Demil
Site Plan
Texas Site
Facility Map
Drawing Number
ENVS-0001-SITE
Sheet
1 of 4
Drawing Size
42" x 60"
Drawing Scale
1 Inch = 150 Feet
Rev.
0
N Montague St
Energetic Activation Unit
PAS
Energetic and Reycling Ops Building
F-Line
Freedom Wy
Rocket Motor Ops Building
PAS
Hybrid Burn Chamber (HBC)
Pine St
Pine St
EnviroSafe Demil, LLC
Part A Application - Attachment C


EnviroSafe Demil
Preliminary Site Plan
Texas Site
Facility Map
Drawing Number
ENVS-0001-OVER
Sheet
1 of 1
Drawing Size
42" x 60"
Drawing Scale
1 Inch = 150 Feet
Rev.
0
F-Line
AGM
ECMs
Future ECM
Future ECM



Produced by the United States Geological Survey

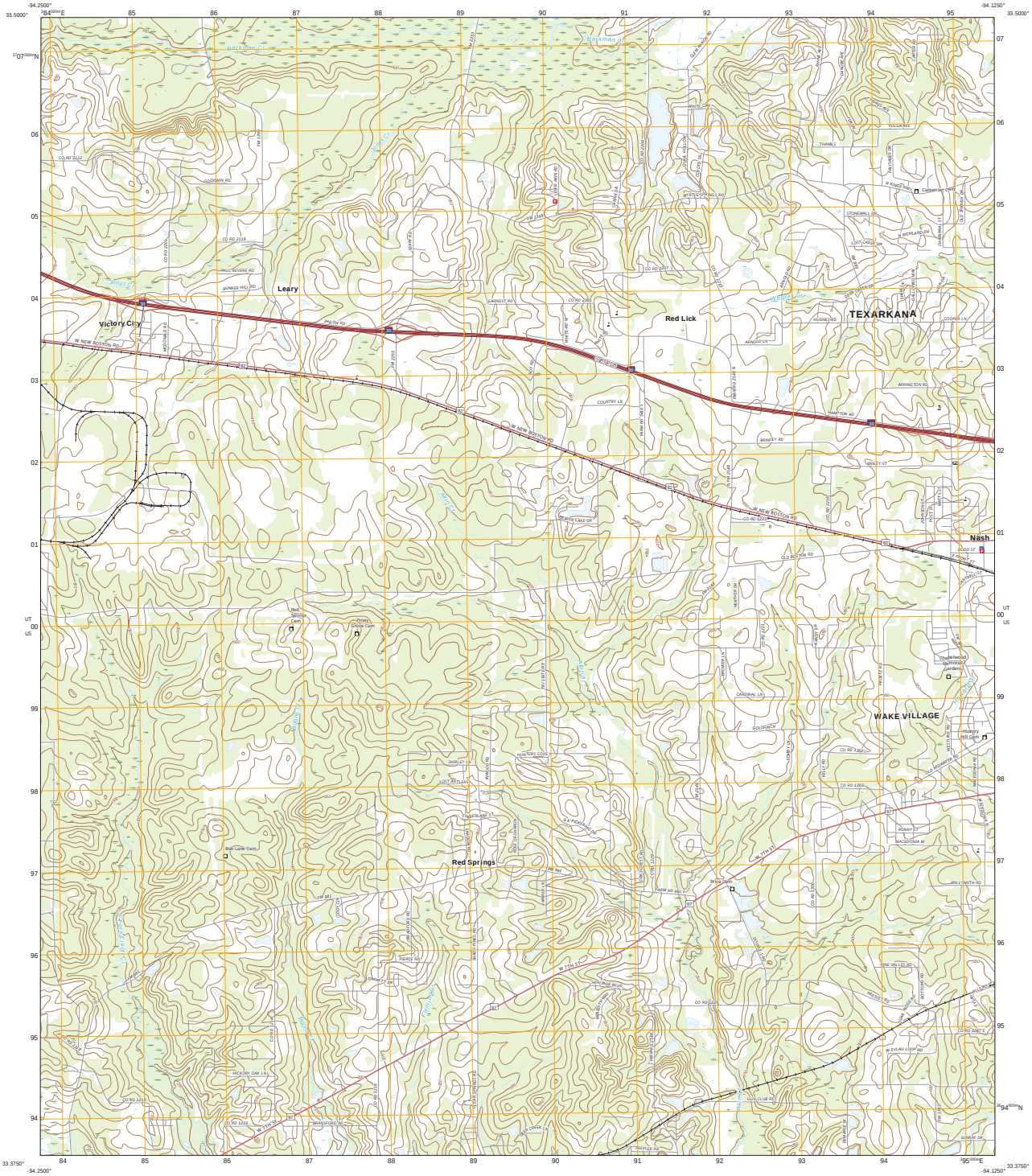
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid Universal Transverse Mercator, Zone 15S
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery			NAIP, August 2016 - November 2016
Roads	U.S. Census Bureau,	2015	- 2018
Names		GNIS, 1979	- 2018
Hydrography	National Hydrography Dataset,	2002	- 2018
Contours	National Elevation Dataset,	2004	
Boundaries	Multiple sources; see metadata file	2016	- 2017
Wetlands	FWS National Wetlands Inventory	1979	- 2002

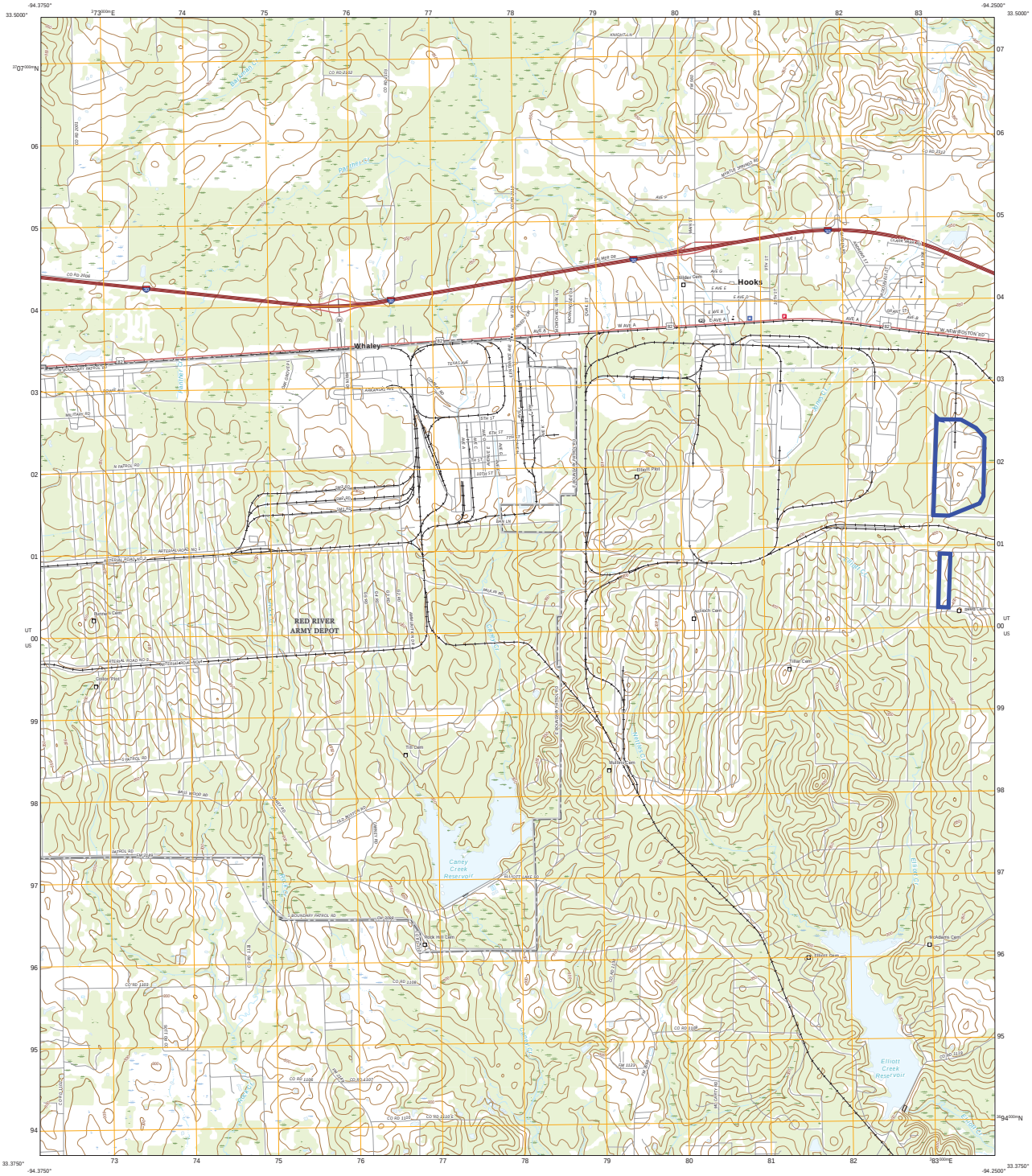
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ADJOINING QUADRANGLES
1 Daniels Chapel
2 Redbank
3 Barkman
4 New Boston
5 Leary
6 Corley
7 Maud
8 Wright Patman Lake

NSN REF NO. USGS 24 K 2 S
USGS 15 0 13 4 2 0 2 5



EnviroSafe Demil, LLC Part A Application - Attachment C



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid Universal Transverse Mercator, Zone 15S
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery			NAIP, August 2016 - November 2016
Roads	U.S. Census Bureau,	2015	- 2018
Names		GNIS, 1979	- 2018
Hydrography	National Hydrography Dataset,	2002	- 2018
Contours	National Elevation Dataset,	2004	
Boundaries	Multiple sources; see metadata file	2016	- 2017
Wetlands	FWS National Wetlands Inventory	1979	- 2002

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION

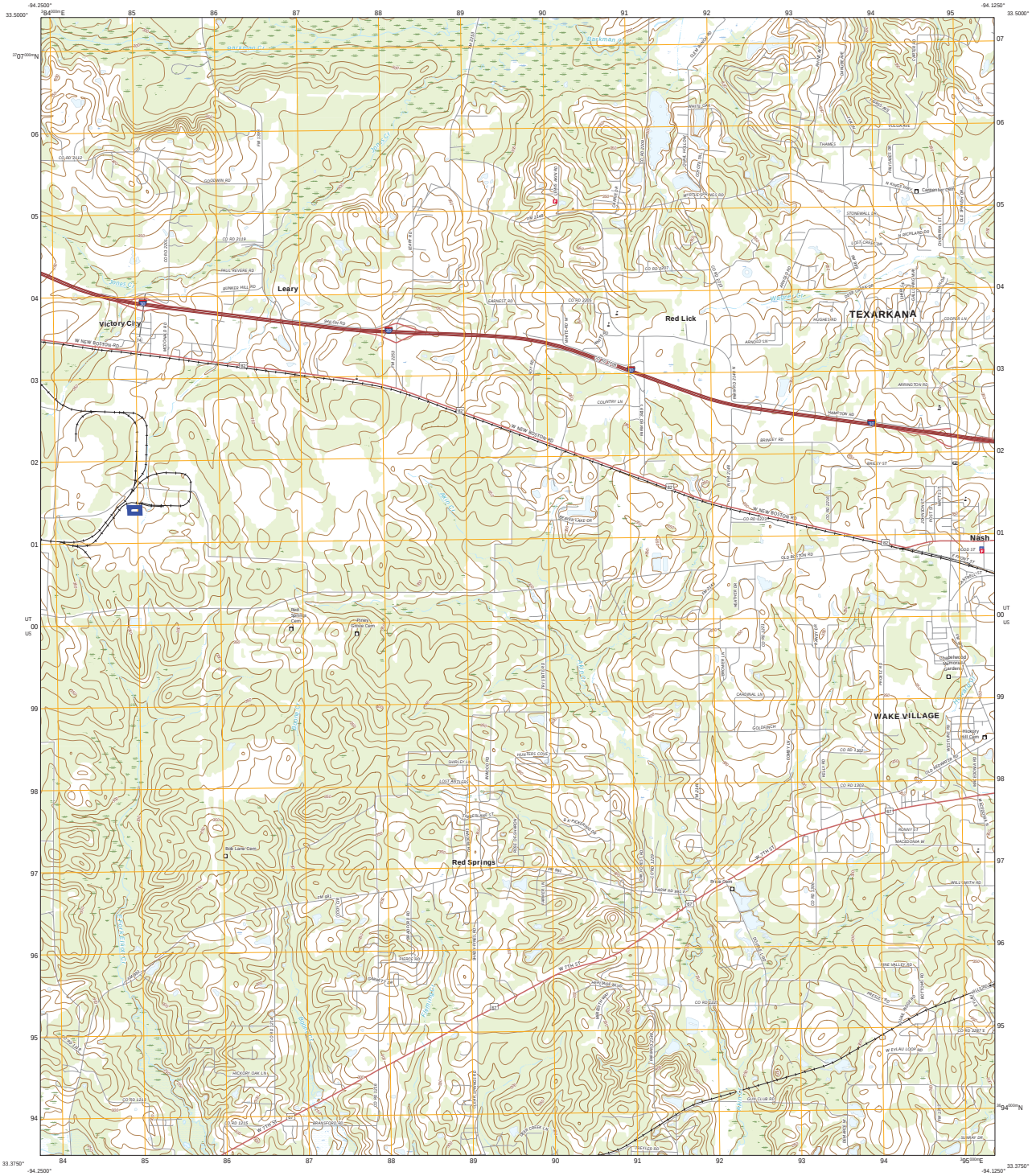
Expressway | Local Connector
Secondary Hwy | Local Road
Ramp | 4WD
Interstate Route | US Route | State Route

1 Daniels Chapel
2 Redbank
3 Barkman
4 New Boston
5 Leary
6 Corley
7 Maud
8 Wright Patman Lake

ADJOINING QUADRANGLES

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

NSN REF NO. USGS 24K TOPO



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid Universal Transverse Mercator, Zone 15S
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, August 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2018
Names.....GNIS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2004
Boundaries.....Multiple sources; see metadata file 2016 - 2017

Wetlands.....FWS National Wetlands Inventory 1979 - 1995

UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

ADJOINING QUADRANGLES
1 Redbank
2 Barkman
3 Ogden
4 Hooks
5 Texarkana
6 Maud
7 Wright Patman Lake
8 Domino

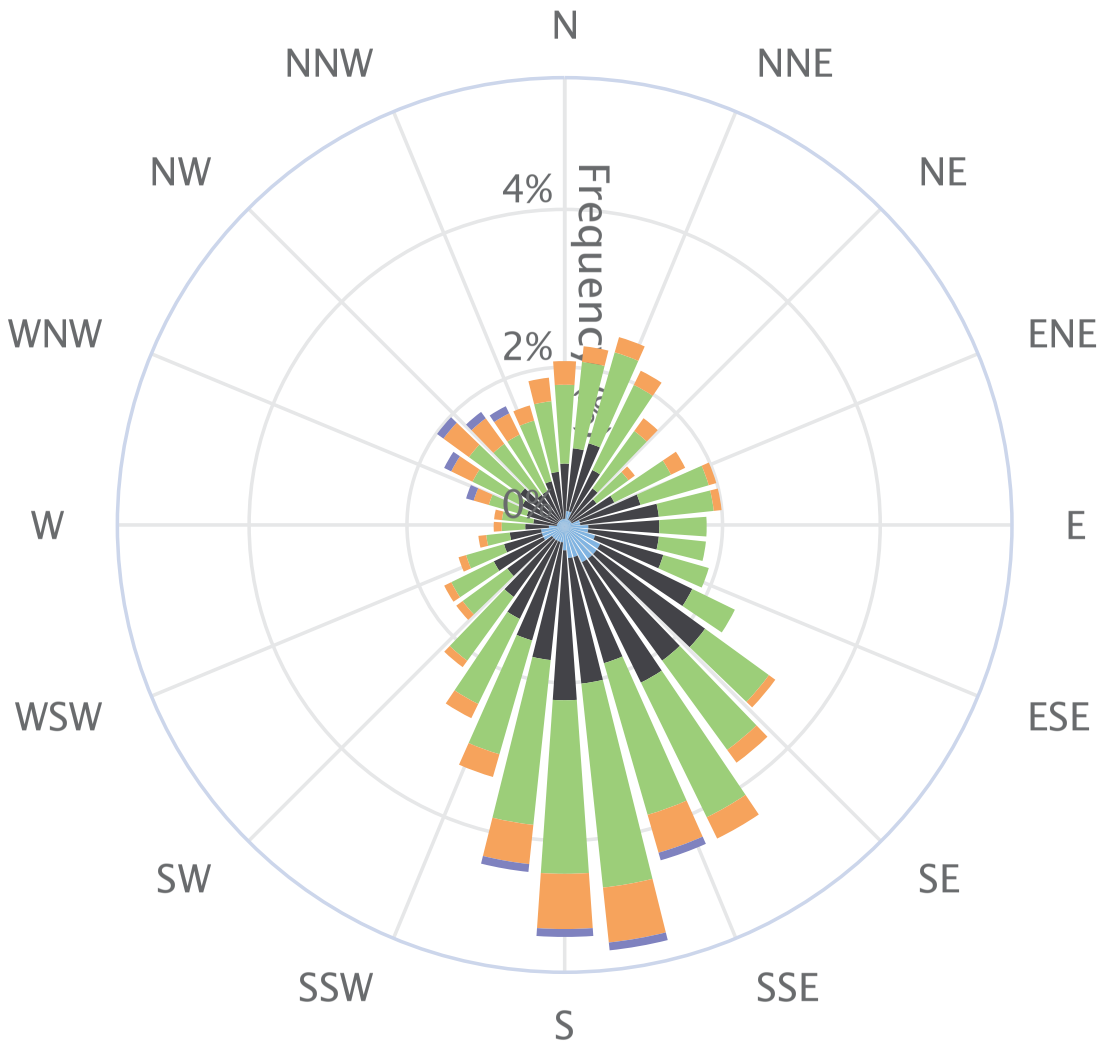
ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

LEARY, TX
2019

NGA REF. NO. USGS 24K

SHREVEPORT RGNL AP (LA) Wind Rose

Feb. 1, 2018 – Feb. 1, 2023
Sub-Interval: Jan. 1 – Dec. 31, 0 – 23



Wind Speed (m/s)

- 1.3 – 1.8
- 1.8 – 3.6
- 3.6 – 5.85
- 5.85 – 8.55
- 8.55 – 11.25
- 11.25 – 14.4
- 14.4 – 17.55
- 17.55 – 21.15
- 21.15 –

Click and drag to zoom

Part A Application Form

Attachment D

Photographs

This attachment includes photographs showing the already built storage magazines and an aerial view of the preparation building.

Storage Magazines:

- Above Ground Magazine (AGM)
- Earth Covered Magazines (ECMs)

Preparation Building:

- Rocket Motor Ops Building

This attachment also includes an aerial view showing the site of the processing unit. The processing unit will include an air pollution control system / pollution abatement system (APCS / PAS).

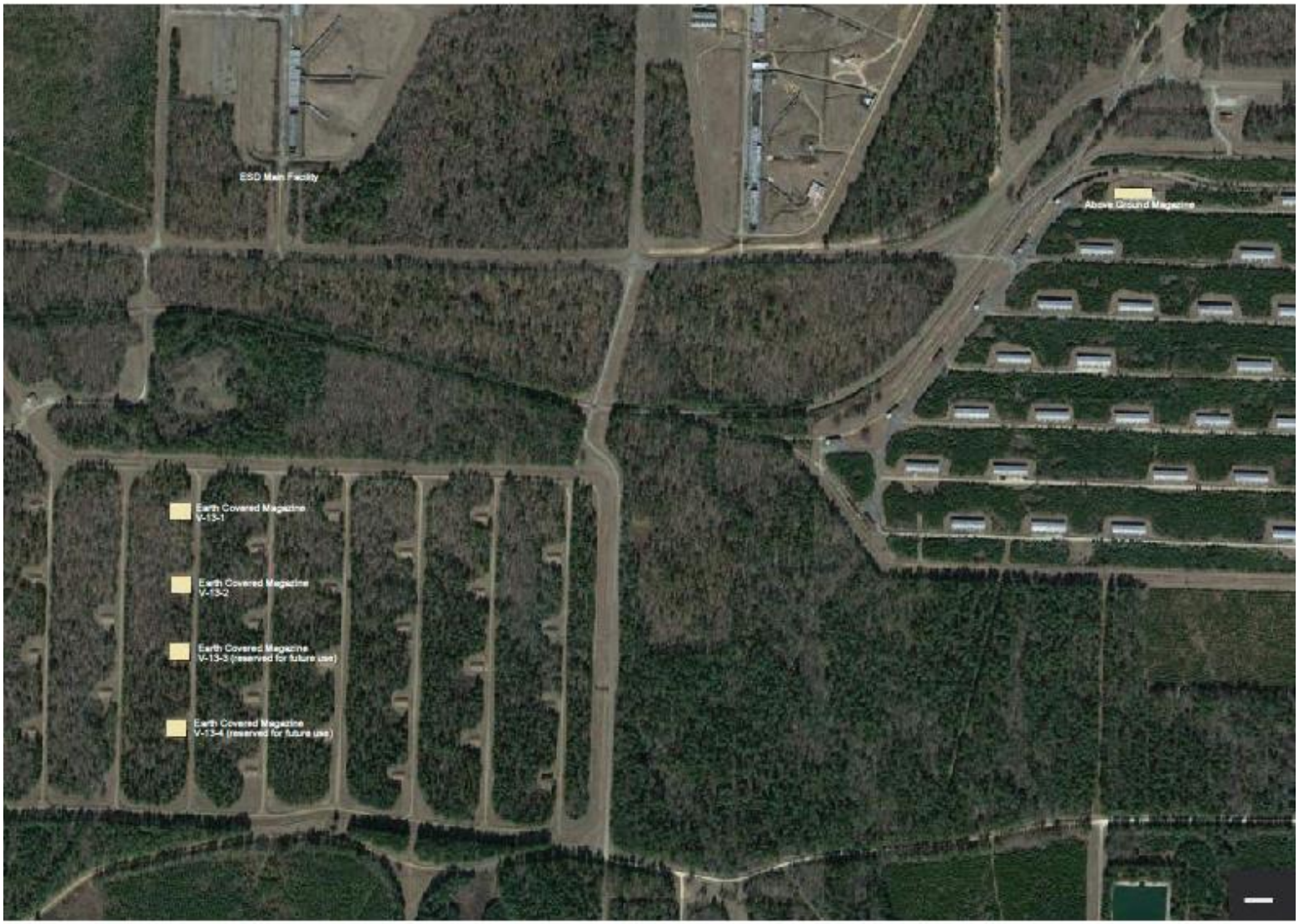
Processing Unit:

- Hybrid Burn Chamber (HBC) – future installation



Main Facility Overview

Part A Application Form, Attachment D
Photographs



Storage Magazines Overview

Part A Application Form, Attachment D
Photographs



Earth Covered Magazines – View from the South



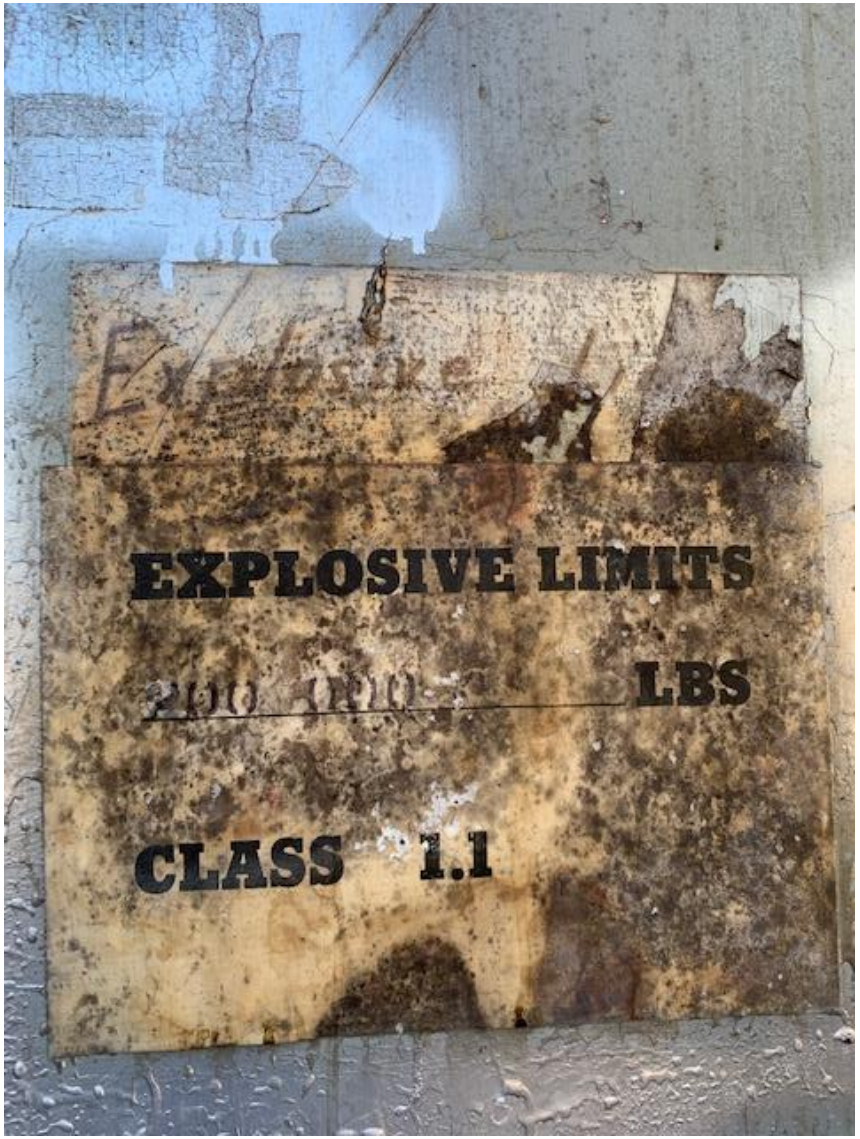
Earth Covered Magazines – View from the East



Earth Covered Magazine – V-13-1 Exterior



Earth Covered Magazine – V-13-2 Exterior

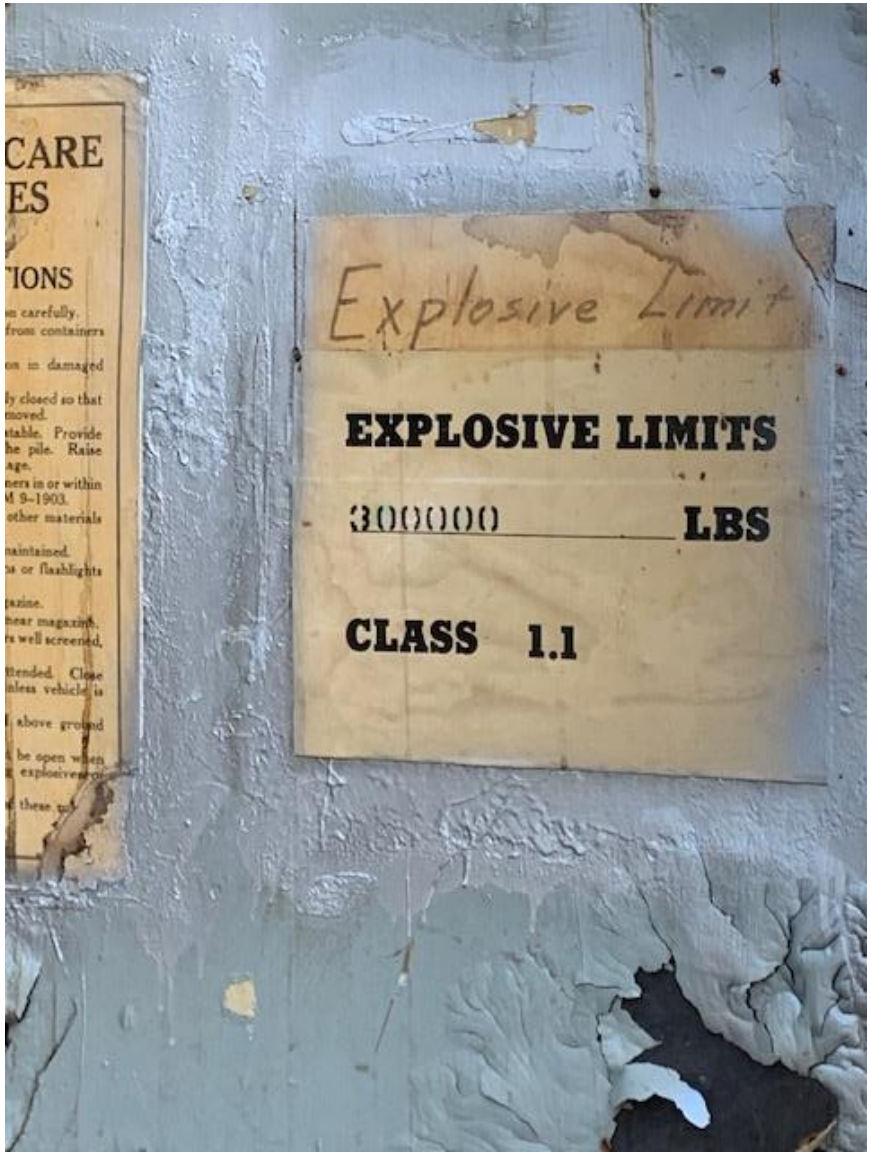


Earth Covered Magazine – V-13-2 Label



Earth Covered Magazine – V-13-3 Exterior

Part A Application Form, Attachment D
Photographs



Earth Covered Magazine – V-13-3 Label



Earth Covered Magazine – V-13-3 Exterior

Part A Application Form, Attachment D
Photographs



Earth Covered Magazine – V-13-3 Label



Above Ground Magazine – View from the South



Above Ground Magazine – View from the East



Above Ground Magazine – Exterior

Part A Application Form

Attachment E

Process Descriptions and Process Flow Diagram

This attachment includes a description of the process flow for the energetic materials arriving on-site all the way through their processing in the Hybrid Burn Chamber (HBC). An overall process flow diagram for the facility is included.

More detailed information on specific units can be found in *Appendix V – Engineering Reports* and *Appendix XIII – Confidential Material*. More detailed process flow diagrams are included in *Appendix XIII – Confidential Material.*

Waste Classification Codes

The waste classification codes for the energetic materials can be found in Table III-1 of the Part A Application Form (TCEQ-0283).

Originating Point of Waste

All energetic materials are generated off-site and are shipped to the ESD site (none are generated on-site). These energetic materials come from various government and commercial customers, such as federal, state or local agencies, explosive manufacturing facilities, chemical and specialty industries, military and defense industries, and/or emergency response agencies.

Materials are received and inspected and are then either sent directly to the Rocket Motor Ops Building (for materials being processed in the HBC) or they are sent to the storage magazines that are adjacent to the main facility.

Process Flow for Materials Processed in the Hybrid Burn Chamber (HBC)

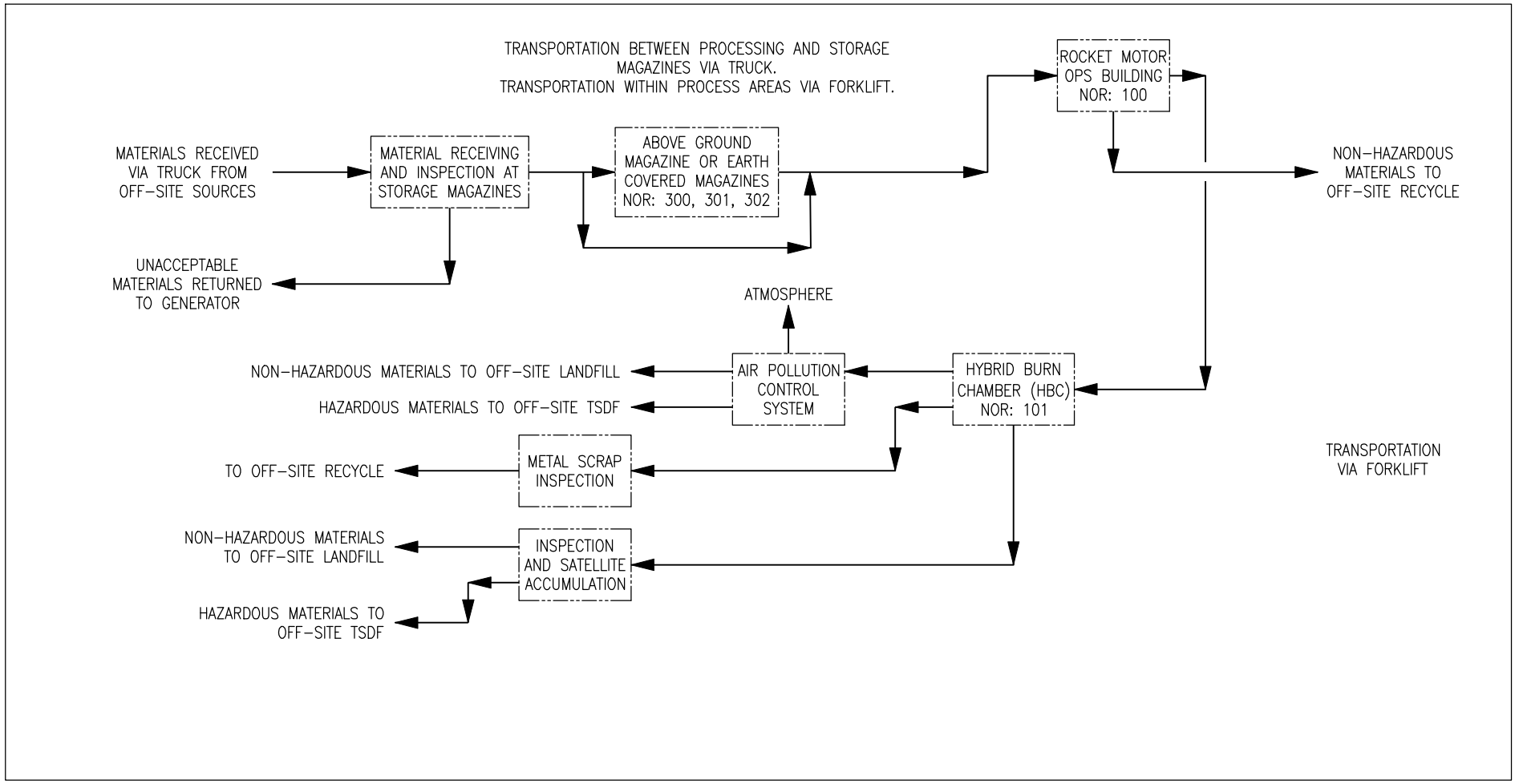
The Rocket Motor Ops Building will be used to prepare the materials for processing in the Hybrid Burn Chamber (HBC). The energetic materials are processed in the HBC and the exhaust gases are collected and treated by the air pollution control systems (APCS).

A step-by-step word description of the process flow is shown below:

1. Materials from off-site generators will be transported to ESD via flatbed trucks.
2. Materials will be received and inspected at the storage magazines.
3. Accepted materials will be stored in the storage magazines or will be sent directly to the Rocket Motor Ops Building to be prepared for processing in the HBC.

4. Materials from the storage magazines will be sent to the Rocket Motor Ops Building via flatbed trucks. Ground handling equipment such as a pallet jack and/or forklift will be used to load and unload the materials from the flatbed trucks.
5. Materials will be unpacked and prepared for processing in the Rocket Motor Ops Building.
6. Prepared materials will be placed in cradles and loaded on forklifts to be transported to the HBC.
7. The HBC will process the energetic material and the associated air pollution control equipment will capture emissions created by the HBC process.
8. Large pieces of metal remaining after processing in the HBC will be inspected to ensure no energetic material remains and then will be shipped off-site for disposal or for recycling.
9. Ash and debris from the HBC will be periodically collected and placed into containers. If the waste profile indicates the material is hazardous, the containers of ash and debris will be transported to a central accumulation area where they will be stored for less than 180 days before being shipped off-site to a TSDF. If the material is non-hazardous, it will be shipped off-site to a landfill.
10. Wastes generated from the air pollution control system will be collected in containers. If the waste profile indicates the material is hazardous, the containers will be transported to a central accumulation area where they will be stored for less than 180 days before being shipped off-site for disposal. If the material is non-hazardous, it will be shipped off-site to a landfill.

Process Flow Diagram
EnviroSafe Demil, LLC



Texas Commission on Environmental Quality
Permit Application for Industrial and Hazardous Waste Storage/Processing/Disposal Facility with Compliance Plan

Part B Application

The TCEQ is committed to accessibility. You may request an accessible version of these documents, by contacting the Industrial and Hazardous Waste permits section program at (512)-239-2335 or by email at [redacted]

Disclaimer:

This document is intended for use in the RCRA Part B application preparation and review process. It contains a screening sheet that will produce a customized Part B application outline that is based on a facility's specific operating characteristics. This screening sheet and application outline are not a substitute for required application materials. This document may omit requirements applicable to the facility and/or include requirements that are not applicable. Please use the knowledge about the facility's operational design and history to ensure that a complete application based on 40 Code of Federal Regulations Part 270 and 30 Texas Administrative Code (TAC) Chapter 305 and Chapter 335 is submitted. Please include any necessary information that may have been mistakenly screened out. If regulatory requirements change during the application process, the TCEQ may request additional information before a permit is issued.

Quick Start Instructions for Part B Application with Screening Tool

Go to screening sheet

View Entire Application

Screening Sheet for Industrial and Hazardous Waste Permitted Facilities.

Please provide a response to all items. **Note: depending on certain selections you make, answers to some questions will automatically default to "No" but some questions will remain to be answered by the user as "Yes" or "No", and if the user does not provide a "Yes" or "No" answer, the application will be generated as if answered "Yes".** It is critical that each response is accurate to ensure retrieval of all applicable application items. If you need to change any response after the initial answer, change the answer and the application will update the application. Print (electronic or physical) a copy of the application materials to create the physical appendix format of your application.

Please answer Questions 1 through 11 and DO NOT leave any questions) unanswered to ensure an complete application.

1.	Is this an application for a compliance plan only?	○ Yes	◉ No
2.	Is this permit for post-closure care only?[1]	○ Yes	◉ No
3.	Is this an application for a compliance plan and post-closure care only?	○ Yes	◉ No
4.	Is this an application for WMU(s) with a compliance plan?[2]	○ Yes	◉ No
5.	Is this an application for WMU(s) with post-closure care?	○ Yes	◉ No
6.	Is this an application for WMU(s), with compliance plan and post-closure care?	○ Yes	◉ No
7.	Is this an application for WMU(s) only?	◉ Yes	○ No
	Any Land Based Units?	○ Yes	◉ No
	Surface Impoundments	○ Yes	◉ No
	Waste Piles	○ Yes	◉ No
	Land Treatment Units	○ Yes	◉ No
	Landfills[3]	○ Yes	◉ No
	Container Storage Areas	◉ Yes	○ No
	Tank and Tank Systems	○ Yes	◉ No
	Incinerators	○ Yes	◉ No
	Boilers/Industrial Furnaces	○ Yes	◉ No
	Drip Pads	○ Yes	◉ No
	Containment Buildings	○ Yes	◉ No
	Miscellaneous Units[4]	◉ Yes	○ No
8.	Is this a new commercial facility?	◉ Yes	○ No
9.	Is this a "One-Stop" application with air provisions?	○ Yes	◉ No
10.	Is this facility military, federal, or state owned?	○ Yes	◉ No
11.	Does the application contain Confidential Materials?	◉ Yes	○ No

Reset All Screening Questions | Jump to Table of Content(s) / Applicable Tables | Generate Application and Save

1 - If "Yes" is indicated for Post-Closure Care only, then all non-land-based units above will default to "No". Additionally if "Yes" is indicated for Post-Closure Care only, then at least one Land-Based Unit must be "Yes."

2 - If "Yes" is indicated for Active Permit Unit(s) with a Compliance Plan, then at least one unit must be "Yes."

3 - Select "Landfills- Yes" for any land-based unit that was closed as a landfill. (Example Surface Impoundment closed s a landfill.)

4 - For Miscellaneous Units, select "yes" and also select "Yes for the appropriate unit types (s) shown above. Address all applicable engineering requirements (e.g., landfill requirements from Section V.G) in Section V.K.

WMU- Waste Management Unit

Table of Contents
EnviroSafe Demil, LLC – RCRA Permit Application
Permit Number 50424

Section	Description	Page
I	General Information	Section I – Page 1
	A. General Information – Table I	Section I – Page 3
	B. TCEQ Core Data Form (Form 10400)	Section I – Page 9
	C. Signature Page	Section I – Page 12
	D. Interim Status Land Disposal Unit(s) Certification (N/A)	Section I – Page 13
	E. List and Map of Adjacent Landowners	Section I – Page 14
II	Facility Siting Criteria	Section II – Page 1
	A. Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills (N/A)	Section II – Page 9
	B. Additional Requirements for Land Treatment Facilities	RESERVED
	C. Additional Requirements for Waste Piles	RESERVED
	D. Additional Requirements for Storage Surface Impoundments	RESERVED
	E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with wastes in place)	RESERVED
	F. Flooding	Section II – Page 60
	G. Additional Information Requirements	Section II – Page 77
III	Facility Management	Section III – Page 1
	A. Compliance History and Applicant Experience	Section III – Page 6
	B. Personnel Training Plan	Section III – Page 7
	C. Security	Section III – Page 11
	D. Inspection Schedule	Section III – Page 12
	E. Contingency Plan	Section III – Page 21
	F. Emergency Response Plan	Section III – Page 45
IV	Wastes and Waste Analysis	Section IV – Page 1
	A. Waste Management Information	Section IV – Page 3
	B. Waste Managed In Permitted Units	Section IV – Page 4
	C. Sampling and Analytical Methods	Section IV – Page 5
	D. Waste Analysis Plan	Section IV – Page 6
V	Engineering Reports	Section V – Page 1
	A. General Engineering Reports	Section V – Page 10
	B. Container Storage Areas	Section V – Page 18
	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

RESERVED means this topic is not applicable.

Table of Contents
EnviroSafe Demil, LLC – RCRA Permit Application
Permit Number 50424 (Continued)

Section	Description	Page
	I. Boilers and Industrial Furnaces	RESERVED
	J. Drip Pads	RESERVED
	K. Miscellaneous Units	Section V – Page 54, 62
	L. Containment Buildings	RESERVED
VI	Geology Report	Section VI – Page 1
	A. Geology and Topography	Section VI – Page 6
	B. Facility Groundwater	RESERVED
	C. Exemption from Groundwater Monitoring for an Entire Facility	RESERVED
	D. Unsaturated Zone Monitoring	RESERVED
VII	Closure and Post-Closure Plans	Section VII – Page 1
	A. Closure	Section VII – Page 4
	B. Closure Cost Estimate (including contingent closure) [30 TAC 335.178, 40 CFR 264.142]	Section VII – Page 26
	C. Post-closure	RESERVED
	D. Post-closure Cost Estimate [40 CFR 264.144]	RESERVED
	E. Closure and Post-Closure Cost Summary	Section VII – Page 30
VIII	Financial Assurance	Section VIII – Page 1
	A. Financial Assurance Information Requirements for all Applicants (30 TAC Chapter 37, Subchapter P, 305.50(a)(4)(A-E), 335.152(a)(6) and 335.179)	Section VIII – Page 8, Section VIII – Page 9
	B. Applicant Financial Disclosure Statements for a new permit, permit amendment, or permit modification, or permit renewal (30 TAC 305.50(a)(4))	Section VIII – Page 8, Section VIII – Page 13
	C. Information for Applicants Subject to Financial Capability Requirements	Section VIII – Page 8, Section VIII – Page 13
IX	Releases from Solid Waste Units and Corrective Action	Section IX – Page 1
	A. Preliminary Review Checklists	Section IX – Page 5
	B. Preliminary Review Facility Checklist	Section IX – Page 6
	C. Preliminary Review Unit Checklist	Section IX – Page 8
	D. Appendices to Preliminary Review (PR)	Section IX – Page 10
	E. Preliminary Review Submittal Format	N/A
X	Air Emission Standards	Section X – Page 1
	A. Process Vents	Section X – Page 5
	B. Equipment Leak	Section X – Page 6
	C. Tanks, Surface Impoundments, and Containers	Section X – Page 7
	D. "One-Stop" Permits	RESERVED
XI	Compliance Plan	RESERVED
	Figure 1	RESERVED
	Figure 2	RESERVED

RESERVED means this topic is not applicable.

Table of Contents
EnviroSafe Demil, LLC – RCRA Permit Application
Permit Number 50424 (Continued)

Section	Description	Page
	Figure 3	RESERVED
	A. Site Specific Information	RESERVED
	B. Hazardous Constituents In Groundwater and Groundwater Protection Standards (GWPSs)	RESERVED
	C. Compliance Monitoring Program	RESERVED
	D. Correction Action Program	RESERVED
	E. Cost Estimates for Financial Assurance	RESERVED
	CP Attachment A - Maps	RESERVED
	CP Attachment B – Well Design and Construction Specifications	RESERVED
	CP Attachment C – Sampling and Analysis Plan	RESERVED
XII	Hazardous Waste Permit Application Fee	Section XI – Page 1
XIII	Confidential Material	Section XIII – Page 1
	Additional Information Submitted with the Part B Application	
	Pre-Application Public Meeting	Additional Information – Page 1
	Information on Compact Disks	Additional Information – Page 6
	Electronic Mailing List of Adjacent Landowners	Compact Disk
	RCRA Part B Administrative and Technical Evaluation Electronic Checklist (Form #00136)	Compact Disk

RESERVED means this topic is not applicable.

Texas Commission on Environmental Quality
Industrial & Hazardous Waste Part B Permit Application

I. General Information

Provide all Part B responsive information in Appendix I. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

Provide responsive information in Appendix I.

a. Complete Table I - General Information

Table I – General Information is Included in Appendix I.

b. For all incoming New, Renewal, Class 3 Permit Modification, and Major Amendment applications, the TCEQ requires that a Core Data Form (CDF) be submitted whether or not a change has occurred in the previously submitted form.

For Minor Amendment, Class 1, Class 1[1] , and Class 2 Permit Modification applications, the TCEQ requires that the CDF be only submitted if a change in any information in the previously submitted form has occurred at the time of the application submittal.

For more information regarding the Core Data Form, call (512) 239 1575 or go to the TCEQ Web site at https://www.tceq.texas.gov/permitting/central_registry/guidance.html

The Core Data Form is included in Appendix I.

c. Signature on Application

It is the duty of the operator to submit an application for a permit. The person who signs the application form will often be the operator himself; when another person signs on behalf of the applicant, his title or relationship to the applicant will be shown. In all cases, the person signing the form must be authorized to do so by the applicant. An application submitted by a corporation must be signed by a responsible corporate officer such as a president, secretary, treasurer, vice president, or by his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the activity described in the form originates. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor, respectively. In the case of a municipal, state, federal, or other public facility, the application must be signed by a principal executive officer, a ranking elected official, or another duly authorized employee. A person signing an application on behalf of an applicant must provide notarized proof of authorization.

d. Complete Interim Status Land Disposal Unit(s) Certification, as applicable

Not Applicable.

e. Submit List and Map of Adjacent Landowners List, as applicable.

The List and Map of Adjacent Landowners is included in Appendix I.

Section I – General Information

Appendix I – General Information

This section of the permit application includes the following:

- Table I – General Information
- Table I.1 – Description of Proposed Application Changes
- TCEQ Core Data Form (updated since last submittal)
- Signature Page
- List and Map of Adjacent Land Owners

Table I: General Information

A. Applicant: Facility Operator (or Facility Owner & Operator, if same)

Name[1]	EnviroSafe Demil, LLC
Address	401 N Montague Street
City, State	Hooks, Texas
Zip Code	75561-0019
Telephone Number	206-999-8684 (TJ Ogden)
Alternate Telephone Number	360-480-9320 (Michael Wentz)
Fax:	
TCEQ Solid Waste Registration No.	98470
EPA I.D. No.	TXR000086289
Permit No.	50424
County	Bowie
Regulated Entity Name	EnviroSafe Demil, LLC
Regulated Entity Reference Number (RN)	RN 111572442
Customer Name	EnviroSafe Demil, LLC
Customer Reference Number:	CN606060028
Charter Number[2]	805003546
Previous or Former Names of the Facility (if applicable)	N/A

B. Facility Owner: Identify the Facility Owner if different than the Facility Operator[3]

☒ Same as Facility Operator?

Name	EnviroSafe Demil, LLC
Address	401 N Montague Street
City, State	Hooks, Texas
Zip Code	75561-0019
Telephone Number	206-999-8684 (TJ Ogden)
Alternate Telephone Number	360-480-9320 (Michael Wentz)
Fax:	

C. Facility Contact

1. **Persons or firms who will act as primary contact:**

Name, Title:	TJ Ogden, CEO & Founder
Address	401 N Montague Street
City, State:	Hooks, TX
Zip Code	75561-0019
Telephone Number	206-999-8684
Alternate Telephone Number	
E-mail	[redacted]
Fax:	

Persons or firms who will act as primary contact (if more than one):

Name, Title:	
Address	
City, State:	
Zip Code	
Telephone Number	
Alternate Telephone Number	
E-mail	
Fax:	

2. **Agent in Service or Agent of Service (if you are an out-of-state company)[4]:**

Name, Title:	Michael Wentz, President
Address	401 N Montague Street
City, State:	Hooks, TX
Zip Code	75561-0019

3. **Individual responsible for causing notice to be published:**

Name:	Michael Wentz, President
Address	401 N Montague Street
City, State:	Hooks, TX
Zip Code	75561-0019
Telephone Number	360-480-9320
Alternate Telephone Number	
E-mail	[redacted]
Fax:	

4. **Public place in county where application will be made available[5]:**

Name	Texarkana Public Library
Address	600 W 3rd Street
City, State	Texarkana, Texas

Zip Code 75501

D. Application Type and Facility Status

1. Application Type

- ☒ Permit
- ☒ New
- ☐ Interim status
- ☐ Renewal
- ☐ RD&D
- ☐ Compliance Plan

- ☐ Amendment
- ☐ Major
- ☐ Minor

- ☐ Modification
- ☐ Class 3
- ☐ Class 2
- ☐ Class 1[1]
- ☐ Class 1

2. Part of a Consolidated Permit Processing request? [30 TAC Chapter 33] No

3. Does the application contain confidential material?[6] Yes

4. Facility Status. Check all that apply

- ☒ Proposed
- ☐ Existing
- ☒ On-Site
- ☐ Off-Site
- ☒ Commercial
- ☐ Recycle
- ☐ Land Disposal
- ☐ Areal or capacity expansion
- ☐ Compliance plan

5. Is the facility within the Coastal Management Program boundary? **No**

6. Description of Application Changes

Complete Table I.1 - Description of Proposed Application Changes.

Note: List all changes requested in Table I.1. Unlisted requests risk remaining unaddressed or possibly denied if brought to the permit application reviewer's attention at a later time.

7. Total acreage of the facility being permitted: **175**

8. Identify the name of the drainage basin and segment where the facility is located

River Segment Jones Creek

River Basin Red River Basin

E. Facility Siting Summary:

Is the facility located or proposed to be located:

1. Within a 100-year floodplain?	No
2. in wetlands?	No
3. In the critical habitat of an endangered species of plant or animal?	No
4. On the recharge zone of a sole-source aquifer?	No
5. In an area overlying a regional aquifer?	No
6. Within 0.5 mile (2,640 feet) of an established residence, church, school, day care center, surface water body used for a public drinking water supply, or dedicated public park?[7] [30 TAC 335.202] If Yes: the TCEQ shall not issue a permit for this facility.	No
7. In an area in which the governing body of the county or municipality has prohibited the processing or disposal of municipal hazardous waste or industrial solid waste? If Yes: provide a copy of the ordinance or order.	No

F. Wastewater and Stormwater Disposition

1. Is the disposal of any waste to be accomplished by a waste disposal well at this facility?	No
If Yes: List WDW Permit No(s):	
2. Will any point source discharge of effluent or rainfall runoff occur as a result of the proposed activities?	No
3. If Yes, is this discharge regulated by a TPDES or TCEQ permit? ☐ Yes	
TCEQ Permit No.	
TPDES Permit No.	
☐ No	
Date TCEQ discharge permit application filed	
Date TPDES discharge permit application filed:	

G. Information Required to Provide Notice

State Officials List [30 TAC 39]

State Senator	Senator Bryan Hughes Texarkana College 2500 N Robinson Road, Suite 190 Texarkana, Texas 75599 (903) 223-7958 [redacted]

State Representative	VanDeaver, Gary Bowie County Courthouse 710 James Bowie Drive New Boston, Texas 75570 (903) 628-0361 [redacted]
Local Officials List [30 TAC 39]	
Mayor	Mayor Marc Reiter 603 E Ave A Hooks, Texas 75561 (903) 547-2261 [redacted]
Local Health Authority	N/A
County Judge	Judge Bobby Howell 710 James Bowie Drive New Boston, Texas 75570 (903)628-6718 [redacted]
County Health Authority	Texarkana-Bowie County Family Health Center Robby Robertson, Director 902 West 12th, Texarkana, Texas 75501 (903) 798-3999 [redacted]
Based on the questions in the Bilingual Notice Instructions for this form, are you required to make alternate (Bilingual) notice for this application?	No
Bilingual Language(s):	Not Applicable
TCEQ Core Data Form Submitted?(see Section I Instructions, Item b.)	Yes
Has any information changed on the TCEQ Core Data Form since the last submittal?	Yes
Signature on Application Submitted? (see Section I Instructions, Item c)	Yes

1. Individual, Corporation, or Other Legal Entity Name - must match the Secretary of State's database records for the Facility)
2. If the application is submitted on behalf of a corporation, please identify the Charter Number as recorded with the Office of the Secretary of State for Texas.
3. The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on Part A of this application [Section 361.087, Texas Health and Safety Code].
4. If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

5. For applications for new permits, renewals, major amendments and Class 3 modifications a copy of the administratively complete application must be made available at a public place in the county where the facility is, or will be, located for review and copying by the public. Identify the public place in the county (e.g., public library, county court house, city hall), including the address, where the application will be made available for review and copying by the public.
6. For confidential information cross-reference the confidential material throughout the application to Section XIII: Confidential Material, and submit as a separate Section XIII document or binder conspicuously marked "CONFIDENTIAL".
7. Use only for a new commercial hazardous waste management facility or areal expansion of an existing commercial hazardous waste management facility or unit of that facility as defined in 30 TAC 335.202

Table I.1-Description of Proposed Application Changes

Permit/Compliance Plan Application Appendix/Section	Brief Description of Proposed Change	Modification or Amendment Type	Supporting Regulatory Citation
New Permit	New Permit	N/A - New Permit	See information in new permit application

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

u

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 606060028		RN 111572442

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	9/26/2022

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

EnviroSafe Demil, LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
805003546	32089250859	352318751	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: LLC

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:								
	EnviroSafe Demil, LLC							
	401 N Montague Street							
	City	Hooks	**State**	TX	**ZIP**	75561	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	[redacted]

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*

(206) 999-8684		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

EnviroSafe Demil, LLC

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	EnviroSafe Demil, LLC							
	401 N Montague Street							
	City	Hooks	**State**	TX	**ZIP**	75561	**ZIP + 4**	
24. County	Bowie							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
New Boston			TX		75570

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
33	27	20	94	16	42

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4953		332993 To thermally neutralize explosives and energetic materials	562211

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

To thermally neutralize explosives and energetic materials

34. Mailing Address:	**EnviroSafe Demil, LLC**							
	401 N Montague Street							
	City	**Hooks**	**State**	**TX**	**ZIP**	**75561**	**ZIP + 4**	
35. E-Mail Address:	**tjogden@envirosafedemil.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(206) 999-8684		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	TJ Ogden		41. Title:	CEO & Founder
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(206) 999-8684		( ) -	[redacted]	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	EnviroSafe Demil, LLC	**Job Title:**	President
Name *(In Print):*	Michael Wentz	**Phone:**	(430) 200- **2296**
Signature:	[signature]	**Date:**	12/3/2024

Signature Page

I, Michael Wentz, President,
(Operator) *(Title)*

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 12/3/2024

To be completed by the Operator if the application is signed by an Authorized Representative for the Operator

I, _____, hereby designate _____
[Print or Type Name] *[Print or Type Name]*

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

_____
Printed or Typed Name of Operator or Principal Executive Officer

_____
Signature

SUBSCRIBED AND SWORN to before me by the said _____
On this 3rd day of December, 2024
My commission expires on the 31st day of August, 2025

Notary Public in and for Bowie County, Texas
*[**Note**: Application Must Bear Signature & Seal of Notary Public]*

PAMELA ANN RICHARDSON
NOTARY PUBLIC
ID# 1030415-5
State of Texas
Comm. Exp. 08-31-2025

Pamela Ann Richardson

Interim Status Land Disposal Unit(s) Certification

For all land disposal units managing wastes which are newly listed or identified as hazardous wastes, the following certification must be executed by or on the date 12 months after the effective date of the rule identifying or listing the waste as hazardous. If the operator fails to certify compliance with these requirements, the operator shall lose authority to operate under interim status. [40 CFR 270.73(d)]

I,_____, _____
(operator) *(title)*

certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete.

I further certify that in accordance with Section 3005(e)(3) of the Resource Conservation and Recovery Act, as amended, the subject land disposal unit(s) are in compliance with all applicable groundwater monitoring and financial responsibility requirements of 30 TAC Sections 335.112, 335.116, and 335.117. I am aware there are significant penalties for submitting false information, including the possibility of civil penalty, criminal fines, and imprisonment.

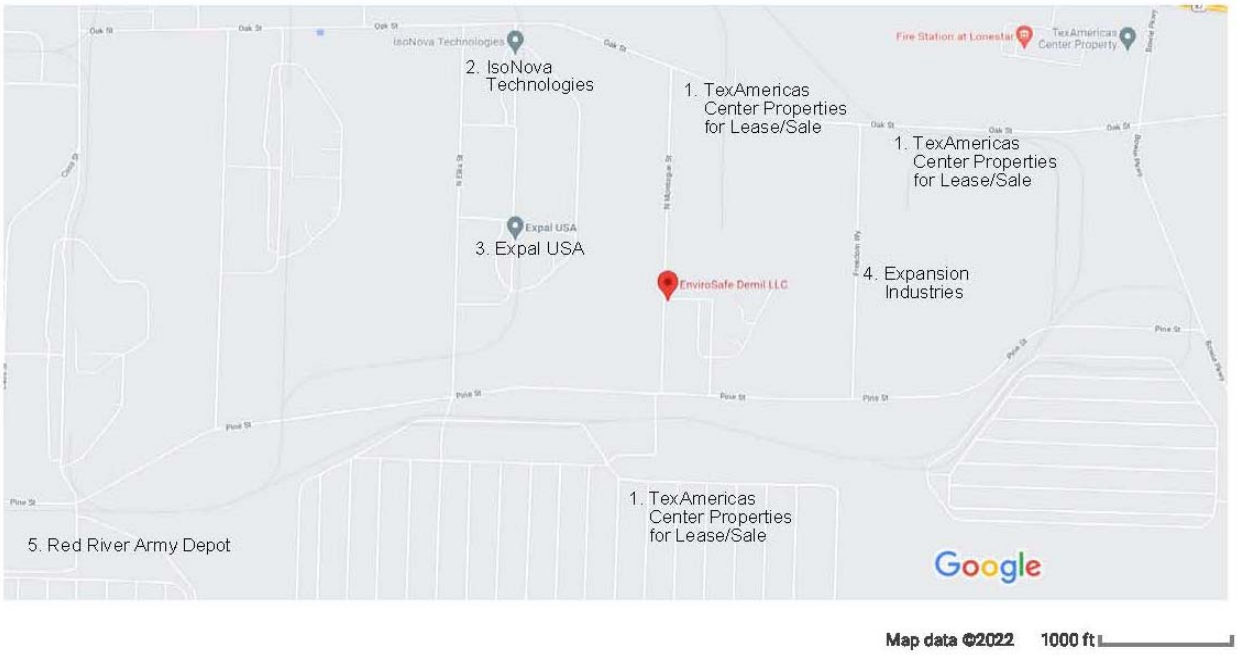
Signature:_____ Date: _____

Not Applicable

Section I – General Information

Appendix I.E - List and Map of Adjacent Landowners

Landowners Cross-Referenced to Map



Adjacent Landowners List

The persons identified below would be considered as affected persons.

1. TEXAMERICAS CENTER PROPERTIES
   107 CHAPEL LANE
   NEW BOSTON TX 75570

2. ISONOVA TECHNOLOGIES
   180 OAK TREE
   HOOKS TX 75561

3. EXPAL USA
   690 N ELLIS
   HOOKS TX 75561

4. EXPANSION INDUSTRIES
   777 FREEDOM WAY
   HOOKS TX 75561

5. RED RIVER ARMY DEPOT
   100 JAMES CARLOW DRIVE
   TEXARKANA TX 75507

II. Facility Siting Criteria

Provide all Part B responsive information in Appendix II. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

For all new hazardous waste management facilities or areal expansions of existing hazardous waste management facilities provide a report which includes all applicable information regarding Unsuitable Site Characteristics found in 30 TAC Chapter 335, Subchapter G. The report must address each requirement applicable to the type of activity submitted in the application. Reference specific rule numbers whenever possible. Supporting information may be cross-referenced to other parts of this application such as Section V - Engineering Report or Section VI - Geology Report, but information submitted in previous applications must be fully reproduced herein. In addition, provide the information in Table II, as applicable.

For permit renewals provide a report which includes all applicable information regarding Unsuitable Site Characteristics found in 30 TAC Chapter 335, Subchapter G. In addition, provide the information in Table II, as applicable. The applicant may resubmit the information submitted with the original permit application provided this information has not changed. For a renewal this information is necessary to ensure a complete application is received.

For capacity expansions of existing facilities, please provide information in Table II, as applicable. Please note however, that additional technical information may be requested to address any facility siting characteristics noted in Table I, under Facility Siting Summary.

> **NOTE:** The standards contained in §335.204(a)(6) - (9), (b)(7) - (12), (c)(6) - (11), (d)(6) - (11), and (e) (8) - (13) are not applicable to facilities that have submitted a notice of intent to file a permit application pursuant to §335.391 of this title (relating to Pre-Application Review) prior to May 3, 1988, or to facilities that have filed permit applications pursuant to §335.2(a) of this title which were submitted in accordance with Chapter 305 of this title and that were declared to be administratively complete pursuant to §281.3 of this title (relating to Initial Review) prior to May 3, 1988.[30 TAC 335.201(b)]

A. Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills.

Complete Table II.A-Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills.

Table II.A is included in Appendix II.

B. Additional Requirements for Land Treatment Facilities [30 TAC 335.204(b)]

Complete Table II.B.-Additional Requirements for Land Treatment Facilities [30 TAC 335.204(b)

Table II.B is included in Appendix II. This table is N/A because there are no land treatment facilities.

C. Additional Requirements for Waste Piles [30 TAC 335.204(c)]

Complete Table II.C.-Additional Requirements for Waste Piles [30 TAC 335.204(c)]

Table II.C is included in Appendix II. This table is N/A because there are no waste piles.

D. Additional Requirements for Storage Surface Impoundments [30 TAC 335.204(d)]

Complete Table II.D.- Additional Requirements for Storage Surface Impoundments [30 TAC 335.204(d)]

Table II.D is included in Appendix II. This table is N/A because there are no surface impoundments.

E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with wastes in place)

Complete Table II.E. - Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with wastes in place)

Table II.E is included in Appendix II. This table is N/A because there are no landfills or surface impoundments closed and landfills with wastes in place.

F. Flooding

Information addressing the following items is included in Appendix II and in Appendix II.F – Flooding. The facility is not located within a 100-year floodplain.

1. Identify whether the facility is located within a 100-year flood plain [40 CFR 270.14(b)(11)(iii)]. This identification must indicate the source of data for such determination and include a copy of relevant documentation (e.g., flood maps, if used and/or calculations). The boundaries of the hazardous waste management facility must be shown on the flood plain map. If the facility is not subject to inundation as a result of a 100-year flood event, indicate that the facility is not within the 100-year flood plain, and do not complete the remainder of the Flooding section in Table II. An applicant for a proposed hazardous waste landfill, areal expansion of a hazardous waste landfill, or a commercial hazardous waste land disposal unit may not rely solely on flood plain maps prepared by the Federal Emergency Management Agency (FEMA) or a successor agency for this determination.

2. If the facility is located within the 100-year flood plain the applicant must provide information detailing the specific flooding levels and other events (e.g., Design Hurricane projected by Corps of Engineers) which impact the flood protection of the facility. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, construction, operating, or maintaining the facility to withstand washout from a 100-year flood.

3. State whether any flood protection devices exist at the facility (e.g., flood walls, dikes, etc.), designed to prevent washout from the 100-year flood.

    a. **If Yes**: provide in Section V an engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the facility as

a consequence of a 100-year flood. [40 CFR 270.14(b)(11)(iv)(A)]

Include structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., flood walls, dikes) at the facility and how these will prevent washout. [40 CFR 270.14(b)(11)(iv)(B)]

b. **If No**: the applicant shall provide in Section V a plan for constructing flood protection devices and a schedule including specific time frames for completion. Provide engineering analyses to indicate the various hydrodynamic and hydrostatic forces expected to result at the facility as a consequence of a 100-year flood. [40 CFR 270.14(b)(11)(iv)(A)]

Include structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., flood walls, dikes) at the facility and how these will prevent washout. [40 CFR 270.14(b)(11)(iv)(B)]

4. If applicable, and in lieu of the flood protection devices from above, provide a detailed description of the procedures to be followed to remove hazardous waste to safety before the facility is flooded. [40 CFR 270.14(b)(11)(iv)(c)] The

procedures should include:

a. Timing of such movement relative of flood levels, including estimated time to move the waste, to show that such movement can be completed before flood waters reach the facility. Indicate which specific events shall be use to begin waste movement (e.g., Hurricane warning, Flash Flood watch, etc.);

b. A description of the location(s) to which the waste will be moved and a demonstration that these facilities will be eligible to receive hazardous waste in accordance with appropriate regulations (i.e., a permitted facility);

c. The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and

d. The potential for accidental discharges of the waste during movement and precautions taken to preclude accidental discharges.

G. Additional Information Requirements

Information addressing the following items is included in Appendix II.G – Additional Information Requirements.

1. For a new hazardous waste management facility, include a map of relevant local land-use plans and descriptions of the major routes of travel in the vicinity of the facility to be used for the transportation of hazardous waste to and from the facility covering at least a five (5)-mile radius from the boundaries of the facility. [30 TAC 305.50(a)(10)(A)&(D)]

2. For a new commercial hazardous waste management facility as defined in 30 TAC 335.202 or the subsequent areal expansion of such a facility or unit of

that facility, indicate on the map the nearest established residence, church, school, day care center, surface water body used for a public drinking water supply, and dedicated public park.

3. For new commercial hazardous waste management facilities, submit the following: [30 TAC 305.50(a)(12)(A)]

   a. the average number, gross weight, type, and size of vehicles used to transport hazardous waste;

   b. the major highways nearest the facility irrespective of distance; and

   c. the public roadways used by vehicles traveling to and from the facility within a minimum radius of 2.5 miles from the facility.

4. Include the names and locations of industrial and other waste-generating facilities within 0.5 miles for a new on-site hazardous waste management facility and the approximate quantity of hazardous waste generated or received annually at those facilities. [30 TAC 305.50(a)(10)(B)&(C)]

5. Include the names and locations of industrial and other waste-generating facilities within 1.0 miles for a new commercial hazardous waste management facility and the approximate quantity of hazardous waste generated or received annually at those facilities. [30 TAC 305.50(a)(10)(B)&(C)]

6. For existing land disposal facility units provide documentation that the information required by 30 TAC 335.5 has been placed in the county deed records. If previously submitted, please reference the submittal by date and registration number.

7. If a surface impoundment or landfill (including post-closure) is to be permitted, provide exposure information to accompany this application and in accordance

   with 30 TAC 305.50(a)(8) and 40 CFR 270.10(j). This information will be considered separately from the TCEQ application completeness determination.

8. For a hazardous waste management facility requesting a capacity expansion of an existing hazardous waste management facility, please provide in Section
   VI.A.1.a the requested fault delineation information. [30 TAC 305.50(a)(4)(D)]

Appendix II – Facility Siting Criteria

1.0 SITE INFORMATION – FORMER F-LINE OF LSAAP

The site for ESD is located on the former F-Line of the former Lone Star Army Ammunition Plant (LSAAP). Storage magazines adjacent to the main facility will also be used – the earth covered magazines (ECMs) are located at LSAAP's former line V-13 and an above ground magazine (AGM) is located at LSAAP's Beech #10 location. The LSAAP previously operated under a RCRA permit (RCRA Permit for Industrial Solid Waste Management No. HW50292-001; EPA identification number TX7213821831) which was originally issued in 1992. Site specific information for the entire LSAAP (the region surrounding the site) has been extensively documented in the *U.S. Army BRAC 2005; Environmental Condition of Property Report, Lone Star Army Ammunition Plant, Texarkana, TX; Final, 20 November 2006* (ECP Report). The following excerpts of this document are included in Attachment II.1.

- Section 3.5 – Environmental Setting – Natural and Physical Environment
    - Section 3.5.1 – Climate
    - Section 3.5.2 – Topography
    - Section 3.5.3 – Surface Water Hydrology
        - Section 3.5.3.1 – Rivers and Streams
        - Section 3.5.3.2 – Ponds, Lakes, and Other Standing Water
        - Section 3.5.3.3 – Stormwater Runoff and Flood Potential
    - Section 3.5.4 – Geology
    - Section 3.5.5 – Hydrogeology
        - Section 3.5.5.1 – Groundwater Flow
        - Section 3.5.5.2 – Aquifers
        - Section 3.5.5.3 – Wells and Groundwater Quality
    - Section 3.5.6 – Demography and Land Use
- Section 3.6 – Biological and Cultural Resources Summary
    - Section 3.6.1 – Biological Resources (including wildlife, protected species, and wetlands)
        - Section 3.6.1.1 – Vegetation
        - Section 3.6.1.2 – Wildlife
        - Section 3.6.1.3 – Protected Species
        - Section 3.6.1.4 – Wetlands
        - Section 3.6.1.5 – Consultations
    - Section 3.6.2 – Cultural Resources
        - Section 3.6.2.1 – Historic Resources

    - Section 3.6.2.2 – Archaeological Sites
    - Section 3.6.2.3 – Buildings/Structures
    - Section 3.6.2.4 – Section 106 Consultation
- Figure 3-1 – Topographic Map
- Figure 3-2 – 100-Year Floodplain, Watersheds, and Drainage Areas
- Figure 3-3 – Geologic Units
- Figure 3-4 – Cistern Locations
- Figure 3-5 – Monitoring Well Locations
- Figure 3-6 – Vegetative Cover
- Figure 3-7 – Primary Wetlands
- Figure 3-8 – Cemetery Locations

2.0 ESD SITE SPECIFIC INFORMATION

The ECP Report discussed in Section 1.0 covers the entire property boundaries of the former LSAAP. The ESD site is located on a small portion of the former LSAAP property. This section provides additional information and clarification, where necessary, of the specific information for the ESD site.

2.1 Precipitation Patterns

Information on the climate and precipitation is covered in Section 3.5.1 of the ECP Report. Additional information on precipitation patterns and historical weather data is documented in Section 3.0 of *Appendix III.F – Emergency Response Plan*.

2.2 100-Year Floodplains

Section 3.5.3.3 of the ECP Report states that there are fifteen areas on LSAAP property that are within 100-year floodplains. The ESD site is not one of those fifteen areas and is not in a 100-year floodplain. More information, including a 100-year floodplain map, is provided in *Appendix II.F – Flooding*.

2.3 Watersheds, Basins, and Regions

Section 3.5.3.1 of the ECP Report describes the watersheds, basins, and regions. The ESD site falls into the northern third of the LSAAP property and therefore is in the Red River Watershed, the Red River Basin, and the Pecan-Waterhole Sub-Basin. The basin is in the Arkansas-White-Red Region and the Red Sulphur Sub-Region.

2.4 Wetlands

Section 3.6.1.4 of the ECP Report states that there are wetlands on the LSAAP property. The National Wetlands Inventory map from the U.S. Fish and Wildlife Service included in Attachment II.2 shows that the ESD site is not located in wetlands. The closest wetlands to the ESD site are to the east.

2.5 Aquifers

Section 3.5.5.2 of the ECP Report provides information about the aquifers located on the LSAAP property. The Carrizo-Wilcox aquifer is not located at the ESD site. A map showing the location of the ESD site in relation to the Carrizo-Wilcox aquifer is included in Attachment II.3. The ESD site is not located directly above the Nacatoch aquifer, but it is located above the Nacatoch aquifer's subcrop. The Nacatoch aquifer is a minor aquifer and is composed of sequences of sandstone separated by impermeable layers of mudstone or clay. The movement of groundwater in this aquifer is to the southeast and is slow because of the discontinuity of the sand beds and fine sand grain size. A map showing the location of the ESD site in relation to the Nacatoch aquifer and the Nacatoch aquifer's subcrop is included in Attachment II.3.

The ESD site is not on the recharge zone of a sole-source aquifer. Attachment II.3 includes a map of the sole-source aquifers in Texas.

2.6 Geology

Section 3.5.4 of the ECP Report describes the geologic units present in the near surface at LSAAP. The ESD site falls into the Tertiary age Midway Group. More information on the Midway Group can be found in Section 3.5.4 of the ECP Report and more information on the site's geology can be found in *Appendix VI.A – Geology and Topography*.

2.7 Land Use

As stated in Section 3.5.6 of the ECP Report, land use in the surrounding area consists of rural agriculture, grazing, and hardwood forest. The areas immediately surrounding the ESD site were previously part of the LSAAP and are currently owned by the TexAmericas Center, which is a large rural industrial center consisting of around 102,000 acres. Land use maps are included in *Attachment II.G.1 – Land Use Maps*.

3.0 ADDITIONAL SITE SPECIFIC INFORMATION

Additional site specific information not covered in the ECP Report is included in this section.

3.1 Public Drinking Water - Surface Water Intake

The figure in Attachment II.4 shows the location on the nearest surface water intake, which is approximately 12 miles from the facility. The location of the nearest surface water intake is Wright Patman Lake.

3.2 Soil Units - Unified Soil Classification

Attachment II.5 includes a map that shows the United States Department of Agriculture, Natural Resources Conservation Service soil designations within the ESD facility boundaries. The maps show that three different soil units exist within the facility boundaries. The soil underneath where the HBC and Rocket Motor Ops Building will be located is classified as CL, ML, and CH.

3.3 Critical Habitat of an Endangered Species of Plant or Animal

Information from the Texas Parks and Wildlife Department shows that there are no endangered species in Bowie County, Texas. The list of rare, threatened, and endangered species for Bowie County, Texas is included in Attachment II.6.

Table II

Table II contains the following: Table II.A, Table II.B, Table II.C, Table II.D, Table II.E and Flooding from Section II. F of the Part B Application

Table II.A - Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills

Is the facility located or proposed to be located[1]:

In wetlands? [as applicable: 30 TAC 335.204(a)(2), (b)(2), (c)(2), (d)(2), and/or (e)(2)	No
If Yes: the TCEQ shall not issue a permit for a new hazardous waste management facility or areal expansion of an existing facility into wetlands, pursuant to 30 TAC 335.205(a)(1).	
In the critical habitat of an endangered species of plant or animal?[6] [as applicable: 30 TAC 335.204(a)(8), (b)(10), (c)(9), (d)(9), and/or (e)(11)]	No
If Yes: submit in Section V information demonstrating that design, construction, and operational features will prevent adverse effects on such critical habitat.	
On the recharge zone of a sole-source aquifer?2 [30 TAC 335.204(a)(3), (b)(3), (c)(3), (d)(3), and/or (e)(3)]	No
If Yes: then for storage and processing facilities (excluding storage surface impoundments), submit in Section V information demonstrating that secondary containment is provided to preclude migration to groundwater from spills, leaks, or discharges.	
In an area overlying a regional aquifer? [as applicable: 30 TAC 335.204(a)(4), (b)(4), (c)(4), (d)(4), and/or (e)(4)]	No
If Yes: submit site-specific information in Section V and/or Section VI demonstrating compliance with 30 TAC 335.205(a)(1).	
In areas where soil unit(s) are within five feet of the containment structure, or treatment zone, as applicable, that have a Unified Soil Classification of GW, GP, GM, GC, SW, SP, or SM, or a hydraulic conductivity greater than 10-5 cm/sec? [as applicable: 30 TAC 335.204(a)(5), (b)(5), (c)(5), (d)(5), and/or (e)(5)]	No
If Yes: provide additional information in Sections V and/or Section VI demonstrating compliance with 30 TAC 335.205(a)(1)	
In areas of direct drainage within one mile of a lake at its maximum conservation pool level, if the lake is used to supply public drinking water through a public water system?[6] [as applicable: 30 TAC 335.204 (a)(6), (b)(7), (c)(6), and/or (e)(8)].	No
If Yes: provide information in Section V demonstrating compliance with 30 TAC 335.205(a)(1).	

In areas of active geologic processes, including but not limited to erosion, submergence, subsidence, faulting, karst formation, flooding in alluvial flood wash zones, meandering river bank cuttings, or earthquakes?[6] [as applicable: 30 TAC 335.204(a)(7), (b)(8) ,(c)(7), (d)(7), and/or (e)(9)]	No
Within 30 feet of the upthrown side or 50 feet of the downthrown side of the actual or inferred surface expression of a fault that has reasonably been shown to have caused displacement of shallow Quaternary sediments or of man-made structures?[6] [as applicable: 30 TAC 335.204(a)(9), (b)(12) ,(c)(11), (d)(11), and/or (e)(13)]	No

If Yes: specify in Section V the design, construction, and operational features that will prevent adverse effects resulting from any fault movement.

If a fault is found to be present, the width and location of the actual or inferred surface expression of the fault, including both the identified zone of deformation and the combined uncertainties in locating a fault trace, must be determined by a qualified geologist or geotechnical engineer and reported in Section VI.

Table II.B. - Additional Requirements for Land Treatment Facilities [30 TAC 335.204(b)]:

Is the land treatment facility located or proposed to be located:

Within 1000 feet of an established residence, church, school, day care center, surface water body used for a public drinking water supply, or dedicated public park which is in use at the time the notice of intent to file a permit application is filed with the commission, or which is in use at the time the permit application is filed with the commission?
If Yes: the TCEQ shall not issue a permit for a new hazardous waste land treatment unit or an areal expansion of an existing land treatment unit, pursuant to 30 TAC 335.204(b)(6) and 335.205(a).
Within 1000 feet of an area subject to active coastal shoreline erosion even though the area is protected by a barrier island or peninsula?
If Yes: submit in Section V.F design, construction, and operational features which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
Within 5000 feet of a coastal shoreline subject to active shoreline erosion and which is unprotected by a barrier island or peninsula.
If Yes: submit Section V.F design, construction and operational features, which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
On a barrier island or peninsula?
If Yes: the TCEQ shall not issue a permit for a new hazardous waste land treatment unit or an areal expansion of an existing land treatment unit, pursuant to 30 TAC 335.204(b)(11) and 335.205(a)(1).

Table II.C. - Additional Requirements for Waste Piles [30 TAC 335.204(c)]

Is the waste pile located or proposed to be located:

Within 1000 feet of an area subject to active coastal shoreline erosion even though the area is protected by a barrier island or peninsula?
If Yes: submit in Section V.E design, construction, and operational features on the facility which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
Within 5000 feet of a coastal shoreline subject to active shoreline erosion and which is unprotected by a barrier island or peninsula.
If Yes: submit Section V.E design, construction, and operational features which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
On a barrier island or peninsula?[6]
If Yes: the TCEQ shall not issue a permit for a new hazardous waste pile or an areal expansion of an existing waste pile, pursuant to 30 TAC 335.204(c)(10) and 335.205(a)(1).

Table II.D. - Additional Requirements for Storage Surface Impoundments [30 TAC 335.204(d)]

Is the land treatment facility located or proposed to be located:

Within 1000 feet of an area of active coastal shoreline erosion even though the area is protected by a barrier island or peninsula
If Yes: submit in Section V.D design, construction, and operational features of the facility which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
Within 5000 feet of a coastal shoreline subject to active shoreline erosion and which is unprotected by a barrier island or peninsula.
If Yes: then submit in Section V.D design, construction, and operational features which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
On a barrier island or peninsula?[6]
If Yes: the TCEQ shall not issue a permit for a new hazardous waste storage surface impoundment or an areal expansion of an existing storage surface impoundment, pursuant to 30 TAC 335.204(d)(10) and 335.205(a)(1).

Table II.E. - Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with wastes in place)

Is the landfill located or proposed to be located:

Within 1000 feet of an established residence, church, school, day care center, surface water body used for a public drinking water supply, or dedicated public park which is in use at the time the notice of intent to file a permit application is filed with the commission, or which is in use at the time the permit application is filed with the commission?
If Yes: the TCEQ shall not issue a permit for a new hazardous waste landfill or an areal expansion of an existing landfill, pursuant to 30 TAC 335.204(e)(6) and 335.205(a)(1).
(For commercial hazardous waste landfills) in the 100-year flood plain of a perennial stream that is delineated on a flood map adopted by the Federal Emergency Management Agency after September 1, 1985, as zone A1-99, VO, or V1-30?
If Yes: the TCEQ shall not issue a permit for a new hazardous waste landfill or an areal expansion of an existing landfill, pursuant to 30 TAC 335.204(e)(7) and 335.205(a)(1).
Within 1000 feet of an area subject to active coastal shoreline erosion even though the area is protected by a barrier island or peninsula?
If Yes: then submit in Section V.G design, construction, and operational features which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
Within 5000 feet of a coastal shoreline subject to active shoreline erosion and which is unprotected by a barriers island or peninsula.
If Yes: then submit in Section V.G design, construction, and operational features which will prevent adverse effects resulting from storm surge and erosion or scouring by water.
On a barrier island or peninsula?
If Yes: the TCEQ shall not issue a permit for a new hazardous waste landfill or an areal expansion of an existing landfill, pursuant to 30 TAC 335.204(e)(12) and 335.205(a)(1).

Flooding (see Section II Instructions, Item F)

Is the facility within a 100-year flood plain?	No
Has a flood plain map been provided?	Yes
Has information about flooding levels and events, and other special flooding factors, been provided?[3]	
Do any flood protection devices exist at the facility (e.g., flood walls, dikes, etc.) designed to prevent washout from the 100-year flood?[3]	
If Yes: provide in Section V an engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the facility as a consequence of a 100-year flood. [40 CFR 270.14(b)(11)(iv)(A)][4]	
If No: the applicant shall provide in Section V a plan for constructing flood protection devices and a schedule including specific time frames for completion. Provide engineering analyses to indicate the various hydrodynamic and hydrostatic forces expected to result at the facility as a consequence of a 100-year flood. [40 CFR 270.14(b)(11)(iv)(A)][5]	
If applicable, and in lieu of the flood protection devices from above, was a detailed description of the procedures to be followed to remove hazardous waste to safety before the facility is flooded provided?[3, 6]	
Additional Information Requirements (see Section II instructions, Item G): Submitted?	

1. Provide the source of information for all questions in the appendix.
2. Note: Land treatment facilities, waste piles, storage surface impoundments, and landfills may not be located on the recharge zone of a sole-source aquifer.
3. Only required to be submitted if the facility is subject to inundation as a result of a 100-year flood event.
4. Include structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., flood walls, dikes) at the facility and how these will prevent washout. [40 CFR 270.14(b)(11)(iv)(B)]
5. Include structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., flood walls, dikes) at the facility and how these will prevent washout. [40 CFR 270.14(b)(11)(iv)(B)]
6. The standards contained in §335.204(a)(6) - (9), (b)(7) - (12), (c)(6) - (11), (d)(6) - (11), and (e) (8) - (13) are not applicable to facilities that have submitted a notice of intent to file a permit application pursuant to §335.391 of this title (relating to Pre-Application Review) prior to May 3, 1988, or to facilities that have filed permit applications pursuant to §335.2(a) of this title which were submitted in accordance with Chapter 305 of this title and that were declared to be administratively complete pursuant to §281.3 of this title (relating to Initial Review) prior to May 3, 1988.[30 TAC 335.201(b)]

ATTACHMENT II.1

EXCERPTS FROM:

U.S. Army BRAC 2005; Environmental Condition of Property Report, Lone Star Army Ammunition Plant, Texarkana, TX; Final, 20 November 2006 **(ECP Report)**

U.S. Army BRAC 2005
Environmental Condition of Property Report
Lone Star Army Ammunition Plant
Texarkana, TX

Final
20 November 2006







FINAL

ENVIRONMENTAL CONDITION OF PROPERTY REPORT
LONE STAR ARMY AMMUNITION PLANT
20 November 2006

Prepared for:

United States Army
Contract W912QR-04-D-0018, Delivery Order 0012

Lone Star Army Ammunition Plant

Prepared by:

12120 Shamrock Plaza, Suite 300
Omaha, Nebraska 68154
16170064

3.4.7 Compressed Air

Production processes throughout the installation use compressed air to power equipment and reduce the risk of explosion. Large compressor buildings are situated on several production lines. The condensate from the compressors passes through oil/water separators before discharging to the sanitary sewer. Oil collected along the production lines accumulates in 55-gallon drums standing outside the buildings. Currently, full barrels are put in storage at Area M. Disposal of the oil drums collected at the load lines is discussed further in **Section 4.4** of this ECP Report. It is not known how this was handled in the past.

3.5 ENVIRONMENTAL SETTING – NATURAL AND PHYSICAL ENVIRONMENT

The following sections summarize the LSAAP climate, topography, surface water hydrology, groundwater hydrology, geology, and demographics.

3.5.1 Climate

The climate in the vicinity of LSAAP is characterized by mild winters and hot summers. The spring and autumn months are mild with cool nights and warm days. The high humidity in this area is typically caused by warm moist air from the Gulf of Mexico. (Flour Daniel, Inc. 1994) Temperatures average 81 degrees Fahrenheit (°F) during the summer and 44°F in the winter, with an average annual temperature of 63°F.

Precipitation averages about 51 inches per year with peak rainfall in November and December, and the driest months in July and August. Snowfall in the area is rare and usually very light, averaging one to two inches per year. Monthly precipitation and temperature parameters collected by the United States Weather Service for Texarkana, Texas are shown in **Table 3-4** below:

TABLE 3-4
SUMMARY OF TEXARKANA, TEXAS CLIMATE DATA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average High	53°F	58°F	67°F	75°F	82°F	89°F	93°F	93°F	86°F	77°F	64°F	55°F
Average Low	31°F	34°F	42°F	50°F	60°F	68°F	72°F	71°F	64°F	52°F	41°F	33°F
Mean	42°F	46°F	55°F	63°F	71°F	79°F	83°F	82°F	75°F	65°F	53°F	44°F
Record High	81°F	90°F	89°F	95°F	98°F	101°F	105°F	106°F	108°F	95°F	86°F	80°F
Record Low	3°F	8°F	15°F	28°F	40°F	52°F	57°F	55°F	38°F	27°F	16°F	-6°F
Average Precipitation	3.91 inches	3.80 inches	4.46 inches	4.23 inches	4.97 inches	4.82 inches	3.62 inches	2.41 inches	3.77 inches	4.61 inches	5.69 inches	4.95 inches

Source: USWS 2006

Humidity is high with an annual average of approximately 65 percent. Severe thunderstorms are numerous in the spring and hurricanes in the Gulf of Mexico have usually dissipated by the time

they reach the area. No tornado has ever been recorded as touching down on the installation. (USATHAMA 1978)

Prevailing winds are northeasterly during the fall and winter months and south-southwesterly during the spring and summer. Average wind speed is 7.6 miles per hour. (USATHAMA 1978)

3.5.2 Topography

LSAAP is situated within the West Gulf Coastal Plain physiographic province (USATHAMA 1978). The topography at this site is generally characterized as flat to gently rolling hills. Elevations vary from a maximum elevation of approximately 450 feet above mean sea level (amsl) in the western half of this site to just under 300 feet amsl where the East Fork of Elliot Creek crosses the southern LSAAP property boundary. In general, the western half of LSAAP is higher in elevation than the eastern side. A topographic map of LSAAP is presented on **Figure 3-1**.

The major topographic feature within the installation is a drainage divide, separating LSAAP into five distinct drainage areas (Flour Daniel, Inc. 1994). This topographic ridge is presented on **Figure 3-2**, and its impact on surface water flow is discussed in **Section 3.5.3.1**.

Some of the creeks and drainage ditches have eroded valleys which may act as barriers to groundwater flow. Groundwater is encountered at elevations higher than surface water elevations at this site. Further information on groundwater flow is presented in **Section 3.5.5.1** (Developers International Services Corporation 1983).

3.5.3 Surface Water Hydrology

3.5.3.1 Rivers and Streams

As stated in **Section 3.5.2**, a topographic ridge running east-west across LSAAP controls surface water flow. The northern third of LSAAP falls in the Red River Watershed and the southern two-thirds fall in the Sulphur River Watershed (see **Figure 3-2**). Watersheds are very large areas and can be divided into more site-specific classifications called basins and regions. The northern third of LSAAP falls within the Red Little Basin, Pecan-Waterhole Sub-Basin. The southern two thirds are within the Big Cypress-Sulphur Basin, Lower Sulphur Sub-Basin. Both basins are in the Arkansas-White-Red Region and the Red Sulphur Sub-Region. **Table 3-5** summarizes this information.

TABLE 3-5
BASINS AND REGIONS

Relationship to Divide	Sub-Basin (Small)	Basin	Sub-Region	Region (Large)
North	Pecan-Waterhole	Red Little	Red Sulphur	Arkansas-White-Red
South	Lower Sulphur	Big Cypress-Sulphur		

Source: United States Geological Survey (USGS) 2006

Although LSAAP falls into two watersheds, there are five drainage areas associated with this site, as illustrated on **Figure 3-2**.

Areas north of the divide drain into several small intermittent streams which exit along the northern boundary of the installation. Four unnamed intermittent tributaries of Panther Creek exit the northern boundary of LSAAP and become perennial streams off installation property. Jones Creek and three unnamed tributaries of Jones Creek also exit the northern property boundary. The four creeks are classified as intermittent streams while on installation property. The streams eventually empty into perennial Barkman Creek (Flour Daniel, Inc. 1994).

Four intermittent tributaries of Aiken Creek exit LSAAP's eastern boundary. The tributaries are classified as perennial streams approximately 2.5 miles downstream LSAAP's eastern border at Aiken Creek. Aiken Creek eventually empties into Elliott Creek downstream of the Wright Patman Dam (Flour Daniel, Inc. 1994).

At the southeast corner of the installation, near the HEDG, an unnamed intermittent stream flows approximately two miles prior to leaving the installation boundary and emptying into Wright Pitman Lake (Flour Daniel, Inc. 1994).

West of this area, Elliott Creek is fed by several intermittent tributaries on LSAAP which drain the south-central portion of the installation. Elliot Creek is the only perennial stream on the installation property. Elliot Creek flows south for approximately 3 miles to the installation boundary, eventually emptying into Wright Patman Lake (Flour Daniel, Inc. 1994).

On the southwestern portion of the installation two unnamed intermittent tributaries of an unnamed perennial stream flow south before leaving LSAAP property and eventually emptying into Elliot Creek Reservoir (Flour Daniel, Inc. 1994).

Nettles Creek is an intermittent stream flowing south along the southwestern edge of LSAAP. Two intermittent unnamed tributaries of Nettles Creek empty into it immediately south of the installation boundary. At this point Nettles creek becomes perennial and flows southward to Elliot Creek Reservoir (Flour Daniel, Inc. 1994).

The western edge of LSAAP is drained by two unnamed intermittent streams which are tributaries of Caney Creek. These two streams empty into perennial Caney Creek 1.5 miles west of the installation boundary and flow southward to Caney Creek Reservoir. (Flour Daniel, Inc. 1994) IRP LSAAP-019 (Creeks, Streams, Drainage (AOC #1)) has received an approved no further action (NFA) from Texas Commission on Environmental Quality (TCEQ). Drainage ditches, creeks, and streams exit LSAAP at numerous locations. Sampling these locations at the installation boundary has not indicated a contamination problem in any of the six hydrologic units (USAEC 2006). Drainage ditches, creeks, and streams have not been sampled at or near areas of potential concern (e.g., load lines).

3.5.3.2 Ponds, Lakes, and Other Standing Water

No significant natural or man-made lakes or reservoirs are located on LSAAP. The largest surface water body on the installation is the former emergency water supply pond (Z-1) in the

south central portion of LSAAP. Three significant reservoirs are located in the vicinity of LSAAP. These include Elliot Creek Reservoir to the south, Caney Creek Reservoir to the west (on RRAD), and Wright Pitman Lake to the south (Flour Daniel, Inc. 1994).

Each of the production lines has or had several sumps used for the treatment of water used in the production of munitions. Areas G (IRP LSAAP-033) and O (IRP LSAAP-034) each had wastewater ponds that were closed in place. The entire installation is covered with drainage ditches that will retain runoff water for a while, but typically remain dry throughout the year. The HEDG is completely surrounded by a dike system that controls erosion and runoff. Runoff flows through a silt retention basin in the southwest corner of the bermed area before being discharged into an adjacent stream. The water is analyzed for pH and perchlorates before discharging to the adjacent stream basin. (DZI SSD 2006 and Altec 2003c)

3.5.3.3 Stormwater Runoff and Flood Potential

In general, runoff from rainfall follows the slope of the land into drainage ditches, then into creeks and streams leaving LSAAP and eventually emptying into either the Red or Sulphur Rivers. Fifteen areas on LSAAP property are within 100-year floodplains, as shown on **Figure 3-2**. One IRP site (IRP LSAAP-018 HEDG) is also within a 100-year floodplain.

There are 31 discharge locations at LSAAP. LSAAP has a TPDES Multi-Sector General Permit that requires a Stormwater Pollution Prevention Plan. The Plan identified 31 non-point source discharges requiring annual monitoring and quarterly inspection during sampling intervals and during site compliance evaluations. Additionally, there are six wastewater discharge outfalls. Three of the outfalls discharge to surface water. Information about the outfalls can be found in **Section 4.1.4**.

3.5.4 Geology

The LSAAP is situated within the West Gulf Coastal Plain physiographic province, characterized by geologic formations that thin landward and form belts parallel to the coast. Resistant formations leave ridges within the province and easily eroded formations leave valleys.

In general, there are three geologic units present in the near surface at LSAAP: the Tertiary age Wilcox and Midway Groups, and the Quaternary age alluvial deposits. The Midway Group is described as massive blocky clay that locally contains glauconitic sand. The Wilcox Group consists of irregularly bedded sands that are interbedded with clay, silty clay, lignitic clay and lignite. Both Groups are often described as "clay-shale" with the Wilcox Group being the coarser grained (silty clay-shale). The alluvial deposits vary from silty clays and clayey silts to sandy silts and silty sands and gravels and are present along the Red River and the Sulfur River and their tributaries. Alluvial deposits typically become coarser with depth. (Flour Daniel, Inc. 1994) The three units are summarized below and the aerial extent is presented on **Figure 3-3**.

- Recent alluvium: Light grey to reddish-brown, very fine to course sand interbedded with dark-colored clays and silts with a few gravels. (USATHAMA 1978)

- Wilcox group: Predominantly a reddish tan to brown sandy and silty clay-shale with siltstone and ironstone concretions. (USATHAMA 1978)
- Midway group: Calcareous clay and clay-shale, grey to bluish grey in color with reddish-brown iron stained lenses of sands and silts. (USATHAMA 1978)

Exposures of Tertiary age Midway and Wilcox Groups predominate in Bowie County in roughly east-west parallel outcrop bands with the Midway Group occurring in the central and northern section of the installation and the Wilcox Group occurring in the southern section of the installation. Gently rolling lowlands have developed on areas underlain by the Midway Group and more hilly terrain has developed on areas underlain by the Wilcox Group. The regional dip of the subsurface units is approximately 15 feet per mile. The east-west Luning-Mexia-Talco Fault system is in the vicinity of LSAAP; however, no displacement is believed to be in the Tertiary or Recent sediments. (USATHAMA 1978)

The Wilcox Group consists of mostly sands, silts, and clays that occur under sloping topography. Studies indicate that the Wilcox Group is as much as 700 feet thick where the entire unit occurs. The maximum thickness of the Wilcox Group at LSAAP is probably not more than 100 feet. (Flour Daniel, Inc. 1994)

The Midway Group consists of clay shale that is poorly bedded with thin discontinuous laminations of silt and fine silty sand (Developers International Services Corporation 1983). The Midway Group is weathered to a depth of about 42 feet. The weathered section of the formation is yellow brown jointed clay shale that is soft and moist and has iron oxide staining along joint planes. Crystalline gypsum is infrequently found lining joint planes near the base of the weathered zone. Below the weathered zone, the shale is dark gray and generally not jointed. The Midway Group represents the oldest and most laterally extensive unit to crop out at LSAAP. The erosion of Wilcox sediments has completely exposed the Upper Midway section. The Midway extends across the northern two-thirds of LSAAP and is characterized as a thick sequence of fine-grain marine sediments. The Midway Group is principally composed of massive clay, interbedded with minor amounts of silt and sand in varying proportions. The thickness of the Midway Group is difficult to determine, but is believed to be approximately 600 feet. (Flour Daniel, Inc. 1994)

There are two major surface soil units and one minor surface soil unit present at LSAAP. The major soil groups roughly correlate to the areas underlain by the Wilcox Group and the Midway Group. The Sawyer-Eylau-Woodtell Soils cover approximately 60 percent of LSAAP. These soils are generally clayey to silty loams with low permeability. The Rushton-McKamie Soils cover the remaining 40 percent of LSAAP. These soils are generally sandy loams with some clay and moderate to low permeability. The low permeability loam of the Annona-Alusa Soils is only present near the HEBG. (Flour Daniel, Inc. 1994)

3.5.5 Hydrogeology

The following sections describe the groundwater characteristics, aquifers, wells and background groundwater quality at LSAAP. Groundwater in the Midway Group is classified as Class III, and Class II in the Wilcox Group, as defined by the TCEQ.

3.5.5.1 Groundwater Flow

Shallow groundwater flow is along the topographic gradient at LSAAP (Developers International Services Corporation 1983). There is a groundwater divide that roughly coincides with the topographic divide (A.T. Kearney, Inc. 1988) as discussed in **Section 3.5.2**. Groundwater north of the divide flows to the north and groundwater south of the divide flows to the south. Local variations in flow direction could also occur. Groundwater levels range from near the surface along creek bottoms to depths of approximately 25 feet below land surface (bls) along ridge lines (Developers International Services Corporation 1983).

Due to the shallow water table, groundwater to surface water transition zones occur at many locations throughout LSAAP. In some locations, groundwater may travel a relatively short distance before discharging into a nearby surface water body, such as a creek or drainage ditch. This occurs most frequently during wet seasons when groundwater levels are near the surface. (Developers International Services Corporation 1983) No springs were identified during the VSI or disclosed in interviews. Seasonal fluctuations in the water table due to precipitation are relatively small due to impermeable soils and the well developed drainage systems (A.T. Kearney, Inc. 1988).

3.5.5.2 Aquifers

The uppermost aquifer located at this site is the Carrizo-Wilcox aquifer, and it is classified as a major aquifer. A major aquifer is one that supplies large quantities of water in large areas of the state. (TWDB 2006) Based on topography, groundwater from this aquifer can be encountered from zero to 25 feet below ground surface. At LSAAP, the hydraulic conductivity of this aquifer within the Wilcox Group was estimated to be 5.0 x 10-5 centimeters per second (cm/sec) at the HEBG (IRP LSAAP-016) and 2 x 10-6 cm/sec at the HEDG (IRP LSAAP-018). Groundwater flow in Quaternary deposits, such as stream beds and terrace deposits, is reported to be from 4 x 10-4 to 6 x 10-6 cm/sec. The hydraulic conductivity of the Midway Group is much lower (Flour Daniel, Inc. 1994). Water may not be present when drilling holes for monitoring wells in the Midway Group.

The Nacatoch sands underlie an estimated 10 percent of the northern portion of LSAAP (A.T. Kearney, Inc. 1988) below the Carrizo-Wilcox aquifer. This sand aquifer is known as the Nacatoch aquifer and it is classified as a minor aquifer (TWDB 2006). Movement of groundwater in this aquifer is to the southeast. The rate of movement is not known, but is presumed to be slow because of the discontinuity of the sand beds and fine sand grain size (A.T. Kearney, Inc. 1988). Wells drilled into the Nacatoch sands located north of LSAAP range from 276 to 455 feet bls (TWDB 2006).

3.5.5.3 Wells and Groundwater Quality

Currently, there are no production, domestic, municipal, or underground injection wells located at LSAAP. However, shallow groundwater may have been a potable water source for former homesteads at LSAAP. (A.T. Kearney, Inc. 1988) Fifty-six cistern locations are presented on **Figure 3-4**. Sixteen old wells and cisterns have been closed (USAEC 2006). In addition to old

wells and cisterns, there are over 200 groundwater monitoring wells at LSAAP (A.T. Kearney, Inc. 1988). Monitoring well locations are presented on **Figure 3-5**.

Groundwater quality is impaired at many site-specific locations throughout LSAAP and those are covered in more detail in other sections. Groundwater in the Carrizo-Wilcox aquifer at this site is characterized by high sodium bicarbonate content and low dissolved solids content. The water is "soft" throughout the formation. Groundwater in the Nacatoch sand has fresh to slightly saline waters. Generally, the water is highly alkaline, high in sodium bicarbonate and "soft." It is suitable for public use, industrial use and irrigation. (A.T. Kearney, Inc. 1988)

3.5.6 Demography and Land Use

LSAAP is located in northeastern Texas, approximately 12 miles west of Texarkana, Texas (population 35,746), in central Bowie County and Texarkana, Arkansas (30,006). The site lies in the heart of a four-state area consisting of Arkansas, Oklahoma, Louisiana, and Texas. Communities in the vicinity of the installation include Hooks (2,924) and Leary (565) to the north, and Redwater (883) and Maud (1,015) to the south and southwest, respectively. The town of New Boston (4,624) is also nearby. To the west is RRAD. (USCB 2006)

According to the United States Census Bureau, the estimated population of Bowie County in 2005 was 90,643 with more than 35,000 in Texarkana, Texas. An estimated population of 5,360 lives within one mile of LSAAP. Approximately 370 persons are employed at LSAAP (Staubach 2006).

LSAAP has a total land area of 15,546 acres, of which 1,089 acres are classified as improved ground; 2,288 acres are semi-improved ground; and 12,169 acres are unimproved grounds. Land use in the surrounding area consists of rural agriculture, grazing, and hardwood forest. (Altec 2002b)

3.6 BIOLOGICAL AND CULTURAL RESOURCES SUMMARY

3.6.1 Biological Resources

A natural resource management plan is in effect and is currently undergoing revision.

3.6.1.1 Vegetation

LSAAP is located in an oak-pine, broadleaf, deciduous, and needle green-evergreen forest comprised of primarily loblolly-short-leafed pine, pine-hardwood, and mixed hardwood associations. Loblolly-short-leafed pine associations occur primarily on gravel ridges, slopes, and areas previously cleared, cultivated, or machine planted. The pine-hardwood association occurs on ridges, slopes, and bottomlands cultivated prior to the development of LSAAP. The mixed hardwood association occurs in undisturbed bottomlands of creeks and drains and in areas that are not well drained. (Tetra Tech EM, Inc. 2006)

Dominant tree species include red maple, black hickory, southern hackberry, persimmon, sweet-gum, short-leafed pine, loblolly pine, southern red oak, and post oak. Common shrub species found at LSAAP include the American beauty berry, hawthorne, sumac, blackberry, and tree huckleberry. Common grass species include longleaf uniola, purple top, little bluestem, and broomsedge. Most grasses are located along roadsides, utility easements, demolition grounds, production areas, training areas, and food plots. Maintained areas surrounding the buildings in the developed areas are also grassed (Tetra Tech EM, Inc. 2006). Vegetative cover for LSAAP is shown on **Figure 3-6**.

3.6.1.2 Wildlife

Several species of mammals are common on LSAAP, including white-tail deer, gray squirrel, fox squirrel, raccoon, bobcat, skunk, and armadillo. Common reptiles found at LSAAP include the cottonmouth, copperhead, diamondback rattlesnake, box turtle, and snapping turtle. Amphibians include the Texas salamander, siren, great plain narrow-mouthed toad, and bullfrog. (Tetra Tech EM, Inc. 2006)

There are also over 400 species of birds that may frequent LSAAP. Migratory waterfowl passing over the Mississippi Valley migration route use LSAAP as a temporary refuge. Game birds found on site include the mourning dove, wild turkey, and bobwhite quail. Other birds that have been recorded to use LSAAP include the eastern bluebird and green heron and several raptor species forage on the property, including American kestrel, red-tailed hawk, and red-shouldered hawk (Tetra Tech EM, Inc. 2006).

3.6.1.3 Protected Species

No federally-listed or state-listed threatened and endangered plant species are known to occur at LSAAP. The alligator snapping turtle (*Macroclemys temminckii*), a state-listed threatened species, was the only observed federally- or state-listed species during a planning level survey in 2000 at the installations (Tetra Tech EM, Inc. 2006). The INRMP lists the American alligator (*Alligator mississippiensis*) as a federally-listed threatened species known to occur at LSAAP. However, the American alligator was delisted in 1987, although the legal trade of alligator skins is still regulated by the United States Fish and Wildlife Service (USFWS) (USFWS 2006). There are no other state- or federally-listed threatened and endangered species known to be present on LSAAP.

The only other federally listed species that may occur in the area are the threatened bald eagle (*Haliaeetus leucocephalus*), endangered interior least tern (*Sterna antillarum*), red-cockaded woodpecker (*Picoides borealis*), and threatened Louisiana black bear (*Ursus americanus*). Other state-listed bird species that may migrate through the area include the endangered American peregrine falcon (*Falco peregrinus anatum*) and the threatened arctic peregrine falcon (*Falco peregrinus tundruis*) (Tetra Tech EM, Inc. 2006). None of these species are likely to inhabit LSAAP due to the lack of quality habitat found on the installation; however, no surveys have been completed for these species or their habitats. **Appendix K** provides a listing of the threatened and endangered species observed or potentially occurring in Bowie County (Tetra Tech EM, Inc. 2006).

3.6.1.4 Wetlands

A wetlands inventory survey was performed at LSAAP by the USFWS in 1997 and 1998. The wetlands survey found that there are approximately 570 acres of wetlands and deepwater habitats on LSAAP (**Figure 3-7** Tetra Tech EM, Inc. 2006). Forested wetlands comprise about 97 percent of the wetlands at LSAAP with deciduous forested wetlands being the most common habitat type. Approximately one percent of the wetlands are emergent and one percent are considered ponds. There are no shrub/emergent wetlands or ponds at LSAAP (Tetra Tech EM, Inc. 2006). **Table 3-6** lists wetland acreages by habitat type for LSAAP. No work has been conducted to delineate jurisdictional wetlands from the total. In the survey conducted at LSAAP, it was determined that no wetland restrictions apply to the main installation or the ranges. Project-specific field delineations, consistent with current USACE protocols for determining the presence of jurisdictional wetlands, must be conducted prior to implementing activities that could potentially impact wetlands.

TABLE 3-6
WETLAND ACREAGE SUMMARY FOR LSAAP

Wetland Type	Acreage
Aquatic Bed	0
Emergent	4.6
Deciduous Scrub-Shrub	0
Evergreen Scrub-Shrub	3.3
Mixed Shrub/Emergent	0
Deciduous Forested	485.5
Evergreen Forested	61.1
Mixed Forested	7.3
Forested – Cypress	0
Forested – Dead	0
Unconsolidated Bottom/Shore (ponds)	7.9
Total	**569.7**

Source: Tetra Tech EM, Inc. 2006

3.6.1.5 Consultations (Sec 7 Formal or Informal)

Under provisions of Section 7 of the Endangered Species Act, a federal agency that permits, licenses, funds, or otherwise authorizes activities must consult with the USFWS when appropriate, to ensure that its actions will not jeopardize the continued existence of a listed threatened or endangered species or a designated critical habitat. Threatened and endangered species are not known to occur at LSAAP, and formal Section 7 consultation with the USFWS has not been performed. The draft INRMP is prepared in coordination with the USACE, the USFWS, and the Texas Parks and Wildlife Department (TPWD). The draft document is then submitted to these agencies and the public for review and comment. Comments received are used to develop the final version of the INRMP.

In addition, the USFWS, TPWD, and LSAAP maintain a cooperative agreement in regards to fish and wildlife resource management. This agreement states the responsibilities of each agency in carrying out the implementation of the INRMP and sets a framework for future cooperation.

3.6.2 Cultural Resources

A current Integrated Cultural Resources Management Plan (ICRMP), prepared in 2002, is maintained at LSAAP. Between the years of 1980 through 1993, approximately 52 percent of LSAAP acreage was surveyed for cultural resources. (USACE, Tierra Environmental Services, Inc. and Earth Tech 2002)

3.6.2.1 Historic Resources

A National Environmental Policy Act (NEPA) questionnaire lists 53 sites eligible for the National Register of Historic Places (NRHP). There has been one recorded violation of the Archaeological Resources Protection Act.

3.6.2.2 Archaeological Sites

Several archaeological investigations have been conducted within LSAAP, including intensive and point surveys. The earliest survey was conducted in 1980, while the most recent investigation was completed in 1993. Nearly 200 archaeological sites and 27 localities have been recorded during that time period. These consist of single component historic or prehistoric resources, as well as multi-component resources. Additional study for determination of eligibility for the NRHP is required for the remaining 38 sites that have not yet been evaluated. Within the boundary of LSAAP, there are currently several individual archaeological sites that are potentially eligible for inclusion in the NRHP. The majority of cultural resource sites, however, have been determined to be ineligible for inclusion in the National Register. (USACE, Tierra Environmental Services, Inc. and Earth Tech 2002)

The only paleontological resources identified within the boundary of LSAAP are scattered concentrations of petrified wood located within Wilcox Formation. These resources have not been evaluated for their paleontological significance.

Further, Executive Order 13007 (24 May 1996) directs each executive branch to (1) accommodate access to and ceremonial use of Indian sacred sites by Indian practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites. Agency heads also are directed to report actions and activities related to sacred sites on their property.

LSAAP currently does not have any known sacred sites on the installation. However, no focused studies have been undertaken at LSAAP for the identification and evaluation of traditional cultural properties. Because of the rich Native American history in the region, there is potential that some of the already recorded archaeological sites would also be considered traditional cultural properties or would contain traditional cultural properties elements, and that other traditional cultural properties are present. (USACE, Tierra Environmental Services, Inc., and Earth Tech 2002)

Any cultural materials collected during archaeological inventory on LSAAP must be curated in compliance with 36 CFR Part 79 (Curation of Federally Owned and Administered Archaeological Collections), and a curation agreement developed with the selected repository. LSAAP may enter into a contract, an MOA, Curation Agreement, or interagency agreement with a curation facility (USACE, Tierra Environmental Services, Inc., and Earth Tech 2002). The agreement will ensure that artifacts are properly preserved in accordance with the Curation standards. The Curation Agreement has not been developed to date.

3.6.2.3 Buildings/Structures

According to the Final ICRMP of 2002, there were 1,160 buildings at LSAAP, 609 of which were constructed during the WWII period (1942-1944). Most of the remaining 600 or so buildings were constructed during the Cold War historic years (1946-1989), although some are of very recent construction (1990 to the present), or consist solely of infrastructure elements (USACE, Tierra Environmental Services, Inc., and Earth Tech 2002). LSAAP includes approximately 946 permanent and semi-permanent buildings, 38 magazines, and 200 storage igloos (LSAAP RPA).

Of the buildings assessed during the 1983 historic properties survey, no Category I, II, or III buildings were identified. Four buildings have since been recognized as eligible for nomination to the NRHP. These are Buildings E-1, E-16, E-17, and Z-1. Building E-1 was constructed in 1942 and is eligible for NRHP under Criteria A and C as a good example of a warehouse associated with LSAAP and its development in support of the WWII effort. Building E-16 was constructed in 1942 and is eligible for NRHP under Criterion A and C as a well-preserved example of an inert warehouse used during WWII. Building E-17 was constructed in 1942 and is eligible for the NRHP under Criterion C as a well-preserved example of a propellant charge building used during WWII. Finally, Building Z-1, which also includes a concrete pond, is eligible for listing in the NRHP also under Criterion C. Buildings E-1, E-16, E-17, and Z-1 are all also eligible under Criterion A for their associations with the development of the installation. All four buildings retain integrity of setting, location, design, materials, workmanship, feeling, and association. (USACE, Tierra Environmental Services, Inc., and Earth Tech 2002)

LSAAP also has few or no WWII-era buildings subject to the Programmatic Memorandum of Agreement (MOA) among the DOD, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation officers (SHPOs) regarding the Demolition of WWII Temporary Buildings, effective June 7, 1986, as amended. The Army has completed all mitigation required prior to the transfer or demolition of WWII temporary buildings (1939-1946) so no further SHPO consultation is required on that class of buildings.

Nine cemeteries are located within LSAAP, covering approximately 256,474 square feet. They are the Elliot Plot Cemetery (576 square feet), the Antioch Cemetery (55,296 square feet), the Mullins Cemetery (7,104 square feet), the Tiller Cemetery (28,656 square feet), the Reed Cemetery (11,232 square feet), the Bob Lane Cemetery (65,500 square feet), the Red Springs Cemetery (45,510 square feet), the Piney Grove Cemetery (41,976 square feet; formerly Red Springs Colored Cemetery), and the Willis W. Langford Cemetery (624 square feet). (Tetra Tech EM, Inc. 2006) The LSAAP cemetery locations (9) are presented on **Figure 3-8**. Tiller

family members, after a recent visit to the Tiller Cemetery (east of Area W), have voiced a concern to LSAAP personnel regarding routine maintenance levels and possible unknown "slave" burials to the south of the cemetery outside boundary fencing near Uncle Grady's burial site. Future consultation and investigations are currently being addressed by LSAAP.

3.6.2.4 Section 106 Consultation

The government Cultural Resources Manager (CRM) manages the cultural resources at LSAAP. Natural resources managers consult and coordinate with the CRM any time an activity or project is planned that might have the potential to impact historic or cultural resources. To comply with the National Historic Preservation Act (NHPA) (Section 106) and the Archaeological Resources Protection Act, the CRM contacts the Texas SHPO to determine further necessary action. Potential actions may require a Phase I archaeological survey, and if potential NRHP eligible sites are found, further excavation work (Phase II and / or Phase III) may be required. If historic structures are involved, the Texas SHPO must approve any proposed modifications or demolition; mitigation efforts may be required (Tetra Tech EM, Inc. 2006). On LSAAP, all site selections, site plans, and construction requests are approved by the LSAAP historic preservation officer prior to implementing any actions that could alter the condition of cultural resources.

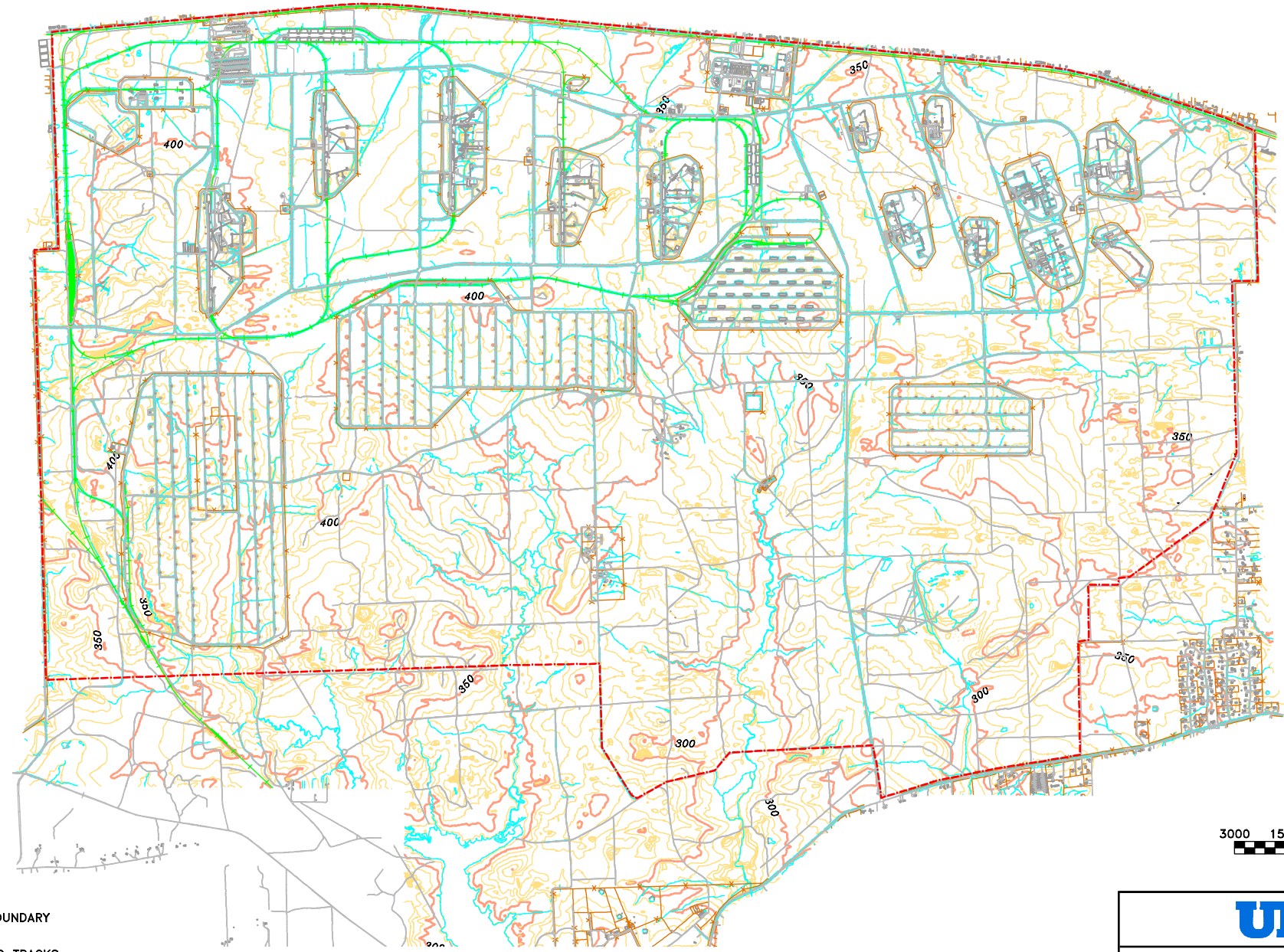
In May 2002, LSAAP contacted the Texas Historical Commission (THC) in reference to the process of completing a NEPA evaluation of LSAAP. The purpose was to assess whether normal operation activities at LSAAP by the Facility Use Contractor would result in significant adverse environmental impacts that cannot be mitigated below the level of significance. In a response letter dated 16 May 2002, the THC reviewed under Section 106 of the NHPA that the proposed undertaking of normal operations will have 'no-effect' on National Register-listed or eligible resources. Correspondence is presented in **Appendix L**.

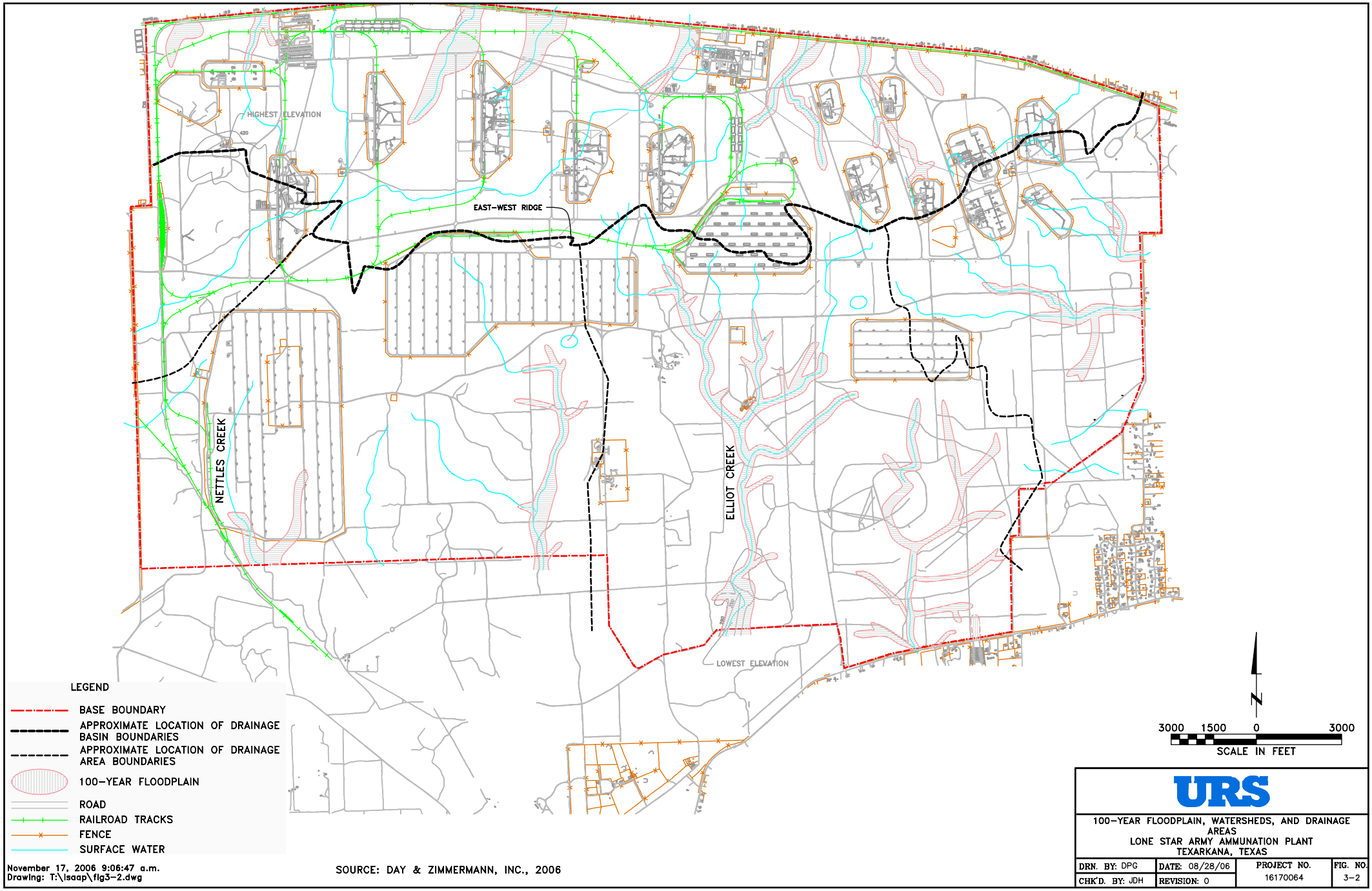
3.7 SITE MAPS

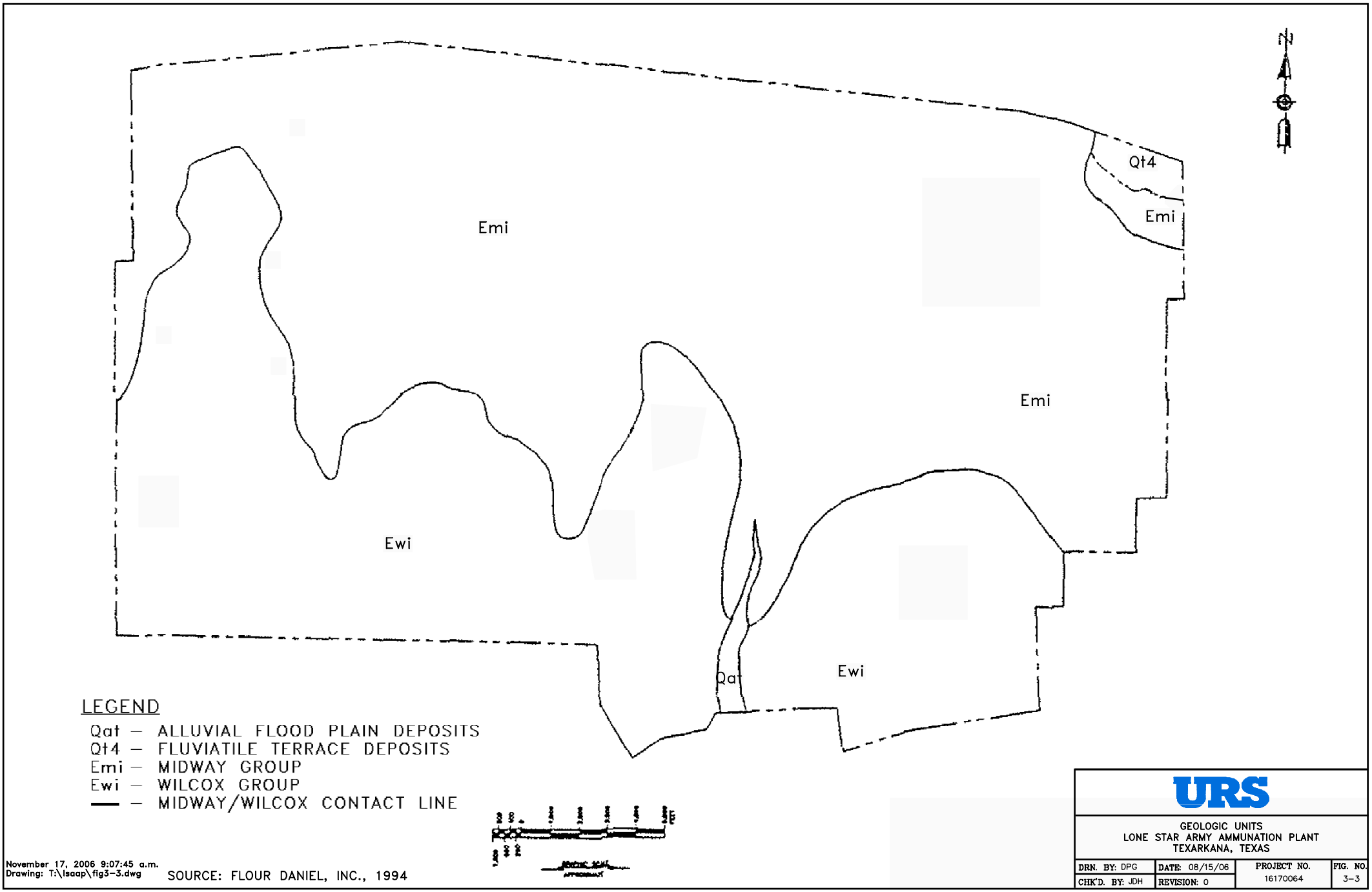
The 1942 Prack and Prack as-built drawings for LSAAP areas are located in Building I-5, Room 310, West Vault, Drawers S-8 through S-15.

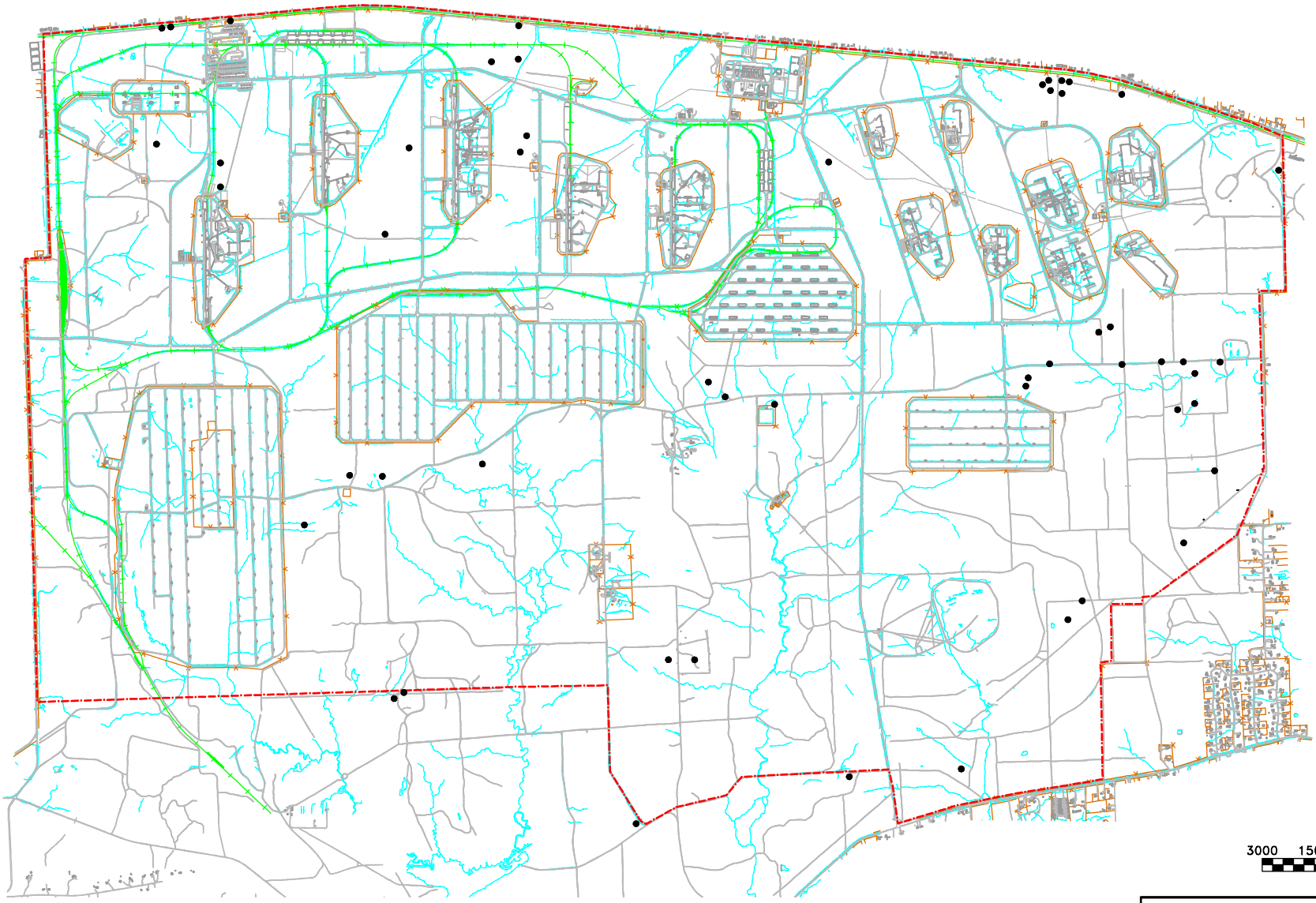
Historic maps have been scanned and are available in **Appendix C**. A limited Geographic Information System (GIS) is available through RRAD and USAEC is developing a LSAAP GIS database.

All supporting maps are provided in **Appendix F** of this ECP. The maps include installation layout by area, including installation roads, buildings, building numbers, railroads, and fences.


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N
3000 1500 0 3000
SCALE IN FEET
LEGEND
BASE BOUNDARY
ROAD
RAILROAD TRACKS
FENCE
SURFACE WATER
November 17, 2006 9:04:56 a.m.
Drawing: T:\lsaap\fig3-1.dwg
SOURCE: DAY & ZIMMERMANN, INC., 2006
URS
TOPOGRAPHIC MAP
LONE STAR ARMY AMMUNATION PLANT
TEXARKANA, TEXAS
DRN. BY: DPG
DATE: 06/21/06
PROJECT NO. 16170064
FIG. NO. 3-1
CHK'D. BY: JDH
REVISION: 0


HIGHEST ELEVATION
EAST–WEST RIDGE
NETTLES CREEK
ELLIOT CREEK
LOWEST ELEVATION
LEGEND
BASE BOUNDARY
APPROXIMATE LOCATION OF DRAINAGE BASIN BOUNDARIES
APPROXIMATE LOCATION OF DRAINAGE AREA BOUNDARIES
100–YEAR FLOODPLAIN
ROAD
RAILROAD TRACKS
FENCE
SURFACE WATER
N
3000 1500 0 3000
SCALE IN FEET
November 17, 2006 9:06:47 a.m.
Drawing: T:\lsaap\fig3–2.dwg
SOURCE: DAY & ZIMMERMANN, INC., 2006
URS
100–YEAR FLOODPLAIN, WATERSHEDS, AND DRAINAGE AREAS
LONE STAR ARMY AMMUNATION PLANT
TEXARKANA, TEXAS
DRN. BY: DPG
DATE: 08/28/06
PROJECT NO. 16170064
FIG. NO. 3–2
CHK'D. BY: JDH
REVISION: 0


N
Qt4
Emi
Emi
Emi
Ewi
Qal
Ewi
LEGEND
Qal – ALLUVIAL FLOOD PLAIN DEPOSITS
Qt4 – FLUVIATILE TERRACE DEPOSITS
Emi – MIDWAY GROUP
Ewi – WILCOX GROUP
– MIDWAY/WILCOX CONTACT LINE
November 17, 2006 9:07:45 a.m.
Drawing: T:\lsaap\fig3-3.dwg
SOURCE: FLOUR DANIEL, INC., 1994
URS
GEOLOGIC UNITS
LONE STAR ARMY AMMUNATION PLANT
TEXARKANA, TEXAS
DRN. BY: DPG
DATE: 08/15/06
PROJECT NO. 16170064
FIG. NO. 3-3
CHK'D. BY: JDH
REVISION: 0



LEGEND

- BASE BOUNDARY
- CISTERN LOCATIONS
- ROAD
- RAILROAD TRACKS
- FENCE
- SURFACE WATER

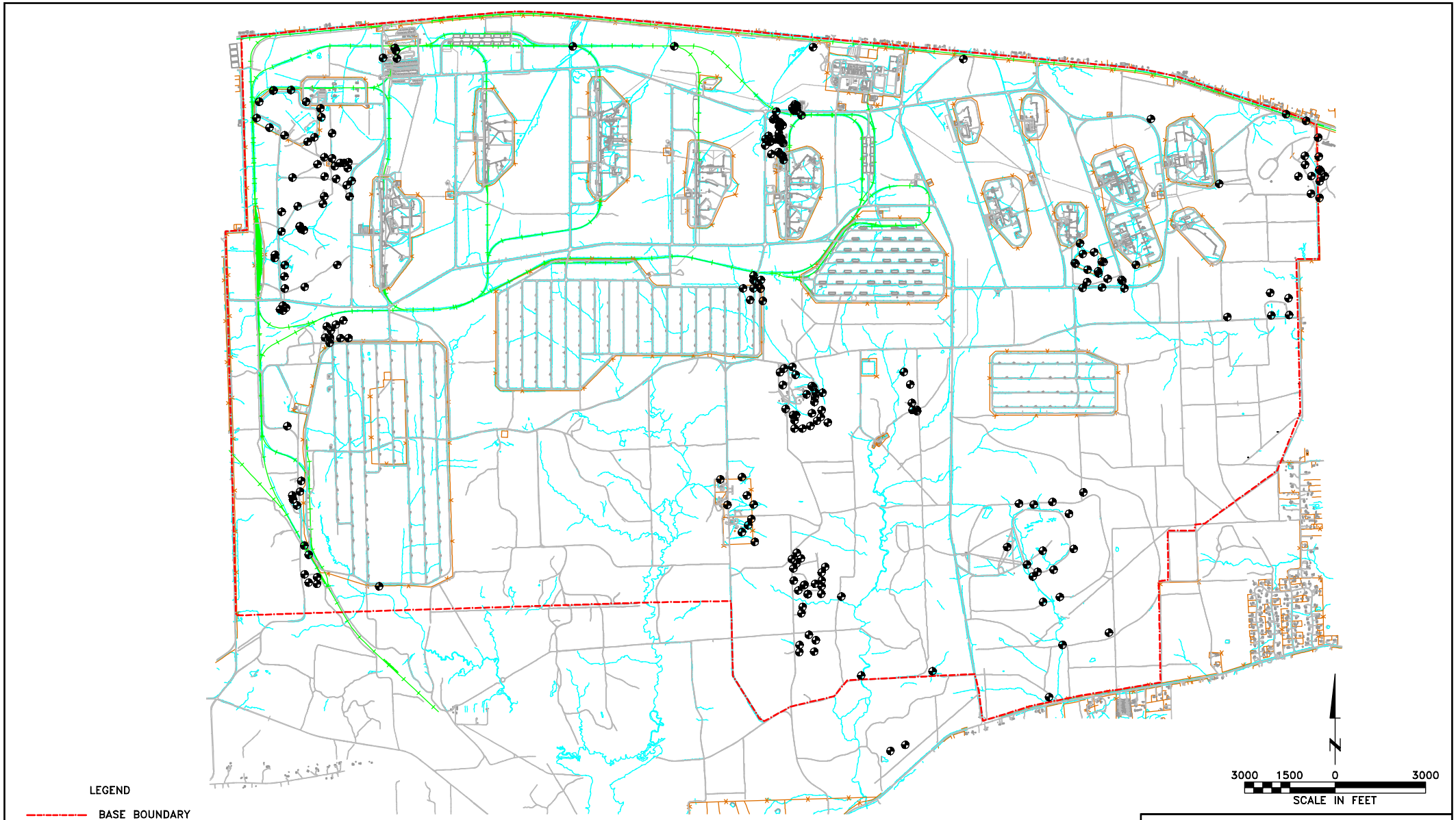
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Drawing: T:\lsaap\fig3-4.dwg

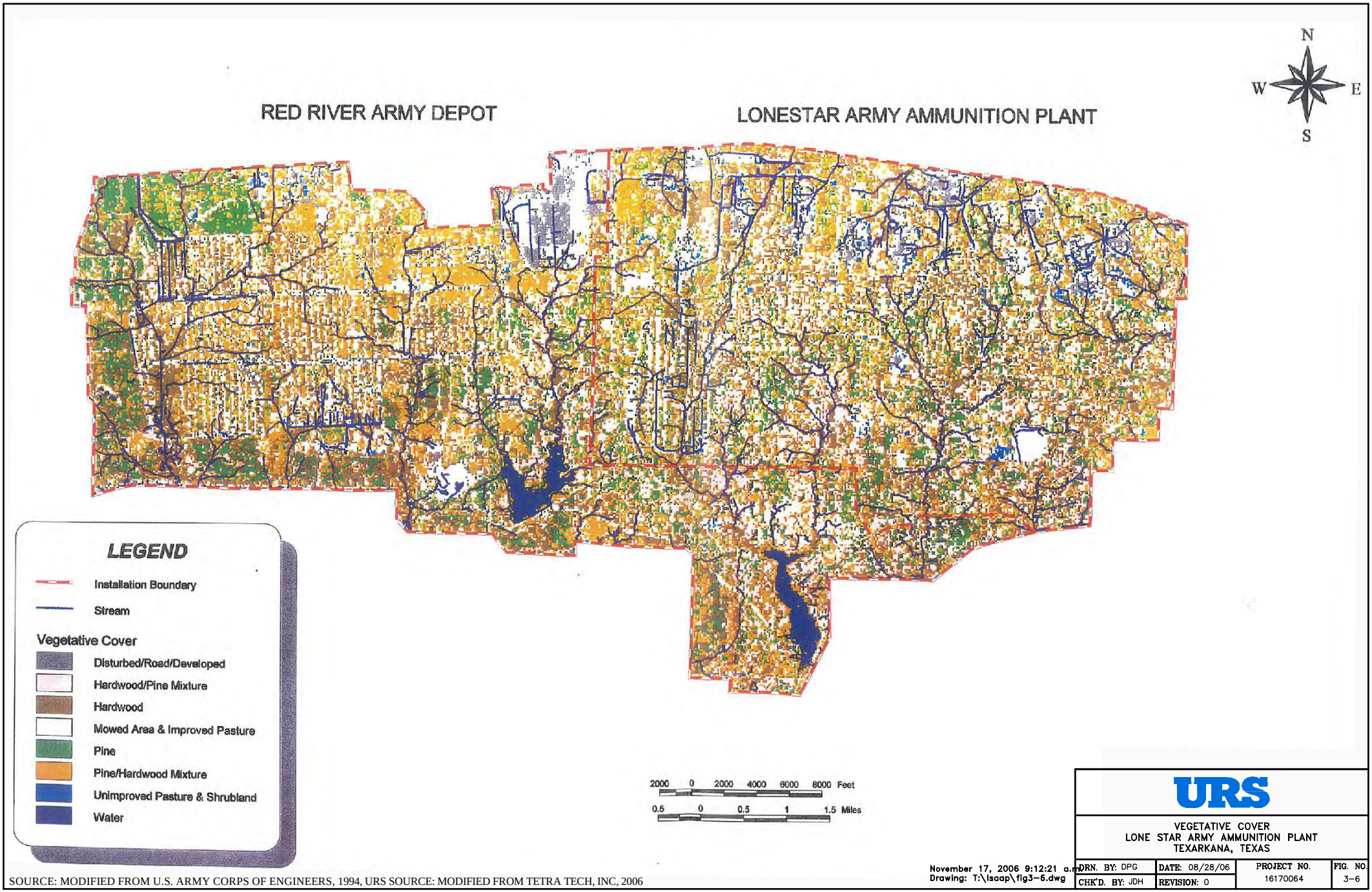
SOURCE: DAY & ZIMMERMANN, INC., 2006

URS

CISTERN LOCATIONS
LONE STAR ARMY AMMUNITION PLANT
TEXARKANA, TEXAS

DRN. BY: DPG	DATE: 06/21/06	PROJECT NO. 16170064	FIG. NO. 3-4
CHK'D. BY: JDH	REVISION: 0		


LEGEND
BASE BOUNDARY
MONITORING WELL LOCATION
ROAD
RAILROAD TRACKS
FENCE
SURFACE WATER
November 17, 2006 9:11:09 a.m.
Drawing: T:\lsaap\fig3-5.dwg
SOURCE: DAY & ZIMMERMANN, INC., 2006
N
3000 1500 0 3000
SCALE IN FEET
URS
MONITORING WELL LOCATIONS
LONE STAR ARMY AMMUNITION PLANT
TEXARKANA, TEXAS
DRN. BY: DPG
DATE: 06/29/06
PROJECT NO. 16170064
FIG. NO. 3-5
CHK'D. BY: JDH
REVISION: 0



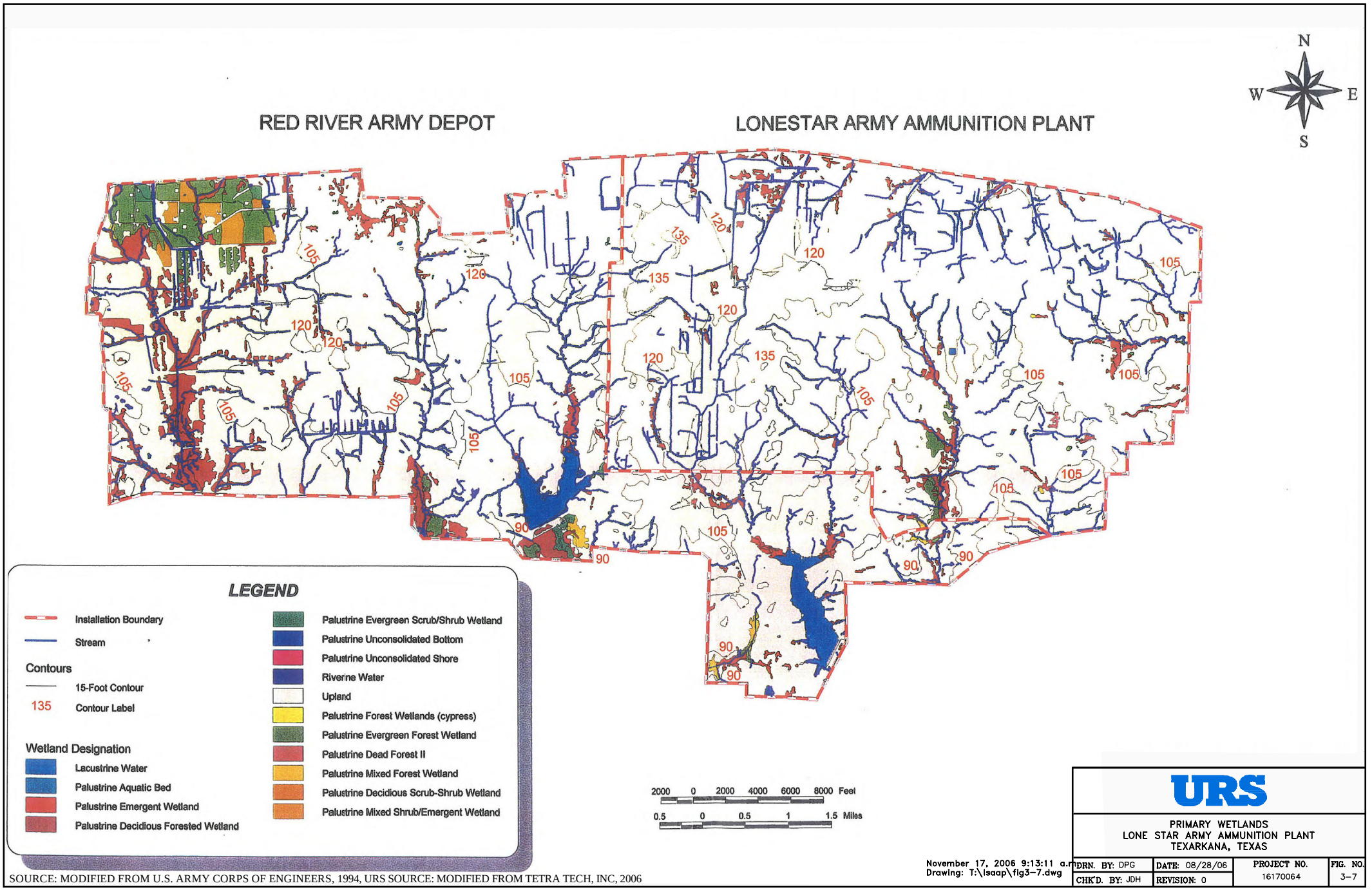
SOURCE: MODIFIED FROM U.S. ARMY CORPS OF ENGINEERS, 1994, URS SOURCE: MODIFIED FROM TETRA TECH, INC, 2006

November 17, 2006 9:12:21 a.m.
Drawing: T:\lsaap\fig3-6.dwg

URS

VEGETATIVE COVER
LONE STAR ARMY AMMUNITION PLANT
TEXARKANA, TEXAS

DRN. BY: DPG	DATE: 08/28/06	PROJECT NO.	FIG. NO.
CHK'D. BY: JDH	REVISION: 0	16170064	3-6



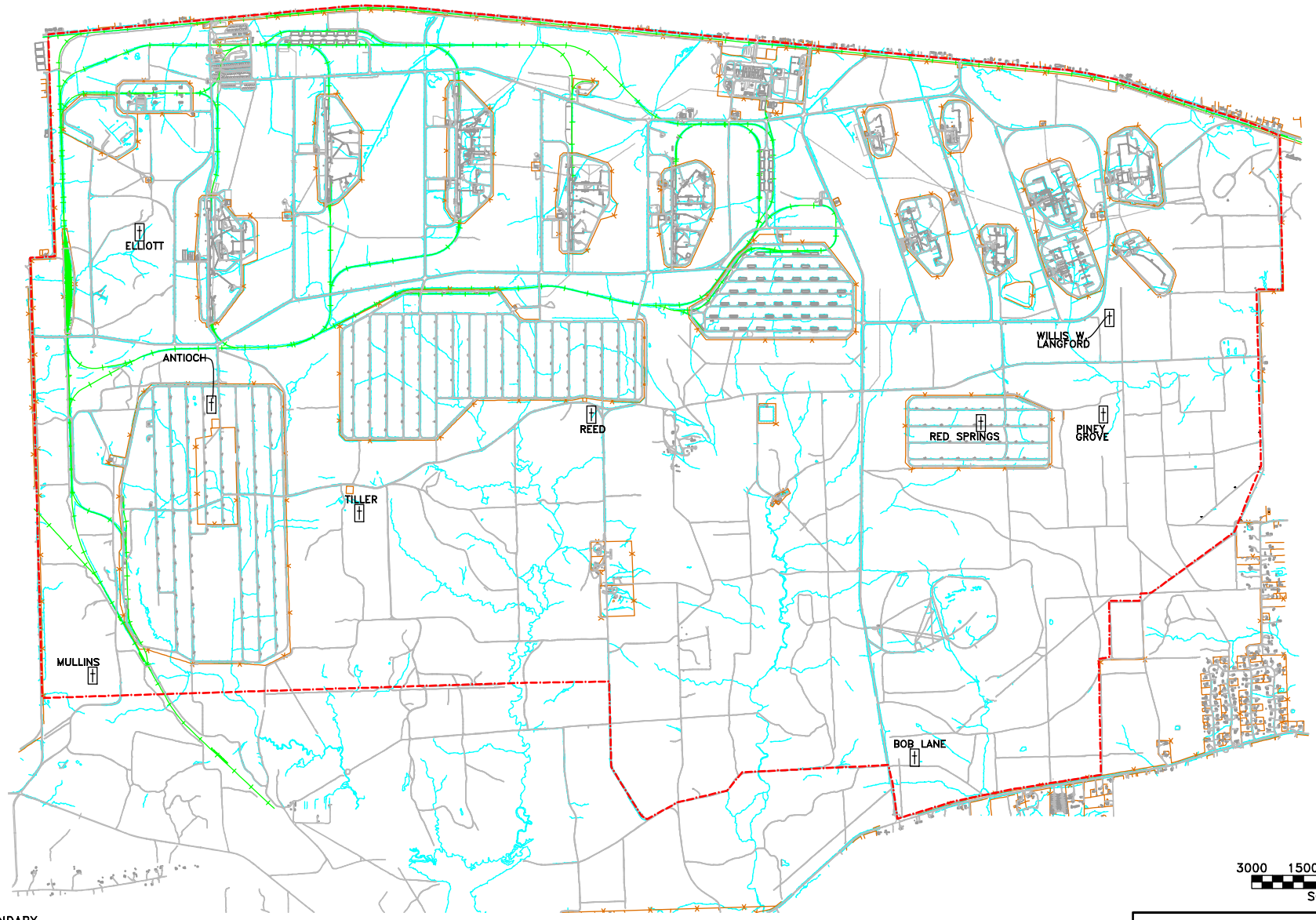
SOURCE: MODIFIED FROM U.S. ARMY CORPS OF ENGINEERS, 1994, URS SOURCE: MODIFIED FROM TETRA TECH, INC, 2006

November 17, 2006 9:13:11 a.m.
Drawing: T:\lsaap\fig3-7.dwg

URS

PRIMARY WETLANDS
LONE STAR ARMY AMMUNITION PLANT
TEXARKANA, TEXAS

DRN. BY: DPG	DATE: 08/28/06	PROJECT NO. 16170064	FIG. NO. 3-7
CHK'D. BY: JDH	REVISION: 0		



LEGEND

- BASE BOUNDARY
- CEMETERY
- ROAD
- RAILROAD TRACKS
- FENCE
- SURFACE WATER

SOURCE: PRACK AND PRACK 1942

November 17, 2006 9:14:08 a.m.
Drawing: T:\lsaap\fig3-8.dwg

URS

CEMETERY LOCATIONS
LONE STAR ARMY AMMUNITION PLANT
TEXARKANA, TEXAS

DRN. BY: DPG	DATE: 06/29/06	PROJECT NO. 16170064	FIG. NO. 3-8
CHK'D. BY: JDH	REVISION: 0		

ATTACHMENT II.2

WETLANDS INFORMATION

U.S. Fish and Wildlife Service
National Wetlands Inventory

National Wetlands Inventory



December 15, 2022

Wetlands

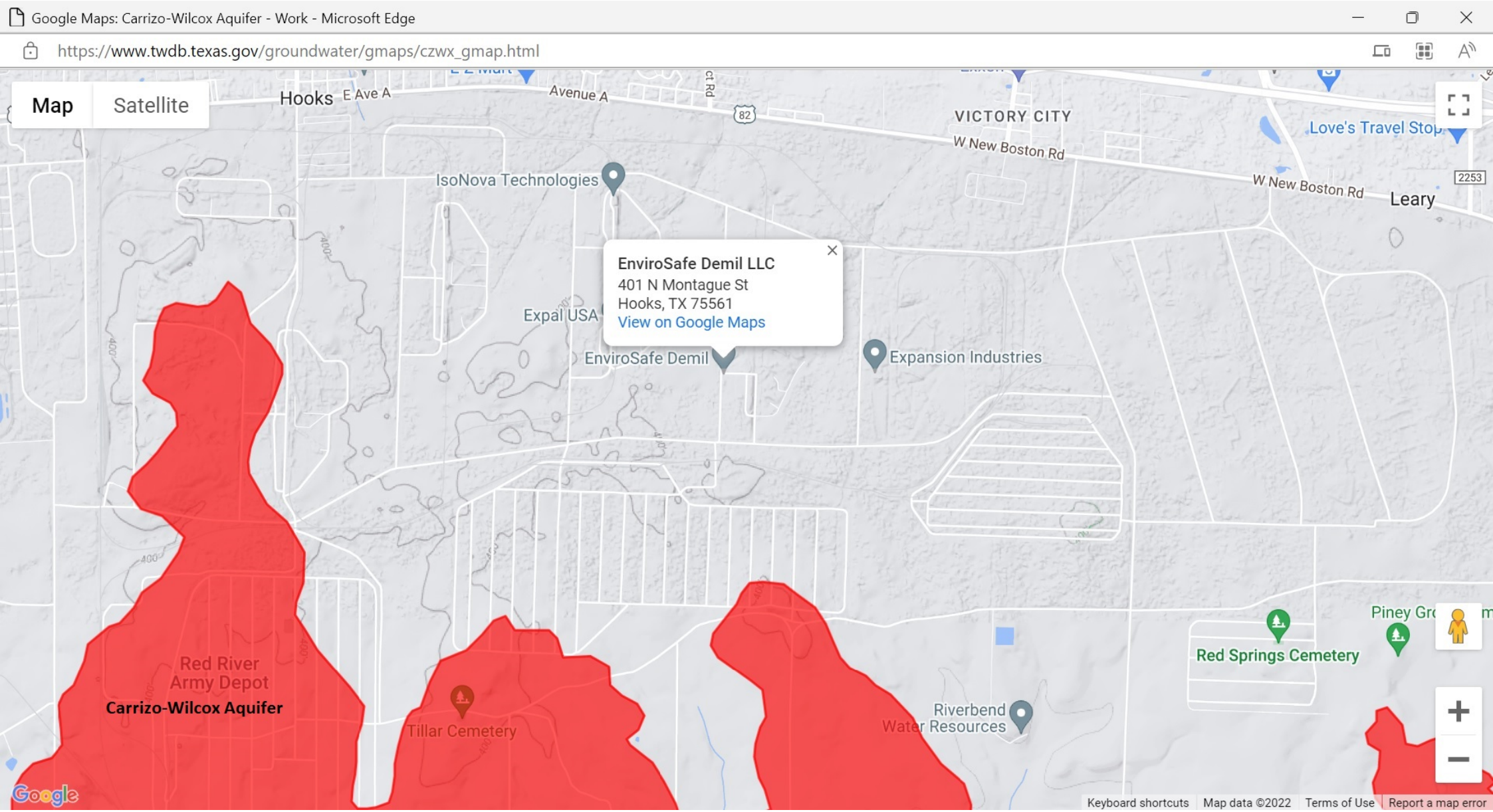
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

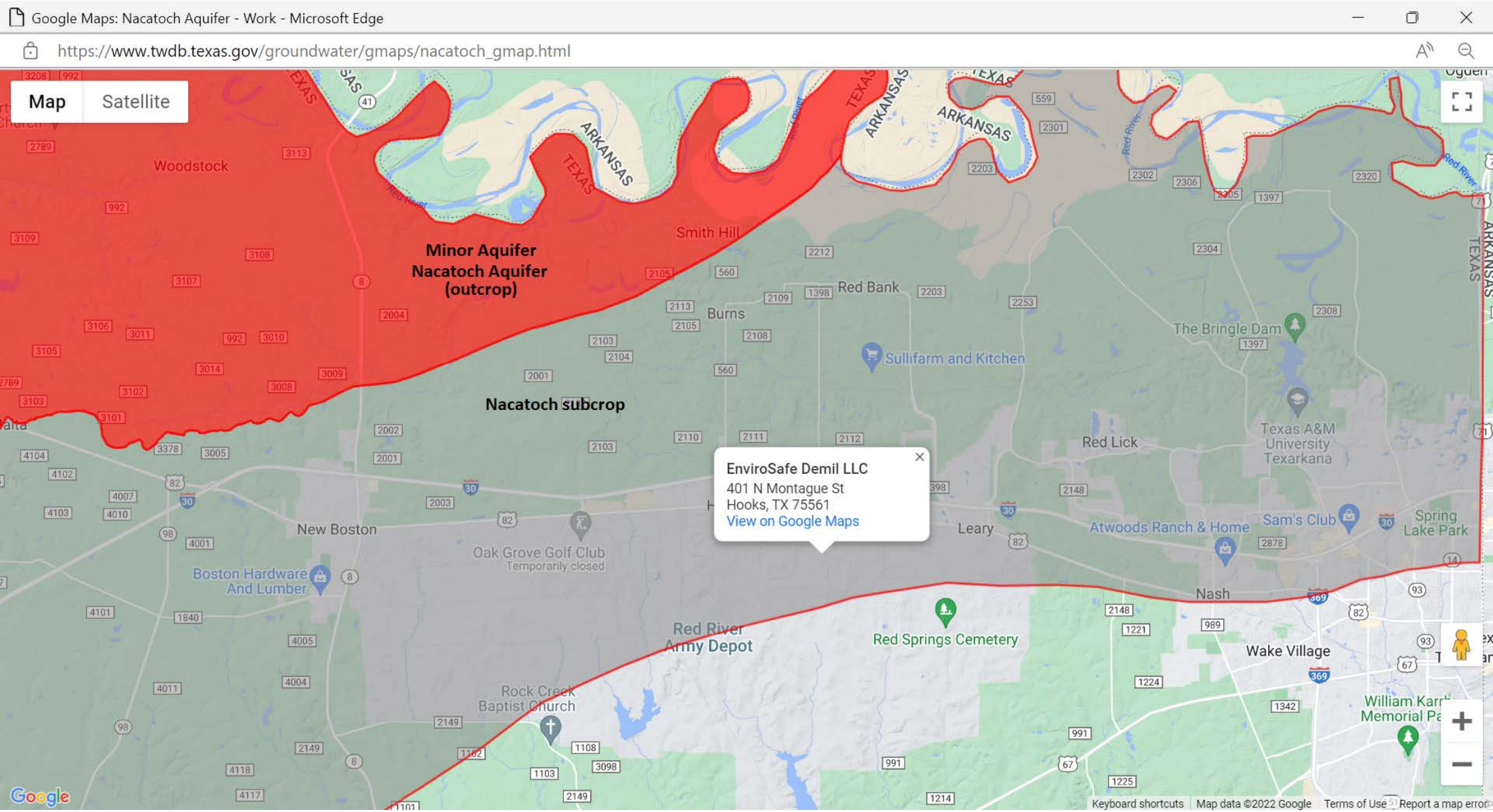
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

ATTACHMENT II.3

AQUIFER INFORMATION


Google Maps: Carrizo-Wilcox Aquifer - Work - Microsoft Edge
https://www.twdb.texas.gov/groundwater/gmaps/czwx_gmap.html
Map
Satellite
Hooks
E Ave A
Avenue A
82
VICTORY CITY
W New Boston Rd
Love's Travel Stop
2253
Leary
IsoNova Technologies
EnviroSafe Demil LLC
401 N Montague St
Hooks, TX 75561
View on Google Maps
Expal USA
EnviroSafe Demil
Expansion Industries
Red River
Army Depot
Carrizo-Wilcox Aquifer
Tillar Cemetery
Riverbend
Water Resources
Red Springs Cemetery
Google
Keyboard shortcuts
Map data ©2022
Terms of Use
Report a map error


Google Maps: Nacatoch Aquifer - Work - Microsoft Edge
https://www.twdb.texas.gov/groundwater/gmaps/nacatoch_gmap.html
Map
Satellite
Minor Aquifer
Nacatoch Aquifer
(outcrop)
Nacatoch subcrop
EnviroSafe Demil LLC
401 N Montague St
Hooks, TX 75561
View on Google Maps
Woodstock
Smith Hill
Red Bank
Burns
Sullifarm and Kitchen
The Bringle Dam
Texas A&M University Texarkana
Red Lick
New Boston
Oak Grove Golf Club
Temporarily closed
Boston Hardware And Lumber
Leary
Atwoods Ranch & Home
Sam's Club
Spring Lake Park
Nash
Red River Army Depot
Red Springs Cemetery
Wake Village
Rock Creek Baptist Church
ARKANSAS
TEXAS
Red River
Keyboard shortcuts
Map data ©2022 Google
Terms of Use
Report a map error



11/15/2022, 9:11:02 AM

Sole_Source_Aquifers

1:9,244,649

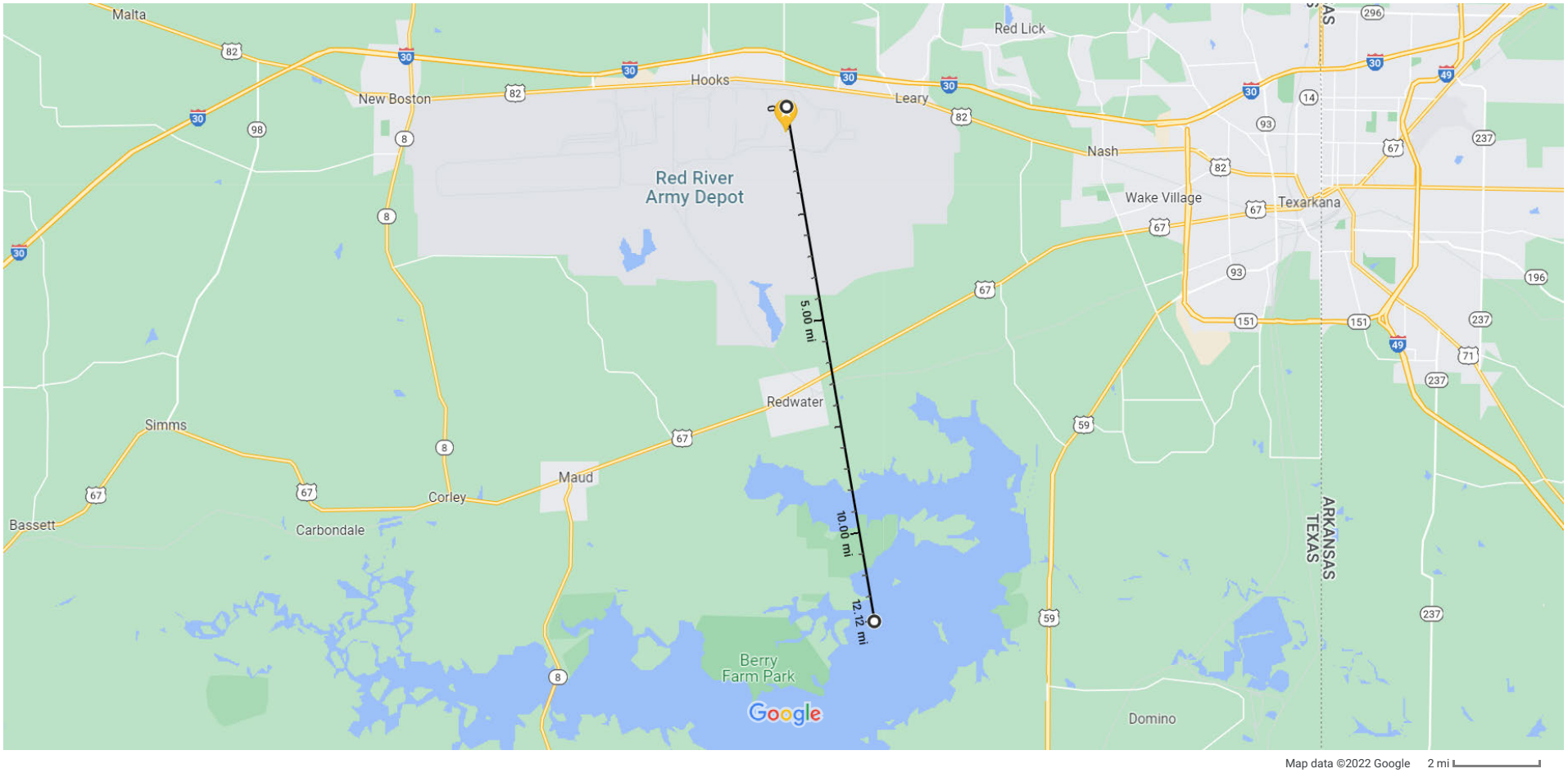
0 90 180 360 mi

0 145 290 580 km

Esri, HERE, Garmin, NGA, USGS, NPS

ATTACHMENT II.4

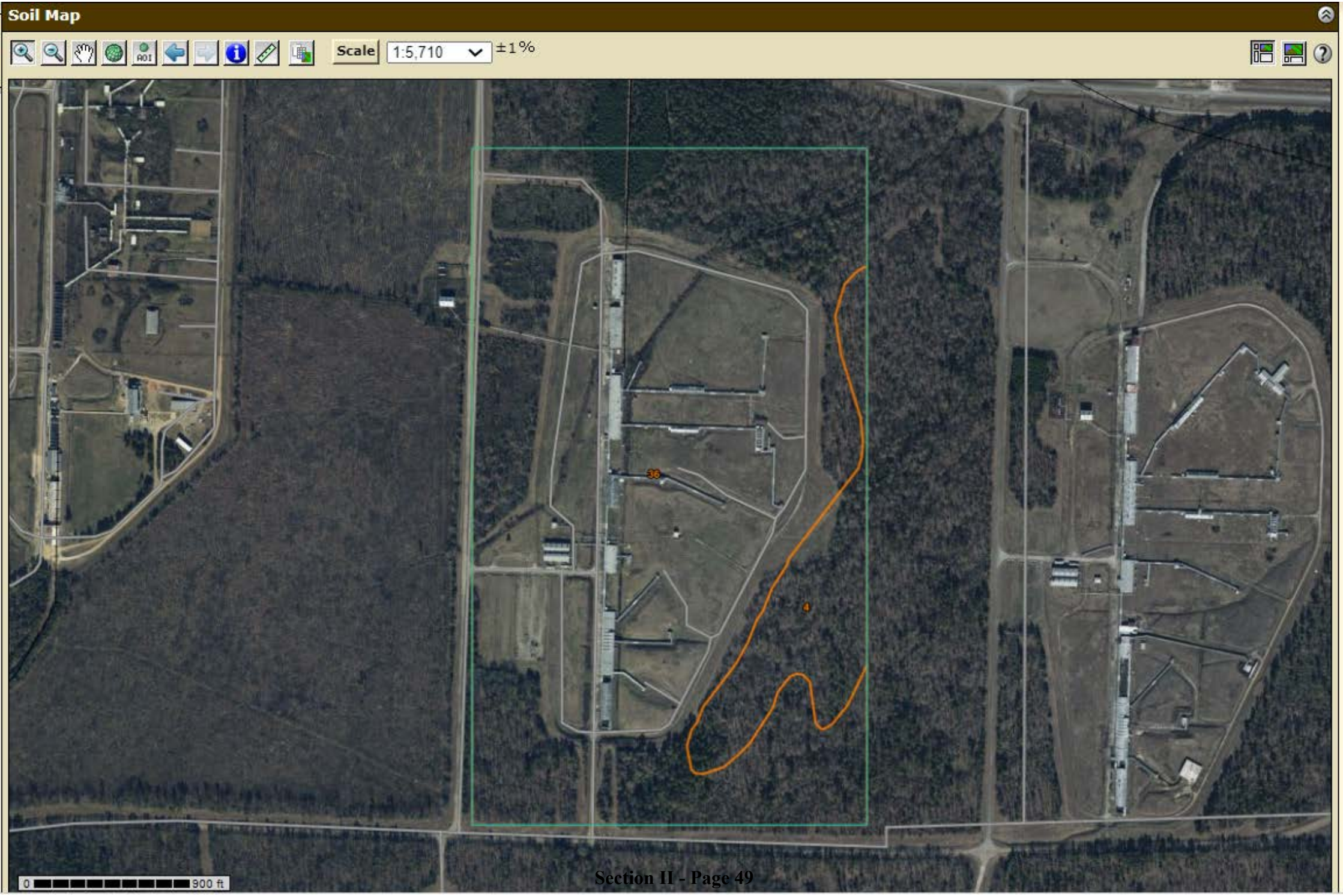
SURFACE WATER INTAKE



Measure distance
Total distance: 12.12 mi (19.50 km)

ATTACHMENT II.5

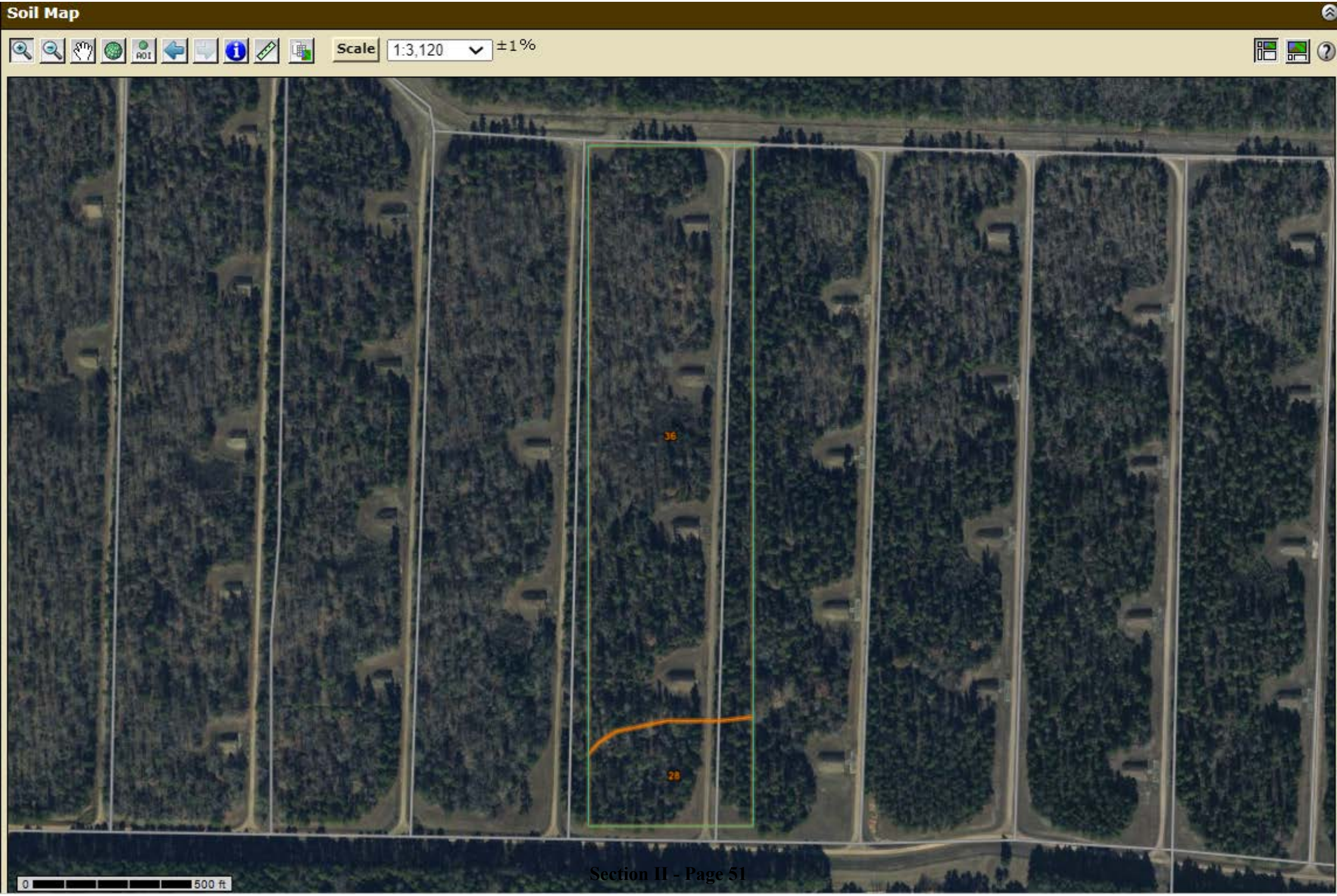
SOIL UNIT INFORMATION


Soil Map
Scale
1:5,710
±1%
36
4
0
900 ft

Soil Map

Scale 1:1,060 ±1%




Soil Map
Scale
1:3,120
±1%
36
28
0
500 ft

Report—Engineering Properties

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties–Bowie County, Texas														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
4—Annona loam, 1 to 3 percent slopes														
Annona	85	D	0-12	Loam	CL-ML, SC-SM, ML, SM	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	75-88-100	45-60-75	16-23-30	NP-4 -7
			12-45	Clay loam, clay	CH	A-7	0- 0- 0	0- 0- 0	95-98-100	95-98-100	90-95-100	75-85-95	51-61-70	30-38-45
			45-80	Clay, clay loam	CH, CL	A-7	0- 0- 0	0- 0- 0	95-98-100	95-98-100	90-95-100	75-85-95	41-53-65	25-35-45

Engineering Properties–Bowie County, Texas														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
28—Ruston fine sandy loam, 3 to 8 percent slopes														
Ruston	85	B	0-4	Fine sandy loam	CL, SC, SM	A-2-4, A-4, A-6	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	83-92-100	35-47-56	0-24 -34	NP-9 -13
			4-9	Fine sandy loam	CL, SC, SM	A-4, A-6	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	83-92-100	38-47-56	0-22 -31	NP-9 -13
			9-46	Sandy clay loam	CL, SC	A-2-6, A-6, A-7-6	0- 0- 0	0- 0- 0	100-100 -100	86-94-100	75-89-100	35-46-58	27-36 -44	12-18-24
			46-55	Fine sandy loam	SC-SM, SC	A-2-4, A-4, A-6	0- 0- 0	0- 0- 0	100-100 -100	86-94-100	75-87-98	31-38-46	20-25 -31	6-9 -13
			55-80	Sandy clay loam	CL, SC	A-2-4, A-6, A-7-6	0- 0- 0	0- 0- 0	100-100 -100	86-93-100	72-89-100	33-46-61	25-36 -45	9-18-25
36—Sawyer silt loam, 0 to 3 percent slopes														
Sawyer, affr 25-30	80	C	0-6	Silt loam	CL-ML, CL, ML	A-4	0- 0- 0	0- 0- 0	100-100 -100	95-98-100	85-90-95	50-70-90	25-28 -30	3-7 -10
			6-26	Silt loam, silty clay loam, loam	CL	A-6	0- 0- 0	0- 0- 0	100-100 -100	95-98-100	85-90-95	60-78-95	30-35 -40	10-15-20
			26-80	Clay, silty clay, silty clay loam	CH, CL	A-7	0- 0- 0	0- 0- 0	100-100 -100	95-98-100	90-95-100	75-85-95	45-53 -60	20-28-35

Data Source Information

Soil Survey Area: Bowie County, Texas
Survey Area Data: Version 20, Aug 24, 2022

ATTACHMENT II.6

CRITICAL HABITAT
OF AN ENDANGERED SPECIES OF PLANT OR ANIMAL

Supplemental Information
Critical Habitat of an Endangered Species of Plant or Animal
30 TAC 335.204(a)(8), (b)(10), (c)(9), (d)(9), and/or (e)(11)

Source:
Texas Parks and Wildlife Department
Rare, Threated, and Endangered Species of Texas by County
Last Updated: July 12, 2022
https://tpwd.texas.gov/gis/rtest/

Information from the above Texas Parks and Wildlife Department source indicates that there are no endangered species in Bowie County. The list of rare, threatened, and endangered species for Bowie County is shown below.

Bowie County
Rare, Threatened, and Endangered Species

Taxonomic Name	Scientific Name	Common Name	Federal Protection/ Listing Status	State Protection/ Listing Status	NatureServe Global Conservation Status Rank	NatureServe Texas Conservation Status Rank
Amphibians	Lithobates areolatus areolatus	southern crawfish frog			G4T4	S3
Amphibians	Pseudacris streckeri	Strecker's chorus frog			G5	S3
Birds	Plegadis chihi	white-faced ibis		T	G5	S4B
Birds	Elanoides forficatus	swallow-tailed kite		T	G5	S2B
Birds	Mycteria americana	wood stork		T	G4	SHB,S2N
Birds	Haliaeetus leucocephalus	bald eagle			G5	S3B,S3N
Birds	Charadrius melodus	piping plover	LT	T	G3	S2N
Birds	Leucophaeus pipixcan	Franklin's gull			G5	S2N
Birds	Anthus spragueii	Sprague's pipit			G3G4	S3N
Birds	Peucaea aestivalis	Bachman's sparrow		T	G3	S1B
Fish	Notropis atrocaudalis	blackspot shiner			G4	S3
Fish	Notropis bairdi	Red River shiner			G4	S3
Fish	Notropis maculatus	taillight shiner			G5	S1
Fish	Notropis potteri	chub shiner		T	G4	S2
Fish	Notropis chalybaeus	ironcolor shiner			G4	S3
Fish	Notropis shumardi	silverband shiner			G5	S4
Fish	Scaphirhynchus platorynchus	shovelnose sturgeon	SAT	T	G4	S2
Fish	Polyodon spathula	paddlefish		T	G4	S3
Fish	Hybognathus nuchalis	Mississippi silvery minnow			G5	S4
Fish	Hiodon alosoides	goldeye			G5	S3
Fish	Campostoma spadiceum	highland stoneroller			G4G5	SNR
Fish	Percina maculata	blackside darter		T	G5	S1
Fish	Etheostoma radiosum	orangebelly darter			G4	S3
Fish	Macrhybopsis storeriana	silver chub			G5	S3

Bowie County
Rare, Threatened, and Endangered Species (continued)

Taxonomic Name	Scientific Name	Common Name	Federal Protection/ Listing Status	State Protection/ Listing Status	NatureServe Global Conservation Status Rank	NatureServe Texas Conservation Status Rank
Fish	Erimyzon claviformis	western creek chubsucker		T	G5	S2S3
Insects	Bombus pensylvanicus	American bumblebee			G3G4	SNR
Mammals	Puma concolor	mountain lion			G5	S2S3
Mammals	Spilogale putorius	eastern spotted skunk			G4	S1S3
Mammals	Mustela frenata	long-tailed weasel			G5	S5
Mammals	Sylvilagus aquaticus	swamp rabbit			G5	S5
Mammals	Ursus americanus	black bear		T	G5	S3
Mammals	Ondatra zibethicus	muskrat			G5	S5
Mammals	Myotis austroriparius	southeastern myotis bat			G4	S3?
Mammals	Perimyotis subflavus	tricolored bat			G3G4	S2
Mammals	Lasiurus cinereus	hoary bat			G3G4	S4
Mammals	Lasiurus borealis	eastern red bat			G3G4	S4
Mammals	Eptesicus fuscus	big brown bat			G5	S5
Plants	Thalictrum arkansanum	Arkansas meadow-rue			G2Q	S2
Plants	Crataegus viridis var. glabriuscula	Sutherland hawthorn			G5T3T4	S3
Plants	Quercus arkansana	Arkansas oak			G3	S1
Reptiles	Macrochelys temminckii	alligator snapping turtle		T	G3	S2
Reptiles	Crotalus horridus	timber (canebrake) rattlesnake			G4	S4
Reptiles	Sistrurus miliarius	pygmy rattlesnake			G5	S2S3
Reptiles	Terrapene carolina	eastern box turtle			G5	S3
Reptiles	Ophisaurus attenuatus	slender glass lizard			G5	S3
Reptiles	Phrynosoma cornutum	Texas horned lizard		T	G4G5	S3
Reptiles	Plestiodon septentrionalis	prairie skink			G5	S2

Notes:
LE or LT: Federally Listed Endangered or Threatened
PE or PT: Federally Proposed Endangered or Threatened
SAE or SAT: Federally Listed Endangered or Threatened by Similarity of Appearance
C: Federal Candidate for Listing
DL or PDL: Federally Delisted or Proposed for Delisting
E or T: State Listed Endangered or Threatened
NT: Not tracked or no longer tracked by the State

Section II – Facility Siting Criteria

Appendix II.A – Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments and Landfills

Table II.A - Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments and Landfills is included as part of Table II. The location of information for the answers to the questions in Table II.A can be found below.

Wetlands
Section 2.4 of Appendix II – Facility Siting Criteria
Attachment II.2 – Wetlands Information

Critical Habitat of an Endangered Species of Plant or Animal
Section 2.9 of Appendix II – Facility Siting Criteria
Attachment II.5 – Critical Habitat of an Endangered Species of Plan or Animal

Sole-Source Aquifer
Section 2.5 of Appendix II – Facility Siting Criteria
Attachment II.3 – Additional Aquifer Information

Regional Aquifer
Section 2.5 of Appendix II – Facility Siting Criteria
Attachment II.3 – Additional Aquifer Information

Unified Soil Classification
Section 3.2 of Appendix II – Facility Siting Criteria
Attachment II.5 – Soil Unit Information

Public Drinking Water from Lake
Section 3.1 of Appendix II – Facility Siting Criteria
Attachment II.4 – Surface Water Intake

Active Geologic Processes
Section 2.6 of Appendix II – Facility Siting Criteria
Appendix VI.A – Geology and Topography
Attachment VI.A.1 – Geologic Information
Attachment VI.A.2 – Fault Information
Attachment VI.A.3 – Earthquake Information

Faults
Appendix VI.A – Geology and Topography
Attachment VI.A.2 – Fault Information

Section II – Facility Siting Criteria

Appendix II.B – Appendix II.E

Appendix II.B – Additional Requirements for Land Treatment Facilities
Not Applicable
ESD has no land treatment facilities.

Appendix II.C – Additional Requirements for Waste Piles
Not Applicable
ESD has no waste piles.

Appendix II.D – Additional Requirements for Storage Surface Impoundments
Not Applicable
ESD has no storage surface impoundments.

Appendix II.E – Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with Wastes in Place)
Not Applicable
ESD has no landfills or surface impoundments closed as landfills with wastes in place.

Section II - Facility Siting Criteria

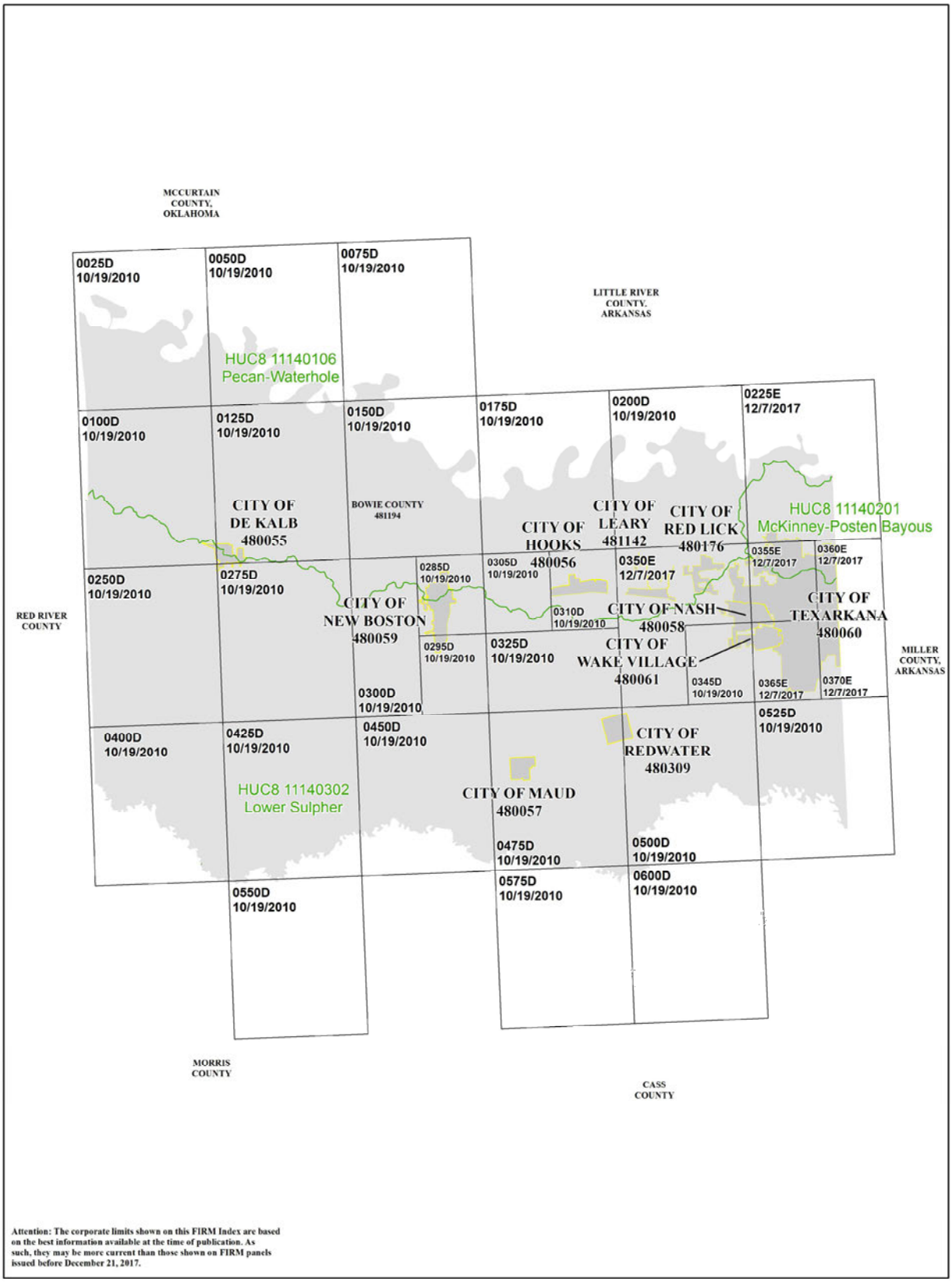
Appendix II.F - Flooding

EnviroSafe Demil, LLC (ESD) is not within a 100-year floodplain. Floodplain maps are provided in this appendix.

The facility's boundaries are near the intersection of the floodplain map panels and the facility lies on three different panels. The first two pages in this appendix show the overall layout of the floodplain maps. The remainder of the appendix is divided into three sections, one for each area of the facility. The table below shows which section each area of the facility is covered in and which panels are associated with each area of the facility.

Appendix Section	Facility Area	FIRM Panel Number
Section II.F.1	Main ESD site: HBC and Rocket Motor Ops Building	310 of 600 (0310D)
Section II.F.2	Above Ground Magazine (AGM) storage	350 of 600 (0350D)
Section II.F.3	Earth Covered Magazines (ECMs) storage	310 of 600 (0310D) 325 of 600 (0325D)

Each section includes an unaltered copy of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map. The next pages in each section show the FEMA FIRM map with the facility boundaries shown. The last pages in each section show a closer view of the facility area on a FIRMETTE map. All facility areas are in Zone X, Area of Minimal Flood Hazard.



Attention: The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before December 21, 2017.

1 inch = 27,083 feet 1:325,000

0 7,500 15,000 30,000 45,000 60,000 feet

Map Projection:
State Plane Texas North Central FIPS 4202
North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

BOWIE COUNTY, TEXAS and Incorporated Areas

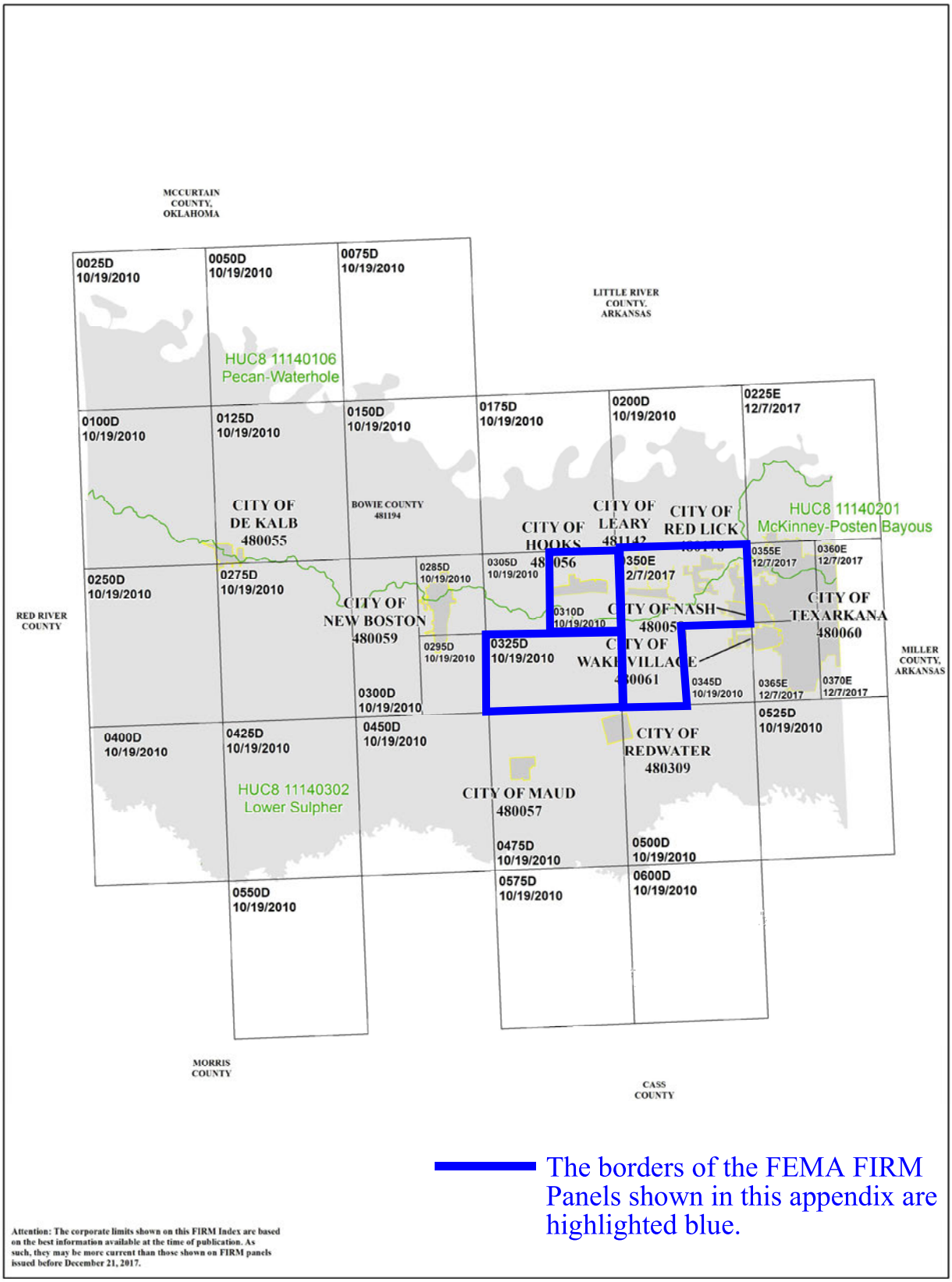
PANELS PRINTED:

0025, 0050, 0075, 0100, 0125, 0150, 0175, 0200, 0225, 250, 0275, 0285, 0295, 0300, 0305, 0310, 0325, 0345, 0350, 0355, 0360, 0365, 0370, 0400, 0425, 0450, 0475, 0500, 0525, 0550, 0575, 0600

FEMA

MAP NUMBER
48037CIND0B

MAP REVISED
DECEMBER 21, 2017


MCCURTAIN COUNTY, OKLAHOMA
LITTLE RIVER COUNTY, ARKANSAS
RED RIVER COUNTY
MILLER COUNTY, ARKANSAS
MORRIS COUNTY
CASS COUNTY
BOWIE COUNTY 481194
HUC8 11140106 Pecan-Waterhole
HUC8 11140201 McKinney-Posten Bayous
HUC8 11140302 Lower Sulpher
CITY OF DE KALB 480055
CITY OF NEW BOSTON 480059
CITY OF HOOKS
CITY OF LEARY
CITY OF RED LICK
CITY OF NASH 480058
CITY OF TEXARKANA 480060
CITY OF WAKE VILLAGE 480061
CITY OF REDWATER 480309
CITY OF MAUD 480057
0025D 10/19/2010
0050D 10/19/2010
0075D 10/19/2010
0100D 10/19/2010
0125D 10/19/2010
0150D 10/19/2010
0175D 10/19/2010
0200D 10/19/2010
0225E 12/7/2017
0250D 10/19/2010
0275D 10/19/2010
0285D 10/19/2010
0295D 10/19/2010
0300D 10/19/2010
0305D 10/19/2010
0310D 10/19/2010
0325D 10/19/2010
0345D 10/19/2010
0350E 12/7/2017
0355E 12/7/2017
0360E 12/7/2017
0365E 12/7/2017
0370E 12/7/2017
0400D 10/19/2010
0425D 10/19/2010
0450D 10/19/2010
0475D 10/19/2010
0500D 10/19/2010
0525D 10/19/2010
0550D 10/19/2010
0575D 10/19/2010
0600D 10/19/2010
The borders of the FEMA FIRM Panels shown in this appendix are highlighted blue.
Attention: The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before December 21, 2017.
1 inch = 27,083 feet
1:325,000
0 7,500 15,000 30,000 45,000 60,000 feet
Map Projection:
State Plane Texas North Central FIPS 4202
North American Datum 1983
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
HTTP://MSC.FEMA.GOV
SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP INDEX
BOWIE COUNTY, TEXAS and Incorporated Areas
PANELS PRINTED:
0025, 0050, 0075, 0100, 0125, 0150, 0175, 0200, 0225, 250, 0275, 0285, 0295, 0300, 0305, 0310, 0325, 0345, 0350, 0355, 0360, 0365, 0370, 0400, 0425, 0450, 0475, 0500, 0525, 0550, 0575, 0600
FEMA
MAP NUMBER
48037CIND0B
MAP REVISED
DECEMBER 21, 2017

APPENDIX II.F - FLOODING

SECTION II.F.1

MAIN ESD SITE:
HBC AND ROCKET MOTOR OPS BUILDING

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

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Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information for this study was provided in digital format by Bowie County. This data was created in State Plane NAD 83 coordinates, U.S. Survey Feet and was produced at scales 1:1,200 (1"=100'); 1:4,800 (1"=400'). Aerial photography of the area was captured during November 2004.

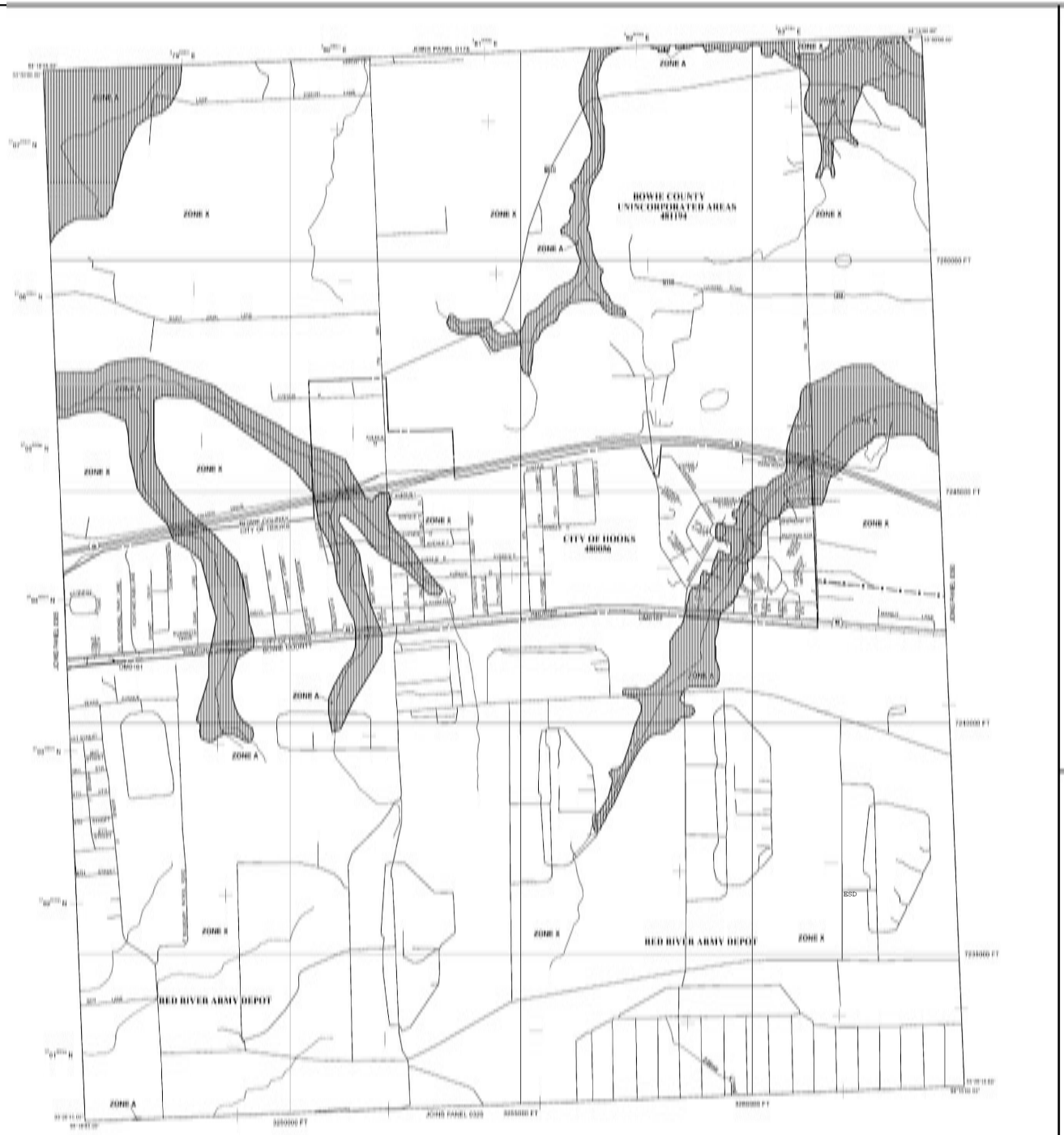
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Contact the **FEMA Map Service Center** at 1- 900- 358- 9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report,* and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1- 800- 358- 9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call1- **877- FEMA MAP** (1- 877- 336- 2627) or visit the FEMA website at http://www.fema.gov/.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, A1-99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE A99 — Areas to be protected from the 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachments so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- (A) — (A) Cross section line
- (23) — (23) Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 1000-meter Universal Transverse Mercator grid ticks, zone 15
- 5000-foot grid ticks: Texas State Plane coordinate system, north central zone (FIPSZONE 4202), Lambert Conformal Conic
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For communities/ map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

PANEL 0310D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 310 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOWIE COUNTY	480194	0310	D
HOOKS, CITY OF	480056	0310	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject property.

MAP NUMBER
48037C0310D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

NOTES TO USERS

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

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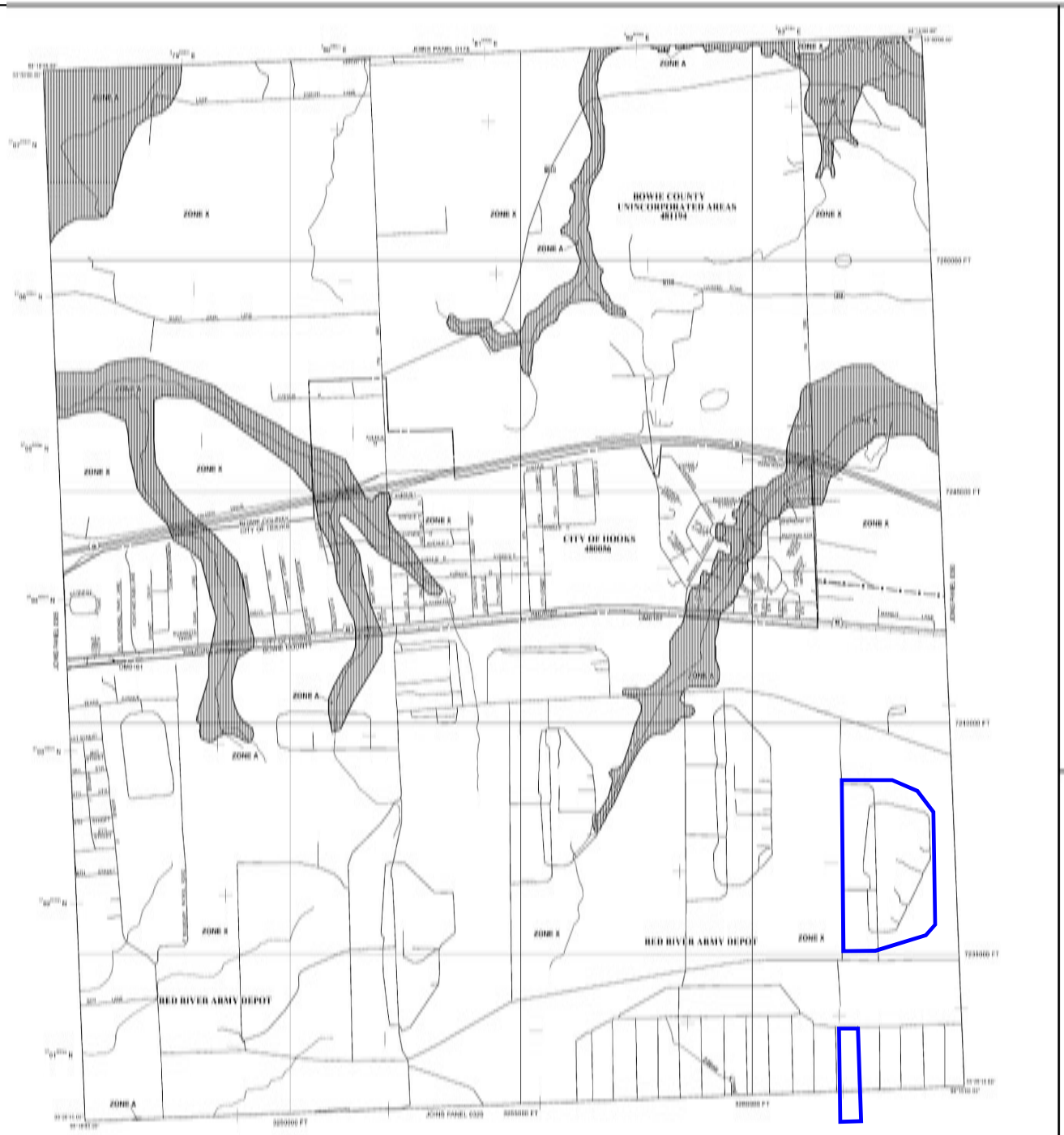
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LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, A1-99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 — Area to be protected from the 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- (A) — (A) Cross section line
- (23) — (23) Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- Western hemisphere transverse Mercator grid value
- 1000-foot grid ticks: Texas State Plane coordinate system, north central zone (FIPSZONE 4202), transverse Mercator projection
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

PANEL 0310D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 310 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
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HOOKS, CITY OF	480056	0310	D

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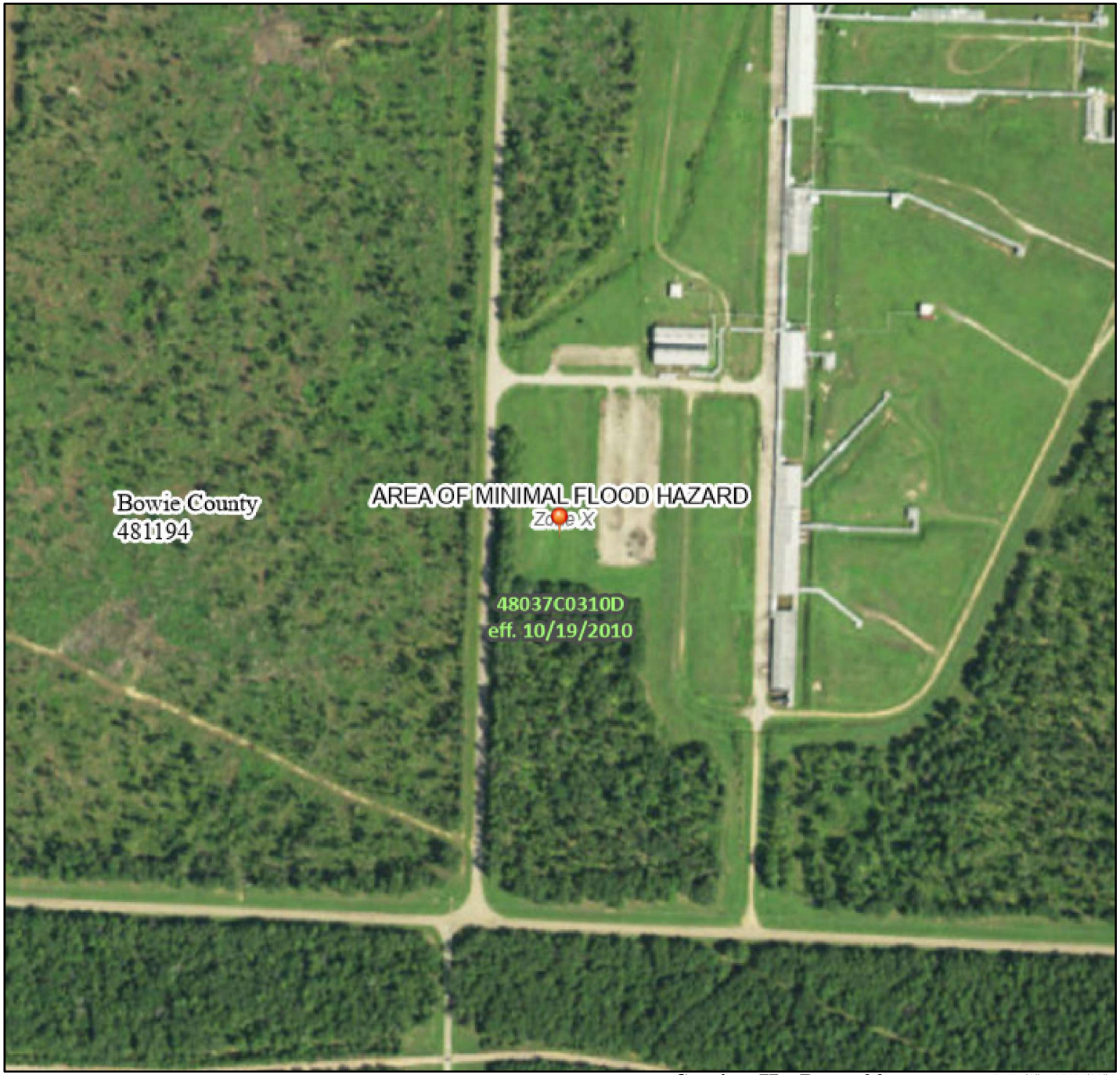
MAP NUMBER
48037C0310D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

National Flood Hazard Layer FIRMette

FEMA

94°15'46"W 33°27'9"N



94°15'9"W 33°26'39"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/4/2022 at 6:11 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX II.F - FLOODING

SECTION II.F.2

ABOVE GROUND MAGAZINE (AGM) STORAGE

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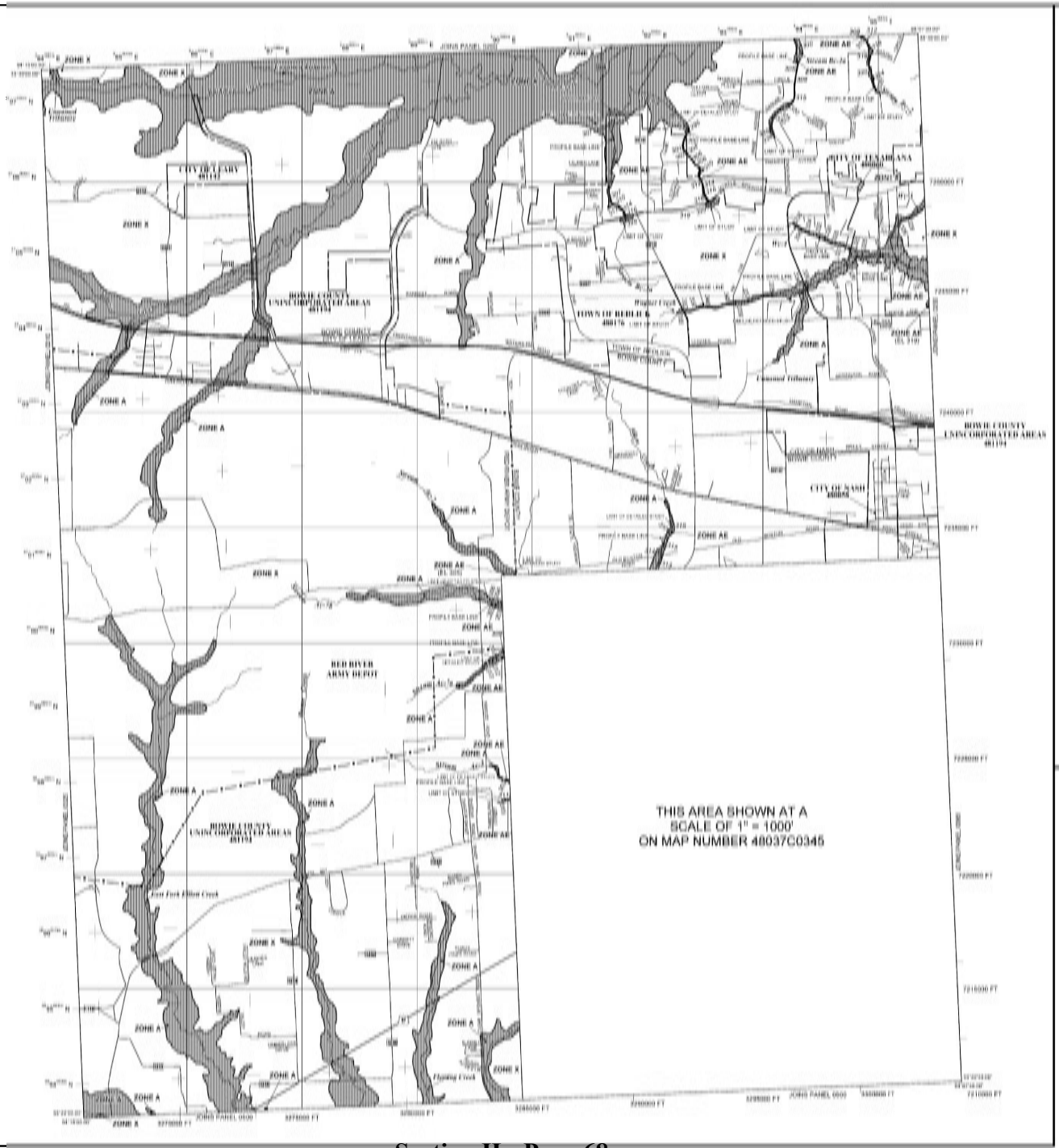
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LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, V, A99, AE, AH, AO, AR, V1-V30, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually shallow ponding); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

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ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- (A) — (A) — Cross section line
- (23) — (23) — Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 1000-meter Universal Transverse Mercator grid values, zone 15
- 5000-foot grid ticks: Texas State Plane coordinate system, north central zone (FIPSZONE 4202), Lambert Conformal Conic
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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MAP SCALE 1" = 2000'
500 0 1000 2000 FEET
500 0 500 1000 METERS

PANEL 0360D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 360 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOWIE COUNTY	480194	0360	D
NASH, CITY OF	480584	0360	D
TEXARKANA, CITY OF	480086	0360	D
WAKE VILLAGE, CITY OF	480587	0360	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
48037C0360D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

NOTES TO USERS

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

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Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

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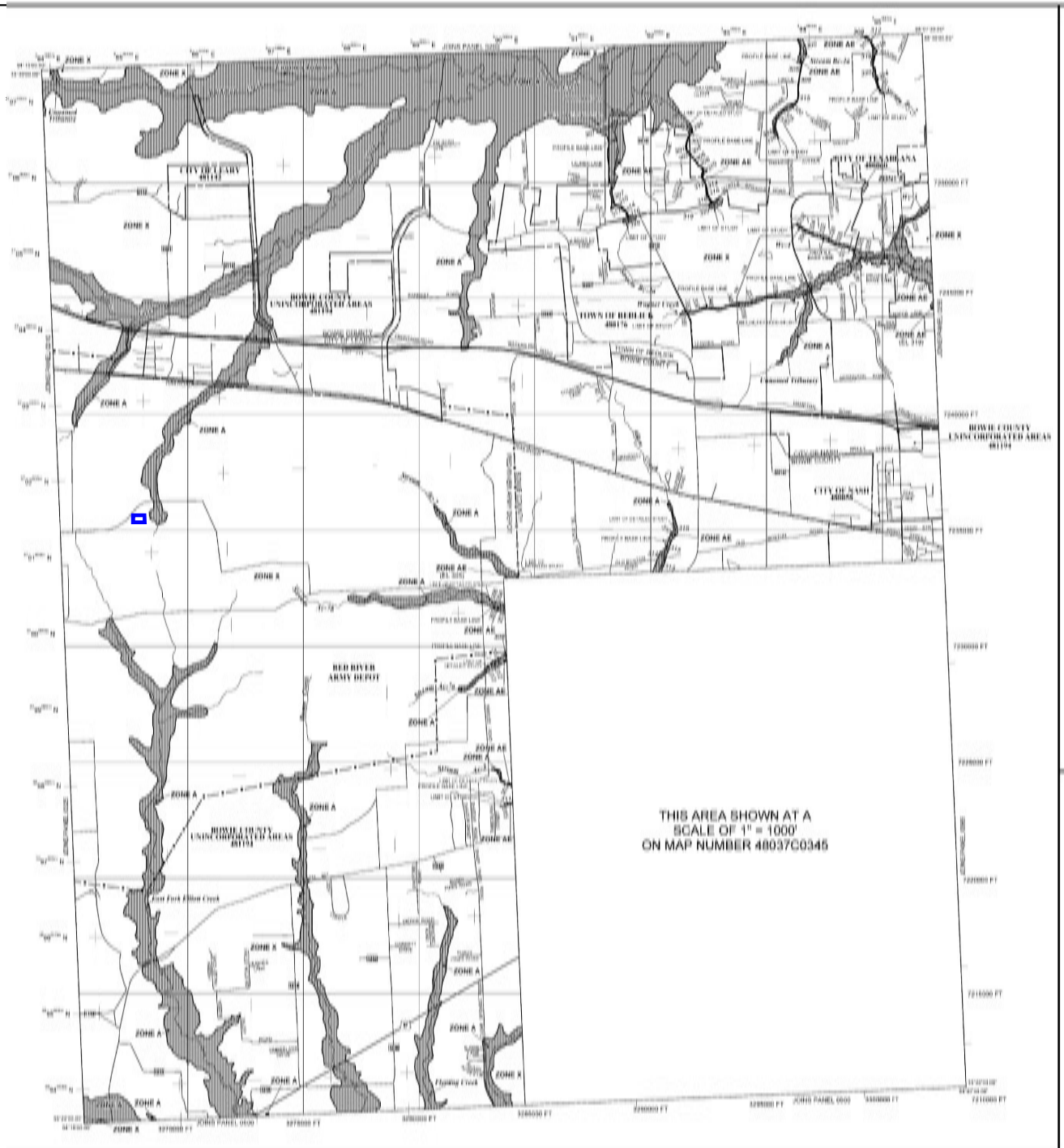
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LEGEND

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ZONE AE — Base Flood Elevations determined.

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ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1% annual chance flood.

OTHER AREAS

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- Zone D boundary
- CBRS and OPA boundary
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- Base Flood Elevation line and value; elevation in feet*
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- 5000-foot grid ticks: Texas State Plane coordinate system, north central zone (FIPSZONE 4202), Lambert Conformal Conic
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River mile

MAP REPOSITORIES
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EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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MAP SCALE 1" = 2000'
500 0 1000 2000 FEET
150 0 300 600 METERS

PANEL 0360D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 360 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOWIE COUNTY	480194	0360	D
LAKE CITY	480117	0360	D
REDLEY	480176	0360	D
TEXARKANA	480058	0360	D

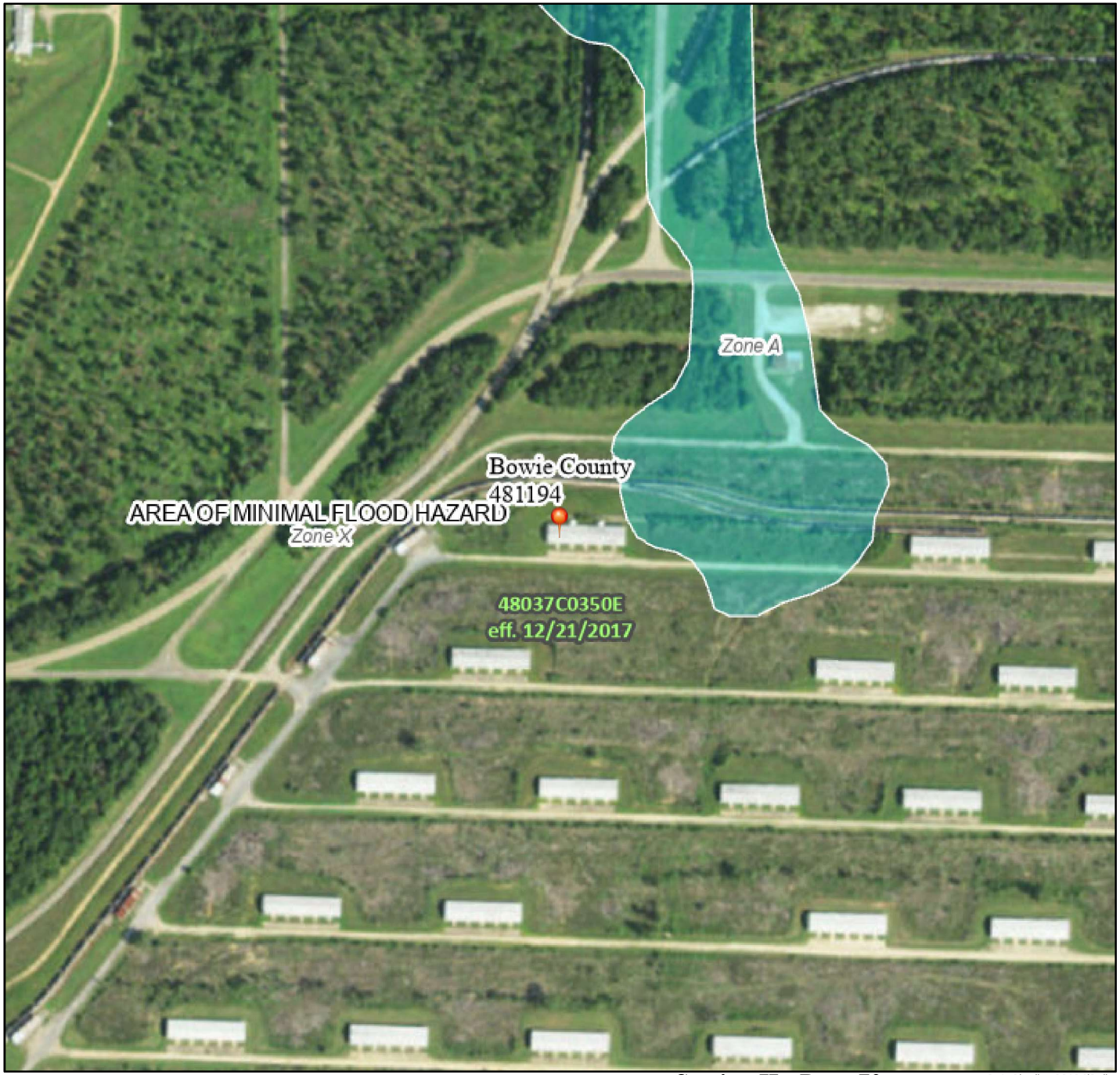
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MAP NUMBER
48037C0360D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

National Flood Hazard Layer FIRMette

94°14'35"W 33°27'1"N



94°13'57"W 33°26'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/20/2022 at 3:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX II.F - FLOODING

SECTION II.F.3

EARTH COVERED MAGAZINES (ECMs) STORAGE

NOTES TO USERS

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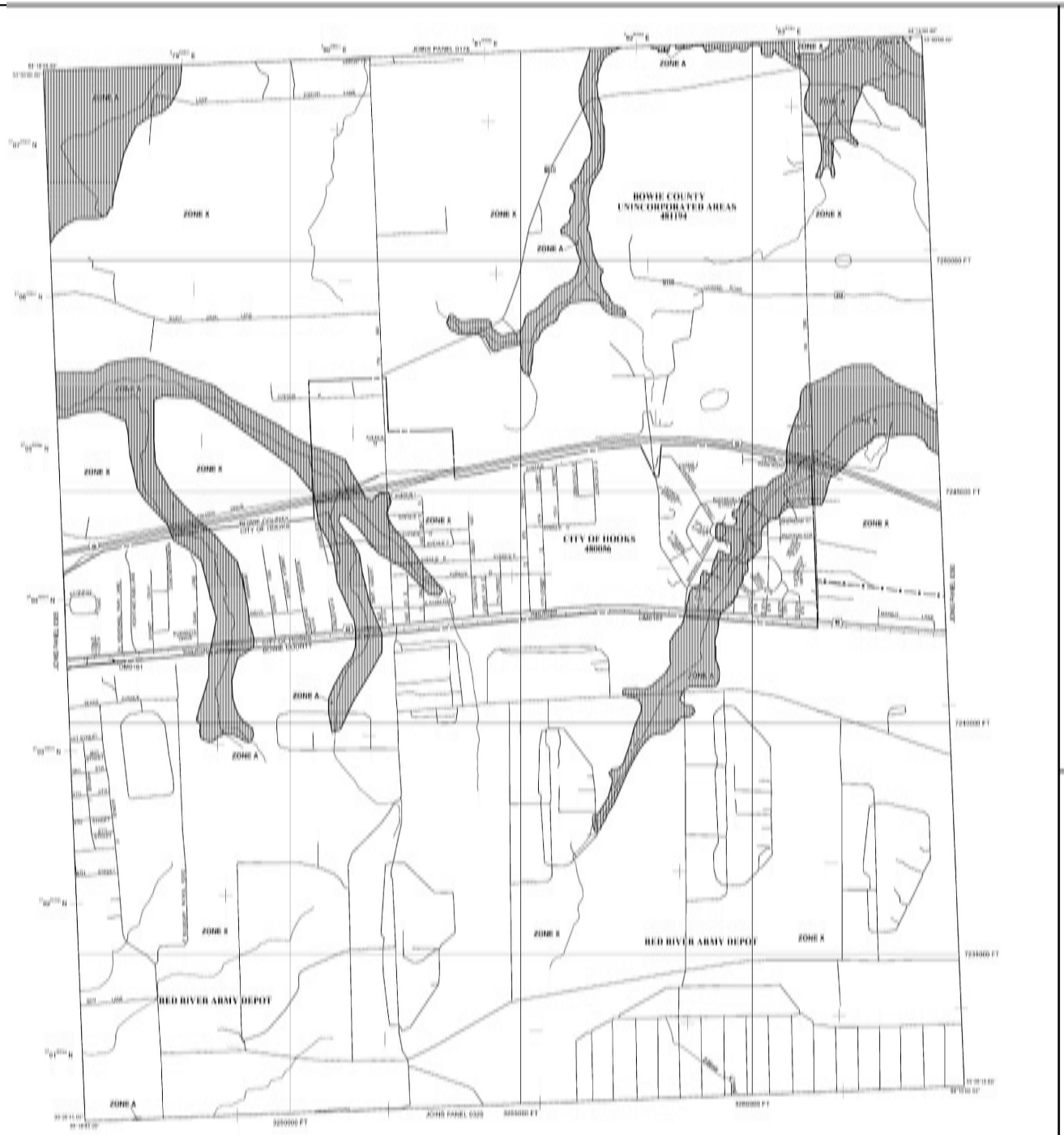
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PANEL 0310D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 310 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOWIE COUNTY	480194	0310	D
CITY OF HOOKS	480056	0310	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject property.

MAP NUMBER
48037C0310D
EFFECTIVE DATE
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Federal Emergency Management Agency

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Silver Spring, MD 20910- 3282

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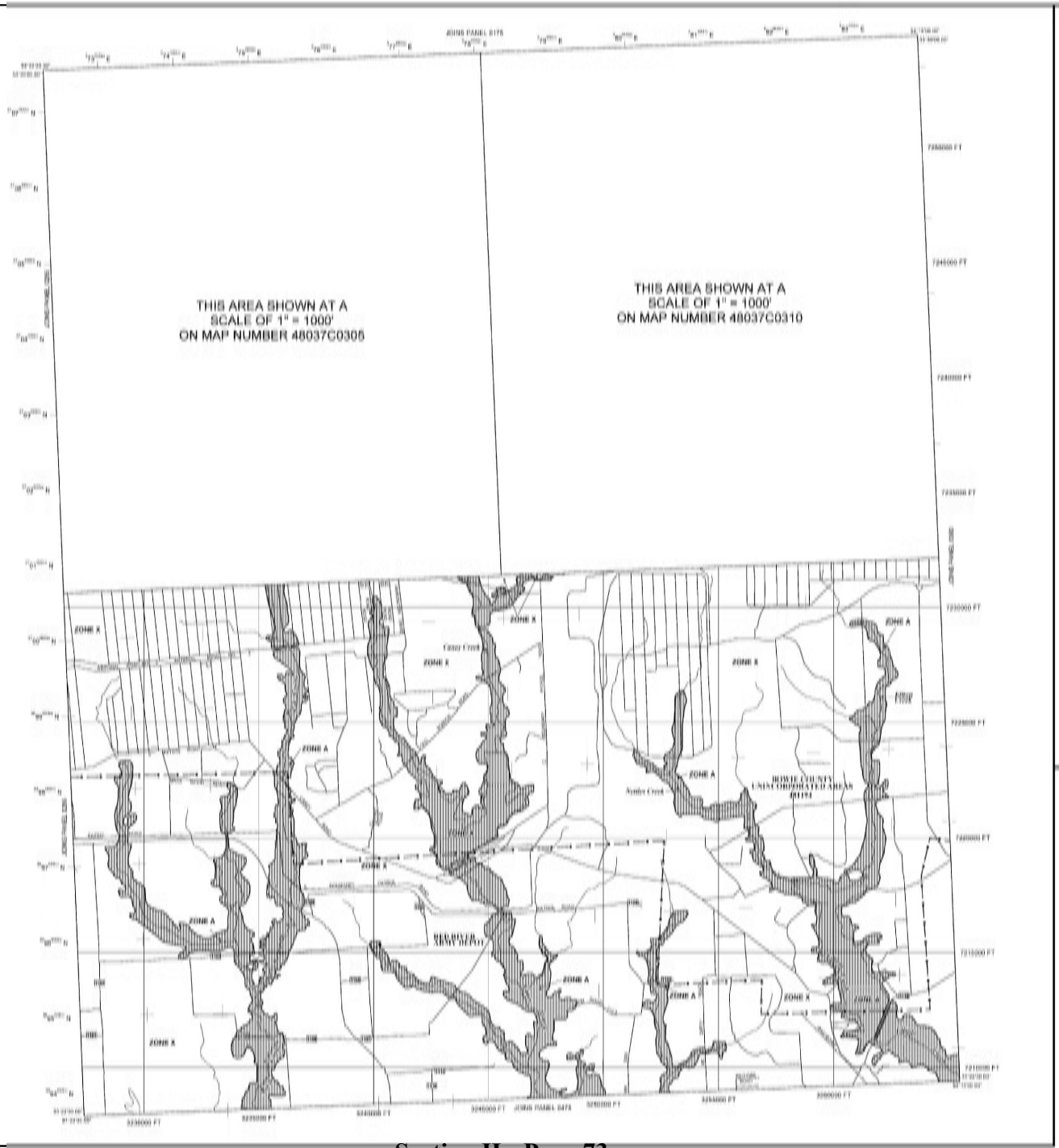
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LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, A1-99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- (EL 987) Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- (A) — (A) Cross section line
- (23) — (23) Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 1000000 mE — 1000000 Universal Transverse Mercator grid ticks, zone 15
- 5000000 FT — 5000 foot grid ticks based on Texas State Plane coordinate system, north central zone (FIPSZONE 4202), Lambert Conformal Conic
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River mile

MAP SCALE 1" = 2000'

PANEL 0328D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 328 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY — NUMBER — PANEL — SUFFIX

MAP NUMBER
48037C0328D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

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Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Texas State Plane north central zone (FIPSZONE 4202). The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

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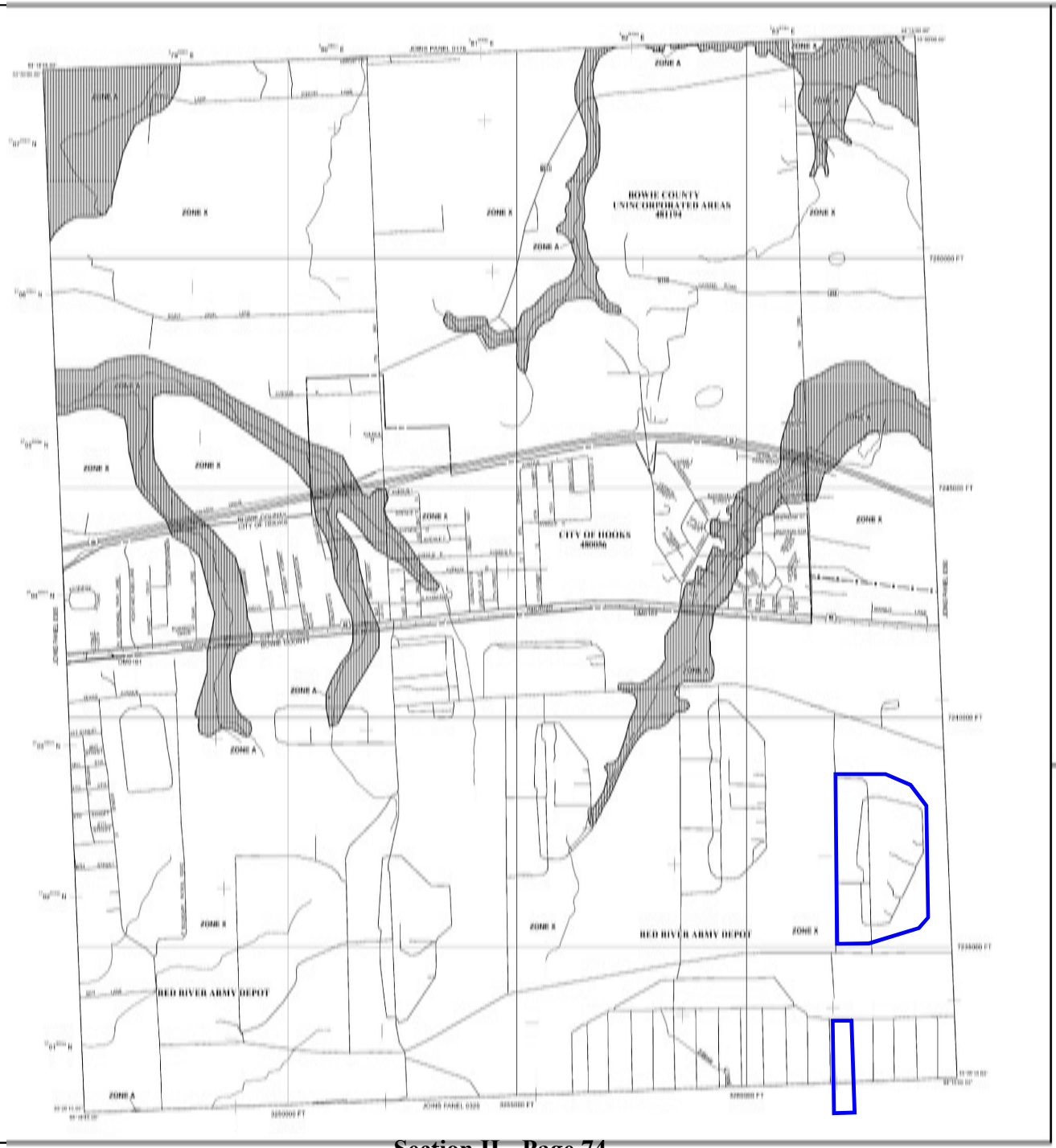
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LEGEND

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FLOODWAY AREAS IN ZONE AE

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OTHER FLOOD AREAS

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OTHER AREAS

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- Base Flood Elevation line and value; elevation in feet*
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- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'
0 500 1000 FEET
0 300 600 METERS

PANEL 0310D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 310 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOWIE COUNTY	480194	0310	D
HOOKS, CITY OF	480056	0310	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject property.

MAP NUMBER
48037C0310D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

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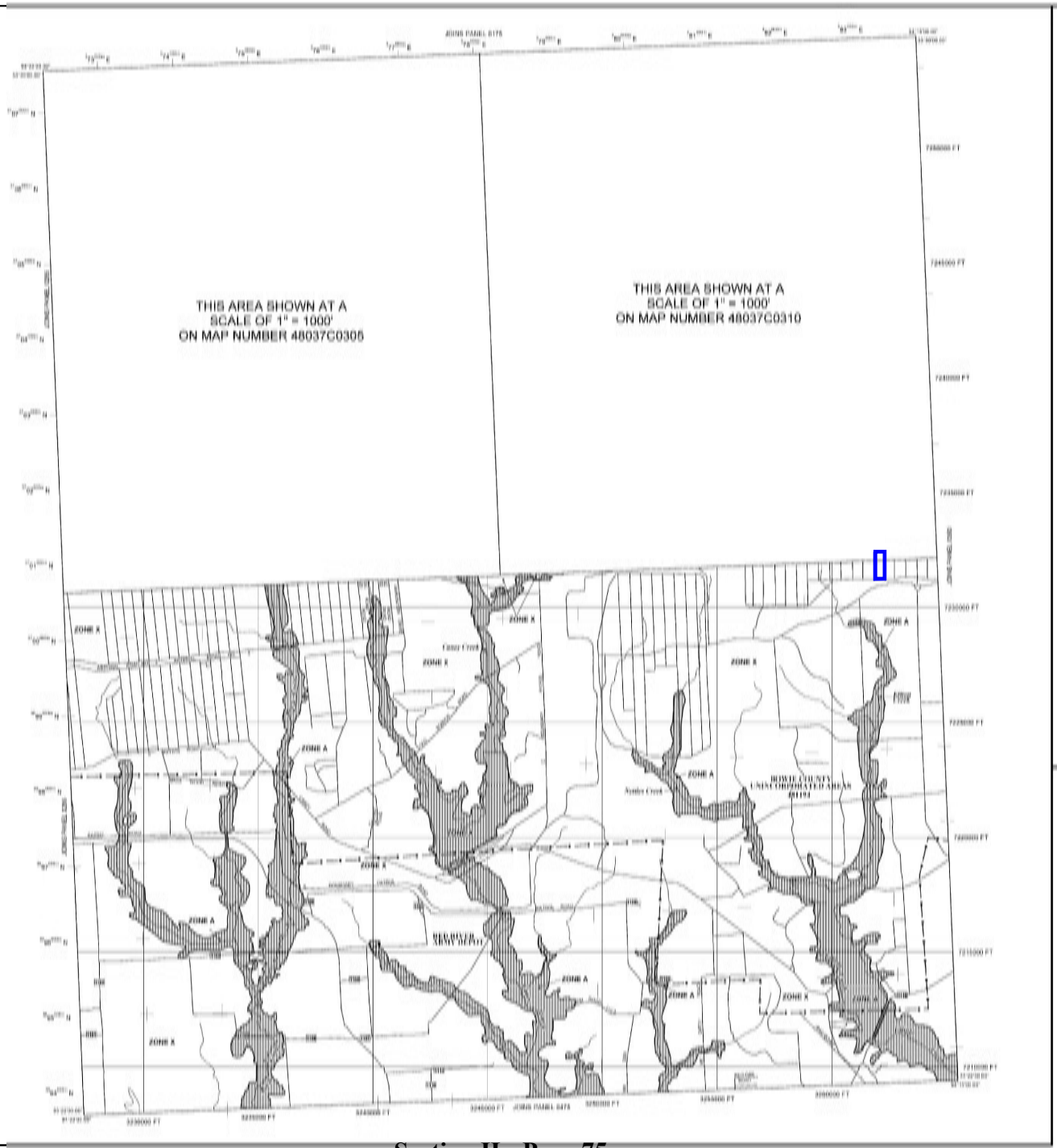
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LEGEND

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

OTHER AREAS

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAS)

MAP SCALE 1" = 2000'

PANEL 0325D

FIRM
FLOOD INSURANCE RATE MAP
BOWIE COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 325 OF 600
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

MAP NUMBER
48037C0325D
EFFECTIVE DATE
OCTOBER 19, 2010

Federal Emergency Management Agency

National Flood Hazard Layer FIRMette

FEMA

94°15'48"W 33°26'37"N



94°15'10"W 33°26'7"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/20/2022 at 4:06 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Section II - Facility Siting Criteria

Appendix II.G - Additional Information Requirements

1. For a new hazardous waste management facility, include a map of relevant local land-use plans and descriptions of the major routes of travel in the vicinity of the facility to be used for the transportation of hazardous waste to and from the facility covering at least a five (5)-mile radius from the boundaries of the facility. [30 TAC 305.50(a)(10)(A)&(D)]

   Land use maps are included in *Attachment II.G.1 – Land Use Maps*. The first map shows the land use for the areas surrounding ESD (greater than a 5 mile radius from the facility boundary). The second map shows a closer view of the land use in the immediate vicinity of ESD.

   Interstate 30 and US-82 are major routes of travel that are within 5 miles of the facility. These are the main routes used to transport energetic materials to the facility or transport hazardous waste away from the facility. A map is included in Attachment C of the Part A Application Form.

   Descriptions of the major routes of travel are provided in Section II.A.2 of the Part A Application Form.

2. For a new commercial hazardous waste management facility as defined in 30 TAC 335.202 or the subsequent areal expansion of such a facility or unit of that facility, indicate on the map the nearest established residence, church, school, day care center, surface water body used for a public drinking water supply, and dedicated public park.

   The places listed below are shown on maps in *Attachment II.G.2 – Nearest Places*. All distances listed below are straight line measurements.

   a. Nearest residence: **1.12 miles***
      13500 W New Boston Road
      Hooks, Texas 75561
   b. Church: **1.24 miles***
      First Assembly of God
      2307 Avenue A
      Hooks, Texas 75561
   c. School: **1.53 miles***
      Hooks Elementary School
      401 Precinct Road
      Hooks, Texas 75561
   d. Day care Center: **2.21 miles***
      Kinder Elite Academy

900 W Ave A,
Hooks, Texas 75561

e. Water for public drinking: **6.96 miles***
Wright Patman Lake

f. Public park: **3.21 miles***
Hooks City Park

***All distances are straight line measurements.**

3. For new commercial hazardous waste management facilities, submit the following: [30 TAC 305.50(a)(12)(A)]

a. the average number, gross weight, type, and size of vehicles used to transport hazardous waste;

It is expected that rocket motors and munitions will be delivered by approximately 5-10 tractor trailers per week. The tractor trailers will be of various sizes rated to transport rocket motors and munitions. The maximum gross weight per tractor trailer is 80,000 pounds, including the load of the munitions.

b. the major highways nearest the facility irrespective of distance; and

The major highways nearest the facility are: US-82, US-67, and TX-8. The nearest interstate is I-30.

c. the public roadways used by vehicles traveling to and from the facility within a minimum radius of 2.5 miles from the facility.

A combination of the following roadways (within a minimum radius of 2.5 miles from the facility) are possible to reach the facility: I-30, US-82, N Montague Street, Oak Street, Pine Street, Freedom Way, Cass Street, East Ave (US-82), W New Boston Rd (US-82), Bowie Parkway.

4. Include the names and locations of industrial and other waste-generating facilities within 0.5 miles for a new on-site hazardous waste management facility and the approximate quantity of hazardous waste generated or received annually at those facilities. [30 TAC 305.50(a)(10)(B)&(C)]

Name: Expal Texarkana (Site ID TXR000083437)
Location: 690 N Ellis, Hooks, TX 75561
According to the EPA RCRA website (List of Permitted Sites | US Environmental Protection Agency (epa.gov) <https://rcrapublic.epa.gov/rcrainfoweb/action/modules/pm/pmindex>), the only site in Hooks, Texas with a RCRA operating permit is Expal Texarkana.

Information from their 2019 Biennial Report shows that 744.6 tons of waste was received; 401.7 tons of waste was generated and 339.8 tons of waste was

managed, leaving 62 tons of waste that was shipped (source: RCRAINFO Search | US EPA <https://enviro.epa.gov/enviro/rcrainfoquery_3.facility_information?pgm_sys_id=TXR000083437>).

Name: Red River Army Depot (Site ID TX3213820738)
Location: 100 James Carlow Drive, Texarkana, TX 75507
Red River Army Depot's mailing address is in Texarkana, but the physical location is closer to ESD's location.

Information from their 2019 Biennial Report shows that 859.2 tons of waste was generated and 860.7 tons of waste that was shipped (source: https://www.epa.gov/enviro/br-search).

5. Include the names and locations of industrial and other waste-generating facilities within 1.0 miles for a new commercial hazardous waste management facility and the approximate quantity of hazardous waste generated or received annually at those facilities. [30 TAC 305.50(a)(10)(B)&(C)]

   See Information in Item #4.

6. For existing land disposal facility units provide documentation that the information required by 30 TAC 335.5 has been placed in the county deed records. If previously submitted, please reference the submittal by date and registration number.

   Not Applicable. There are no land disposal units.

7. If a surface impoundment or landfill (including post-closure) is to be permitted, provide exposure information to accompany this application and in accordance with 30 TAC 305.50(a)(8) and 40 CFR 270.10(j). This information will be considered separately from the TCEQ application completeness determination.

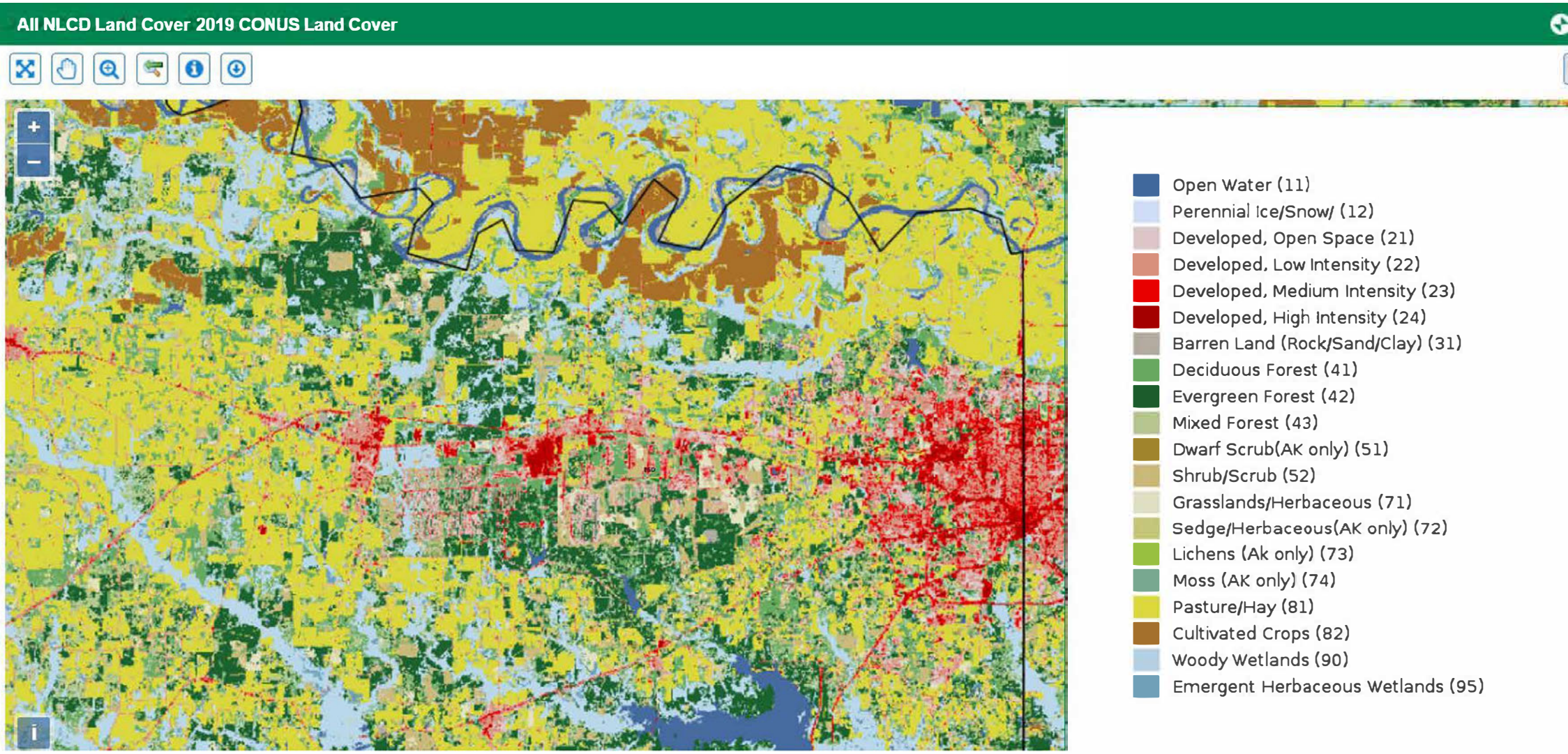
   Not Applicable. There are no surface impoundments or landfills.

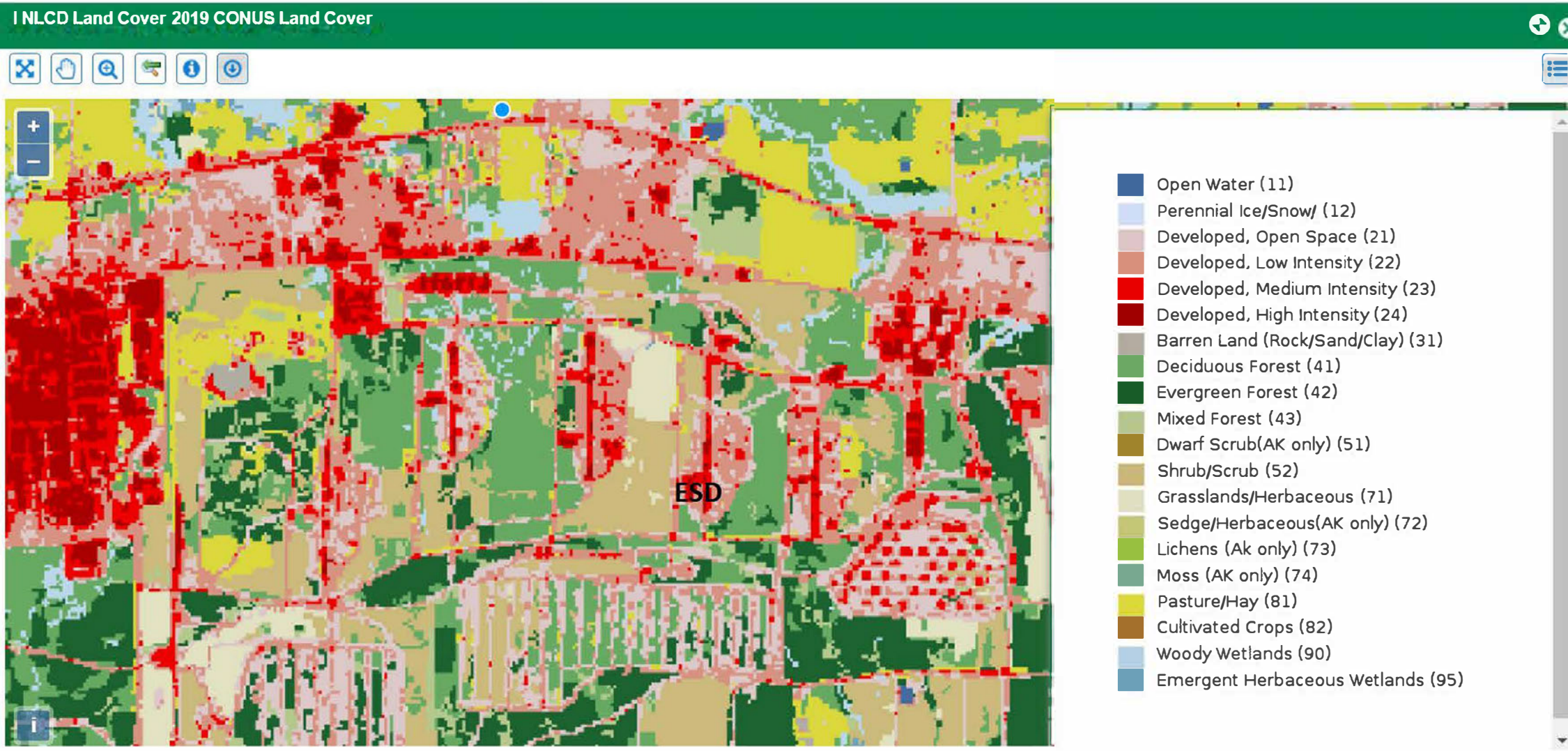
8. For a hazardous waste management facility requesting a capacity expansion of an existing hazardous waste management facility, please provide in Section VI.A.1.a the requested fault delineation information. [30 TAC 305.50(a)(4)(D)]

   Based on the above statement (taken from the Part B Application with Screening Tool document), this is Not Applicable because ESD is a new facility. However, a regulatory reference is missing in the Part B Application with Screening Tool document. 30 TAC 305.50(a)(10)(E) also requires that a new hazardous waste management facility provide the information required by 30 TAC 305.50(a)(4)(D). Therefore, this information is included in Appendix VI.A – Geology and Topography.

ATTACHMENT II.G.1

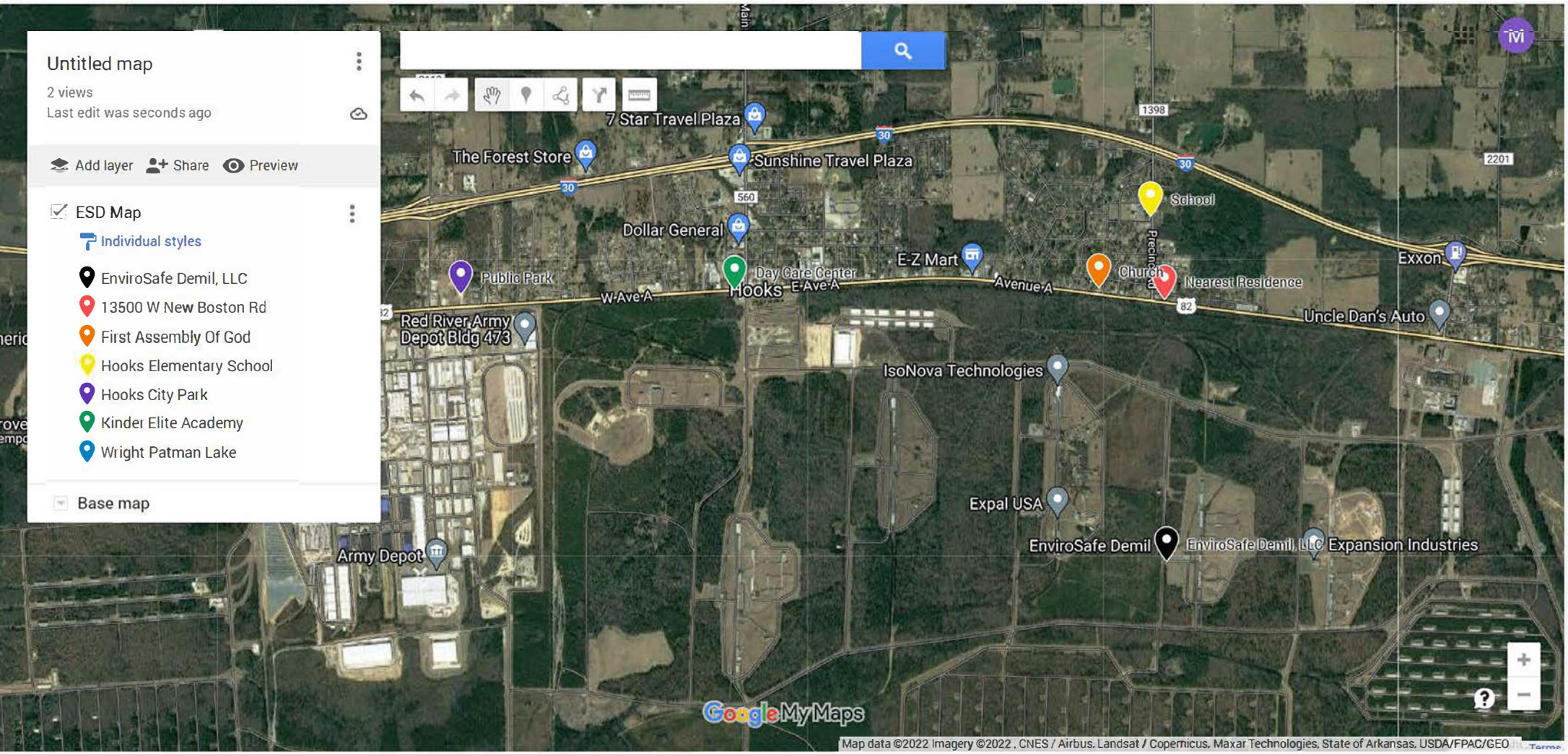
LAND USE MAPS

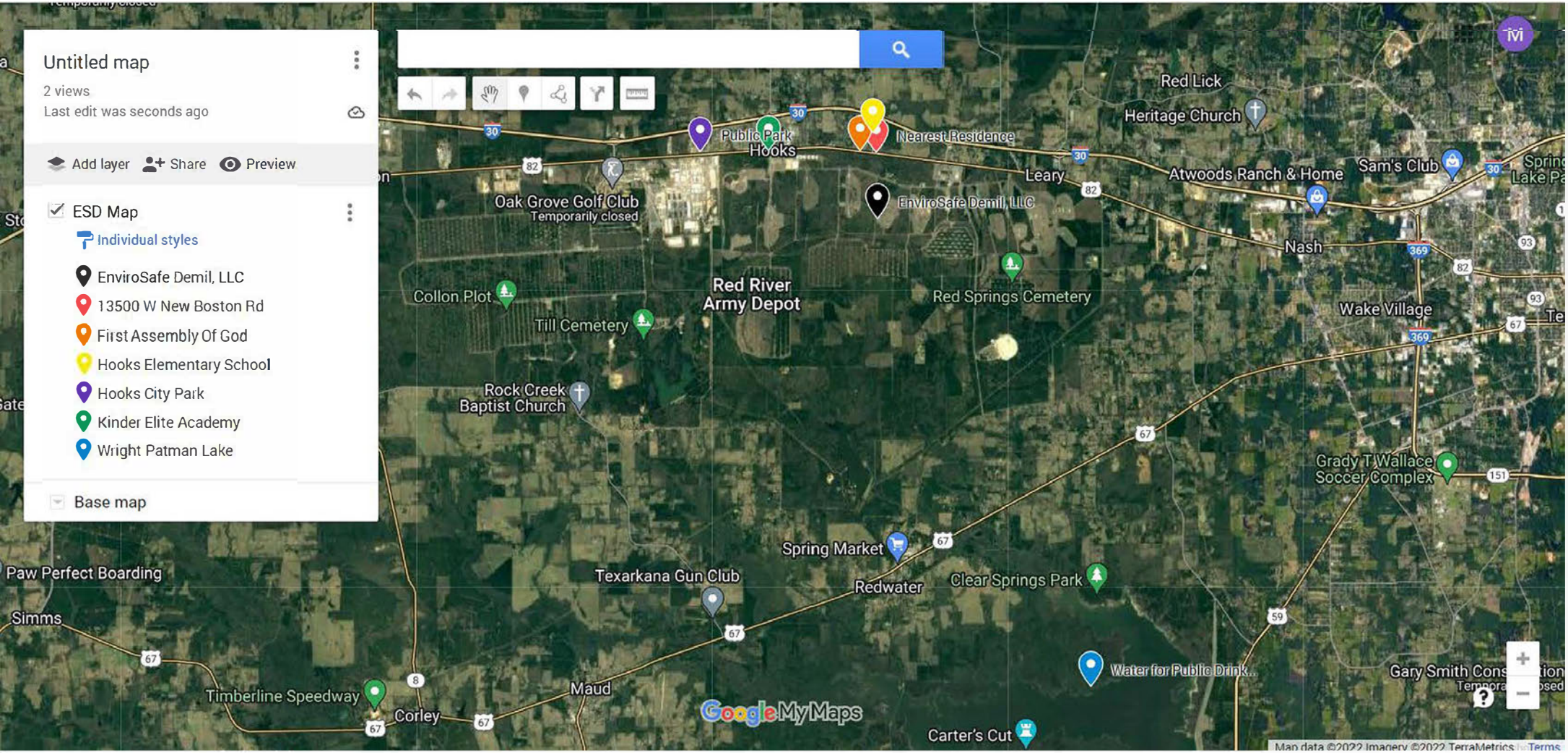

All NLCD Land Cover 2019 CONUS Land Cover
Open Water (11)
Perennial Ice/Snow/ (12)
Developed, Open Space (21)
Developed, Low Intensity (22)
Developed, Medium Intensity (23)
Developed, High Intensity (24)
Barren Land (Rock/Sand/Clay) (31)
Deciduous Forest (41)
Evergreen Forest (42)
Mixed Forest (43)
Dwarf Scrub(AK only) (51)
Shrub/Scrub (52)
Grasslands/Herbaceous (71)
Sedge/Herbaceous(AK only) (72)
Lichens (Ak only) (73)
Moss (AK only) (74)
Pasture/Hay (81)
Cultivated Crops (82)
Woody Wetlands (90)
Emergent Herbaceous Wetlands (95)


NLCD Land Cover 2019 CONUS Land Cover
ESD
Open Water (11)
Perennial Ice/Snow/ (12)
Developed, Open Space (21)
Developed, Low Intensity (22)
Developed, Medium Intensity (23)
Developed, High Intensity (24)
Barren Land (Rock/Sand/Clay) (31)
Deciduous Forest (41)
Evergreen Forest (42)
Mixed Forest (43)
Dwarf Scrub(AK only) (51)
Shrub/Scrub (52)
Grasslands/Herbaceous (71)
Sedge/Herbaceous(AK only) (72)
Lichens (Ak only) (73)
Moss (AK only) (74)
Pasture/Hay (81)
Cultivated Crops (82)
Woody Wetlands (90)
Emergent Herbaceous Wetlands (95)

ATTACHMENT II.G.2

NEAREST PLACES


Untitled map
2 views
Last edit was seconds ago
Add layer
Share
Preview
ESD Map
Individual styles
EnviroSafe Demil, LLC
13500 W New Boston Rd
First Assembly Of God
Hooks Elementary School
Hooks City Park
Kinder Elite Academy
Wright Patman Lake
Base map
7 Star Travel Plaza
The Forest Store
Sunshine Travel Plaza
Dollar General
Public Park
Day Care Center
Hooks
E-Z Mart
School
Church
Nearest Residence
Exxon
Uncle Dan's Auto
W Ave A
E Ave A
Avenue A
Red River Army Depot Bldg 473
IsoNova Technologies
Expal USA
EnviroSafe Demil
EnviroSafe Demil, LLC
Expansion Industries
Army Depot
1398
2201
30
560
82
Google My Maps
Map data ©2022 Imagery ©2022 , CNES / Airbus, Landsat / Copernicus, Maxar Technologies, State of Arkansas, USDA/FPAC/GEO


Untitled map
2 views
Last edit was seconds ago
Add layer
Share
Preview
ESD Map
Individual styles
EnviroSafe Demil, LLC
13500 W New Boston Rd
First Assembly Of God
Hooks Elementary School
Hooks City Park
Kinder Elite Academy
Wright Patman Lake
Base map
Red Lick
Heritage Church
Public Park
Hooks
Nearest Residence
Leary
Atwoods Ranch & Home
Sam's Club
Oak Grove Golf Club
Temporarily closed
EnviroSafe Demil, LLC
Nash
Red River
Army Depot
Collon Plot
Till Cemetery
Red Springs Cemetery
Wake Village
Rock Creek
Baptist Church
Grady T Wallace
Soccer Complex
Spring Market
Texarkana Gun Club
Redwater
Clear Springs Park
Paw Perfect Boarding
Simms
Timberline Speedway
Corley
Maud
Water for Public Drink...
Carter's Cut
Google My Maps
Map data ©2022 Imagery ©2022 TerraMetrics
Terms

III. Facility Management

Provide all Part B responsive information in Appendix III. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

A. Compliance History and Applicant Experience

1. Provide listings of all solid waste management sites in Texas owned, operated, or controlled by the applicant as required by 30 TAC 305.50(a)(2).

2. For a new commercial hazardous waste management facility, provide a summary of the applicant's experience in hazardous waste management as required by 30 TAC 305.50(a)(12)(F).

Information is included in Appendix II.A – Compliance History and Applicant Experience.

B. Personnel Training Plan

Provide an outline of the facility training plan which includes all the information required by 40 CFR 264.16. Indicate which training will be repeated annually.

Information is included in Appendix II.B – Personnel Training Plan.

C. Security

Describe how the facility complies with the security requirements of 40 CFR 264.14 or submit a justification demonstrating the reasons for requesting a waiver of these requirements.

Information is included in Appendix II.C – Security.

D. Inspection Schedule

Describe summary of inspection schedule and Table III.D in Appendix III.D in accordance with instructions below.

Information addressing the following items is included in Appendix II.D – Inspection Schedule and in Table III.D – Inspection Schedule.

Provide an inspection schedule summary for the facility which reflects the requirements of 40 CFR 264.15(b), 264.33 and, where applicable, the specific requirements in 40 CFR 264.174, 264.193(i), 264.195, 264.226, 264.254, 264.273, 264.303, 264.347, 264.552, 264.574, 264.602, 264.1033(f), 264.1034, 264.1052, 264.1053(e), 264.1057, 264.1058, 264.1063, 264.1084, 264.1085, 264.1086, 264.1088, 264.1101(c)(4) and 270.14(b)(5). The inspection schedule should reflect the requirements described below. The schedule should encompass each type of hazardous waste management (HWM) unit (i.e., facility component) and its inspection requirements. For incorporation into a permit, complete Table III.D. - Inspection Schedule for all units to be permitted.

The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to the release of hazardous waste constituents to the environment or which may pose a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

The owner or operator must develop and follow a written schedule for inspecting other basic elements such as monitoring equipment, safety and emergency equipment, security devices, the presence of liquids in leak detection systems, where installed, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

If the owner or operator of a facility which contains a waste pile wishes to pursue an exemption from the groundwater monitoring requirements for that waste management unit, the inspection schedule must include examination of the base for cracking,

deterioration, or other conditions that may result in leaks. The frequency of inspection must be based on the potential for the liner (base) to crack or otherwise deteriorate under the conditions of operation (e.g., waste type, rainfall, loading rates, and subsurface stability).

N/A – the facility will not operate a waste pile.

E. Contingency Plan (Not Applicable to Permits for Post-Closure Care Only)

Information addressing the requirements below is included in Appendix II.E – Contingency Plan. Table III.E.1, III.E.2, and III.E.3 are also included.

If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this section. Provide a Contingency Plan which includes all the information required by 40 CFR Part 264 Subparts C and D, except for 40 CFR 264.56(d)(1) and 30 TAC 335.153(2). This plan must also include a drawing of the facility which shows the location of all emergency equipment. In addition, complete the following tables to summarize information expressed in more detail in the plan.

1. Arrangements with Local Authorities

   Complete Table III.E.1. - Arrangements With Local Authorities to indicate arrangements (if made) with local authorities to familiarize local fire and police departments, local hospitals, equipment suppliers, and local and State emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes. Provide documentation of the attempts and any arrangements made with local authorities and emergency response teams.

2. Emergency Coordinator's List

   For inclusion into a permit, list in Table III.E.2. - Emergency Coordinators the persons qualified to act as emergency coordinator. List the alternates in the order in which they will assume responsibility.

3. Emergency Equipment List

   For inclusion into a permit, list in Table III.E.3. - Emergency Equipment all types of emergency equipment at the facility [such as fire-extinguishing systems, spill- control equipment, communications and alarm systems (internal and external), and decontamination equipment], if this equipment is

required. Briefly outline the equipment capabilities.

4. Waiver from Preparedness and Prevention Requirements

   If the owner or operator wishes to request a waiver from any of the preparedness and prevention requirements, he must submit a justification demonstrating the reasons for requesting the waiver, as discussed below.

F. Emergency Response Plan

Information addressing the requirements below is included in Appendix II.F – Emergency Response Plan.

For a new commercial hazardous waste management facility, the application shall contain evidence sufficient to demonstrate that emergency response capabilities are available or will be available before the facility first receives waste. An emergency response plan must be provided which satisfies the requirements of 30 TAC 305.50(a) (12)(C) and (D). This plan must show that the proposed facility has sufficient emergency response capabilities for managing a reasonable worst-case emergency condition associated with the operation of the facility. (For financial assurance requirements associated with the emergency response activities, please see Section

VIII.C.3.)

1. Practice Drills

   In addition to the contingency plan required under 40 Code of Federal Regulations Part 270.14(b)(7), provisions specifying procedures and timing of practice facility evacuation drills are required. Provide a description and a frequency for facility evacuation drills.

2. If a private corporation, municipality or county group will provide emergency response actions at the proposed facility, include a copy of the contract for this type of agreement with this application or state that documentation will be submitted before the facility accepts wastes.

3. Historical weather data for the area should be documented and submitted. Information regarding how emergency response operations may be affected by weather conditions should be included. (Local rainfall extremes, average rainfall amounts, average wind speeds and directions, potential for major weather events such as hurricanes, tornados, icy conditions, flash flooding etc., should be addressed.)

4. A definition of a worst-case emergency for the proposed facility should be described in the application. This worst-case emergency should take into account the possible complications involved with a facility emergency compounded by adverse weather conditions. It should also detail spills, fires, explosions, etc. This worst case scenario should be developed with the help of local governmental entities where possible. Emergency planning should include both unexpected emergencies and emergencies occurring as a result of a predictable event such as a flood or hurricane. For areas which are prone to hurricanes and flash flooding, the worst case which allows for a realistic situation should be used. For example, response teams should be well versed in reacting to events such as a 100-year flood.

5. A training program for personnel who will respond to these types of emergencies must be provided and must include the requirements described

in OSHA Federal Register 1910 and EPA Federal Register 311, the Texas Hazard Communication Act, SARA Title III 302, 304, 311, 312, and 313. If emergency response actions are contracted out, the contracted employees must be properly trained and documentation of this training must be maintained on-site. All responders to emergencies at the proposed facility must be involved in training and drills at the facility in order to be thoroughly familiar with the facility and its operations.

6. The application must include a description and identification of first-responders (i.e. all pertinent facility personnel, local responders, and contractors). The duties of the facility employee who is to be the on-scene coordinator (OSC) must be described. Additional information must be provided detailing the OSC's role in the emergency response activities. This person must have the authority to commit the resources needed to carry out the Emergency Response Plan. His duties must be thoroughly described so that it is clear whether he will remain in control once the emergency response team arrives or whether he will relinquish control to another incident commander upon that person's arrival on the scene. Additionally, there must be a qualified OSC on-site or on call 24 hours a day. The name, address and phone numbers (home and work) of the OSC(s) must be listed in the Emergency Response Plan. Where more than one person is listed, one must be named as the primary OSC and others must be listed in the order

   in which they will assume responsibility as alternates.

7. Local or regional emergency medical services or hospitals which have experience in hazardous materials training must be identified in the application. The names, addresses and phone numbers of the hospitals or medical centers should be listed here and updated as necessary. Additionally, maps showing the quickest routes to the medical services must be provided. A description of decontamination procedures for injured personnel prior to transport to medical services must also be provided. The decontamination and transport of injured people to appropriate medical centers must be included in the emergency evacuation training and drills.

8. A pre-disaster plan which includes training drills must be included in the application. This plan should include a schedule for staging evacuations of the facility and for emergency response training drills. At least two evacuations and two emergency response drills should occur annually. The plan should also include additional drills for responding to "predictable" emergencies such as floods and hurricanes. The plan must include the following (or must reference applicable sections of the Contingency Plan): a description of arrangements already in place with local authorities; emergency phone numbers; internal communication or alarm systems and proper alarm codes; a list of all types of emergency equipment at the facility, including a physical description and the capabilities of each item on the list, and the location of each item (a map would be useful here); a description of decontamination equipment; an evacuation plan including signals, evacuation routes and alternate evacuation routes; listing of pertinent first responder emergency phone numbers, and codes for other types of communication devices; and a description of actions that will be performed in the event that a "predictable" emergency occurs.

9. Describe the mechanism which will be used to notify first responders and appropriate local governmental entities that an emergency has occurred. Also describe the mechanism which will be used to notify all applicable

governmental agencies when an incident occurs (i.e., TCEQ, Texas Parks and Wildlife, General Land Office, TCEQ Office of Air Quality, Texas Department of Health, and the Texas Railroad Commission).

10. Evidence must be provided that shows coordination with the Local Emergency Planning Committee (LEPC) and any local comprehensive emergency management plan. The applicants should be able to show compliance with SARA Title III.

11. Any medical response capabilities proposed for the facility property must be detailed in the application.

Section III - Facility Management

Appendix III.A – Compliance History and Applicant Experience

30 TAC 305.50(a)(2) and 30 TAC 305.50(a)(12)(F)

30 TAC 305.50(a)(2)

EnviroSafe Demil, LLC (ESD) does not own, operate, or control any other solid waste management sites in Texas.

30 TAC 305.50(a)(12)(F)

ESD has been in the business of demilitarization since 2018 and is experienced in the clean and safe disposal of military and industrial explosives. The company is managed by a team of highly experienced defense industry and explosive handling experts. The proprietary units are specifically designed to deactivate the energetics in an environmentally responsible manner.

Through ESD's proprietary system of processing the materials, the potential for fires, explosions, detonations, or releases, including run-off to the soil, groundwater, surface water, and emissions to the atmosphere is minimized. Energetic materials destined for on-site processing are transported in sealed explosion-proof containers from the point of generation (off-site) to the ESD facility. Once at the ESD facility, the materials are safely stored until they are ready to be processed.

The facility has developed Standard Operating Procedures to include specific instructions for the handling and transporting of energetic materials. Appropriate controls and processes are in place to ensure no accidental fires, explosions, detonations, or releases occur.

Section III - Facility Management

Appendix III.B – Personnel Training Plan

40 CFR §270.14(b)(12) and 40 CFR §264.16

EnviroSafe Demil, LLC (ESD) has a training program for operations personnel responsible for energetic material management and emergency response responsibilities. An outline of the personnel training plan of the facility, which includes all the information required by 40 CFR §264.16, is included below.

1.0 INTRODUCTION

Personnel training provisions under RCRA are specified by 40 CFR §270.14(b)(12) and 40 CFR §264.16. The facility's personnel training program is described in this document.

1.1 Facility Personnel Trained

All personnel who may come into contact with hazardous materials are trained in basic firefighting response, emergency communication procedures, emergency equipment locations, and plant evacuation procedures. Additional job-specific training is given to applicable operations personnel responsible for energetic material management and emergency response.

1.2 Timing of Training

Applicable facility personnel must successfully complete the introductory training program within six months after the date of their employment (or assignment to a new position). In accordance with 40 CFR §264.16(b), new facility personnel are not to work alone until they have been thoroughly trained.

An annual review of the initial training is also conducted for all applicable facility personnel.

1.3 Method of Training

Both classroom and on-the-job training are given as specified in 40 CFR §264.16(a). The training may utilize training methods such as: handouts, presentations, and hands-on demonstrations.

1.4 Training Responsibilities

As specified by 40 CFR §264.16(a)(2), the training program is directed by a person trained in hazardous waste management procedures. It includes instruction that teaches facility personnel

hazardous waste management procedures relevant to their position (including contingency plan implementation).

1.5 Content of Training

As specified by 40 CFR §264.16(a)(3) and further described in Section 1.5.1 through Section 1.5.6 of this plan, the training program is designed to ensure that facility personnel are able to respond effectively to emergencies. The training program familiarizes personnel with emergency procedures, emergency equipment, and emergency systems, including:

i. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
ii. Key parameters for automatic waste feed cut-off systems;
iii. Communications or alarm systems;
iv. Response to fires or explosions;
v. Response to ground-water contamination incidents; and
vi. Shutdown of operations.

1.5.1 Use, Inspection, Repair, and Replacement of Emergency Equipment

All in-plant personnel who may come into contact with hazardous materials are trained on using plant emergency response equipment. Employees are trained to ensure that emergency equipment is inspected, repaired, and replaced if necessary. Emergency equipment is inventoried regularly while inspecting for badly worn, broken, or missing equipment.

1.5.2 Key Automatic Waste Feed Cut-Off Parameters

No automatic waste feed cut-off (AWFCO) parameters apply to the Hybrid Burn Chamber (HBC) since it is batch fed by the operator. However, there are HBC and APCS sensors that will not allow a batch to be processed until the correct conditions are met within the HBC and APCS. Operators are trained on this automatic interlock system.

1.5.3 Communications Systems or Alarm Systems

All new employees who may come into contact with hazardous materials are given a plant tour and shown the emergency equipment locations, including communication systems, eyewash stations, emergency showers, fire extinguishers, etc. The locations of all emergency equipment, including communication systems, are illustrated on the Emergency Equipment Maps that are posted throughout the facility. These maps will be reviewed during introductory and annual training with applicable employees.

1.5.4 Responses to Fires and Explosions

Basic firefighting training is given to employees with those responsibilities on an annual basis. This basic training qualifies employees to implement first responses to small localized fires. Any large fires will require that the local fire department be contacted. If an accidental detonation or explosion occurs, all employees in the affected area are trained to evacuate immediately to the designated evacuation area.

1.5.5 Response to Groundwater Contamination Incidents

There is minimal chance of a groundwater contamination incident at this facility because of the type of the materials handled, the small size of containers handled, and the design of the equipment where the materials are processed.

If a small-scale spill occurs, facility personnel will respond. Training will be given on the location of spill response equipment, how to use the spill response equipment, who to notify in the event of a spill, and appropriate disposal methods.

1.5.6 Shutdown Operations

Introductory training will explain any manual shutdown operations. Any situations that might result in operating problems will be discussed. Procedures for a safe shutdown during emergencies will be addressed with particular emphasis on methods to minimize the chance of materials becoming involved in any fire or explosion.

Continuing training will focus on the identification of any problems with current shutdown procedures. Any manual shutdown situations resulting from actual emergencies or drills will be analyzed. Any issues and/or non-standard events that occur related to shutdown activities will be discussed, as well as ways to improve shutdown operations. Strategies for improvement will be made where inadequate shutdown procedures are identified.

1.6 Designing Training to Meet Actual Job Tasks

In addition to the content covered in Section 1.5, the following items will be discussed during training as it relates to specific job tasks:

i. Explanation of proper emergency procedures for storage areas or material handling areas.
ii. Identification of specific hazards, procedures, and cautions that may apply in addition to normal plant emergency procedures.

iii. Specific contents of the Contingency Plan (included as *Appendix III.E – Contingency Plan*) and the Emergency Response Plan (included as *Appendix III.F – Emergency Response Plan*) as they relate to the storage areas, material handling area, or processing unit.
iv. Proper use of PPE designed for use in the storage areas or material handling areas.
v. Explanation of responsibilities for each job function as it relates to compliance with RCRA regulations.

1.7 Recordkeeping of Training

In accordance with 40 CFR §264.16(d), the following documents and records are maintained at the facility:

1. The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job;
2. A written job description for each position which includes the requisite skill, education, or other qualifications, and duties of employees assigned to each position;
3. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position referenced in item number 1;
4. Records that document that the training or job experience required has been given to, and completed by, facility personnel.

Personnel training records are maintained at the facility. All training records for current personnel will be maintained on-site until the closure of the facility. Records will document who was given training and who completed training. Training records of employees who leave the facility will be retained on site for at least three years after their termination.

Section III - Facility Management

Appendix III.C – Security

40 CFR §264.14

EnviroSafe Demil, LLC (ESD) has developed site security procedures to ensure compliance with 40 CFR §264.14. ESD prevents unknowing entry and minimizes the possibility of unauthorized entry of persons or livestock onto the active portion of the facility through the active and passive security controls discussed in the following paragraphs.

ESD maintains a six-foot high fence with triple strand barbed wire in good repair around the active portion of the facility. Entry and exit through the fence are strictly controlled through key card access and an automatic gate opener that requires a security code. Additionally, the entry point and facilities are under 24-hour surveillance camera monitoring.

"Danger-Unauthorized Personnel Keep Out" signs legible from a distance of 25 feet are posted on or near the entrance, all gates, and at least one sign is placed along each straight fence run.

Section III - Facility Management

Appendix III.D – Inspection Schedule

40 CFR §264.15(b), §264.33 and, where applicable, the specific requirements in 40 CFR §264.174, §264.193(i), §264.195, §264.226, §264.254, §264.273, §264.303, §264.347, §264.552, §264.574, §264.602, §264.1033(f), §264.1034, §264.1052, §264.1053(e), §264.1057, §264.1058, §264.1063, §264.1084, §264.1085, §264.1086, §264.1088, §264.1101(c)(4) and §270.14(b)(5)

1.0 INSPECTION REQUIREMENTS

Inspections of the facilities and equipment will be conducted to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of hazardous waste constituents to the environment or a threat to human health. The frequency of inspections listed in this document were selected based on the requirements in the applicable regulations or based on the timeframe determined to be adequate to identify problems in time to correct them before they harm human health or the environment, whichever was shorter.

Any deterioration or malfunction of equipment or structures discovered during an inspection will be remedied on a schedule to ensure that the problem does not lead to an environment or human health hazard as required by 40 CFR §264.15(c).

Table 1 contains a regulatory checklist of the inspection requirements listed in TCEQ's Part B Application.

2.0 SCHEDULE AND TYPES OF EQUIPMENT INSPECTIONS

A checklist of inspected items will be created and inspections will be recorded and filed as described in Section 4.0.

2.1 Monitoring Equipment

The monitoring equipment associated with the Hybrid Burn Chamber (HBC) and the associated air pollution control system will be inspected regularly in accordance with the manufacturer's recommendations and good engineering practice.

Automatic Interlock Systems

The monitoring equipment associated with the automatic interlock systems will be inspected and tested on a weekly basis. The inspections will be performed by operating personnel and will be

documented in inspection logs as described in Section 4.0.

2.2 Safety and Emergency Equipment

The safety and emergency equipment must be regularly inspected and function tested. In accordance with 40 CFR §264.33, the equipment is tested and maintained to ensure proper operation in times of emergency. Table 2 lists the safety and emergency equipment inspection frequencies.

2.3 Security Devices

Facility security devices will be inspected for damage and proper working condition on a frequency to minimize risk, but at least weekly. This includes the facility fence, gates, doors, windows, and locks.

2.4 Operating and Structural Equipment

The material preparation area and the HBC process operation area are subject to visual examination daily as part of regular operations. Daily visual inspections are conducted each day that the respective area is in operation and consist of a walk-through of the facility to inspect piping, equipment, and containers for integrity, evidence of leaks, and excessive accumulation of ash/debris in the HBC. Visible cracks or leaks from containers and other identified deficiencies are promptly corrected. The facility's preventative maintenance program helps ensure that equipment is serviced correctly and minimizes the likelihood of spills or releases due to equipment failure.

The concrete pads and the areas around the concrete pads are also inspected for signs of leakage such as erosion, wet spots, or dead vegetation. Concrete pads are visually inspected daily when in operation for cracks, gaps, erosion, wet spots, and damage.

After an emergency, the affected facility areas will be inspected for cleanliness and safe working conditions. Containers will be checked to see that they are in good condition and properly sealed and labeled. Tanks, pipe fittings, pumps, and hoses will be inspected to ensure proper working order. The buildings, building supports, framework, walls, and floors will be checked for signs of deterioration.

3.0 INSPECTIONS SPECIFIC TO HAZARDOUS WASTE

Hazardous waste handling and storage areas inspected as described in this section.

3.1 Loading and Unloading Areas

The loading and unloading areas are inspected for spills, loose debris, and improperly stored materials. Wooden crates, ammunition cans, and any other packaging materials will be inspected for signs of damage, discoloration, perforation, degradation, and unusual odors upon arrival to the facility. Any damaged packaging will be inspected to see if the energetics within are damaged. These visual inspections are also conducted once per day when the areas are in use and being accessed by personnel.

3.2 Storage of Energetic Material [40 CFR §264.1201, §264.174]

The energetic material is stored in dedicated storage magazines designed for energetic materials per 40 CFR §264.1201. Each storage magazine has a log where the type of material, amount of material, and the date the material was put into storage is recorded. Each magazine is designed to hold a different amount of net explosive weight (NEW). The basis for these limits is to ensure explosives safety and are the limits are approved by the Army. The operators assure that the design amount of NEW for each magazine is not exceeded. Weekly inspections of the storage magazines are conducted to meet the requirements of 40 CFR §264.1201(a)(5) and §264.1201(f). In addition, hazardous waste munitions and explosives are inventoried at least annually in accordance with 40 CFR §264.1201(e).

Containers are inspected for leaks or deterioration caused by corrosion or other factors. In accordance with 40 CFR §264.171, if a container holding hazardous wastes is not in good condition or if it begins to leak, the hazardous waste will be removed from the container and placed into another container that is in good condition. The defective container will not be used to manage hazardous waste until the defect is repaired.

The weekly inspections of the storage magazines will be logged and consist of the following inspections:

- Verify doors are locked when not in use
- Verify warning signs are in place and readable
- Verify container labels are readable and containers are closed
- Verify containers are not damaged and there are no leaks or spills
- Verify there is sufficient aisle space
- Inspect the floor for spills, loose debris, cracks, and damage.

3.3 Material Preparation Building

The Rocket Motor Ops Building will be inspected when energetic waste is present. Daily visual inspections (when in operation) will be conducted to look for spills, loose debris, and improperly stored materials.

3.4 Hybrid Burn Chamber (HBC) and APCS Equipment

The HBC and air pollution control system (APCS) is subject to visual examination each day as part of regular operations. Daily visual inspections (when the unit is in operation) will be logged and consist of the following inspections:

- Visual inspections of the HBC and the associated equipment for damage, corrosion, cracks, leaks, signs of tampering, and fugitive emissions
- Visual inspections of the APCS equipment for damage, corrosion, cracks, leaks, signs of tampering
- Visual inspection of the concrete pad for cracks, gaps, erosion, wet spots, and damage.

The operator will also complete a walk-through of the HBC area to inspect equipment for integrity and to look for excessive accumulation of ash or debris (wastes such as wires, paper, plastic, packaging, fragments, shrapnel, etc.). Excessive ash or debris will be properly collected, containerized, and disposed of off-site. Any other identified deficiencies will be promptly corrected before commencing HBC operations.

4.0 RECORDKEEPING

Inspections will be recorded on an inspection log and the records will be maintained on-site at the facility for a minimum of three years as required by 40 CFR §264.15(d). These records will include the inspection's date and time, the inspector's name, a notation of the observations made, and the date and nature of any repairs or other remedial actions. Checks will be performed to assure that records are being adequately maintained.

Any deficiencies found during inspections or during routine operations will be reported to the respective supervisors for correction. Records will be maintained of the reported deficiencies and the associated corrections.

Table 1
Inspection Schedule Regulatory Checklist

Regulatory Citation	Description	Location Addressed
40 CFR §264.15(b)	The owner or operator shall develop and implement a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards. The schedule must be kept at the facility, identify the types of possible problems and the frequency of inspections.	Section 1.0 Table III.D
40 CFR §264.33	All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.	Section 2.2 Table 2
40 CFR §264.174	At least weekly, the owner or operator must inspect areas where containers are stored. The owner or operator must look for leaking containers and for deterioration of containers and the containment system cause by corrosion or other factors.	Section 3.2
40 CFR §264.193(i)	Tank systems	N/A
40 CFR §264.195	Tank systems	N/A
40 CFR §264.226	Surface impoundments	N/A
40 CFR §264.254	Waste piles	N/A
40 CFR §264.273	Land treatment	N/A
40 CFR §264.303	Landfills	N/A
40 CFR §264.347	Incinerators	N/A
40 CFR §264.552	Corrective Action Management Units	N/A
40 CFR §264.574	Drip pads	N/A
40 CFR §264.602	Miscellaneous Units Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance to protect human health and the environment as specified in the permit.	Section 2.1 Section 3.4

Table 1
Inspection Schedule Regulatory Checklist (continued)

Regulatory Citation	Description	Location Addressed
40 CFR §264.1033(f)	Air emission standards for process vents	N/A
40 CFR §264.1034	Air emission standards for process vents	N/A
40 CFR §264.1052	Air emission standards for equipment leaks	N/A
40 CFR §264.1053(e)	Air emission standards for equipment leaks	N/A
40 CFR §264.1057	Air emission standards for equipment leaks	N/A
40 CFR §264.1058	Air emission standards for equipment leaks	N/A
40 CFR §264.1063	Air emission standards for equipment leaks	N/A
40 CFR §264.1084	Air emission standards for tanks, surface impoundments, containers	N/A
40 CFR §264.1085	Air emission standards for tanks, surface impoundments, containers	N/A
40 CFR §264.1086	Air emission standards for tanks, surface impoundments, containers	N/A
40 CFR §264.1088	Air emission standards for tanks, surface impoundments, containers	N/A
40 CFR §264.1101(c)(4)	Containment buildings	N/A
40 CFR §270.14(b)(5)	A copy of the General Inspection Schedule required by §264.15(b), shall include where applicable, as part of the inspection schedule, specific requirements in §§ 264.174, 264.193(i), 264.195, 264.226, 264.254, 264.273, 264.303, 264.602, 264.1033, 264.1052, 264.1053, 264.1058, 264.1084, 264.1085, 264.1086, and 264.1088 of this part.	Table 1

Table 2
Safety and Emergency Equipment Inspection Frequencies

Device Type [a]	Frequency	Inspections, Tests, & Calibrations
Fire extinguishers	Monthly Inspections	Check that extinguisher is present in its proper location. Check that its' most recent test or certification is up-to-date. Check seal.
	Annual Test	The contractor performs pressure and function tests.
Eyewash stations	Monthly Test	Check that adequate water flows from the eyewash fountain when activated.
Sprinkler systems	Monthly Inspections	Operational verification of system performance; verify adequate water volume and pressure will be available during an emergency situation
Spill kits	Monthly Inspection	Check that spill kits and spill containers are present in their proper locations. Check that they are complete and are in good condition.
First Aid kit	Monthly Inspection	Check that first aid kits are present in their proper locations. Check that first aid kits are complete, are in good condition, and the contents have not expired.
	As Needed	Review the first aid kit contents list to ensure that the contents meet the needs of workplace hazards.
Communication systems	Monthly Test	Operational verification
Alarm system	Monthly Test	Operational verification

Notes:

[a] The location of the equipment is shown in Table III.E.3 included in *Appendix III.E – Contingency Plan*.

Table III.D. – Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Loading and unloading areas	Spills, loose debris, improperly stored material	Daily when in operation
Rocket Motor Ops Building	Spills, loose debris, improperly stored material	Daily when in operation
Hybrid Burn Chamber (HBC) and air pollution control system	Deterioration, and unit malfunction; damage, corrosion, cracks, leaks, signs of tampering, fugitive emissions	Visual inspection daily when in operation
HBC automatic interlock system monitoring equipment	Process monitoring malfunction; incorrect readings or measurements; signal failure; equipment failure; operability	Weekly when in operation
Concrete pads	Cracks, gaps, erosion, wet spots, and damage	Visual inspection daily when in operation
-Above Ground Magazine (AGM) -Earth Covered Magazine (ECM) V-13-1 -ECM V-13-2 -ECM V-13-3 (reserved for future use) -ECM V-13-4 (reserved for future use)	Improper storage or labeling, open containers, doors left unlocked, warning signs not visible, spills, loose debris, cracks, inadequate aisle space	Weekly; Inventoried annually

Table III.D. – Inspection Schedule (continued)

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Safety and Emergency Equipment:		
Fire extinguishers	Inadequate pressure, broken seal, access blocked, inspection out of date, bad hose/nozzle	Monthly
Eyewash stations	Inadequate pressure, access blocked, plugged lines	Monthly
Sprinkler systems	Inadequate pressure, malfunction	Monthly
Spill kits	Inadequate supply	Monthly
First Aid kit	Inadequate supply; expired contents	Monthly
Communication systems	Delay in communications; system malfunction	Monthly
Alarm system	Delay in communications; system malfunction	Monthly
Security devices	Fence compromise, gate malfunction; Increased potential of unauthorized access	Weekly

Appendix III.E – Contingency Plan

40 CFR Part 264 Subpart C (264.30-264.37) and 40 CFR Part 64 Subpart D (264.50-56)

1.0 INTRODUCTION

This document serves as the Contingency Plan for EnviroSafe Demil, LLC (ESD) and includes all information required by 40 CFR Part 264 Subparts C and D. Section 2.0 consists of the Contingency Plan and Emergency Procedures, which satisfies the requirements of Subpart D. Section 3.0 consists of the Preparedness and Prevention Plan which meets the requirements of Subpart C. Table 1.1-1 provides the regulatory references for each of the required components of the Contingency Plan.

The Emergency Response Plan (included as *Appendix III.F – Emergency Response Plan*) is incorporated by reference into this document. In an emergency, both this Contingency Plan and the Emergency Response Plan should be consulted, as applicable.

2.0 CONTINGENCY PLAN AND EMERGENCY PROCEDURES

The Contingency Plan and Emergency Procedures are designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water. The plan's provisions should be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

2.1 Distribution of the Contingency Plan

In accordance with 40 CFR §264.53, a copy of the Contingency Plan, and all revisions, is maintained at the facility and is submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services. These agencies are listed in Table III.E.1.

2.2 Revisions to the Contingency Plan

In accordance with 40 CFR §264.54, the Contingency Plan will be reviewed and immediately amended, if necessary, whenever:

- The facility permit is revised;

- The plan fails in an emergency;
- The facility changes - in its design, construction, operation, maintenance, or other circumstances - in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents or changes the response necessary in an emergency;
- The list of emergency coordinators changes; or
- The list of emergency equipment changes.

Amendments and updated plans will be provided to the agencies listed in Table III.E.1.

2.3 Leadership

Responses to emergencies will be supervised by the Emergency Coordinator, in accordance with 40 CFR §264.55.

2.3.1 Emergency Coordinator

In accordance with 40 CFR §264.55, at all times, there is at least one employee on the facility premises or on call with the responsibility for coordinating all emergency response measures. This person serves as the Emergency Coordinator and is familiar with all aspects of the Contingency Plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The Emergency Coordinator has the authority to commit the resources needed to carry out the Contingency Plan.

2.3.2 Persons Qualified to Act as Emergency Coordinator

In accordance with 40 CFR §264.52(d), the names, addresses, and phone numbers (office and home) of all persons qualified to act as Emergency Coordinator must be included in the Contingency Plan and be kept up to date. The list of persons qualified to act as Emergency Coordinator can be found in Table III.E.2.

2.4 Emergency Procedures

The facility's Emergency Response Plan (included as *Appendix III.F - Emergency Response Plan*) describes the specific actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. The Emergency Procedures described in Sections 2.4.1 and 2.4.2 are required by 40 CFR §264.56 and are in addition to those procedures described in *Appendix III.F - Emergency Response Plan*.

2.4.1 Emergency Procedures Overseen by the Emergency Coordinator

During an imminent or actual emergency situation, the Emergency Coordinator (or their designee when the Emergency Coordinator is on call) must immediately:

1. Activate internal communication systems to notify all facility personnel; and
2. Notify appropriate State or local agencies with designated response roles if their help is needed. The contact information for these agencies is in Table III.E.1.

During a release, fire, or explosion, the Emergency Coordinator must immediately identify the character, exact source, amount, and the areal extent of any released materials. This may be done by observation or review of facility records or manifests and, if necessary, by chemical analysis.

Concurrently, the Emergency Coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

If the Emergency Coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

1. If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities listed in Table III.E.1. He must be available to help appropriate officials decide whether local areas should be evacuated; and
2. He must immediately notify the government official designated as the on-scene coordinator for that geographical area (see Section 2.4.2 for the Regional Administrator's contact information) and, as appropriate, the National Response Center (using their 24-hour toll-free number **800-424–8802**). The report must include:
    i. Name and telephone number of reporter;
    ii. Name and address of facility;
    iii. Time and type of incident (e.g., release, fire);
    iv. Name and quantity of material(s) involved, to the extent known;
    v. The extent of injuries, if any; and
    vi. The possible hazards to human health, or the environment, outside the facility.

During an emergency, the Emergency Coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

If the facility stops operations in response to a fire, explosion, or release, the Emergency Coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever appropriate.

Immediately after an emergency, the Emergency Coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

Unless the facility can demonstrate, in accordance with 40 CFR §261.3(c) or (d), that the recovered material is not hazardous waste, the facility must manage this waste in accordance with all applicable requirements of 40 CFR Parts 262, 263, and 264.

The Emergency Coordinator must ensure that, in the affected area(s) of the facility:

1. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
2. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

2.4.2 Reporting Requirements for Implementing the Contingency Plan

The facility must note in the operating record the time, date, and details of any incident that requires implementing the Contingency Plan. In addition to other reporting requirements mandated by environmental laws, within 15 days after the incident, the facility must submit a written report to the Regional Administrator:

Dr. Earthea Nance, or successor
Regional Administrator
US EPA Region 6
307 W. 7th St., Suite 100
Fort Worth, TX 76102
(214) 665-2200; toll-free (817) 978-5600

The report must 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 (e.g., fire, explosion);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

2.5 Emergency Equipment

In accordance with 40 CFR §264.52(e), the Contingency Plan must include a list of all emergency equipment at the facility and the location and physical description of this equipment. Equipment necessary for safety and emergency response is listed in Table III.E.3 and is discussed further in Section 3.1.

2.6 Evacuation Plan

In accordance with 40 CFR §264.52(f), the Contingency Plan must include an evacuation plan for facility personnel. Evacuation route maps are posted throughout the facility. Through these posted maps and facility-wide drills, employees will understand where their respective evacuation points are located and they will know their actions upon arrival. ESD will maintain a list of all employees on staff at the time of an evacuation and that list will be used to perform a roll call immediately upon evacuating to the designated locations.

2.6.1 Emergency Signals Used to Begin Evacuation

When an evacuation is needed, radio communications and alarm systems will announce the evacuation order.

2.6.2 Evacuation Routes

The designated evacuation routes and points are shown on the Evacuation Map in Figure 2-1.

Since each emergency has its own set of conditions, there may be a situation where the primary evacuation route is not usable. Therefore, alternate evacuation routes have been established and are included in the site training program.

Primary Evacuation Route (Marked with a Green Dashed Arrow)

A primary evacuation route has been established to assist in a safe evacuation. The primary evacuation routes are marked with a green dashed arrow on the Evacuation Map.

Alternate Evacuation Route (Marked with a Yellow Dashed Arrow)

If imminent danger may be encountered along the primary evacuation route or the primary evacuation route is not usable, the alternate evacuation route will be used. The alternate evacuation routes are marked with a yellow dashed arrow on the Evacuation Map.

2.6.3 Evacuation Procedures

An evacuation must be conducted in such a way as to minimize the risk of harm to everyone involved. This requires the development of a pre-plan with all foreseeable conditions taken into consideration.

In the event that the emergency necessitates that all personnel evacuate their work areas and report to their designated evacuation point, the following will apply.

1. A designated Evacuation Point Supervisor will be in charge of the evacuation points and will report to the Emergency Coordinator, or their designee if they are in another area of the facility.
2. Follow the primary evacuation route to the designated evacuation areas. If there is imminent danger that may be encountered along the primary evacuation route, you must follow the alternate evacuation route, away from the incident. Remain in the designated area until otherwise notified.
3. Visitors and Contractors will evacuate to the nearest designated evacuation area and report to the Evacuation Point Supervisor.
4. Each lead person/supervisor will take a head count of their employees and report their findings to the Evacuation Point Supervisor.
5. Evacuation Point Supervisors will provide the Emergency Coordinator, or their designee, with a report of those employees present and those unaccounted for as quickly as possible.
6. In the event that someone is missing or unaccounted for, the Emergency Coordinator, or their designee, will:

    - Verify with Evacuation Point Supervisors that person(s) are missing
    - Confer with the area supervisor or lead person and determine the appropriate course of action.

7. All employees must remain in the designated evacuation area until the Emergency Coordinator, or their designee, gives the "all clear" announcement.

2.6.4 Evacuation Drills

The frequency for evacuation drills is discussed in *Appendix III.F - Emergency Response Plan*.

2.7 Arrangements with Local Authorities

In accordance with 40 CFR §264.52(c) and §264.37, the Contingency Plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services. Coordination with the local emergency planning committee and the aforementioned municipalities is essential to the communication and the success of the response to an emergency scenario. The outside organizations listed in Table III.E.1 are to remain outside the gate until checked in by facility personnel. They will then be directed to the designated Command Center or the Emergency Staging Area.

2.7.1 Familiarizing Off-Site Organizations with the Facility

The facility has provided the local police, fire department, and hospital with the layout of the facility, the locations and characteristics of materials handled at the facility and the associated hazards with these materials, the places where the facility personnel would normally be working, entrances to the facility, roads inside the facility, and possible evacuation routes. In addition, the facility has familiarized the local hospitals with the properties of the materials handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

2.7.2 Understanding Between Outside Organizations and the Facility

Documentation describing the understanding between the responding units and the facility is included in *Attachment III.E.1 – Agreement Letters* and will be available at the facility in the operating record. If a State or local authority declines attempts at arrangements, the refusal will be documented in the operating record.

2.7.3 Protocol When Outside Organizations Are Called In

In accordance with 40 CFR §264.37(a)(2), agreements designating primary emergency authority to a specific police or fire department must be made if more than one police and fire department might respond to an emergency. The local authorities listed in Table III.E.1 will have primary emergency authority over another fire or police department who might respond. However, if the Emergency Coordinator decides that based on the specific emergency situation, another

department has increased capability or experience in handling a certain type of emergency, the Emergency Coordinator may designate alternate primary emergency authority.

The information below addresses emergencies requiring outside emergency organization involvement. The purpose of this information is to promote accurate communication among all personnel involved to minimize the effects of a significant emergency in the area.

Emergency Coordinator

The Emergency Coordinator will be the main point of contact for all aspects of the emergency response. If necessary, the Emergency Coordinator may designate other individuals to lead certain areas of the emergency response. All Unit Commanders (i.e., Fire Chief, Police Chief, Head Medical Personnel, etc.) will report directly to the Emergency Coordinator.

Command Center

A Command Center may be established to function as a unified base of operations for response coordination. As Emergency Response Teams are formed, their Unit Commander will report to the Command Center before the team proceeds to the affected area. The Command Center will ideally be located in the main conference room. If conditions are such that this location is unsafe or if a more suitable location for the emergency scenario exists, then an alternate location for the Command Center will be utilized. The alternate site selection will be influenced by meteorological conditions and safe distances from the known and anticipated hazards.

Emergency Staging Area

An Emergency Staging Area may be established and will function as a central location for all emergency service equipment and personnel. The Emergency Staging Area will be selected based on the location and nature of the emergency. It should be in close proximity to the Command Center so that orders from the Emergency Coordinator and/or Unit Commanders can be relayed quickly. The location will ideally be located outside of the building, just outside the main conference room. If the Command Center is situated in an alternate location, then the Emergency Staging Area will be located in a suitable location near the Command Center

Unit Commanders

Upon arrival at the facility, Unit Commanders (i.e., Fire Chief, Police Chief, Head Medical Personnel, etc.) should report to the facility Emergency Coordinator at the Command Center. The Unit Commanders will be briefed and provided pertinent information by the Emergency Coordinator. The facility Emergency Coordinator and responding Unit Commanders will function as a Unified Incident Command and will direct the efforts of the Emergency Response Teams.

Emergency Response Teams

Personnel comprising the Emergency Response Teams will be directed to the Emergency Staging Area to await direction from their Unit Commanders or the Emergency Coordinator. At no time should an Emergency Response Team enter the material handling area of the facility without the direction of their Unit Commander or the Emergency Coordinator. At no time shall responding units attempt to walk through explosive material spills.

If during a response to the emergency, an explosion occurs, the area should be evacuated, and the facility Emergency Coordinator should be notified immediately. The facility Emergency Coordinator will determine the appropriate action to be taken.

3.0 PREPAREDNESS AND PREVENTION PLAN

Preparedness and Prevention provisions under RCRA are identified in 40 CFR §270.14(b)(6) and Part 264 Subpart C. In accordance with 40 CFR §264.31, the facility is designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment.

3.1 Required Equipment

Emergency equipment is strategically located throughout the facility. The facility is equipped with the following equipment. More information on the equipment is shown in Table III.E.3.

- An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel
- A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams
- Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

3.1.1 Communications System and Alarm System

Communication within the facility will be conducted via two-way radios. Additionally, the facility has alarms/speakers that will be used for announcements throughout the facility.

3.1.2 Summoning Emergency Assistance

The facility will use two-way radios to summon emergency assistance. The alarm/speaker system will be used to notify plant personnel of emergency situations.

3.1.3 Fire Control Equipment

The facility's fire extinguishers are dry chemical units. Each unit is portable (either hand held or wheeled) and contains fire suppression chemicals that, when sprayed on a fire, smothers it. The operator points the nozzle towards the fire and pulls the trigger to activate the fire extinguishing chemical. The operator utilizes the PASS method in which the operator first **P**ulls the pin releasing the locking mechanism, **A**ims at the base of the fire, **S**queezes the lever slowly and evenly, and **S**weeps the nozzle from side to side.

3.1.4 Spill Control and Decontamination Equipment

Due to the type of materials handled, the small size of containers handled, and the design of the equipment where the materials are processed, large spills or leaks are not expected to occur.

Facility personnel will respond to all small-scale spills and leaks. Spill response equipment consists of a broom and dustpan, absorbent material, neutralizing/desensitizing agents (diesel or solvent/water mixture), and tools to clean up absorbed spills. Absorbent material can be placed directly on or around a liquid spill to absorb the liquid material. Absorbent material can also be used to form a dike to prevent the spread of a liquid spill. Powder spills are neutralized or desensitized before any attempts are made to clean up. Spill clean-up waste can be shoveled, swept up, and placed in containers with appropriate labels. Clean-up wastes will be appropriately disposed of off-site.

3.1.5 Adequate Volume of Water

Overhead water sprinklers are installed in all process building for fire suppression. The sprinkler systems will be inspected in accordance with *Appendix III.D – Inspection Schedule* to ensure adequate volumes of water and water pressure.

3.2 Testing and Maintenance of Equipment

All emergency response equipment is appropriately maintained and inspections are performed to ensure the equipment is in good working order. Testing and maintenance of emergency response equipment, such as the fire protection equipment, spill control equipment, and decontamination equipment, is discussed in *Appendix III.D – Inspection Schedule*.

The communication system is used on a daily basis and therefore is not scheduled for specific inspections. If a problem is detected in everyday use, the problem is fixed immediately.

3.3 Access to Communications or Alarm System

Whenever hazardous waste is being handled, all personnel involved in the operation will have immediate access to an internal alarm or emergency communication device (either directly or through visual or voice contact with another employee).

It is not anticipated that there will ever be just one employee on the premises while the facility is operating, but in the rare event this may occur, they will have immediate access to a device, such as a telephone or a hand-held two-way radio, that is capable of summoning external emergency assistance.

3.4 Required Aisle Space

Adequate clearance is maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility in an emergency.

3.5 Arrangements with Local Authorities

Arrangements with local authorities are described in Section 2.7 of this document.

Table 1.1-1
Contingency Plan Regulatory Checklist

Regulatory Citation	Description	Location Addressed
40 CFR §264.31	Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water that could threaten human health or the environment.	Section 3.0
40 CFR §264.32	Facilities must be equipped with the following: internal communication or alarm system capable of providing immediate emergency instruction to the facility, a telephone or two-way radio capable of summoning emergency assistance from local fire or police departments or response teams, portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment, and water at adequate volume and pressure to supply water host streams, automatic sprinklers or water spray systems.	Section 3.1 Table III.E.3
40 CFR §264.33	Facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to ensure their proper operation in an emergency.	Section 3.2
40 CFR §264.34	Facilities must ensure that operators have immediate access to an internal alarm or emergency communication device. If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device capable of summoning external emergency assistance.	Section 3.3
40 CFR §264.35	The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.	Section 3.4
40 CFR §264.37; 40 CFR §264.52(c)	Describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services.	Section 2.7 Section 2.7.2 Section 3.5 Table III.E.1

Table 1.1-1
Contingency Plan Regulatory Checklist (continued)

Regulatory Citation	Description	Location Addressed
40 CFR §264.51	Each owner or operator of a facility must have a Contingency Plan designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air soil, or surface water.	Section 2.0
40 CFR §264.52(a)	Describe the actions facility personnel must take to comply with §264.51 and §264.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	Section 2.4
40 CFR §264.52(d)	List names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see §264.55).	Table III.E.2
40 CFR §264.52(e)	List of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. The location and a physical description of each item must be included.	Section 2.5 Section 3.1 Table III.E.3
40 CFR §264.52(f)	Include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	Section 2.6
40 CFR §264.53	Distribution of copies of the Contingency Plan	Section 2.1
40 CFR §264.54	Amendments of the Contingency Plan	Section 2.2
40 CFR §264.55	The emergency Coordinator must have the authority to commit the resources needed to carry out the Contingency Plan.	Section 2.3.1
40 CFR §264.56	Emergency Procedures	Section 2.4

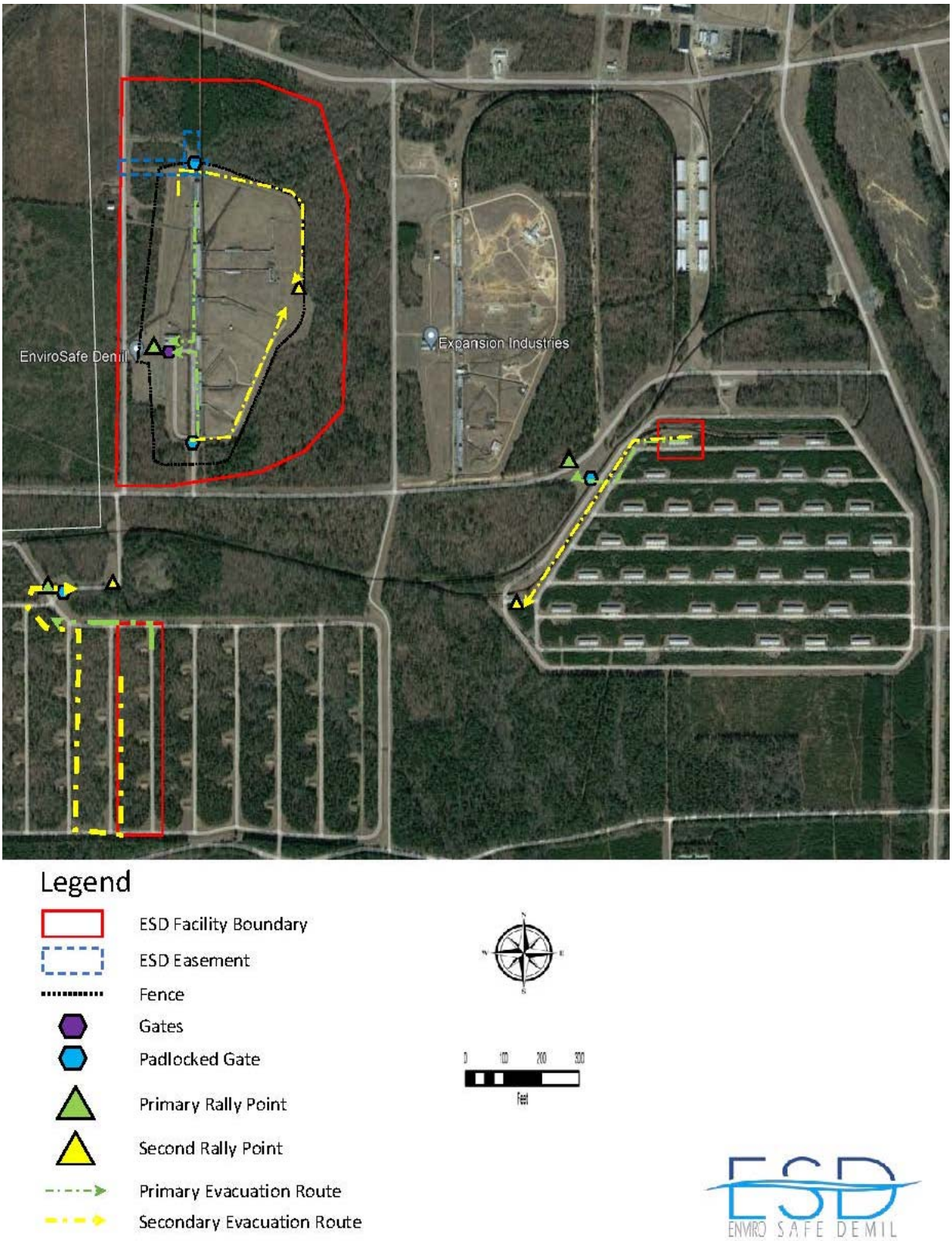


Figure 2-1
Evacuation Map

Table III.E.1
Arrangements with Local Authorities

	City of Hooks Police Department
Address	603 E. Avenue A, Hooks, TX 75561
Person Contacted	Police Chief Ricky Woodard [redacted]
Phone Number	903-547-2222
Agreed Arrangements	Provide emergency and non-emergency response support services that require the assistance of the police department.

	Hooks Volunteer Fire Department
Address	1007 E. Avenue A, Hooks, TX 75561
Person Contacted	Fire Chief Brandon Whitehurst [redacted]
Phone Number	903-547-2250
Agreed Arrangements	Provide emergency response support services during fire emergencies or other types of emergencies if needed.

	Christus St. Michael Hospital – Texarkana: Emergency Room
Address	2600 St. Michael Drive, Texarkana, TX 75501
Person Contacted	Nicole Cole [redacted]
Phone Number	903-614-2027; 903-614-1000
Agreed Arrangements	Provide emergency medical services (emergency room will be used) and provide occupational injury evaluations.

	(Other)
Organization Name	
Address	
Person Contacted	
Phone Number	
Agreed Arrangements	

Table III.E.2
Emergency Coordinators [a]

Name	Home Address	Office Phone(s) and/or Pager	Home Phone(s)
Primary Emergency Coordinator			
See note b	See note b	See note b	See note b
Alternate Emergency Coordinator			
See note b	See note b	See note b	See note b

Notes:

[a] In an emergency, contact the Primary Emergency Coordinator. If the Primary Emergency Coordinator is not readily available, the Alternate Emergency Coordinator will assume responsibility.

[b] 40 CFR §264.52(d) states: "*For new facilities,* this information must be supplied to the Regional Administrator at the time of certification, rather than at the time of permit application."

Table III.E.3
Emergency Equipment

Equipment	Location	Physical Description	Capability
Fire extinguishers	Buildings F-1, F-2, F-27 and F-28	Portable (hand held, wheeled) extinguishers with chemical agents. Extinguisher sizes are variable (e.g., 5, 10, 20, 30 pounds)	Fire suppression
Eyewash stations	Buildings F-1, F-2, and F-28	Portable eyewash stations	Chemical decontamination
Sprinkler systems	Buildings F-1, F-2, and F-28	Pumps, piping, and sprinkler nozzles provide water at adequate volume and pressure during an emergency situation	Fire suppression
Spill kits	Buildings F-1, F-2, and F-28	Absorbent material	Spill clean up
Communication systems	Facility-wide	Portable communication receivers/transmitters with base station	Emergency communication
Alarm system	Facility-wide	Facility-wide alarm signal notification system	Emergency communication

ATTACHMENT III.E.1

AGREEMENT LETTERS

August 9, 2023

Christus St. Michael Hospital – Texarkana: Emergency Room
Attn: Nicole Cole
2600 St. Michael Drive
Texarkana, TX 75501
E-mail: [redacted]

RE: ENVIROSAFE DEMIL, LLC (HOOKS, TEXAS)
EMERGENCY RESPONSE ARRANGEMENTS

Dear Ms. Cole:

EnviroSafe Demil, LLC (ESD), located at 401 N Montague Street in Hooks, Texas, will operate an energetic demilitarization facility in Hooks, Texas. The facility will accept military munitions and commercial munition items from off-site facilities for treatment. The facility is subject to the Resource Conservation and Recovery Act (RCRA) permitting and operating requirements.

40 CFR §264.37 requires ESD to attempt to make arrangements with local authorities for assistance in the event of an emergency at the facility. ESD must familiarize local authorities with the layout of the facility, properties of hazardous waste handled at the facility and the associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes. ESD must also familiarize local hospitals with the types of injuries or illnesses which could result from fires, explosions, or releases from the facility. The main hazards associated with activities at this facility are related to energetic material – the possibility for fires or explosions would be the worst-case emergency scenario at the facility. ESD has attached their Contingency Plan and the Emergency Response Plan (which is incorporated into the Contingency Plan by reference) and these documents include a map of the facility evacuation routes and other required information.

In addition ESD would like to offer the opportunity for you to visit the facility in order to become more familiar with the plant layout, the hazardous waste facilities and their locations, and the emergency response systems.

ESD is requesting that the Christus St. Michael Hospital – Texarkana: Emergency Room provide assistance in the event of an emergency at the facility. Please acknowledge your willingness to assist in emergencies and your receipt and review of the Contingency Plan by signing and returning the enclosed form.

Thank you in advance. If you have any questions, please feel free to contact me at 430-200-2296.

Sincerely,

Michael Wentz, President
EnviroSafe Demil, LLC
401 N Montague Street
Hooks, Texas 75561

Attachment: Contingency Plan and Emergency Response Plan

EnviroSafe Demil, LLC
401 N Montague Street
Hooks, Texas 75561

ENVIROSAFE DEMIL, LLC (HOOKS, TX) EMERGENCY RESPONSE ARRANGEMENTS

In the event of an emergency at the EnviroSafe Demil, LLC (ESD) facility in Hooks, Texas, the Christus St. Michael Hospital – Texarkana: Emergency Room agrees to provide assistance as requested. The level of assistance will be determined by the resources available as determined by CHRISTUS St. Michael Health System and the extent to which CHRISTUS St. Michael Health System is affected by the disaster. This form acknowledges receipt of the ESD RCRA Contingency Plan (and the Emergency Response Plan which is incorporated into the Contingency Plan by reference).

Signature _____ Date 8/17/23

Printed Name Stephen Johnson

Title Manager of Emergency Preparedness

Signature _____ Date 8/21/2023

Printed Name M Glen Boles

Title CFO

401 N Montague Street
Hooks, TX 75561

December 12, 2022

Brandon Whitehurst
Hooks Fire Department
1007 E. Avenue A.
Hooks, Texas 75561

Re: EnviroSafe Demil LLC – Hooks
Emergency Response Arrangements

Dear Mr. Whitehurst:

EnviroSafe Demil LLC, (ESD) will operate a demilitarization facility in Hooks, Texas. The facility will be called ESD, Hooks. ESD will accept munition items from offsite facilities for demilitarization and recycling. The initial permitted units at the facility will consist of 4 Earth Covered Magazines (ECM), 1 Above Ground Magazine (AGM), two packaging disassembly buildings, one feed building with an external Energetic Activation Unit (EAU), and one Hybrid Burn Chamber (HBC). The facility will also operate several accumulation (less than 90-day) waste container storage areas in the future. Future waste management units may be subject to the Resource Conservation and Recovery Act (RCRA) general permitting and operating requirements of Title 40 Code of Federal Regulations (CFR) Parts 264, 266, and 270.

40 CFR § 264.37 requires ESD to attempt to make the arrangements with local authorities for assistance in the event of an emergency at the facility. ESD must familiarize local authorities with the layout of the facility, properties of hazardous materials handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes. The attached draft Contingency Plan for the ESD facility provides the required information. In addition, ESD is offering the opportunity to visit the facility in order to become more familiar with the facility layout, the hazardous material facilities and their locations, as well as the emergency response systems.

ESD is requesting that the Hooks Fire Department provide aid in the event of an emergency at the facility. Please acknowledge your willingness to assist in emergencies and your receipt and review of the draft Contingency Plan by signing and returning the enclosed form.

Thank you in advance. If you have any questions, please feel free to contact me at (903) 490-7626.

Sincerely,

EnviroSafe Demil LLC

Calvert Cannon
Program Manager

401 N Montague Street
Hooks, TX 75561

Attachment: Contingency Plan

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561

In the event of an emergency at the ESD facility, the Hooks Fire Department agrees to provide aid as requested. This form acknowledges receipt of the draft ESD RCRA Contingency Plan December 12, 2022.

Signature B W Date 12/13/22

Print Name Brandon Whitehurst

Title Fire chief

December 12, 2022

Ricky Woodard
Hooks Police Department
603 E. Avenue A.
Hooks, Texas 75561

Re: EnviroSafe Demil LLC – Hooks
Emergency Response Arrangements

Dear Mr. Woodard:

EnviroSafe Demil LLC, (ESD) will operate a demilitarization facility in Hooks, Texas. The facility will be called EnviroSafe Demil LLC, Hooks, TX. ESD will accept munition items from offsite facilities for demilitarization. The permitted units at the facility will consist of 4 Earth Covered Magazines (ECM), 1 Above Ground Magazine (AGM), two packaging disassembly buildings, one feed building with an external Energetic Activation Unit (EAU), and one Hybrid Burn Chamber (HBC). The facility will also operate several accumulation (less than 90-day) waste container storage areas in the future. The hazardous waste management units are subject to the Resource Conservation and Recovery Act (RCRA) general permitting and operating requirements of Title 40 Code of Federal Regulations (CFR) Parts 264, 266, and 270.
40 CFR § 264.37 requires ESD to attempt to make the arrangements with local authorities for assistance in the event of an emergency at the facility. ESD must familiarize local authorities with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes. The attached Contingency Plan for the ESD facility provides the required information. In addition, ESD is offering the opportunity to visit the facility in order to become more familiar with the plant layout, the hazardous waste facilities and their locations, and the emergency response systems.
ESD is requesting that the Hooks Police Department provide assistance in the event of an emergency at the facility. Please acknowledge your willingness to assist in emergencies and your receipt and review of the Contingency Plan by signing and returning the enclosed form.
Thank you in advance. If you have any questions, please feel free to contact me at (903)472-8331.

Sincerely,

EnviroSafe Demil LLC

Calvert Cannon
Program Manager

Attachment: Contingency Plan

EnviroSafe Demil LLC
401 N. Montague St
Hooks, Texas 75561

In the event of an emergency at the ESD facility, the Hooks Police Department agrees to provide assistance as requested. This form acknowledges receipt of the ESD RCRA Contingency Plan December 12, 2022.

Signature _____ Date 12-13-2022

Print Name Ricky Woodard

Title Chief of Police

Section III - Facility Management

Appendix III.F – Emergency Response Plan

30 TAC 305.50(a)(12)(C) and (D)

1.0 INTRODUCTION

New commercial hazardous waste management facilities are required to show sufficient evidence to demonstrate that emergency response capabilities are available before receiving wastes on-site. This plan shows that the facility has sufficient emergency response capabilities for managing a reasonable worst-case emergency condition associated with the operation of the facility. The Contingency Plan (included as *Appendix III.E – Contingency Plan*) is incorporated by reference into this document.

It is expected that facility response personnel, with support as needed, will mitigate the consequences of a potential disaster and restore the facility to normal operations. Emergencies will be addressed safely and effectively in an environmentally responsible way, minimizing risks to employees, contractors, visitors, plant property and resources, as well as beyond the facility boundaries to the citizens of Hooks, Texas and surrounding areas.

2.0 REASONABLE WORST-CASE EMERGENCY SCENARIO

Per 30 TAC 305.50(a)(12)(C)(IV), a definition of a worst-case emergency should be listed and evidence should be provided to show the ability to manage the worst-case emergency condition. A worst-case emergency scenario would involve an explosion and/or a fire in an area that contains explosives. Explosives are kept in the storage magazines and when they are ready to be processed, they are removed from the storage magazines and are sent to the HBC. A fire or explosion could happen in any of these areas.

In order to prevent an explosion from propagating, the facility is designed and has operational practices in place to ensure that a fire or explosion in one area will not spread or cause additional explosions in another area. The storage areas are designed to hold a certain amount of NEW and regular inventory and inspections ensure these limits are not exceeded. In addition, there are limits on the amount of NEW that can be fed to the HBC and this amount is tracked in the daily logs. During operation, operating personnel are kept at a safe distance from the HBC. Additionally, applicable employees are trained in proper handling and transport of energetic materials. Employees who handle energetic waste are also trained on emergency response in the event of an

explosion. "No Smoking" signs are placed wherever there might be a hazard from energetic material.

Lightning has the potential to strike buildings containing explosives, possibly leading to an explosion. In accordance with the Department of Defense (DOD) Contractor's Safety Manual for Ammunition and Explosives (DOD 4145.26-M, March 13, 2008), the facility will be equipped with a lighting protection system that includes lightning rods and advanced warning systems. When an electrical storm is approaching the facility, the HBC will be shutdown as soon as possible after the current batch of explosives has been processed and all employees will relocate to a place that is a safe distance from the areas containing explosives.

If, despite the efforts listed above, an explosion were still to occur, ESD will ensure that emergency response teams are adequately trained on potential worst-case emergency scenarios for the facility. ESD will ensure the emergency response teams and are familiar with alternate routes to the facility in the event one or more routes are blocked. The Emergency Response Drills discussed in Section 6.1 will include scenarios such as this worst-case emergency. As mentioned in Sections 6.1 and 6.2, the emergency response teams will be invited to participate in the Emergency Response Drills.

3.0 WEATHER AND POSSIBLE EFFECTS ON EMERGENCY RESPONSE

Per 30 TAC 305.50(a)(12)(C)(III), weather data that might tend to affect emergency response should be evaluated.

3.1 Historical Weather Data

The ESD facility in Hooks, Texas has a relatively mild climate with hot summers and mild winters. Snowfall in the area is rare and usually very light. The relatively high humidity year-round is generally attributed to the influence of the Gulf of Mexico.

The average annual temperature from 1991-2020 in Texarkana, Texas was 64°F. The hottest month is typically July, averaging a temperature of 83.2°F and the coolest month is typically January, averaging 43.7°F. This data is shown in Attachment III.F.1.

3.2 Precipitation

Charts of monthly total precipitation and monthly total snowfall over the past 22 years for Texarkana, Texas is shown in Attachment III.F.2.

The average annual rainfall over the last 22 years in Texarkana, Texas was 53.45 inches, the maximum was 78.21 inches in 2009, and the minimum was 30.79 inches in 2005.

The average rainfall per month over the last 22 years in Texarkana, Texas was 4.33 inches, the maximum was 17.74 inches in October 2009, and the minimum was 0.01 inches in October 2005.

The average annual snowfall over the last 22 years in Texarkana, Texas was 2.4 inches, the maximum was 11.9 inches in 2011, and the minimum was 0.0 inches (many years). Although the average snowfall value calculated is 2.4 inches per year, this average was largely influenced by heavier than normal snowfall during a couple of years. However, for more than half of the years in this data set, the snowfall is 0.0 inches.

3.3 Wind

Average wind speeds are around 8 mph, with gusts to 23 mph, mainly blowing from the south. A chart of monthly wind speed statistics and directions for Texarkana Regional Airport are shown in Attachment III.F.3.

3.4 Potential for Major Weather Events

The potential for major weather events is summarized in the table below.

Natural Disasters	Risk	Information
Hurricanes	Very Low [a]	24 hurricanes have been recorded in Hooks, TX since 1930.
Tornadoes	High [b]	Hooks, TX averages 2 tornadoes per year.
Icy Conditions	Very Low	Temperatures are typically greater than the freezing point, though lower temperatures occasionally occur during the months of December, January, and February.
Flash Flooding	Low	The facility is not in the 100-year floodplain. The area around the facility has good drainage and flash flooding is not expected during normal weather patterns. However, extreme weather patterns could result in flash flooding around the facility.

Notes:

[a] Source: Hooks, TX - Hurricane Information & Risks | Homefacts

[b] Source: Hooks, Bowie County, TX Tornadoes (homefacts.com)

3.5 Effect of Weather on Emergency Response

Additional considerations must be accounted for in the emergency response in the event of extreme weather. Emergency operations are expected to be much slower if there is severe weather. Roads may become flooded, or blocked due to a fallen tree, and emergency responders may have to use alternative routes to and from the facility. Alternate routes are discussed during practice drills and communication with external emergency response crews.

4.0 EMERGENCY RESPONSE

The response during an emergency is covered in Sections 2.4 and 2.7.3 of the Contingency Plan (included as *Appendix III.E – Contingency Plan*).

Response Time

Response time during an emergency is important in minimizing the impacts of the incident, so the facility will participate in training and drills in order to ensure response time is as quick as possible. During normal operations, the response teams should be assembled within less than five minutes. During off-hours, the complete response team assembly may take longer (up to 30 minutes) if personnel need to be called in from off-site.

5.0 IDENTIFICATION OF FIRST-RESPONDERS

5.1 Emergency Coordinator - (On-Scene Coordinator (OSC))

The On-Scene Coordinator (OSC) will be the Emergency Coordinator or their designee. The names, addresses, and phone numbers (office and home) of all persons qualified to act as Emergency Coordinator is found in *Table III.E.2 – Emergency Coordinators* (included as part of *Appendix III.E – Contingency Plan*).

5.2 List of First-Responders

A list of first-responders is provided in *Table III.E.1 – Arrangements with Local Authorities* (included as part of *Appendix III.E – Contingency Plan*). Section 2.7.3 of the Contingency Plan (included as *Appendix III.E – Contingency Plan*) discusses which responder will have primary emergency authority.

5.3 Medical Services or Hospitals

The name, address, and phone number of the hospital that will provide assistance if outside medical care is needed is listed in *Table III.E.1 – Arrangements with Local Authorities* (included as part of *Appendix III.E – Contingency Plan*). A map showing the quickest route to the hospital is included in Attachment III.F.4. The hospital is located approximately 14-15 miles from the facility.

Off-site medical facilities will not require any specific hazardous materials training to deal with injuries from the facility. The most likely serious injuries that would require transport to a medical facility would result from fires or explosions. Hazardous materials contamination is not a concern based on types of materials handled at the facility.

The need for decontamination is not a major concern and is unlikely based on the types of materials handled at the facility. However, if determined necessary, decontamination procedures for injured personnel will simply be removing work boots, personal protective equipment (PPE), and any outer clothing (if not covered by PPE). Any clothing that has the possibility of being contaminated will either need to be decontaminated or containerized for disposal off-site. Additionally, the affected area may be washed with soap and water. Drills will be run periodically that require decontamination and transport of injured people to the appropriate medical centers.

5.4 Local Emergency Planning Committee (LEPC)

ESD does not anticipate relying on the Bowie County Local Emergency Planning Committee for emergency response capabilities. ESD personnel who may come into contact with hazardous materials will be thoroughly trained on the hazards associated with explosives and the required emergency response procedures. ESD believes that facility personnel, with assistance from the local police and fire departments (when needed), will be better equipped to handle these emergencies than the LEPC. In the event the LEPC ever needs to be contacted, the contact information is included below.

Local Emergency Planning Committee (LEPC)
Bowie County LEPC
Mr. Lance Hall (subject to change)
710 James Bowie Drive
New Boston, TX 75570
LEPC phone: 903-628-6776
Spill phone: 903-798-3042
Report type required: Electronic via E-mail
E-mail address: [redacted]

6.0 PRE-DISASTER PLAN

The facility has developed a pre-disaster plan to ensure that employees and outside responders are ready in the event of an emergency. The pre-disaster plan consists of drills and training.

6.1 Drills

As part of the facility's pre-disaster plan, at least two evacuation drills and two emergency response drills will be conducted each year. Additionally, the facility will conduct drills for "predictable" emergencies such as floods or hurricanes. The purpose of these drills is to:

1. Promote emergency preparedness
2. Test or evaluate emergency operations, procedures, or facilities
3. Ensure personnel are properly trained in emergency response duties and their knowledge of emergency response duties is refreshed at a regular interval
4. Demonstrate operational capability

Procedures to account for personnel are included in all drills. The Contingency Plan (included in *Appendix III.E – Contingency Plan*) includes information on proper response to emergencies, a list showing the location of the emergency equipment, and contact information for emergency responders.

Evacuation Drills

The Evacuation Plan is included in Section 2.6 of the Contingency Plan (which is included by reference) and can be found in *Appendix III.E – Contingency Plan*. The Evacuation Plan includes the signals used to begin evacuation, a map of the evacuation routes, and the evacuation procedures.

Emergency Response Drills

There are different scenarios that could result in emergency response and these are covered during new hire orientation and in the annual review of training given for operations personnel responsible for energetic material management and emergency response. Not every type of possible scenario will be exercised each year during the drills. The rotation of the drill scenarios will be chosen based on those scenarios that are most likely and the scenarios that are the most destructive. The type of drill scenario chosen is at the discretion of facility management. A facility practice drill schedule is kept to ensure adequate rotation of practice drills. When planning a drill, the county emergency management agency, police, fire, and ambulance rescue services, if applicable, should be included in the planning process and invited to participate in the event, if possible.

Severe Weather Drills

The facility will also conduct drills for severe weather. These can include tornado drills, hurricane drills, flooding drills, earthquake drills, etc. Responses to severe weather is also covered during new hire orientation and in the annual review of training given for applicable facility personnel.

6.2 Emergency Response Training

Employee training for emergency responses is included in *Appendix III.B – Personnel Training Plan*. Outside organizations will be invited to participate in the Emergency Response Drills. Section 2.7 of the Contingency Plan (included as *Appendix III.E – Contingency Plan*) discusses arrangements with local authorities, the protocol when outside organizations are called in, and documentation describing the understanding between the responding units and the facility.

All personnel who may come into contact with hazardous materials are trained in basic firefighting response, emergency communication procedures, emergency equipment locations, and plant evacuation procedures. Additional job-specific training is given to applicable operations personnel responsible for energetic material management and emergency response. ESD plans to have an on-site team of at least 2 individuals who are fully trained for emergency response related to energetic materials.

7.0 NOTIFICATION OF EMERGENCY RESPONSE INCIDENTS

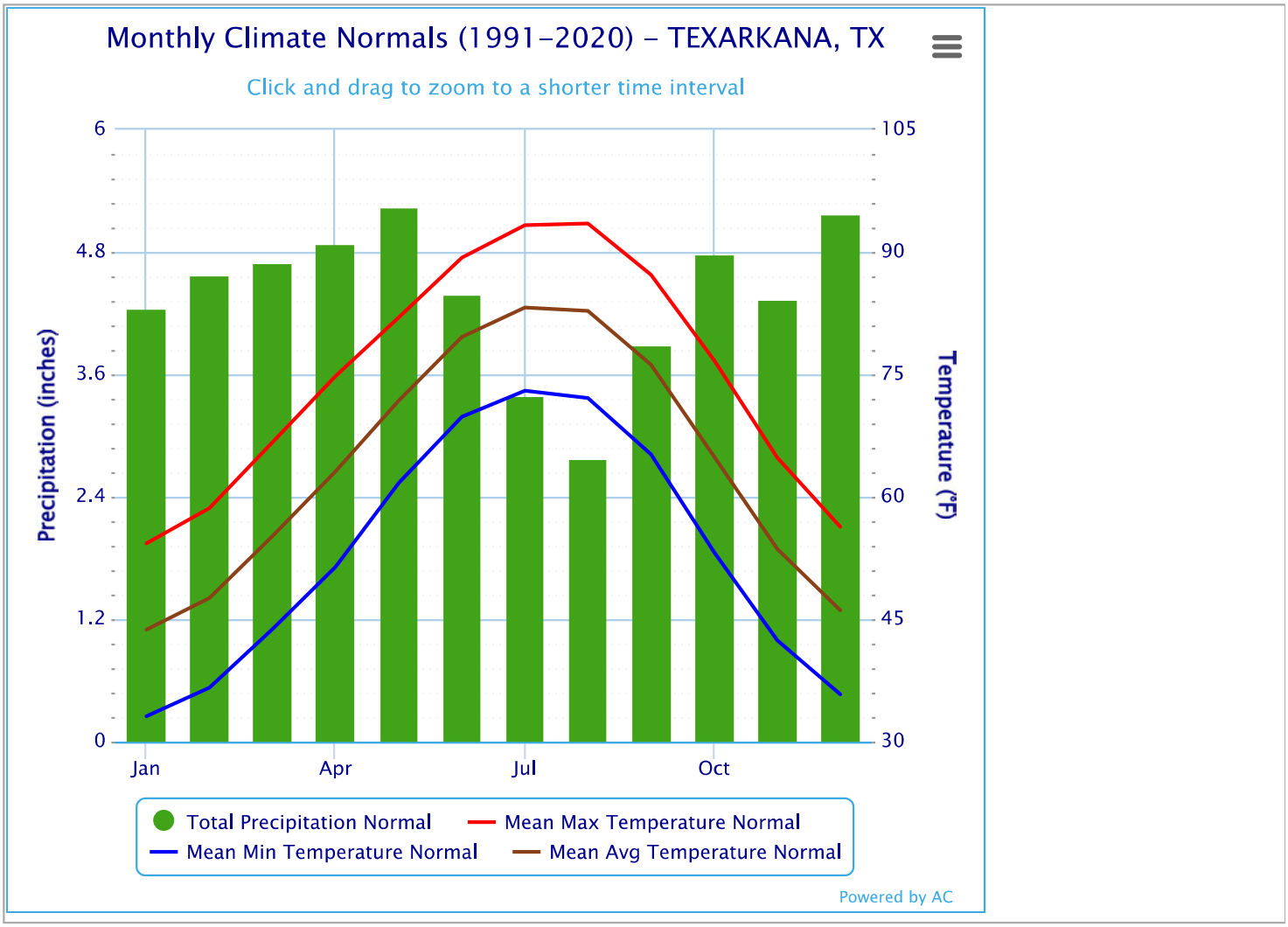
As described in Section 2.4.1 of the Contingency Plan (included as *Appendix III.E – Contingency Plan*), the Emergency Coordinator, or their designee, will immediately notify the appropriate emergency response services needed.

Government agencies including the Texas Commission on Environmental Quality (TCEQ), Texas Parks and Wildlife, General Land Office, Texas Department of State Health Services, and Texas Railroad Commission may also be notified when an incident occurs, if applicable. The notification may not be immediate if the Emergency Coordinator is responding to immediate emergency response activities that do not need the assistance of these agencies. Notification may take place via a telephone call or an email as soon as possible after the incident occurs. As discussed in Section 2.4.2 of the Contingency Plan (included as *Appendix III.E – Contingency Plan*), a written report will also be submitted to the Regional Administrator within 15 days after the incident.

ATTACHMENT III.F.1

HISTORICAL WEATHER DATA

Source: <https://www.weather.gov/wrh/Climate?wfo=shv>



Month	Total Precipitation Normal (inches)	Mean Max Temperature Normal (°F)	Mean Min Temperature Normal (°F)	Mean Avg Temperature Normal (°F)
January	4.26	54.3	33.1	43.7
February	4.58	58.6	36.6	47.6
March	4.70	66.7	43.8	55.2
April	4.88	74.8	51.4	63.1
May	5.25	82.0	61.7	71.8
June	4.39	89.3	69.8	79.6
July	3.40	93.3	73.0	83.2
August	2.77	93.5	72.1	82.8
September	3.89	87.2	65.2	76.2
October	4.78	76.7	53.2	64.9
November	4.33	64.8	42.4	53.6
December	5.18	56.3	35.8	46.1
Annual	52.41	74.8	53.2	64.0

ATTACHMENT III.F.2

PRECIPITATION

Source: <https://www.weather.gov/wrh/Climate?wfo=shv>

Monthly Total Precipitation for TEXARKANA, TX

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	3.77	2.71	3.31	4.09	8.00	7.21	0.28	0.17	3.92	2.07	15.13	7.17	57.83
2001	5.98	9.70	7.46	6.03	5.60	4.34	2.20	2.35	7.45	8.69	4.84	9.14	73.78
2002	2.51	2.51	10.05	3.87	4.98	2.18	1.80	0.90	1.50	5.67	2.09	M	M
2003	0.04	7.64	2.42	2.32	4.77	10.93	0.35	1.14	2.22	1.43	3.43	3.29	39.98
2004	3.28	6.28	3.56	3.80	4.09	10.66	2.02	0.82	0.65	5.12	6.72	2.64	49.64
2005	4.49	2.96	2.12	2.72	1.13	1.22	5.15	3.70	3.73	0.01	2.75	0.81	30.79
2006	4.72	3.87	7.03	3.27	1.85	4.74	3.99	0.69	1.37	3.09	2.02	6.80	43.44
2007	9.95	2.02	4.30	2.77	4.93	5.71	5.74	0.42	3.42	3.53	1.81	3.56	48.16
2008	2.38	4.39	6.95	7.14	6.46	4.14	2.48	5.23	9.38	4.56	3.93	2.10	59.14
2009	2.52	1.02	6.90	4.14	12.72	1.11	10.86	2.16	8.49	17.74	3.83	6.72	78.21
2010	3.50	4.32	1.80	1.15	3.10	4.37	4.84	2.35	4.37	2.36	4.12	1.59	37.87
2011	2.46	2.89	0.63	6.09	6.82	1.22	2.02	0.26	1.72	1.35	3.11	6.34	34.91
2012	3.53	3.85	6.09	M	0.46	1.14	5.02	1.85	3.51	2.48	0.38	4.13	M
2013	4.38	2.28	1.81	4.54	5.24	2.67	3.16	1.08	13.42	7.57	3.97	5.62	55.74
2014	1.15	4.58	3.33	4.60	5.87	4.99	2.76	1.16	1.62	2.97	3.34	3.38	39.75
2015	5.19	4.02	9.19	6.94	10.69	3.46	1.39	1.12	0.70	7.72	10.73	7.42	68.57
2016	2.50	4.64	8.02	7.84	4.50	3.42	2.52	5.97	0.32	0.22	3.71	7.70	51.36
2017	4.77	3.13	2.30	5.47	3.98	2.89	7.08	9.34	0.36	1.16	1.75	9.34	51.57
2018	3.30	13.26	4.81	3.24	1.85	4.87	3.26	1.96	7.41	6.86	7.16	5.01	62.99
2019	4.70	5.00	2.29	8.17	12.50	6.88	3.21	1.24	0.29	6.55	2.81	2.94	56.58
2020	6.98	8.06	7.30	6.50	7.85	3.15	2.74	12.24	7.25	1.31	0.80	6.15	70.33
2021	7.50	5.83	6.32	3.81	13.45	1.82	4.43	2.48	3.06	2.80	2.53	4.26	58.29
2022	1.53	4.87	5.98	4.50	3.12	3.10	1.17	9.14	0.12	1.70	4.76	M	M
Mean	3.96	4.78	4.96	4.68	5.82	4.18	3.41	2.95	3.75	4.22	4.16	5.05	53.45
Max	9.95 2007	13.26 2018	10.05 2002	8.17 2019	13.45 2021	10.93 2003	10.86 2009	12.24 2020	13.42 2013	17.74 2009	15.13 2000	9.34 2017	78.21 2009
Min	0.04 2003	1.02 2009	0.63 2011	1.15 2010	0.46 2012	1.11 2009	0.28 2000	0.17 2000	0.12 2022	0.01 2005	0.38 2012	0.81 2005	30.79 2005

Monthly Total Snowfall for TEXARKANA, TX

Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Season
1999-2000	0.0	0.0	0.0	0.0	0.0	0.0	M	0.0	0.0	0.0	0.0	0.0	M
2000-2001	0.0	0.0	0.0	0.0	0.0	M	6.0	0.0	0.0	0.0	0.0	0.0	M
2001-2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	4.8
2002-2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003-2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0
2004-2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005-2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006-2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007-2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008-2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009-2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	6.0
2010-2011	0.0	0.0	0.0	0.0	0.0	0.0	7.0	4.9	0.0	0.0	0.0	0.0	11.9
2011-2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	M	0.0	M	M
2012-2013	M	M	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	M
2013-2014	0.0	0.0	M	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	M
2014-2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.0	0.0	0.0	0.0	6.0
2015-2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016-2017	0.0	0.0	0.0	0.0	0.0	0.0	M	0.0	0.0	0.0	M	0.0	M
2017-2018	0.0	M	M	0.0	M	0.0	4.0	0.0	0.0	0.0	0.0	0.0	M
2018-2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-2020	0.0	0.0	0.0	0.0	M	0.0	0.0	M	0.0	0.0	M	M	M
2020-2021	M	0.0	M	0.0	0.0	0.0	T	17.5	0.0	M	0.0	0.0	M
2021-2022	0.0	0.0	0.0	0.0	0.0	0.0	M	0.0	0.0	0.0	0.0	0.0	M
Mean	0.0	0.0	0.0	0.0	0.0	0.1	0.9	1.9	0.0	0.0	0.0	0.0	2.4
Max	0.0 2021	0.0 2021	0.0 2021	0.0 2021	0.0 2021	2.0 2012	7.0 2011	17.5 2021	1.0 2015	0.0 2022	0.0 2022	0.0 2022	11.9 2011
Min	0.0 2021	0.0 2021	0.0 2021	0.0 2021	0.0 2021	0.0 2021	0.0 2020	0.0 2022	0.0 2022	0.0 2022	0.0 2022	0.0 2022	0.0 2019

ATTACHMENT III.F.3

WIND

Source: <https://www.windfinder.com/windstatistics/texarkana_regional_airport**>**

windfinder.com/windstatistics/texarkana_regional_airport

https://www.office.c... HCPSS Connect – H... New Tab

WINDFINDER Map Locations Search

Monthly wind speed statistics and directions for Texarkana Regional Airport

Dominant wind direction

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSW	NE	S	S	S	S	S	SE	E	SSW	SSE	S

Average wind speeds and gusts (mph)

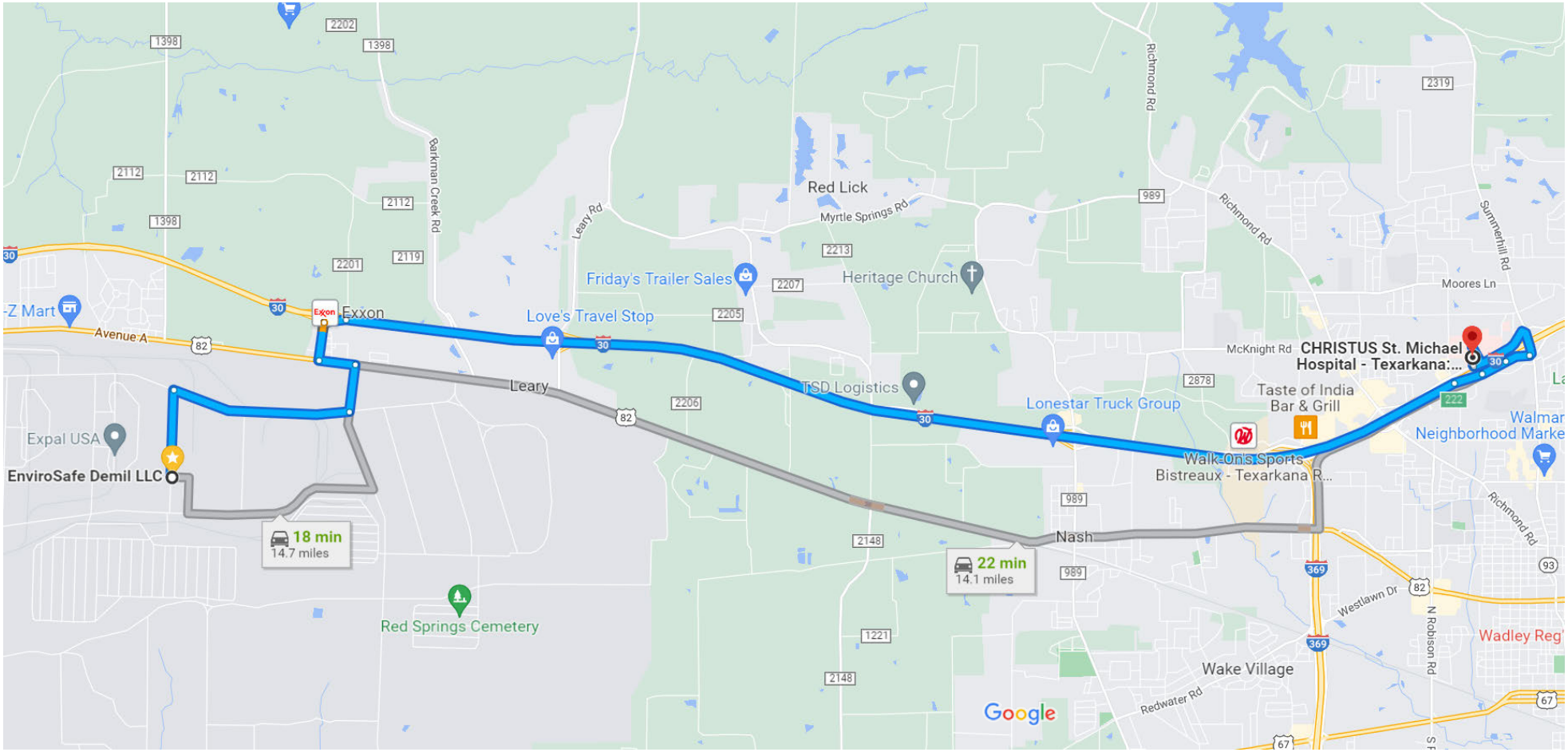


ATTACHMENT III.F.4

ROUTE TO MEDICAL SERVICE

ENVIROSAFE DEMIL, LLC TO CHRISTUS ST. MICHAEL HOSPITAL – TEXARKANA: EMERGENCY ROOM

Google Maps EnviroSafe Demil LLC to CHRISTUS St. Michael Hospital - Texarkana: Emergency Room Drive 14.2 miles, 18 min



via I-30 E Fastest route now due to traffic conditions	18 min 14.2 miles
via Pine St and I-30 E	18 min 14.7 miles
via US-82 E/W New Boston Rd	22 min 14.1 miles

IV. Wastes and Waste Analysis

Provide all Part B responsive information in Appendix IV. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

A. Waste Management Information

For a new hazardous waste management facility or for a facility hazardous waste management capacity expansion, complete Table IV.A. - Waste Management Information for each waste, source, and volume of waste to be stored, processed, or disposed of in the facility units to be permitted as required by 30 TAC 305.50(a)(9). For on-site facilities, list "on-site" for the waste source. For off-site facilities, list the source of the waste. If unknown, identify potential sources (e.g., industries/processes to be serviced).

Table IV.A. - Waste Management Information is included.

B. Waste Managed In Permitted Units

For all hazardous waste management facilities and for inclusion into a permit, complete Table IV.B. - Wastes Managed In Permitted Units for each waste and debris to be managed in a permitted unit. Provide a description, EPA waste codes, and TCEQ waste form codes and classification codes. Guidelines for the Classification & Coding of Industrial Wastes and Hazardous Wastes, TCEQ publication RG-22, contains guidance for how to properly classify and code industrial waste and hazardous waste in accordance with 30 TAC 335.501-335.515 (Subchapter R).

Applicants need not specify the complete 8-digit waste code formulas for their wastes but must include the 3-digit form codes and 1-digit classification codes. This allows the applicant to specify major categories of wastes in an overall manner without having to list all the specific waste streams as generated.

Table IV.B. - Wastes Managed in Permitted Units is included.

C. Sampling and Analytical Methods

For inclusion into a permit, complete Table IV.C. - Sampling and Analytical Methods for each waste and debris proposed to be sampled and analyzed and include sampling location, sampling method, sample frequency, analytical method, and desired accuracy level for each waste and debris to be managed in a permitted, storage, processing, or disposal unit at the facility.

Table IV.C. - Sampling and Analytical Methods is included.

D. Waste Analysis Plan

Information addressing the requirements below is included in Appendix IV.D – Waste Analysis Plan.

The Waste Analysis Plan must address the requirements of 40 CFR §264.13 and §268.7. The Plan should include supplemental and coordinating information on how the facility will analyze wastes and debris (as listed in Table IV.B) to be managed in permitted units. The plan must address the determination of land disposal restrictions.
Generators must determine and certify with the manifest the land disposal restriction status of a waste, even if the waste or debris is not intended for land disposal. Land disposal treatment facilities must identify the treatment process and analytical procedures to be used, and include them in the waste analysis plan. Land

disposal restriction records must be maintained at the facility until closure of the facility [40 CFR §264.73(b)]. Landfill facilities must determine through the Paint Filter Liquids Test (SW-846 Method 9095) if there is free liquid in a bulk or containerized waste to be landfilled. If so, it must be stabilized; adding adsorbents alone is not acceptable, even for containerized waste.

For off-site facilities the waste analysis plan must specify procedures which will be used to inspect and, if necessary, analyze each movement of industrial and hazardous waste or hazardous debris received at the facility to ensure it matches the identity of the waste designated on the accompanying shipping ticket. The plan must describe methods which will be used to determine the identity of each movement of waste and debris managed at the facility and sampling method used if the identification method includes sampling in order to store, process, or dispose of the wastes and debris in accordance with 40 CFR Parts 264 and 268 and any abnormal characteristics which may upset further treatment or processing operations. Include rejection criteria for shipments of waste and debris received at the facility

For on-site facilities the waste analysis plan must specify the normal characteristics of the waste (including EPA hazardous waste codes, EPA hazard codes, and 40 CFR Part 261, Appendix VIII Hazardous Constituents) which must be known to store, process, or dispose of the wastes and debris in accordance with 40 CFR Parts 264 and 268 and any abnormal characteristics which may upset further treatment or processing operations.

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Those sampling methods listed in 40 CFR Part 261 Appendix I, for sampling waste with properties similar to the indicated materials, or equivalent sampling methods approved by EPA under 40 CFR §260.20 and §260.21, will be considered by the TCEQ to be acceptable.

Section IV – Wastes and Waste Analysis

Appendix IV.A –Waste Management Information

30 TAC 305.50(a)(9)

Information for each waste, the source of the waste, and the expected volume of the waste to be stored or processed at EnviroSafe Demil, LLC (ESD) is provided in *Table IV.A. - Waste Management Information.*

Table IV.A
Waste Management Information

Waste Type(s) [a]	Source	Volume (tons/year)
Materials Shipped to ESD for Processing		
Military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	See note b	16,500,000 lbs NEW received
Materials Prepared On-Site for Processing		
Prepared military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	On-site preparation of military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	16,500,000 lbs NEW prepared

Notes:

[a] These energetic materials will be stored on-site in the storage magazines. They will be prepared for processing in the Rocket Motor Ops Building and processed in the Hybrid Burn Chamber (HBC).

[b] All energetic materials processed at the facility are generated off-site. These energetic materials come from various government and commercial customers, such as federal, state or local agencies, explosive manufacturing facilities, chemical and specialty industries, military and defense industries, and/or emergency response agencies.

Section IV – Wastes and Waste Analysis

Appendix IV.B – Waste Managed In Permitted Units

30 TAC 335.501-335.515

Information on the wastes managed at ESD is shown in *Table IV.B. - Wastes Managed In Permitted Units*. This table provides a description of the waste, EPA waste codes, and TCEQ waste form codes and classification codes.

Table IV.B
Wastes Managed In Permitted Units [a]

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
Materials Shipped to ESD for Processing			
5001	Military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030	315H
Materials Prepared On-Site for Processing			
5002	Prepared military and industrial energetics, ammunition, munitions and munition components, and energetically combustible materials from off-site sources	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030	315H

Notes:

[a] These energetic materials will be stored on-site in the storage magazines. They will be prepared for processing in the Rocket Motor Ops Building and processed in the Hybrid Burn Chamber (HBC).

Appendix IV.C – Sampling and Analytical Methods

Table IV.C. - Sampling and Analytical Methods includes the sampling and analytical information for each waste and debris proposed to be sampled and analyzed. This table includes the sampling location, sampling method, sample frequency, analytical method, and desired accuracy level for each waste to be managed at ESD.

Table IV.C
Sampling and Analytical Methods

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
5001 and 5002	None; [a] Energetic materials will be inspected upon delivery	None; [a] Visual observation by operators familiar with the types of energetic materials expected to be shipped on-site [a]	Every shipment	Ensure energetic materials match the information on the accompanying manifest or shipping documents [b,c]	See notes b and c	100% [d]

[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] 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.

Notes:

[a] No sampling or analysis will be performed due to the dangerous nature of explosives.

[b] Off-site generators of the energetic materials are responsible for providing the information needed in order to safely and properly treat, store, or dispose of the energetic materials. ESD operators will verify energetic materials match the information on the accompanying manifest or shipping documents.

[c] Military munitions are characterized by information identified by the Department of Defense Identification Codes (DODICs) provided by the military or information in the Munitions Item Disposition Action System (MIDAS). The U.S. Government provides information about the munitions to disposition. Documentation from manufacturers, suppliers, or reliable resources will be used to characterize industrial munitions.

[d] If the materials do not match the information on the accompanying manifest or shipping documents, ESD will refuse the shipment delivery and will return the materials to the generator for proper characterization.

Section IV – Wastes and Waste Analysis

Appendix IV.D – Waste Analysis Plan

40 CFR §264.13 and §268.7

1.0 TYPES OF HAZARDOUS WASTES

For the purposes of describing the processes used to characterize the waste, the waste streams are divided into two main categories:

- Energetic Materials Shipped to the Facility to be Processed On-site
- Wastes Generated On-site

These categories are described in more detail in the following sections.

1.1 Energetic Materials Shipped to the Facility to be Processed On-site

Energetic materials shipped to the facility will be packaged and shipped to meet the Department of Transportation (DOT) regulations. The off-site generators of the energetic materials are responsible for providing the information needed in order to safely and properly treat, store, or dispose of the energetic materials. Documentation from the manufacturer will be used to characterize industrial munitions.

The military munitions received by the facility have been manufactured following U.S. Government specifications. The military munitions are characterized by information identified by the Department of Defense Identification Codes (DODICs) provided by the military or information in the Munitions Item Disposition Action System (MIDAS), which is an ammunition information databased located within the Defense Ammunition Center (DAC) Munitions Analytical Compliance System (MACS). The database information is based upon military specifications and specific production records and contains the chemical constituent information for all ammunition, components, and parts.

Due to the dangers associated with sampling and analyzing explosives, ESD does not intend to rely on sampling and analysis to characterize the materials shipped to the facility. The energetic materials received on-site will be inspected to determine whether they match the identification information specified on the accompanying manifest or shipping documents. The operators conducting the inspections are very familiar with the types of energetic materials expected to be shipped on-site and will be able to tell by visual observation if the energetic materials match the

accompanying manifest or shipping documents. If the energetic materials match the information, they will be stored in dedicated storage magazines until they can be processed on-site. If the energetic materials do not match the information, ESD will refuse the shipment delivery and will return the materials to the generator for proper characterization.

When the materials are ready to be processed, they will be sent to the Rocket Motor Ops Building (prior to being processed in the HBC). In this building, the materials will be removed from their packaging and will be prepared for processing. The packaging will be recycled.

1.2 Wastes Generated On-site

The facility generates wastes that may be hazardous. These wastes generated on-site include:

Wastes Generated from HBC and APCS Operation:

- HBC ash/debris
- Filter cakes from filter press in HBC Wash System
- Air pollution control wastes from the HBC APCS (used baghouse and HEPA filters, baghouse and cyclone separator particulate dust)

The wastes will be collected in drums, or an equivalent storage device, and will be sampled and analyzed (TCLP for metals) to determine if they are hazardous prior to final disposal. Waste profiles are developed for each waste based upon facility knowledge of the characteristics of the waste and/or analytical data. Each waste is assigned a waste profile and is packaged in accordance with the description on the respective profile. If wastes are not hazardous, they will be disposed of at an off-site landfill. If wastes are determined to be hazardous, they will be shipped off-site to a permitted Treatment, Storage, and Disposal Facility (TSDF).

2.0 WASTE CHARACTERIZATION

In accordance with 40 CFR §264.13, before treating, storing, or disposing of any hazardous wastes, a detailed chemical and physical analysis of a representative sample of the wastes must be obtained. At a minimum, the analysis must contain all the information which must be known to treat, store, or dispose of the waste. The purpose of this section is to identify the waste streams and to describe the method used to properly characterize these waste streams so that they are treated, stored, and disposed of correctly. All approved waste characterization profiles are kept on-site.

2.1 Energetic Materials Shipped to the Facility to be Processed On-site

As mentioned in Section 1.1, the off-site generators of the energetic materials will supply the information needed in order to safely and properly treat, store, or dispose of the energetic materials in the accompanying manifest or shipping documents. The information in the manifest or shipping documents will be used to create a waste characterization profile (WCP) for the energetic wastes. These profiles contain all the information which must be known to treat, store, or dispose of the wastes properly. This information includes the following items, if applicable to the particular waste:

- Product name
- Hazardous waste codes
- Product composition
- Net explosive weight (NEW)
- Special handling requirements
- Proper packaging requirements
- Shipping requirements (DOT EX numbers, etc.)

One important parameter listed on the WCP is the net explosive weight (NEW). The percentage by weight of the reactive portion, or the NEW, is important in determining the amount of waste that can be stored in each magazine because each magazine is designed to safely store a certain limit in pounds of NEW. The NEW is also important in determining the amount of energetic material that can be safely processed in the HBC at one time.

The military munitions will be characterized by information provided by the U.S. Government and documentation from manufacturers, suppliers, or reliable resources will be used to characterize industrial munitions. This information demonstrates that no free liquids are present in the energetic materials.

2.2 Wastes Generated On-site

In general, the waste generated at the facility can be substantially characterized by knowledge of the materials that were processed in the HBC. All of the wastes generated on-site are dry and contain no free liquids. Waste characterization profiles are created based upon the type of materials processed in the HBC and on analytical results. These profiles contain all the information which must be known to treat, store, or dispose of the wastes properly. This information includes the following items, if applicable to the particular waste:

- Product name
- Hazardous waste codes
- Product composition
- Special handling requirements
- Proper packaging requirements
- Shipping requirements (DOT EX numbers, etc.)

The waste characterization profiles are to be reviewed to ensure they are accurate and up to date when there is reason to believe that the composition of the feed material has changed or if notified that the hazardous waste does not match the waste designated on the accompanying waste shipping manifest.

In order to properly characterized waste, process knowledge and/or analytical results will be used. A representative sample will be collected using the "scoops and shovels" method listed in SW-846 Chapter 9 for off-site laboratory analysis by the methods listed in Table 2-1. The results of this analysis will then be used to create a waste profile for future waste streams from the same source.

Quality assurance/quality control (QA/QC) procedures specified in *Chapter One of the SW-846 Compendium: Project Quality Assurance and Quality Control* will be included with each batch of samples analyzed in accordance with this Waste Analysis Plan, as applicable for the method. The QA/QC documentation will be maintained at the facility along with the results of all analyses.

2.3 Hazardous Waste Codes

A list of the hazardous waste codes to be managed at the facility is provided in Part A of the permit application and is also included in *Table IV.B. - Wastes Managed In Permitted Units*.

Table 2-1
Analytical Methods for Waste Generated On-Site

Type of Analysis	Frequency	Parameter	Analysis Method (or equivalent) [a]
Waste characterization	Once initially for each new item processed	Reactivity	Process knowledge and inspection [a]
		Metals, including: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver	SW-846 Methods 1311 and 6010, 6020, or 7000 series
		2,4-dinitrotoluene	Process knowledge and inspection [a] or SW-846 Methods 1311 and 8270
Land Disposal Restriction	Once initially for each new item processed	Metals, including: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver	SW-846 Methods 1311 and 6010, 6020, or 7000 series
		Underlying hazardous constituents as listed in 40 CFR §268.48	SW-846 Methods 1311 and 8000 series

Notes:

[a] Process knowledge and inspections will be used to assess some of the characteristics of the wastes generated on-site. For example, the wastes resulting from the HBC process are not expected to be reactive or to contain any organics. Therefore, the samples will not be analyzed for these parameters unless visual inspection indicates a concern. The samples will only be analyzed for constituents that are reasonably expected to be present in the wastes, such as metals.

3.0 HANDLING OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

40 CFR §264.17 states that precautions must be in place to prevent accidental ignition or reaction of ignitable or reactive waste. Ignitable and reactive waste will be handled at this facility and will be separated and protected from open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. "No smoking" signs will be conspicuously placed wherever there is a hazard from reactive waste. Reactive wastes are stored in dedicated storage magazines until they are ready to be processed on-site.

The energetic materials are not incompatible with each other. Each type of energetic material is stored in its own sealed container and will not be mixed with another type of energetic material. Materials will be stored in the original shipping containers which are designed to safely hold the energetic material until they are ready to be prepared for processing. The containers are compatible with their contents and there is no potential for the energetic material to react with the containers.

V. Engineering Reports

Provide all Part B responsive information in Appendix V. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

For multiple units provide and include all Part B responsive information in a separate Appendix for each unit.

The engineering report represents the conceptual basis for the storage, processing, or disposal units at the hazardous waste management (HWM) facility. It should include calculations and other such engineering information as may be necessary to follow the logical development of the facility design. Plans and specifications are an integral part of the report. They should include construction procedures, materials specifications, dimensions, design capacities relative to the volume of wastes (as appropriate), and the information required by 40 CFR 270.14(b)(8), 270.14(b)(10). Since these reports may be incorporated into any issued permit, the report should not include trade names, manufacturers, or vendors of specific materials, equipment, or services unless such information is critical to the technical adequacy of the material. Technical specifications and required performance standards are sufficient to conduct a technical review. For landfills, surface impoundments, and waste piles, a Construction Quality Assurance Plan, which considers the guidance in EPA publication 530-SW-85-014, Minimum Technology Guidance on Double Liner Systems for Landfills and Surface Impoundments; Design, Construction, and Operation, and/or EPA/600/R-93/182, Quality Assurance And Quality Control For Waste Containment Facilities, should be submitted.

For facilities which will receive wastes from off-site sources, the engineering report must also contain information on the units which will manage these off-site wastes in accordance with 30 TAC 335.45(a).

Certain ancillary components or appurtenant devices must be addressed in the Part B application. These include but are not limited to sumps, pipelines, ditches, and canals. The technical information and the level of detail required will vary with the nature, scope, and location of the ancillary component. At a minimum they should be included in descriptions of piping and process flow. More information may be required. A single area containing a large number of ancillary components or a remote appurtenant device in an unusually sensitive location may warrant some specific permit requirements. All ancillary components must be included in calculating closure cost estimates.

In each of the unit-specific sections, describe precautions taken to prevent accidental commingling of incompatible wastes. If reactive or ignitable wastes are to be managed, or if incompatible wastes are deliberately commingled, provide information to ensure that precautions are taken to avoid danger due to:

- generation of extreme heat or pressure, fire, explosion, or violent reaction;
- production of uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
- production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;
- damaging the structural integrity of the device or facility containing the waste; or
- threatening human health or the environment by any other means.

Comprehensive consideration should be given to ensure that the facility is designed in accordance with good public health and hazardous waste management practices. The application will be evaluated primarily for the aspects of design covered by the regulations. Nothing in any approval is intended to relieve the facility owner or operator of any liabilities or responsibilities with respect to the design, construction, or operation of the project.

Appendix V – Engineering Reports includes Table V.A – Facility Waste Management Handling Units, Table V.B – Container Storage Areas, and Table V.K – Miscellaneous Units.

A. General Engineering Reports

The information below is addressed in Appendix V.A – General Engineering Reports.

1. General Information

Complete Table V.A. - Facility Waste Management Handling Units listing all past, current or proposed units. *[Indicate units' status as* Active, Closed, Inactive *(built but not yet managing waste)*, Proposed *(not yet built)*, Never Built, Transferred, or Post-Closure*. Indicate appropriate units for Capacity information.]* **Note for renewals and modifications involving adding or dropping units from the permit:** List all TCEQ Permit Unit Numbers that have been assigned previously as in a current permit Attachment D - Authorized Facility Units table and do not reuse or reassign permit numbers for units that have been replaced, closed, removed from the permit, or transferred to other ownership. All Notice of Registration (NOR) Numbers must match the State of Texas Environmental Electronic Reporting System (STEERS) and may not be reused for replacement units.

Provide an overall plan view of the entire facility. Identify each hazardous or industrial solid waste management unit (container storage area, tank, incinerator, etc.) to be permitted in relation to its location and the type of waste managed in that unit. Also provide a plan view at an appropriate scale to clearly show the location of all hazardous waste management units to be permitted on one or more 8 1/2" x 14" sheets. Indicate on this plan view how the design or operation provides for buffer zones or waste segregation as appropriate for incompatible, ignitable, or reactive wastes.

Submit a topographic map or maps of the facility which clearly shows the information specified in 40 CFR 270.14(b)(19), 270.14(c)(3), and 270.14(d)(1)(i) (for large HWM facilities, the TCEQ will allow the use of other scales on a case- by-case basis). Please note that the term "facility" includes all contiguous land, structures, other appurtenances, and improvements on the land for storing, processing, or disposing of hazardous and industrial solid waste.

2. Features to Mitigate Unsuitable Site Characteristics

For all new hazardous waste management storage and/or processing facilities or areal expansions of existing hazardous waste management storage and/or processing facilities, include in the engineering report design, construction, and operational information specified in 30 TAC 335.204(a)(1) and (a)(3) through (9).

3. Construction Schedules

a. In order to meet the required design standards, extensive retrofitting of some facilities may be required. In the worst case, the applicant may elect to close certain operations rather than comply with the RCRA standards. Thus, the permit may specify a schedule of compliance

requiring the accomplishment of given tasks within specific time frames. As required, indicate an appropriate schedule(s) of compliance in this application. The schedule should provide for facility compliance as soon as possible and in accordance with 40 CFR 270.33(a)(2) and 270.33(b).

b. For commercial hazardous waste management facilities, permit applications (new, renewal, or interim status applications), major amendments, and Class 3 modifications must include a construction schedule. A construction schedule must be submitted even if the application does not include an addition of units or a revision to permitted units. This schedule should comply with the requirements of 30 TAC 305.149.

4. Provide detailed plans and specifications which when, accompanied by the engineering report, will be sufficiently detailed and complete to allow the Executive Director to ascertain whether the facility will be constructed and operated in compliance with all pertinent permitting requirements. Engineering plans and specifications must be prepared under the supervision of and sealed by a licensed Professional Engineer, with current license, along with the Registered Engineering Firm's name and Registration Number as required by the Texas Engineering Practice Act. For some facilities, plans in the form of a standard piping and instrumentation diagram will be sufficient. Overall dimensions and materials of construction must be shown.

B. Container Storage Areas

The information below is addressed in Appendix V.B – Container Storage Areas.

1. Provide an engineering report which includes all of the information specified in 40 CFR 264.170-264.173, 264.175-264.177, and 270.15.

   Complete Table V.B - Container Storage Areas and list the container storage areas covered by this application to be permitted. List the N.O.R. unit number, the rated capacity or size of each unit (including the maximum number of each type of container to be stored at each unit and total maximum capacity of all types wastes stored in the unit), the areal dimensions, containment volume, aisle space requirements, whether ignitable, reactive, or incompatible waste will be stored in each unit, and whether processing will occur within the unit.

2. Container storage areas must have a containment system that is capable of collecting and holding spills, leaks, and precipitation. In addition to the requirements of 40 CFR 270.15, the design report should include the following:

   a. Capacity of the containment relative to the number and volume of containers to be stored; in addition, for unenclosed areas, the amount of rainfall collected prior to removal. The TCEQ recommends using a 25-year, 24-hour rainfall event for this extra capacity; and

   b. Run-on into the containment system must be prevented, or a collection system with sufficient excess capacity must be provided. If run-on is collected within the containment system, delineate the area(s) from which run-on is collected. The 25-year, 24-hour rainfall event should be used to calculate the excess capacity.

3. Wastes Containing No Free Liquids

With the exception of 40 CFR 264.175(d), storage areas that hold only wastes that do not contain free liquids need not have a containment system, provided that compliance with 40 CFR 264.175(c) is demonstrated. This demonstration must be submitted as part of the application and must include:

a. test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

b. a description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing

liquids.

4. Managing Ignitable or Reactive Wastes

If a container storage area will manage ignitable or reactive waste, as indicated on Table V.B, provide in the engineering report drawings demonstrating compliance with the buffer zone requirement of 40 CFR 264.17 and 264.176.

5. Managing Incompatible Wastes

If a container storage area will manage incompatible waste, as indicated on Table V.B, provide in the engineering report a description of the procedures used to ensure compliance with 40 CFR 264.17 and 264.177.

6. Managing Nonhazardous Wastes and/or Universal Wastes

If a container storage area will manage nonhazardous wastes, and/or universal wastes in addition to hazardous waste, provide a description of all types of wastes managed in the engineering report and procedures used to ensure compliance with 40 CFR 264 Subpart I.

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

A miscellaneous unit is a unit other than a container, tank, incinerator, boiler, industrial furnace, landfill, surface impoundment, waste pile, underground injection well, land treatment area, drip pad, or unit eligible for an R, D & D permit that is used to process, store, or dispose of hazardous waste.

For each miscellaneous unit for which an operating permit is sought, provide an engineering report which includes all of the information specified in 40 CFR 264.600-264.602, and 270.23.

This information is addressed in the following appendices:

- **Appendix V.K – Miscellaneous Units (Rocket Motor Ops Building)**
- **Appendix V.K – Miscellaneous Units (Hybrid Burn Chamber)**

1. Complete Table V.K - Miscellaneous Units and list the miscellaneous units covered by this application. List the waste managed in each unit and the rated capacity or size of the unit. If the information requested is not applicable, an explanation must be submitted.

   Table V.K – Miscellaneous Units is included.

2. Provide any other information which is descriptive of the relationship between the miscellaneous unit and the environment. Application information may include design requirements of 30 TAC 305 and 335, 40 CFR Part 264 Subparts I through O, and Part 270 that are appropriate for the miscellaneous unit or portions of the unit being permitted.

   This information is addressed in the following appendices:

   - **Appendix V.K – Miscellaneous Units (Rocket Motor Ops Building)**
   - **Appendix V.K – Miscellaneous Units (Hybrid Burn Chamber)**

3. For a unit which involves combustion, please provide emissions data or a trial burn plan. Tables V.H.1-5 for incinerators or Tables V.I.1-5 for boilers and industrial furnaces may be adapted as appropriate to provide operation, monitoring, and emission information for a miscellaneous combustion unit.

   The HBC is not an incinerator. There is no controlled flame combustion. The operation most closely resembles open burning/open detonation, but is more environmentally responsible. As opposed to open burning/open detonation, this system has the advantage of containing and cleaning the exhaust gases.

   Tables V.K.2, V.K.3, V.K.4, and V.K.5 are included for the HBC and provide compliance information for this miscellaneous unit.

L. Containment Buildings - RESERVED

Section V – Engineering Reports

Appendix V – Engineering Reports

Table V.A, Table V.B, and Table V.K

This Section includes the following tables:

- *Table V.A – Facility Waste Management Handling Units*
- *Table V.B – Container Storage Areas*
- *Table V.K – Miscellaneous Units*

Table V.A. – Facility Waste Management Handling Units

TCEQ Permit Unit No.[1]	Unit Name	NOR No.[1]	Unit Description[3]	Capacity [a,b]	Unit Status[2]
100	Rocket Motor Ops Building	100	Preparation of materials prior to processing in the HBC	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Proposed
101	Hybrid Burn Chamber (HBC)	101	The HBC is a contained burn system followed by air pollution control equipment.	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Proposed
300	Above Ground Magazine (AGM)	300	Energetic material storage magazine	100,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Proposed
301	Earth Covered Magazine (ECM) (V-13-1)	301	Energetic material storage magazine	300,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Proposed
302	Earth Covered Magazine (ECM) (V-13-2)	302	Energetic material storage magazine	200,000 lbs HD 1.1 NEW 150,000 lbs HD 1.2.1 NEW 200,000 lbs HD 1.2.2 NEW 200,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	Proposed
Reserved for future use	Earth Covered Magazine (ECM) (V-13-3)	Reserved for future use	Energetic material storage magazine (reserved for future use)	TBD (reserved for future use)	Proposed (reserved for future use)
Reserved for future use	Earth Covered Magazine (ECM) (V-13-4)	Reserved for future use	Energetic material storage magazine (reserved for future use)	TBD (reserved for future use)	Proposed (reserved for future use)

Notes

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.

[a] NEW stands for Net Explosive Weight.

[b] Most of these figures are the NEW values that have been approved in relation to ESD's contract with the U.S. Army.

Table V.B. – Container Storage Areas

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos.[4]	Rated Capacity[3,a,b]	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable[1], Reactive[1], or Incompatible[2] waste (state all that apply)	Unit Status
300	Above Ground Magazine (AGM)	300	5001 and 5002	100,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	225 ft x 60 ft	Not Applicable	Ignitable, Reactive	Proposed
301	Earth Covered Magazine (ECM) (V-13-1)	301	5001 and 5002	300,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	27 ft x 60 ft	Not Applicable	Ignitable, Reactive	Proposed
302	Earth Covered Magazine (ECM) (V-13-2)	302	5001 and 5002	200,000 lbs HD 1.1 NEW 150,000 lbs HD 1.2.1 NEW 200,000 lbs HD 1.2.2 NEW 200,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	27 ft x 60 ft	Not Applicable	Ignitable, Reactive	Proposed
Reserved for future use	Earth Covered Magazine (ECM) (V-13-3)	Reserved for future use	5001 and 5002	TBD (reserved for future use)	27 ft x 60 ft	Not Applicable	Ignitable, Reactive	Proposed (reserved for future use)
Reserved for future use	Earth Covered Magazine (ECM) (V-13-4)	Reserved for future use	5001 and 5002	TBD (reserved for future use)	27 ft x 60 ft	Not Applicable	Ignitable, Reactive	Proposed (reserved for future use)

Notes:

1. Containers managing ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
2. Incompatible waste must be separated from other waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments by means of a dike, berm, wall, or other device.
3. Container Storage Areas need to include in capacity calculations any nonhazardous wastes and universal wastes managed in the unit in addition to hazardous wastes.
4. from Table IV.B, first column

[a] NEW stands for Net Explosive Weight.

[b] Most of these figures are the NEW values that have been approved in relation to ESD's contract with the U.S. Army.

Table V.K. - Miscellaneous Units

Permit Unit No.*	Miscellaneous Unit	N.O.R. No.	Storage, Processing, and/or Disposal	Waste Nos.[1,a]	Rated Capacity [b,c]	Dimensions	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
100	Rocket Motor Ops Building	100	Processing	5001 and 5002	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	407 ft x 70 ft	Ignitable, Reactive
101	Hybrid Burn Chamber (HBC)	101	Processing	5001 and 5002	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW	20 ft x 20 ft (HBC) 100 ft x 50 ft (APCS)	Ignitable, Reactive

Notes:

[1] from 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.

[a] No wastes are pumpable; all wastes are in solid form.

[b] NEW stands for Net Explosive Weight.

[c] Most of these figures are the NEW values that have been approved in relation to ESD's contract with the U.S. Army.

Section V – Engineering Reports

Appendix V.A – General Engineering Reports

1.0 INTRODUCTION

Table V.A – Facility Waste Management Handling Units lists information for the different hazardous waste management units for the facility. Additional information for the storage magazines is provided in *Table V.B – Container Storage Areas. Table V.K – Miscellaneous Units* provides information about the miscellaneous units at the facility.

This section of the permit application includes additional appendices that cover more in depth information about each of the hazardous waste management units. The additional appendices included in this section are shown in *Table 1-1 – Additional Engineering Reports Appendices*.

An overall view of the entire facility can be found in *Attachment D - Photographs* of the Part A Application Form. On this map, each hazardous waste management unit to be permitted (container storage areas, preparation building, and processing unit) are shown. Figure V.A.1 includes a map showing the location of all hazardous waste management units to be permitted and their distance from the facility's property line. Per 40 CFR §264.176, these units must be 50 feet from the facility's property line because they handle reactive materials.

Topographic maps of the facility are included in *Attachment C – Topographic Maps* of the Part A Application Form. Table 1-2 shows the location of the information specified in 40 CFR 270.14(b)(19), 270.14(c)(3), and 270.14(d)(1)(i). More information on the siting and location information for the facility can be found in *Section II – Facility Siting Criteria.*

Table 1-1
Additional Engineering Reports Appendices

Appendix	Units Covered
Appendix V.B – Container Storage Areas	- Above Ground Magazine (AGM) - Earth Covered Magazine (ECM) V-13-1 - Earth Covered Magazine (ECM) V-13-2 - Earth Covered Magazine (ECM) V-13-3 (reserved for future use) - Earth Covered Magazine (ECM) V-13-4 (reserved for future use)
Appendix V.K – Miscellaneous Units (Rocket Motor Ops Building)	Rocket Motor Ops Building
Appendix V.K – Miscellaneous Units (Hybrid Burn Chamber)	Hybrid Burn Chamber (HBC)

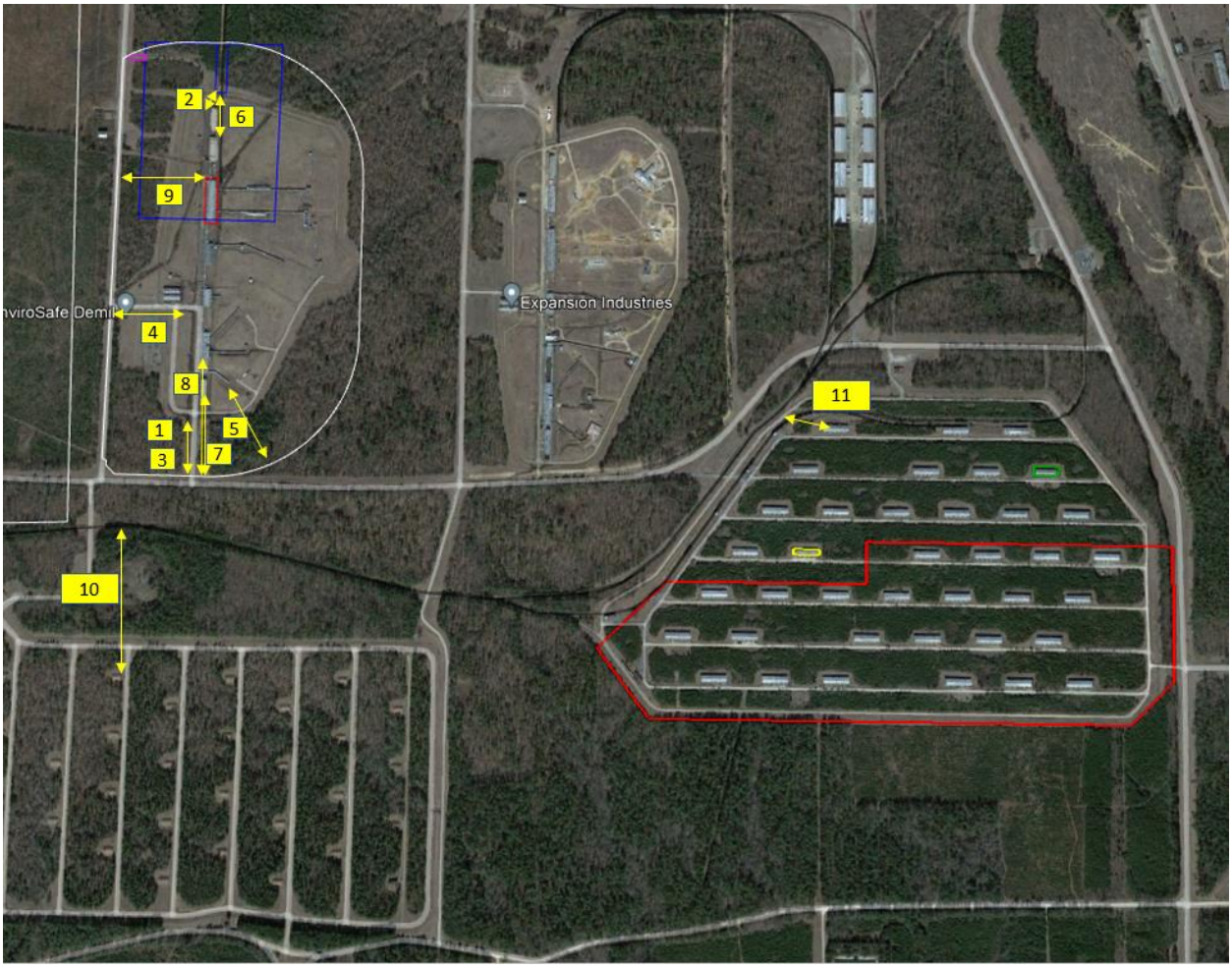
Table 1-2
Table of Information Requirements for Maps

Regulatory Citation (40 CFR)	Description	Location Requirement is Addressed [a]
§270.14(b)(19)	Topographic map	*Attachment C – Topographic Maps* of the Part A Application Form
§270.14(b)(19)(i)	Topographic map scale and date	*Attachment C – Topographic Maps* of the Part A Application Form
§270.14(b)(19)(ii)	100-year floodplain area	*Appendix II.F – Flooding*
§270.14(b)(19)(iii)	Surface waters including intermittent streams	*Attachment C – Topographic Maps* of the Part A Application Form; *Attachment II.4 – Surface Water Intake*
§270.14(b)(19)(iv)	Surrounding land uses (residential, commercial, agricultural, recreational)	*Attachment II.G.1 - Land Use Maps*
§270.14(b)(19)(v)	A wind rose (*i.e.*, prevailing wind-speed and direction)	*Attachment C – Topographic Maps* of the Part A Application Form
§270.14(b)(19)(vi)	Orientation of the map (north arrow)	*Attachment C – Topographic Maps* of the Part A Application Form
§270.14(b)(19)(vii)	Legal boundaries of the HWM facility site	*Attachment B – Legal Description of the Facility* of the Part A Application Form*;* *Attachment C – Topographic Maps* of the Part A Application Form
§270.14(b)(19)(viii)	Access control (fences, gates)	Figure 2-1 in *Appendix III.E – Contingency Plan*
§270.14(b)(19)(ix)	Injection and withdrawal wells both on-site and off-site	N/A
§270.14(b)(19)(x)	Buildings; treatment, storage, or disposal operations	*Attachment D - Photographs* of the Part A Application Form
§270.14(b)(19)(xi)	Barriers for drainage or flood control	N/A
§270.14(b)(19)(xii)	Location of operational units within the HWM facility site, where hazardous waste is (or will be) treated, stored, or disposed (include equipment cleanup areas).	*Attachment D - Photographs* of the Part A Application Form
§270.14(c)(3)	Location of waste management area, property boundary, aquifers	*Attachment B – Legal Description of the Facility* of the Part A Application Form*;* *Attachment D - Photographs* of the Part A Application Form; *Attachment II.3 – Aquifer Information*
§270.14(d)(1)(i)	The location of the unit on the topographic map	*Attachment C – Topographic Maps* of the Part A Application Form

Notes:

[a] The location listed is within the Part B Application, unless otherwise noted.

Figure V.A.1
Distances from the Property Line



Line Number on Map	Description	Distance to Nearest Property Line
1	Hybrid Burn Chamber (HBC)	100
2	Energetic Activation Unit (EAU)	150
3	Air Pollution Control System (Pollution Abatement System)	100
4	Employee/ Operations Building	590
5	Range Control Building	800
6	Energetic and Recycling Ops Building	415
7	Rocket Motor Ops Building (Rocket Motor Prep Area)	300
8	Rocket Motor Ops Building (Segmenting Area)	450
9	Inert Storage Building	770
10	Earth Covered Magazines	1250 or greater
11	Above Ground Magazine	400

2.0 FEATURES TO MITIGATE UNSUITABLE SITE CHARACTERISTICS

Table 2-1 shows the information specified in 30 TAC §335.204(a)(1) and (a)(3) through (9). All of this information is addressed in other portions of this permit application and Table 2-1 indicates which section of the permit application contains this information.

Table 2-1
Table of Information Requirements for Mitigating Unsuitable Site Characteristics

Regulatory Citation (30 TAC)	Description *The facility may not be located in:*	Location Requirement is Addressed [a]
§335.204(a)(1)	the 100-year floodplain	*Section 2.2 of Appendix II – Facility Siting Criteria; Appendix II.F - Flooding*
§335.204(a)(3)	the recharge zone of a sole-source aquifer	*Section 2.5 of Appendix II – Facility Siting Criteria; Attachment II.3 – Additional Aquifer Information*
§335.204(a)(4)	areas overlying regional aquifers unless:	*Section 2.5 of Appendix II – Facility Siting Criteria; Attachment II.3 – Additional Aquifer Information*
§335.204(a)(5)	areas where soil unit(s) within five feet of the containment structure have a Unified Soil Classification of GW, GP, GM, GC, SW, SP, or SM, or a hydraulic conductivity greater than 10^{-5} cm/sec	*Section 3.2 of Appendix II – Facility Siting Criteria; Attachment II.5 – Soil Unit Information*
§335.204(a)(6)	areas of direct drainage within one mile of a lake at its maximum conservation pool level, if the lake is used to supply public drinking water through a public water system	*Section 3.1 of Appendix II – Facility Siting Criteria; Attachment II.4 – Surface Water Intake*
§335.204(a)(7)	areas of active geologic processes	*Section 2.6 of Appendix II – Facility Siting Criteria; Appendix VI.A – Geology and Topography; Attachment VI.A.1 – Geologic Information; Attachment VI.A.2 – Fault Information; Attachment VI.A.3 – Earthquake Information*
§335.204(a)(8)	the critical habitat of an endangered species of plant or animal	*Section 2.9 of Appendix II – Facility Siting Criteria; Attachment II.5 – Critical Habitat of an Endangered Species of Plan or Animal*
§335.204(a)(9)	within 30 feet of the upthrown side or 50 feet of the downthrown side of the actual or inferred surface expression of a fault that has reasonably been shown to have caused displacement of shallow Quaternary sediments or of man-made structures	*Appendix VI.A – Geology and Topography; Attachment VI.A.2 – Fault Information*

Notes:

[a] The location listed is within the Part B Application, unless otherwise noted.

3.0 CONSTRUCTION SCHEDULES

The construction schedules for each hazardous waste management unit are included in their respective appendix, if a construction table is applicable to the particular unit. The appendices for each unit are listed in *Table 1-1 – Additional Engineering Reports Appendices.*

4.0 PLANS, SPECIFICATIONS, AND OPERATIONS

The plans, specification and operations for each hazardous waste management unit are included in their respective appendix. The appendices for each unit are listed in *Table 1-1 – Additional Engineering Reports Appendices.*

Section V – Engineering Reports

Appendix V.B – Container Storage Areas

40 CFR §264.170-§264.173, §264.175-§264.177, and §270.15

1.0 INTRODUCTION

EnviroSafe Demil, LLC (ESD) will use storage magazines that are adjacent to the main facility to store energetic materials. The storage magazines are listed below:

- Above Ground Magazine (AGM)
- Earth Covered Magazine (ECM) V-13-1
- Earth Covered Magazine (ECM) V-13-2
- Earth Covered Magazine (ECM) V-13-3 (reserved for future use)
- Earth Covered Magazine (ECM) V-13-4 (reserved for future use)

The above ground magazine (AGM) is located to the southeast of the main facility and the earth covered magazines (ECMs) are located to the south of the main facility. More information on the siting and location information for the storage magazines can be found in *Section II – Facility Siting Criteria*.

Table 1, *Table of Information Requirements for Container Storage Areas*, presents the regulatory references for the information required to be submitted for container storage areas in 40 CFR §264.170-§264. 177 and 40 CFR §270.15 and the section of this document that addresses the specific requirement.

Table 1
Table of Information Requirements for Container Storage Areas

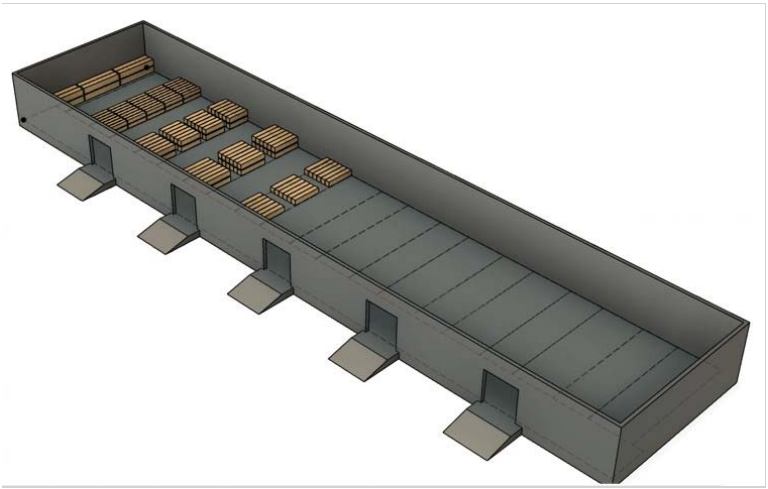
Regulatory Citation (40 CFR)	Description	Section Requirement is Addressed
§264.171	If a container holding hazardous waste is not in good condition or if it begins to leak, the hazardous waste must be transferred from this container to a container that is in good condition	Section 5.0
§264.172	Hazardous waste must be stored in a container that is compatible with, the hazardous waste to be stored	Section 5.0
§264.173(a)	A container holding hazardous waste must be closed during storage, except when adding or removing waste	Section 5.0
§264.173(b)	A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak	Section 5.0
§264.174	Inspections	Section 5.0
§264.175(a)	Containment system	N/A, see §264.175(c)
§264.175(b)	Containment system design	N/A, see §264.175(c)
§264.175(c)	Storage areas that store containers holding only wastes that do not contain free liquids do not need to have a containment system	Section 4.0
§264.175(d)	Applicable to waste codes F020, F021, F022, F023, F026, and F027	N/A
§264.176	Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line	Section 6.0
§264.177	Incompatible wastes	Section 6.0
§270.15(a)	Containment system description	N/A, see Section 4.0
§270.15(b)	Requirements for storage of wastes that do not contain free liquids	Section 4.0
§270.15(c)	Sketches, drawings, or data showing location of buffer zone for containers holding ignitable or reactive wastes	Section 6.0
§270.15(d)	Incompatible waste requirements	Section 6.0
§270.15(e)	Air emission control equipment	N/A

2.0 DESCRIPTION OF THE ABOVE GROUND MAGAZINE

2.1 Physical Characteristics, Materials of Construction, and Dimensions

The above ground magazine (AGM) was constructed in the 1940s and is approximately 225 feet by 60 feet with 16-foot tall walls. The walls are steel beam construction with reinforced brick and concrete foundations. The roof is steel. All of the doors have locking hasps and all vents are covered with security grating. It can be described as a large above ground storage facility for explosives. The entrance to the above ground magazine has a raised edge so that in the event of a spill, no material will reach the soil outside.

The figure below shows the shape of the AGM.



Above Ground Magazine

2.2 Design and Safety

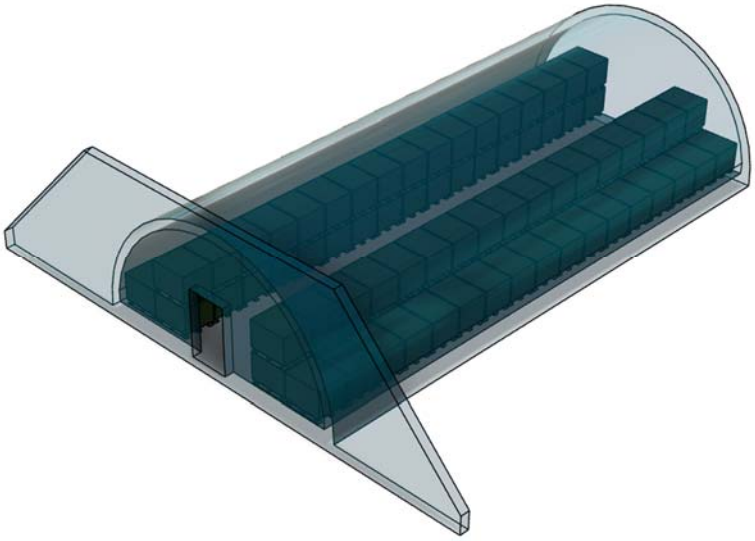
The Department of Defense (DoD) Explosives Safety Board (DDESB) has safety standards that cover the design, construction, and use of all ammunition and explosive storage magazines within the DoD. The AGM meets the design and construction requirements for the safety standards specified in DoD 6055.09-M and DoD 4145.26-M for DoD Contractors. It is designed for the storage of Hazard Division 1.3 or 1.4 ammunition and explosives. The Army has approved net explosive weight (NEW) limits for the AGM and these limits are included in this application in *Table V.B – Container Storage Area*.

3.0 DESCRIPTION OF THE EARTH COVERED MAGAZINES

3.1 Physical Characteristics, Materials of Construction, and Dimensions

The earth covered magazines (ECMs) were constructed in 1942 and are approximately 27 feet by 60 feet. They are arched-shaped with a midline height of 13 feet and the walls and floor are 12-inches thick and are made from rebar reinforced concrete. Each ECM has a concrete headwall and the earth and grass cover on each magazine is kept at a depth of at least two feet. The floor of each storage magazine is sloped from the center towards the channels that run along the side walls. The channels discharge to the ground and are part of the ventilation system. The ECMs are watertight and are designed to drain water out of small holes in the front of the magazine that are attached to the channels.

The figure below shows the shape of the earth covered magazines.



Earth Covered Magazine(s)

3.2 Design and Safety

The Department of Defense (DoD) Explosives Safety Board (DDESB) has safety standards that cover the design, construction, and use of all ammunition and explosive storage magazines within the DoD. The ECMs meet the design and construction requirements for the safety standards specified in DoD 6055.09-M and DoD 4145.26-M for DoD Contractors. The ECMS are designed to prevent propagation of an explosion that may occur in an adjacent magazine. They are designed to store certain amounts of Hazard Division 1.1, 1.2, 1.3, or 1.4 ammunition and explosives. Each

storage magazine has an approved net explosive weight (NEW) limit and these limits are included in this application in *Table V.B – Container Storage Area*.

They are built to the standards for Mounded Concrete Igloo Magazines on page 20 of the document included in *Attachment V.B. – Army Engineering Publication* (source: Department of the Army; U.S. Army Corps of Engineers; Engineering and Design; Explosive Storage Magazines; EP-1110-345-102; 31 August 1995).

4.0 SECONDARY CONTAINMENT

As discussed in *Appendix IV.D – Waste Analysis Plan*, the information used to characterize the energetic materials demonstrates that no free liquids are present. Since the storage magazines will not store containers with free liquids, secondary containment is not required by 40 CFR §264.175(c) as long as:

- The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or
- The containers are elevated or are otherwise protected from contact with accumulated liquid.

The storage magazines are enclosed structures and there is no possibility of precipitation or run-on entering the storage magazines. Additionally, the energetic materials that will be stored contain no free liquids. Therefore, there is no potential for liquid spills or leaks. All containers will be stored on pallets in order elevate them above the floor surface in the event of an accumulated liquid, such as condensation, being on the floor.

5.0 INSPECTIONS AND CONTAINER MANAGEMENT

Each storage magazine has a log where the type of material, amount of material, and the date the material was put into storage is recorded. Each magazine is designed to hold a different amount of net explosive weight (NEW). The basis for these limits is to ensure explosives safety and are the limits are approved by the Army. The operators assure that the design amount of NEW for each magazine is not exceeded. Weekly inspections of the storage magazines are conducted in accordance with *Appendix III.D – Inspection Schedule*. In addition, hazardous waste munitions and explosives are inventoried at least annually.

Containers are inspected for leaks or deterioration caused by corrosion or other factors. In accordance with 40 CFR §264.171, if a container holding hazardous wastes is not in good condition or if it begins to leak, the hazardous waste will be removed from the container and placed

into another container that is in good condition. The defective container will not be used to manage hazardous waste until the defect is repaired.

Materials will be stored in the original shipping containers which are designed to safely hold the energetic material. The containers are compatible with their contents and there is no potential for the energetic material to react with the containers. All containers are kept closed during storage. No open containers or containers without covers securely fastened are allowed in the storage magazines. Containers are not opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Containers may be stacked in the storage magazines. Stacked containers will be grouped and identified according to lots. Appropriate stacking methods are used in order to provide good ventilation to all parts of the stack and to ensure that the containers are not damaged.

Adequate aisle space will be maintained so that units in each stack can be inspected and inventoried as required. Aisle space will also be maintained such that containers can be accessed when they are ready to be sent to the on-site processing areas.

6.0 HANDLING OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

Ignitable and reactive waste will be handled at this facility and will be separated and protected from open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. "No smoking" signs will be conspicuously placed wherever there is a hazard from reactive waste. Reactive wastes are stored in dedicated storage magazines until they are ready to be processed on-site. In accordance with 40 CFR §264.176, the storage magazines are located at least 15 meters (50 feet) from the facility's property line. Figure V.A.1 in *Appendix V.A – General Engineering Reports* shows the distance from the storage magazines to the property lines.

The energetic materials are not incompatible with each other. Each type of energetic material is stored in its own sealed container and will not be mixed with another type of energetic material.

7.0 CONSTRUCTION SCHEDULE

The storage magazines are existing structures that will be used for storage of energetic materials at the ESD facility. Therefore, a construction schedule is not applicable.

ATTACHMENT V.B –

ARMY ENGINEERING PUBLICATION

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	Engineering and Design EXPLOSIVES STORAGE MAGAZINES	
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Pamphlet
No. 1110-345-102 31 August 1995

Engineering and Design
EXPLOSIVES STORAGE MAGAZINES

1. Purpose. Appendix A provides a ready reference of explosives storage magazine information such as shape, size, explosive limits, and operational features. It is intended to provide planners and designers sufficient information to select the most suitable standard magazine design to satisfy the user's requirements.

2. Applicability. This pamphlet is applicable to all HQUSACE elements, major subordinate commands, districts, and field operating activities (FOA) having military design and construction responsibilities.

3. References.

a. DoD 6055.9-STD

b. AR 385-60

c. AR 385-64

d. AR 415-17

e. TM 5-1300

4. Discussion. Military installations use magazines, sometimes referred to as igloos, for the storage of ammunition and explosives. Selecting the correct storage capacity, siting, and type of magazine has been a problem to military planners, and especially to those responsible for assuring safety compliance. Investigational work with earth-covered magazines has been concerned with intra relationships within magazine complexes for siting purposes. Numerous full-scale tests performed over a period of several years have established magazine separation criteria that will prevent magazine-to-magazine explosion propagation. These tests formed the basis for the explosive safety standards in AR 385-64 which implements DOD 6055.9-STD requirements. The primary objective of standard magazines is to provide designers and installation planners pre-approved magazines meeting the Department of Defense Explosives Safety Board (DDESB) safety criteria. This pamphlet is structured to

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This pamphlet supersedes DG 1110-3-170, dated June 1986.

provide complete guidance to Army. It does not address those magazines listed in references a and c that were developed by the Naval Facilities Engineering Command.

FOR THE COMMANDER:

1 Appendix
APP A - Explosives
Storage Magazines

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Colonel, Corps of Engineers
Chief of Staff

This pamphlet supersedes DG 1110-3-170, dated June 1986.

APPENDIX A

EXPLOSIVES STORAGE MAGAZINES

TABLE OF CONTENTS

	Paragraph	Page
Chapter 1. INTRODUCTION		
General	1-1	A-3
Definitions	1-2	A-3
Separation Distances of Standard Magazines	1-3	A-4
Magazine Grouping Concepts	1-4	A-4
Storage and Outloading Drawings	1-5	A-8
Cost of Magazines	1-6	A-8
Waivers and Exemptions	1-7	A-8
Technical Assistance	1-8	A-8
Chapter 2. STANDARD MAGAZINES		
General	2-1	A-10
Description of Earth-Covered Magazines	2-2	A-10
Standard Magazines	2-3	A-11
Site Adaptation	2-4	A-20
Changes to Standard Design	2-5	A-20
DDESB Approval	2-6	A-20
Specifications	2-7	A-20
Chapter 3. MISCELLANEOUS CONSIDERATIONS		
Earth Cover	3-1	A-21
Waterproofing	3-2	A-21
Drainage Systems	3-3	A-21
Doors	3-4	A-21
Utilities and Power	3-5	A-22
Road - Network	3-6	A-22
Aprons	3-7	A-22
Retaining walls (Wing Walls)	3-8	A-22
Ventilation	3-9	A-22
Security	3-10	A-22
Cathodic Protection	3-11	A-22
Lightning Protection	3-12	A-23
Mixing Standard and Non-Standard Magazines	3-13	A-23

	Paragraph	Page
Chapter 4. NON-STANDARD MAGAZINES		
General	4-1	A-24
Evaluating Non-Standard Magazines	4-2	A-24
Hybrid Magazines	4-3	A-24
Preapproved Non-Standard Magazines	4-4	A-24

LIST OF FIGURES

	Page
Figure 1. Minimum Separation Distances of Standard Magazines	A-5
2. Siting plan - Rear to Front	A-6
3. Siting Plan - Back to Back	
4. Earth-covered Steel Arch Magazine	A-12
5. Magazine, Concrete, Oval-arch, Earth-covered	A-13
6. Magazine, Steel, Semicircular-arch, Earth-covered	A-14
7. Steel and Concrete Box Magazine, Earth-covered	A-15
8. Magazine, Steel, Oval-arch, Earth-covered	A-16
9. Magazine, Mounded Concrete Igloo	A-17
10. Magazine, Stradley Type, Earth-covered	A-18
11. Igloo, Storage, Steel-arch, Earth-covered	A-19
12. Magazine, Concrete Cubicle, Earth-covered	A-25

CHAPTER I

INTRODUCTION

1-1. General. An important element in selecting storage magazines for construction is determining the type of magazine to be used and the siting requirements. AR 385-64 provides clear guidance in this regard. An earth-covered magazine is not designed to resist the damaging effects of its own exploding contents. It is accepted that the donor magazine will be demolished if an internal explosion occurs. Earth-covered magazines are utilized primarily to prevent propagation of an explosion within an adjacent (receiver) magazine. During the design phase, and prior to construction, site plans and non-standard magazine drawings must be submitted to the DDESB for review in accordance with AR 385-60 to assure that the proposed project meets explosives safety standards. only the drawing numbers of standard magazines need be submitted with the site plan since the construction of such magazines are preapproved by the DDESB.

1-2. Definitions.

a. Magazine: Any building or structure, except an operating building, used for the storage of ammunitions and explosives.

b. Standard Magazine: A preapproved magazine of the designation listed in AR 385-64. It is a magazine approved for the storage of 500,000 pounds net explosive weight (NEW) at the separation distances listed in AR 385-64.

c. Non-Standard Magazine: An earth-covered magazine that is not listed in AR 385-64 as being approved by the DDESB. These magazines are limited to a maximum 250,000 pounds NEW at the separation distances listed in AR 385-64.

d. Hybrid Magazine: A magazine that uses components and/or modifications from more than one magazine.

e. Intermagazine Distance: This is the minimum permissible distance between storage magazines. For earth-covered magazines, this distance is intended to provide reasonable protection against the propagation of an accidental explosion by airblast and by fragments.

f. Quantity-Distance: The quantity of explosive material and distance separation relationship that provide defined types of protection.

g. Donor Magazine: Is a magazine which produces the damaging output.

h. Receiver Magazine: Is the magazine away from the donor source which requires protection.

i. Barricaded: Magazines with intervening barrier, natural or artificial, of such type, size, and construction as to limit in a prescribed manner the effect of an explosion on a nearby magazine.

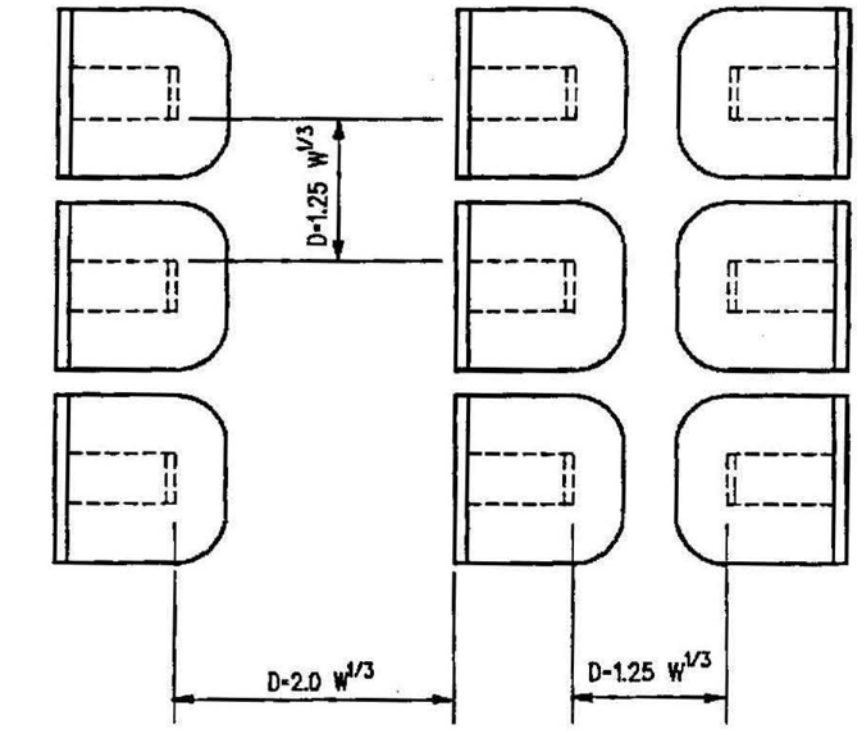
j. Unbarricaded: Magazines without an intervening barrier.

1-3. Separation Distances of Magazines. Separation distance from magazines, commonly referred to as quantity-distance (Q-D), governs many aspects of a project. Stated simply, the more explosive material concentrated at one place, the farther that place has to be from a potential target. AR 385-64 contains tables equating amounts of explosives to the distance that they must be separated from other magazines, other ammunition and explosives handling facilities, public roads, and inhabited buildings. Orientation effects on intermagazine distance can also be found in AR 385-64. The following table and Figure 1 show the Q-D requirements between standard magazines:

Orientation	Minimum Separation for Standard Magazines	Separation for W=500,000 pounds
Side-to-Side	1.25 $W^{1/3}$	100 feet
Rear-to-Front	2.00 $W^{1/3}$	160 feet
Side-to-Front	2.75 $W^{1/3}$	220 feet
Front-to-Front (barricaded)	6.00 $W^{1/3}$	480 feet
Front-to-Front (unbarricaded)	11.00 $W_{1/3}$	880 feet

W = largest net explosive weight (NEW)

1-4. Magazine Grouping Concepts. Magazine grouping concepts are provided in Figures 2 and 3. These concepts are typical layouts found on most Army installations. Magazines may be placed in one row or multiple rows. Siting is generally side-to-side and



HEADWALL
REAR WALL
EDGE OF EARTH COVER
EDGE OF ARCH
W = CHARGE WEIGHT

FIGURE 1. MINIMUM SEPARATION DISTANCES OF STANDARD MAGAZINES

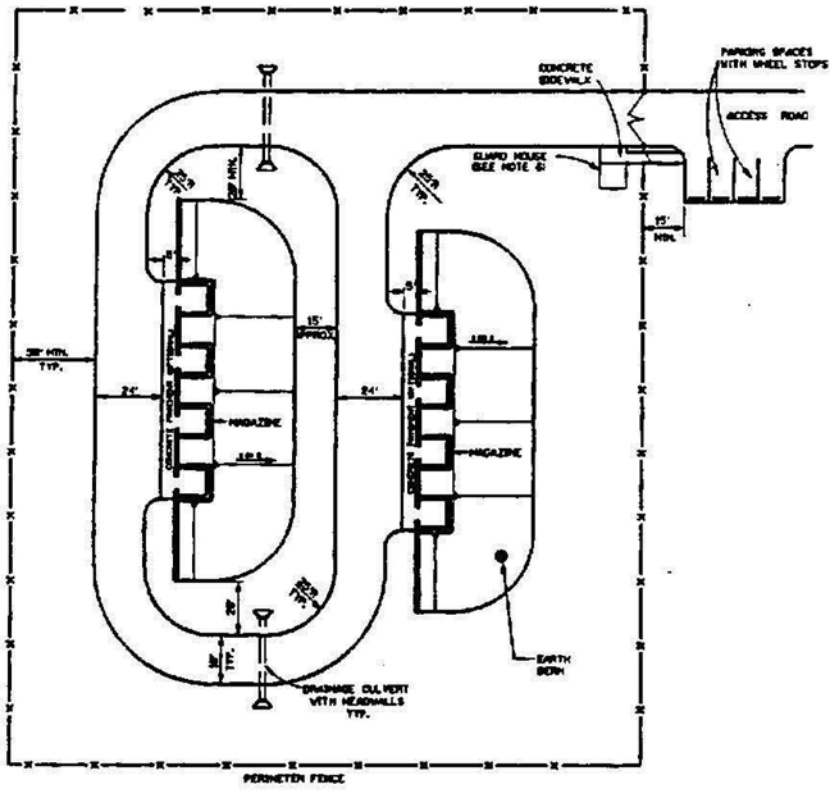


FIGURE 2 - SITING PLAN

REAR TO FRONT

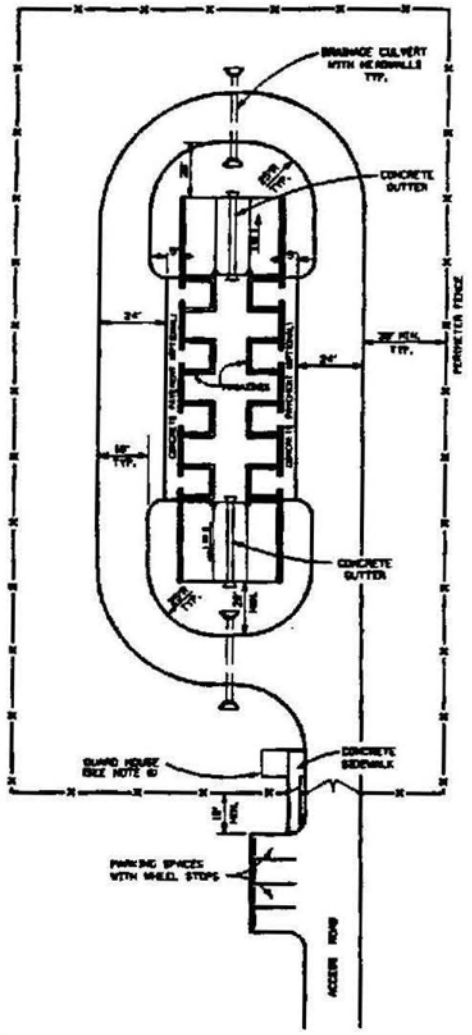


FIGURE 3 - SITING PLAN

BACK TO BACK

rear-to-front. Front-to-front orientation is seldom used because of the excessive intermagazine separation distance required.

1-5. Storage and Outloading Drawings. Storage and outloading drawings for ammunition are provided in U.S. Army Materiel Command drawings 19-48-75-5 published and distributed by the U.S. Army Ammunition Center and School (USADACS). These drawings will assist Army activities and contractors in the effective use of storage to ensure safe, economic and standardized procedures for storing and transporting ammunition commodities. Its Index lists the drawings that depict storage configurations (stacking patterns) of ammunition and components in various types of magazines.

1-6. Cost of Magazines. Construction cost estimates of magazines for programming purposes can be found in AR 415-17.

1-7. Waivers and Exemptions. Waivers, exemptions, and site general construction plan requests pertaining to Army owned facilities will be processed in accordance with AR 385-64. They are, however, discouraged since these waivers permit temporary deviation from the standards.

1-8. Technical Assistance. Users of this pamphlet are encouraged to communicate with the following organizations for technical assistance:

a. Planning Ammunition Facilities:

U.S. Army Defense Ammunition Center and School (USADACS)
ATTN: SMCAC-AV
Savanna, IL 61074-9639
Telephone: DSN 585-8921.

b. Facilities-Related Explosive Safety Matters:

U.S. Army Technical Center for Explosives Safety (USATECS)
ATTN: SMCAC-ES
Savanna, IL 61074-9639
Telephone: DSN 585-8919, commercial (815) 273-8919.

c. Magazine Designs and Criteria:

Headquarters, U.S. Army Corps of Engineers
ATTN: CEMP-ET
20 Massachusetts Avenue, NW
Washington, D.C. 20314-1000
Telephone: 202-761-1436

U.S. Army Engineer Division, Huntsville
ATTN: CEHND-ED-CS
4820 University Drive
Huntsville, AL 35816-1822
Telephone: 205-895-1650.

d. Protective Design Technical Assistance:

U.S. Army Engineer District, Omaha
ATTN: CEMRO-ED-SH
215 North 17th Street
Omaha, NE 68102-4978
Telephone: 402-221-3177

e. Distribution of Magazines (drawings and specifications):

U.S. Army Engineer Division, Huntsville
ATTN: CEHND-ED-ES (Service Section)
106 Wynn Drive
Huntsville, AL 35805-1957
Telephone: 205-955-4782

CHAPTER II

STANDARD MAGAZINES

2-1. General. Standard magazines are preapproved for construction and are mandatory for use within the Department of Defense unless circumstances, such as less storage capacity, require a non-standard design. The advantages of standard designs are:

a. Design costs are saved.

b. obtaining approval from The DDESB is simplified.

c. Less real estate may be required because of certain decreased intermagazine separations permitted when standard magazines are used.

d. The user has confidence in the end product.

e. Flexibility of storage situations exists because magazines can be designed to varying lengths.

f. Because of certain reduced separation distances, less roads, fences, utilities, etc., may be required.

2-2. Description of Earth-Covered Magazines. A typical earth-covered magazine has the following features:

a. A semicircular arch, oval arch, or a rectangular box constructed of reinforced concrete or steel or a combination thereof.

b. A reinforced concrete floor slab, sloped for drainage.

c. A reinforced concrete rear wall.

d. A reinforced concrete headwall that extends at least 2-1/2 feet above the top of the magazine.

e. Reinforced concrete wingwalls on either side of the headwall. The wingwalls may slope to the ground or may adjoin wingwalls from adjacent magazines. The wingwalls may be either monolithic or separated by expansion joints from the headwall.

f. Heavy steel doors in the headwall (either manually operated or motorized).

g. An optional gravity ventilation system.

h. Earth cover over the top, sides and rear of the magazine.

i. Lightning protection and grounding systems.

2-3. Standard Magazines. Standard magazine designs have been developed in coordination with the Department of Defense Explosive Safety Board (DDESB) so that designs would be considered preapproved when called for in construction. The largest sizes are about 25 feet wide. The length can vary, but is usually 80 feet. Smaller magazines have widths ranging from approximately 8 feet to 14 feet, with the length also varying.

a. Drawings approved for new construction. These standard magazines, are for the most part, a complete set of construction drawings with accompanying specifications. The magazines must, however, be site-adapted for local conditions. These magazines designs are approved for storing 500,000 pounds and may be ordered from the U.S. Army Engineer Division, Huntsville.

(1) Semicircular steel arch - 33-15-65 (Figure 4)

(2) Reinforced concrete arch - 33-15-74 (Figure 5)

(3) Semicircular steel arch - 421-80-01 (Figure 6)

(4) Steel and concrete large box - 421-80-02 (Figure 7)

(5) Steel oval arch - 421-80-03 (Figure 8)

b. Older magazines found on Army installations:

(1) Mounded concrete - 33-15-06 (Figure 9)

(2) Atomic blast resistant - 33-15-58

(3) Stradley - 33-15-61 (Figure 10)

(4) Steel arch - AW 33-15-63

(5) Steel arch - AW 33-15-64 (Figure 11)

(6) Steel oval arch - 33-15-73

(7) Semicircular mounded concrete - 652 series

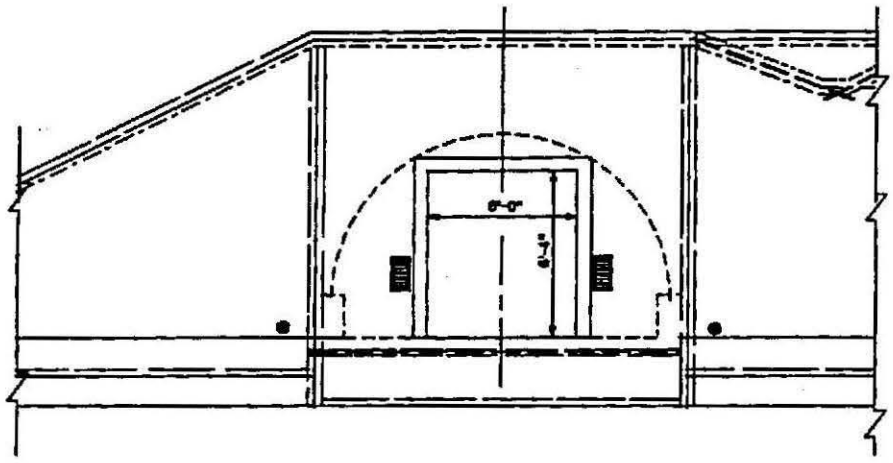


FIGURE 4. EARTH COVERED STEEL ARCH MAGAZINE

DRAWING NUMBER	33-15-65
ISSUE DATE	MARCH 1963
DIMENSIONS	WIDTHS: 8'-0", 10'-0", 12'-0" AND 14'-0" VARIABLE LENGTH TO 27' MAX
DOOR	HINGED, DOUBLE-LEAF 6'-0" x 6'-4"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP (MIL-H-29181)
GENERAL FEATURES	1. HEADWALL - 1'-0" THICK REINFORCED CONCRETE 2. BACKWALL - 1'-0" THICK REINFORCED CONCRETE 3. ARCH - 8 GAUGE CORRUGATED STEEL
COMMENT	HEADWALL NOT EQUIVALENT IN STRENGTH TO 33-15-74 OR LATER DEVELOPED STANDARD MAGAZINE
DDESB APPROVAL DATE	15 MARCH 1965

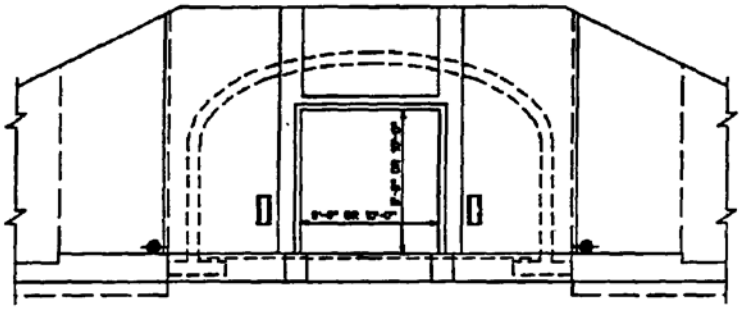


FIGURE 5. MAGAZINE, CONCRETE, OVAL-ARCH, EARTH-COVERED

DRAWING NUMBER	33-15-74
ISSUE DATE	APRIL 1979
DIMENSIONS	25'-0"Wx14'-0"H LENGTH VARIES: 60'-0" TO 90'-0"
DOOR	SLIDING, 8'-0"x8'-0" OR 10'-0"x10'-0"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP NOT SPECIFIED
GENERAL FEATURES	1. WALLS - 1'-0" THICK REINFORCED CONCRETE 2. ARCH - 1'-0" THICK REINFORCED CONCRETE 3. PILASTERS - 2'-6"x1'-10" AT DOOR JAMBS
COMMENT	RECOMMENDED FOR NEW CONSTRUCTION. THE 8' VERTICAL WALL PROVIDES EFFICIENT AMMUNITION STORAGE
DDESB APPROVAL DATE	22 JULY 1980

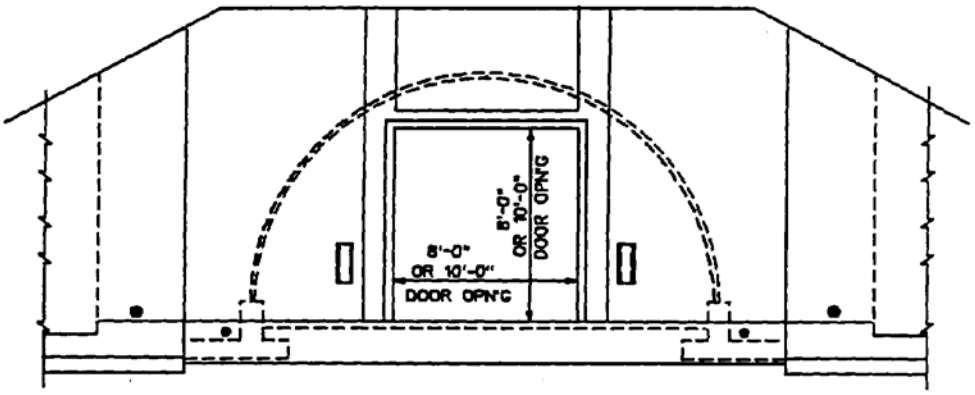


FIGURE 6. MAGAZINE, STEEL, SEMICIRCULAR-ARCH, EARTH-COVERED

DRAWING CODE	421-80-01
ISSUE DATE	MARCH 1963
DIMENSIONS	25'-0"W x 14'-0"H LENGTH VARIES: MAX. 89'-0"
DOOR	SLIDING, 8'-0" x 8'-0" OR 10'-0" x 10'-0"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP (MIL-H-29181)
GENERAL FEATURES	1. HEADWALL - 1'-0" THICK REINFORCED CONCRETE 2. REARWALL - 1'-0" THICK REINFORCED CONCRETE 3. ARCH - 1 GAUGE CORRUGATED STEEL FOR 2" DEEP OR 5½" DEEP ARCHES 4. PILASTERS- 1'-10" x 2'-6" AT DOOR JAMBS
DDESB APPROVAL DATE	02 OCTOBER 1987

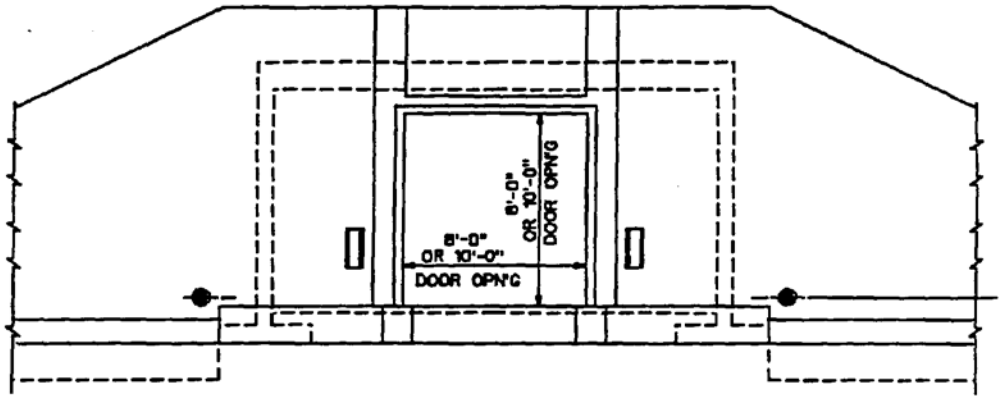


FIGURE 7. STEEL AND CONCRETE BOX MAGAZINE, EARTH-COVERED

DRAWING CODE	STD 421-80-02
ISSUE DATE	JUNE 1993
DIMENSIONS	24'-0"Wx11'-2"H LENGTH VARIES: MAX. 90'-0"
DOOR	SLIDING, 8'-0"x8'-0" OR 10'-0"x10'-0"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP (MIL-H-29181).
GENERAL FEATURES	1. ROOF - 1'-6" THICK REINFORCED CONCRETE 2. WALLS - 10" THICK BFR PANELS 3. HEADWALL - 10" THICK BFR PANELS 4. PILASTERS - 2'-0"x2'-6" REINFORCED CONCRETE 5. WINGWALLS - BFR PANELS
COMMENT	BFR (BLAST AND FRAGMENT RESISTANT) PANELS ARE PATENTED
DDESB APPROVAL DATE	22 FEBRUARY 1993

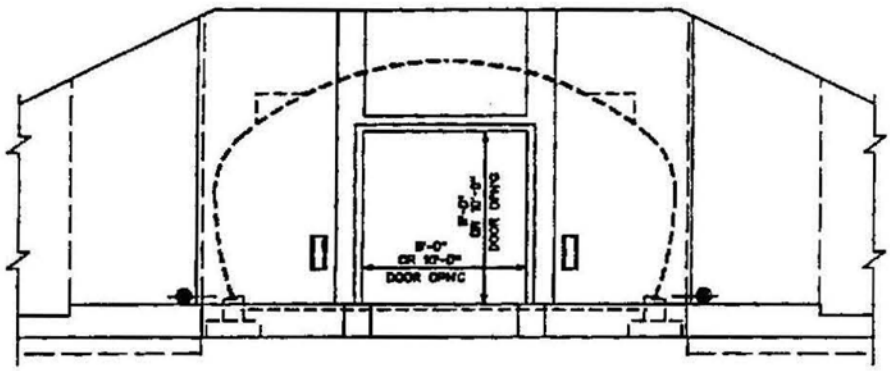


FIGURE 8. MAGAZINE, STEEL, OVAL-ARCH, EARTH-COVERED

DRAWING CODE	STD 421-80-03
ISSUE DATE	APRIL 1993
DIMENSIONS	25'Wx14'-5"H , LENGTH VARIES 21'-0" TO 89'-0"
DOOR	SLIDING, 8'x8' OR 10'x10'
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP (MIL-H-29181)
GENERAL FEATURES	1. HEADWALL - 1'-0" THICK REINFORCED CONCRETE 2. BACKWALL - 1'-0" THICK REINFORCED CONCRETE 3. ARCH - 1 GA. CORRUGATED PLATE 4. PILASTERS - 2'-6"x1'-10" AT DOOR JAMBS
COMMENT	THIS MAGAZINE REPLACES 33-15-73
DDESB APPROVAL DATE	28 DECEMBER 1992

MAG03S2.DGN

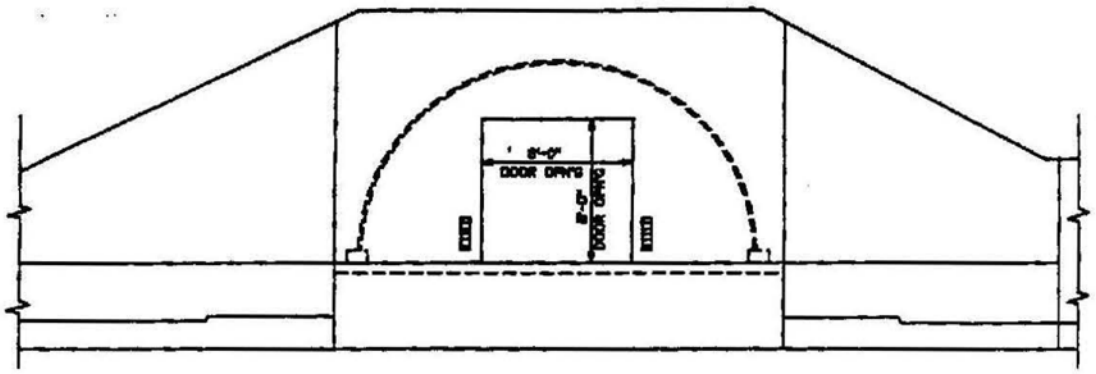


FIGURE 9. MAGAZINE, MOUNDED CONCRETE IGLOO

STANDARD MAGAZINE	33-15-06
ISSUE DATE	AUGUST 1951
DIMENSIONS	26'-6"Wx12'-9"H LENGTH VARIES: 81'-0" MAXIMUM
DOOR	HINGED, DOUBLE-LEAF 8'-0" x 8'-0"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	NONE
GENERAL FEATURES	1. HEADWALL- 1'-0" THICK REINFORCED CONCRETE 2. REARWALL - 8" THICK REINFORCED CONCRETE 3. ARCH-THICKNESS VARIES, 6" @ CROWN 1'-4" @ BASE 4. PILASTERS- 1'-6" x 3'-4¾" AT DOOR JAMBS
COMMENT	THIS MAGAZINE SUPERSEDED DWGS 652-686 THRU 652-692 & 33-15-01
DDESB APPROVAL DATE	29 JULY 1955

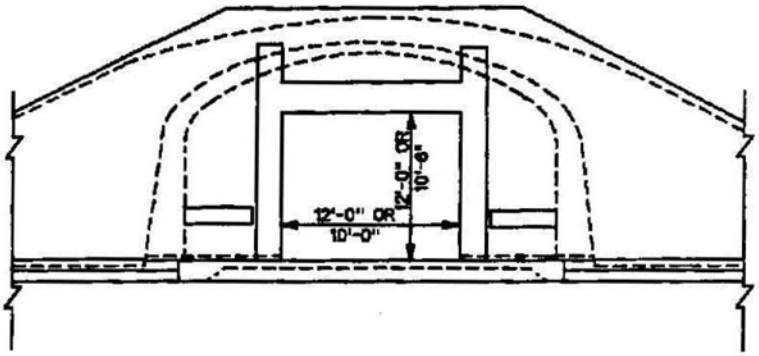


FIGURE 10. MAGAZINE, STRADLEY TYPE, EARTH-COVERED

DRAWING NUMBER	33-15-61
ISSUE DATE	DECEMBER 1959
DIMENSIONS	25'-0"Wx14'-0"Hx80'-0"L
DOOR	SLIDING, 10'-0"x10'-6" OR 12'-0"x12'-0"
EXPLOSIVE LIMIT	500,000 LBS. (NEW)
PHYSICAL SECURITY	NONE
GENERAL FEATURES	1. HEADWALL - 1'-0" THICK REINFORCED CONCRETE 2. REARWALL - 10" THICK REINFORCED CONCRETE 3. PILASTERS - 2'-4"x1'-8" AT DOOR JAMBS
COMMENT	THIS MAGAZINE REPLACES "YURT" MAGAZINE YT-106 THRU YT-111
DDESB APPROVAL DATE	30 DECEMBER 1959

MAG033.DGN

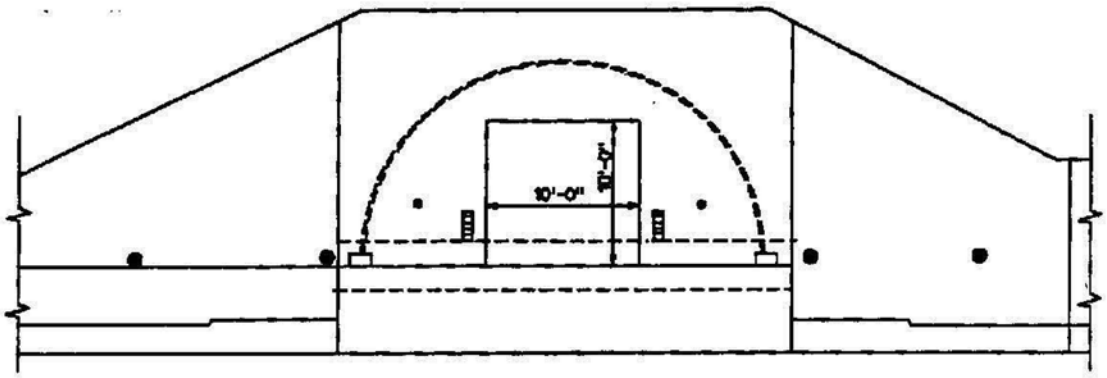


FIGURE 11. IGLOO, STORAGE, STEEL ARCH - EARTH MOUNDED

DRAWING NUMBER	AW 33-15-64
ISSUE DATE	MAY 1963
DIMENSIONS	25' x 14'-4"H x 59'L
DOOR	HINGED, DOUBLE-LEAF 10'x10'
EXPLOSIVE LIMIT	500,000 LBS (NEW)
PHYSICAL SECURITY	NONE
GENERAL FEATURES	1. REAR WALL- 1'-0" THICK REINFORCED CONCRETE 2. ARCH- 1 GA CORRUGATED STEEL 3. HEADWALL- 1'-0" THICK REINFORCED CONCRETE 4. PILASTERS- NONE
COMMENTS	1. HEADWALL NOT EQUIVALENT IN STRENGTH TO 33-15-74 OR LATER DEVELOPED STANDARD MAGAZINES
DDESB APPROVAL DATE	11 MARCH 1966

2-4. Site-Adaptation. Standard magazines are meant to be site-adapted, that is, tailored to the peculiarities at each particular location. For magazines, this tailoring mainly involves the foundation and the drainage system. For instance, if the soil bearing pressures at the construction location is below the design value, then an increase in the footing width is necessary. Also, a deep versus a shallow foundation is influenced by the frost penetration depth at the particular site. Site-adaptation also includes determining magazine length and deciding whether ventilators are required. The protective construction of the magazine (arch, headwall and door) must remain unchanged. The 2-foot minimum earth cover must also be maintained.

2-5. Changes to Standard Designs. changes to standard designs, other than site adaptation, should not be made without coordination with the DDESB. Any change will invalidate the DDESB's approval and result in the magazine being considered non-standard. This may require greater Q-D separations for those magazines in certain situations.

2-6. DDESB Approval. Site plans for construction projects containing magazines must be submitted in accordance with AR 385-60 for review and approval by the DDESB for:

a. New construction.

b. Changes in utilization of facilities or mission affecting Q-D requirements.

c. Major modification to facilities.

2-7. Specifications. Specifications have been developed for each standard design, and are available with the drawings. Users can obtain a set of these specifications for the construction project with a request for the drawings. Deviations from these specifications may compromise the quality of the constructed project, and therefore must not be made. Design analyses may be requested if required.

CHAPTER III

MISCELLANEOUS CONSIDERATIONS

3-1. Earth Cover. Material for earth cover over magazines should be reasonably cohesive (solid or wet clay, or similar types of soil may not be used as they are too cohesive), free from deleterious organic matter, trash, debris, and stones heavier than 10 pounds or larger than 6 inches in diameter. The larger stones should be limited to the lower center of fills and will not be used for earth cover over magazines. Compaction and surface preparation should be provided, as necessary, to maintain structural integrity and avoid erosion. When it is impossible to use a cohesive material, for example, in sandy soil, the earth cover over magazines should be finished with a suitable material to ensure structural integrity. The minimum earth cover over the top of the magazine should be 2 feet, with a slope of 2 horizontal and 1 vertical. periodic maintenance must be performed to ensure restoration of erosion of cover below the 2-foot depth requirement. The earth-cover over and around the magazine is a critical element of the standard design. It provides some confinement and tends to directionalize the explosive force both upward and outward from the door end of the donor magazine. The cover over receiver magazines resists fragment penetrations and provides mass to the arch to resist the blast pressure. Where practical, earth cover should be seeded to prevent soil erosion. Where rainfall is insufficient to maintain grass cover, soil stabilization methods should be used.

3-2. Waterproofing. provisions are made in the standard magazine designs to ensure watertightness of the magazine. The type of magazine (steel or concrete) generally dictates the type of waterproofing used. An elastomeric membrane is most suitable on concrete arches, and a bituminous waterproofing is suitable on steel magazines. Moisture proofing difficulty is increased with steel-arch magazines because of the many lineal feet of joints.

3-3. Drainage Systems. Drainage systems are provided around the magazines to channel the water away from the structure. For concrete magazines, the drainage composite system is recommended. The older sand-gravel filter system is more costly and should be avoided, except for the steel arch where it is recommended due to the corrugated configuration.

3-4. Doors. Magazine doors are either of the swinging or the sliding type. Sliding doors are generally specified on large magazines, and swinging doors on smaller magazines. Doors are

designed to withstand the dynamic forces from an explosion in an adjacent magazine and, therefore, are a critical element of the magazine design. These doors do not provide resistance to the effects of an explosion within the magazine.

3-5. Utilities and Power. The only utility usually required at a magazine site is electricity. This power is needed for lights at individual magazines, for perimeter lighting, and possibly for operation of electronic security equipment.

3-6. Road Network. The road network is not part of the standard design. The user must provide service to each magazine as part of the site adaptation process. vehicle size and wheel loads should be stated in the project development documentation. Forklift loads are usually the most critical. Two-lane roads are seldom required, except at the site entrance.

3-7. Aprons. Each magazine has an apron in front of its door to allow for loading and unloading. The aprons slope away from the door for drainage. Changes to the apron configuration to suit user needs will not compromise the pre-approved status of the standard design.

3-8. Retaining Walls (Wing walls). Retaining walls are for the sole purpose of retaining the earth fill away from the magazine doors. Construction type may vary from reinforced concrete, precast concrete to reinforced-earth systems. The slope of these walls should be 2 horizontal to 1 vertical.

3-9. Ventilation. Standard magazine designs usually include provisions for ventilation. Ventilation is provided by louvered openings in the headwall and ventilator stacks at the rear walls. Magazines intended for weapons storage containing certain active materials must be ventilated. Otherwise, louvers and ventilators are optional. Their necessity and size should be determined during the site adaptation based on material to be stored and geographical location.

3-10. Security. The security at a magazine complex is an integration of physical measures, equipment, and operational procedures. procedures are left to the using agency, since they are beyond the control of the designer. Limited security features included in the standard designs are high security hasp requirements at magazine doors (MIL-H-29181), steel bars at openings, shrouded ventilators, and basic provisions, i.e., steel conduit for electronic security equipment.

3-11. Cathodic protection. Cathodic protection may be required for steel-arch magazines and should be considered in areas where

galvanic action in some types of soils is likely to occur.

3-12. Lightning protection. Standard magazine designs include an integral system of lightning protection. The system consists of air terminals, roof conductors, down conductors, ground connections, and ground, electrically interconnected to form the shortest distance to ground. Lightning protection requirements are clearly described in each magazine specifications.

3-13. Mixing of Standard and Non-Standard Magazines. Mixing of standard and non-standard magazines is not cost effective and, therefore, is discouraged. The element that greatly influence the magazine classification (standard or non-standard) is the headwall and its door. Since the headwall and door cost is a small portion of the overall cost of the magazine, a greater benefit is realized from the increased storage capacity in standard magazines.

CHAPTER IV

NON-STANDARD MAGAZINES

4-1. General. Non-standard earth covered magazines are those not listed in AR 385-64. Non-standard magazines are approved for all quantities of explosives up to 250,000 pounds. Earth cover over the top of these magazines should be equal to or greater than that required for standard magazines.

4-2. Evaluating Non-Standard Magazines. Th 5-1300 should be used to design or evaluate the blast resistance of non-standard magazines. Headwalls and doors of standard magazines are designed for 100 psi overpressure and 22 millisecond load duration (equivalent impulse of 1,100 psi-millisecond). Magazines not classified as standard must be analyzed for this loading to determine whether storage capacity can be increased to 500,000 pounds. A guide prepared by the U.S. Army Engineer Division, Huntsville provides procedures for determining the adequacy of the non-standard headwalls and doors to withstand blast effects from a donor explosive source.[1] The guide is based on TM 5-1300 criteria and magazine tests.

4-3. Hybrid Magazines. Hybrid magazines have been developed and used by installations to meet specific needs. As stated above, these magazines use components from more than one standard magazine. This type of magazine is not considered preapproved for construction and, therefore, requires DDESB approval if it is to be sited as a standard magazine. This magazine type offers no real advantage over standard magazines and their use is discouraged.

4-4. Preapproved Non-Standard Magazine. Magazine 422-15-01 (Figure 12) is a reinforced concrete cubicle magazine which is preapproved for a limited storage of 425 pounds. This magazine is approved for siting at the intermagazine separation distance of standard magazines.

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[1]U.S. Army Engineer Division, Huntsville, HNDED-CS-93-4, "Guide for evaluating Blast Resistance of Non-Standard Magazines", December 1994.

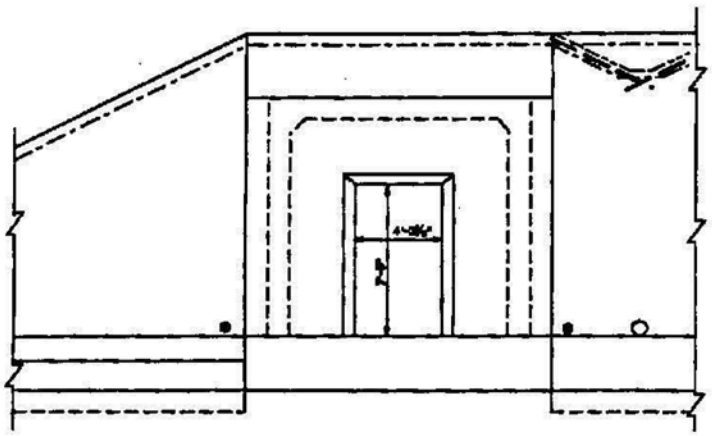


FIGURE 12. MAGAZINE, CONCRETE CUBICLE, EARTH-COVERED

DRAWING CODE	STD 422-15-01
ISSUE DATE	JUNE 1987
DIMENSIONS	10'W x 10'L x 10'H
DOOR	HINGED, SINGLE-LEAF 4'-3½"x7'-3"
EXPLOSIVE LIMIT	425 LBS (NEW)
PHYSICAL SECURITY	HIGH SECURITY HASP (MIL-H-29181)
GENERAL FEATURES	1. WALLS: 1'-0" THICK REINFORCED CONCRETE 2. ROOF: 1'-0" THICK REINFORCED CONCRETE
DDESB APPROVAL DATE	03 MARCH 1988

MAGD04.DGN

Appendix V.C – Tanks and Tank Systems
Not Applicable
40 CFR Part 264 Subpart J applies to owners or operations of facilities that use tank systems for storing or treating hazardous waste. ESD does not use tank systems for storing or treating hazardous waste.

Appendix V.D – Surface Impoundments
Not Applicable
ESD has no surface impoundments.

Appendix V.E – Waste Piles
Not Applicable
ESD has no waste piles.

Appendix V.F – Land Treatment Units
Not Applicable
ESD has no land treatment units.

Appendix V.G – Landfills
Not Applicable
ESD has no landfills.

Appendix V.H – Incinerators
Not Applicable
ESD has no incinerators.

Appendix V.I – Boilers and Industrial Furnaces
Not Applicable
ESD has no boilers or industrial furnaces.

Appendix V.J – Drip Pads
Not Applicable
ESD has no drip pads.

Section V – Engineering Reports

Appendix V.K – Miscellaneous Units (Rocket Motor Ops Building)

40 CFR §264.600-§264.602, and §270.23

1.0 INTRODUCTION

The Rocket Motor Ops Building will be used to prepare materials for processing in the Hybrid Burn Chamber (HBC). The Rocket Motor Ops Building is subject to 40 CFR Part 264 Subpart X (40 CFR §264.600-§264.603) – Miscellaneous Units. 40 CFR §264.601 requires that a miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Site-specific information pertaining to the hydrologic and geologic characteristics, groundwater flows, patterns of land use, precipitation patterns, etc. are required by 40 CFR §264.601 in order to ensure that the site is suitable to ensure protection of human health and the environment. Detailed site-specific information is provided in *Appendix II – Facility Sitting Criteria* of the Part B Application.

The Rocket Motor Ops Building will be located towards the southern portion of the main facility property, near the intersections of N Montague Street and Pine Street in Hooks, Texas (Bowie County). The exact location is described in Section II of the Part A Application Form – *Facility Background Information* and in Section II of the Part B Application – *Facility Siting Criteria*. A map of the location is shown in the attachments to the Part A Application Form.

Table 1, *Table of Information Requirements for Miscellaneous Units*, presents the regulatory references for the information required to be submitted for miscellaneous units in 40 CFR §270.23 and 40 CFR §264.600-§264.602 and the section of this document that addresses the specific requirement. Some information is addressed in other portions of this permit application. A statement indicating which section the information can be found in is provided. Any additional information that is not covered in other portions of this permit application is presented in this document.

40 CFR §264.601 states that permit terms and provisions must include those requirements that are appropriate for the miscellaneous unit being permitted. There are no performance standard requirements for preparation buildings. The most applicable performance standards would be 40 CFR Part 264 Subpart I (Use and Management of Containers) and 40 CFR §270.15 (Specific Part B Information Requirements for Containers). Therefore, the requirements listed in 40 CFR §264.171-§264.177 and in 40 CFR §270.15 are also included in Table 1.

Table 1
Table of Information Requirements for Miscellaneous Units

Regulatory Citation (40 CFR)	Description	Section Requirement is Addressed
§270.23(a)(1)	Physical characteristics, materials of construction, and dimensions of the unit	Section 2.1
§270.23(a)(2)	Description of how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of §264.601 and §264.602	Section 2.1, Section 2.2, Section 5.0, Section 7.0
§270.23(a)(3)	For disposal units, plans for post-closure requirements	N/A
§270.23(b)	Hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site	Section 1.0
§270.23(c)	Information on potential pathways of exposure and on the potential magnitude and nature of such exposures	Section 3.0
§270.23(d)	For any treatment unit, a demonstration of the effectiveness of the treatment based on laboratory or field data	N/A
§270.23(e)	Additional information determined by the Director to be necessary	N/A
§264.601(a)	Prevention of releases due to migration of waste constituents in the groundwater or subsurface environment	Section 3.2
§264.601(b)	Prevention of releases of due to migration of waste constituents in surface water, or wetlands, or on the soil surface	Section 3.2
§264.601(c)	Prevention of releases due to migration of waste constituents in the air	Section 3.1
§264.602	Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies	Section 5.0
§264.171	If a container holding hazardous waste is not in good condition or if it begins to leak, the hazardous waste must be transferred from this container to a container that is in good condition	Section 5.0
§264.172	Hazardous waste must be stored in a container that is compatible with, the hazardous waste to be stored	Section 5.0
§264.173(a)	A container holding hazardous waste must be closed during storage, except when adding or removing waste	Section 5.0
§264.173(b)	A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak	Section 5.0

Table 1
Table of Information Requirements for Miscellaneous Units (continued)

Regulatory Citation (40 CFR)	Description	Section Requirement is Addressed
§264.174	Inspections	Section 5.0
§264.175(a)	Containment system	N/A, see §264.175(c)
§264.175(b)	Containment system design	N/A, see §264.175(c)
§264.175(c)	Storage areas that store containers holding only wastes that do not contain free liquids do not need to have a containment system	Section 4.0
§264.175(d)	Applicable to waste codes F020, F021, F022, F023, F026, and F027	N/A
§264.176	Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line	Section 6.0
§264.177	Incompatible wastes	Section 6.0
§270.15(a)	Containment system description	N/A, see Section 4.0
§270.15(b)	Requirements for storage of wastes that do not contain free liquids	Section 4.0
§270.15(c)	Sketches, drawings, or data showing location of buffer zone for containers holding ignitable or reactive wastes	Section 6.0
§270.15(d)	Incompatible waste requirements	Section 6.0
§270.15(e)	Air emission control equipment	N/A

2.0 DESCRIPTION OF THE ROCKET MOTOR OPS BUILDING

The purpose of the Rocket Motor Ops Building is to prepare materials for processing in the Hybrid Burn Chamber (HBC). The Rocket Motor Ops Building is comprised of two separate sections: the Rocket Motor Prep Area and the Segmenting Area. Energetic materials are transferred from the storage magazines to the Rocket Motor Prep Area of the building via flatbed trucks. Materials are removed from the flatbed trucks via forklift and are transported to the Rocket Motor Prep Area of the building. Within the Rocket Motor Prep Area, the energetic materials are taken out of the packaging. If the rocket motors require segmenting prior to processing, they are placed into cradles and are transported via pallet jacks to the Segmenting Area of the building where they are segmented into smaller pieces using a water-cooled band saw. After they are segmented, they are sent to the HBC for processing.

2.1 Physical Characteristics, Materials of Construction, and Dimensions

The Rocket Motor Ops Building was built in 1942, with modifications planned in 2023. After modifications, the building's footprint will be approximately 407 feet by 70 feet with 16-foot walls. It is a one-story building with poured and polished concrete floors and has no basement. The Rocket Motor Ops Building has two separate areas – the Rocket Motor Prep Area and the Segmenting Area. The two separate areas are connected via enclosed breezeways. The walls of the Rocket Motor Prep Area are concrete and brick. The walls of the Segmenting Area are steel, concrete and brick. The walls on the north and south side of the Segmenting Area are designed to absorb fragments and control effects of potential energetic events. The floors are solid concrete and are designed not to allow for explosives to lodge into cracks. The floors and work surfaces are non-sparking and the facility utilizes grounding mechanisms for all equipment and work surfaces. The building will contain work benches for tools.

A general layout of the Rocket Motor Ops Building is included in *Appendix XIII – Confidential Material*.

2.2 Operation, Monitoring, and Maintenance

2.2.1 Operation

Energetic material prepared for processing in the Rocket Motor Ops Building must be processed in the HBC during the same operating shift. No unprocessed energetic material will be left in the Rocket Motor Ops Building when the HBC is not in operation.

Operating instructions, start-up and shutdown procedures, preventive maintenance, servicing instructions, and troubleshooting methods will be developed based on manufacturer

recommendations, processing needs, and to ensure protection of human health and the environment.

2.2.2 Monitoring

ESD will have electronic surveillance equipment located throughout the Rocket Motor Ops Building to include at the Rocket Motor Prep Area and the Segmenting Area. Additionally, ESD will have a Human Machine Interface (HMI) that monitors all HBC system readings and operating parameters to ensure safe conditions. HBC process cycles are not allowed to commence if all safe conditions are not met or remedied. The HMI is located in the Range Control Room, which is located to the east of the Rocket Motor Ops Building.

2.2.3 Maintenance

Maintenance will be performed in accordance with the manufacturer recommendations for the specific equipment used within the building. For example, the water-cooled band saw's maintenance will follow the servicing instructions given by the manufacturer. Additionally, any maintenance that needs to be performed as a result of an inspection will be conducted. Any cracks in the flooring will be repaired and sealed.

3.0 PATHWAYS OF EXPOSURE

The possibility for release exists at any facility that handles hazardous wastes. However, multiple precautions have been taken to minimize risks, exposure, and releases. Due to the nature of the wastes, the manner in which hazardous wastes are stored and handled, the equipment used, the building designs, and the operational practices of the facility, the likelihood of a release of hazardous wastes or hazardous waste constituents is remote. Training on the proper methods of packaging, storing and transporting energetic materials is provided to employees who handle energetic materials. Inspections are conducted on a regular basis to ensure that all areas where energetic materials are stored or handled are safe and that facility operating procedures are being followed.

3.1 Air Pathway of Exposure

One potential pathway of exposure to humans or environmental receptors is through the air. However, the operations within the Rocket Motor Ops Building are not expected to contribute to air emissions from the facility due to their management by the building enclosure. The only activity that could result in airborne contamination would be the use of a water-cooled band saw. However, airborne contaminates generated in the building are expected to be insignificant and managed within the enclosed building. The building's HVAC system filter is designed to collect

the small amount of airborne contaminants resulting from these types of activities and would not result in the release of contaminants outside of the building.

3.2 Surface Water, Groundwater, or Soil Pathways of Exposure

Another potential pathway of exposure to humans or environmental receptors is through surface water, groundwater, or soil. Surface water, groundwater, or soil could be affected if hazardous wastes were spilled or if run-off from hazardous waste areas occurred. However, the potential for exposure from spills and/or runoff is minimized due to the types of materials handled and effective management and handling procedures, as described below.

3.2.1 Spills

The Rocket Motor Ops Building is routinely inspected to ensure that no spillage has occurred. If spillage does occur, the structure is equipped with concrete floors with a raised entrance to prevent the material from leaving the building and contaminating the soil. Any spills in the building will be cleaned up immediately.

3.2.2 Precipitation Run-on or Runoff

The Rocket Motor Ops Building is a covered structure protected from precipitation and has concrete floors with a raised entrance that prevents precipitation or run-on from entering the building.

These measures guard against the release of hazardous waste to the surface water, groundwater, or soil.

4.0 SECONDARY CONTAINMENT

As discussed in *Appendix IV.D – Waste Analysis Plan*, the information used to characterize the energetic materials demonstrates that no free liquids are present. Since the Rocket Motor Ops Building will not have containers with free liquids, secondary containment is not required by 40 CFR §264.175(c) as long as:

- The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or
- The containers are elevated or are otherwise protected from contact with accumulated liquid.

The Rocket Motor Ops Building is an enclosed building and there is no possibility of precipitation or run-on entering the building. Additionally, the energetic materials contain no free liquids.

Therefore, there is no potential for liquid spills or leaks. All containers not currently being prepared for processing are kept on pallets in order elevate them above the floor surface in the event of an accumulated liquid, such as condensation, being on the floor.

5.0 INSPECTIONS AND CONTAINER MANAGEMENT

Inspections are described in the Inspection Schedule in *Appendix III.D – Inspection Schedule*. The Rocket Motor Ops Building will be inspected when energetic waste is present. Daily visual inspections (when in operation) will be conducted to look for spills, loose debris, and improperly stored materials.

The frequency of inspections were selected based on regulatory requirements or based on the timeframe determined to be adequate to identify problems in time to correct them before they harm human health or the environment, whichever is shorter. A checklist of inspected items will be created and inspections will be recorded and filed as described in Section 4.0 of *Appendix III.D – Inspection Schedule*.

Containers are inspected for leaks or deterioration caused by corrosion or other factors. In accordance with 40 CFR §264.171, if a container holding hazardous wastes is not in good condition or if it begins to leak, the hazardous waste will be removed from the container and placed into another container that is in good condition. The defective container will not be used to manage hazardous waste until the defect is repaired.

Materials are stored in the original shipping containers which are designed to safely hold the energetic material until they are ready to be prepared for processing. The containers are compatible with their contents and there is no potential for the energetic material to react with the containers. All containers are kept closed until they are ready to be prepared for processing. Containers are not opened, handled, or stored in a manner which may rupture the container or cause it to leak.

6.0 HANDLING OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

Ignitable and reactive waste are handled at this facility and are separated and protected from open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. “No smoking” signs are conspicuously placed wherever there is a hazard from reactive waste. In accordance with 40 CFR §264.176, the Rocket Motor Ops Building is located at least 15 meters (50 feet) from the facility’s property line. Figure V.A.1 in *Appendix V.A – General Engineering Reports* shows the distance from the Rocket Motor Ops Building to the nearest property line.

The energetic materials are not incompatible with each other. Each type of energetic material is stored in its own sealed container and is not mixed with another type of energetic material.

7.0 CLOSURE

The Rocket Motor Ops Building will be closed to comply with the requirements of 40 CFR §264.601 and §264.602 in a manner that will ensure protection of human health and the environment. The information on closure of the Rocket Motor Ops Building can be found in *Appendix VII.A - Closure Plan*.

8.0 CONSTRUCTION SCHEDULE

The Rocket Motor Ops Building is an existing structure, but modifications began in Spring 2023 to accommodate the HBC installation near the southern portion of the building and to expand the Rocket Motor Ops Building further north. A general construction schedule is included below.

Tasks	Days from Permit Issuance
Permit Issuance	0
Modify southern portion of building to accommodate HBC installation	Currently on-going; will be completed prior to permit issuance
Expand northern portion of the building	Currently on-going; will be completed prior to permit issuance
Construction of interior bays	Currently on-going; will be completed prior to permit issuance
Rocket Motor Ops Building construction complete	Currently on-going; will be completed prior to permit issuance
Rocket motor segmenting equipment installed	1-365 days after permit issuance

Section V – Engineering Reports

Appendix V.K – Miscellaneous Units (Hybrid Burn Chamber)

40 CFR §264.600-§264.602, and §270.23

1.0 INTRODUCTION

The Hybrid Burn Chamber (HBC) is subject to 40 CFR Part 264 Subpart X (40 CFR §264.600-§264.603) – Miscellaneous Units. *Table V.K – Miscellaneous Units* lists information for the HBC. The HBC is located, designed, constructed, operated, maintained, and will be closed in a manner that will ensure protection of human health and the environment. Site-specific information pertaining to the hydrologic and geologic characteristics, groundwater flows, patterns of land use, precipitation patterns, etc. are required by 40 CFR §264.601 in order to ensure that the site is suitable to ensure protection of human health and the environment. Detailed site-specific information is provided in Section II of the Part B Application in *Appendix II – Facility Sitting Criteria*.

The HBC and the associated air pollution control system will be located towards the southern portion of the main facility property, near the intersections of N Montague Street and Pine Street in Hooks, Texas (Bowie County). The exact location is described in Section II of the Part A Application Form – *Facility Background Information* and in Section II of the Part B Application – *Facility Siting Criteria*. A map of the location is shown in the attachments to the Part A Application Form.

Table 1, *Table of Information Requirements for Miscellaneous Units*, presents the regulatory references for the information required to be submitted for miscellaneous units in 40 CFR §270.23 and 40 CFR §264.600-§264.602 and the section of this document that addresses the specific requirement. Most of the information for this miscellaneous unit is addressed in other portions of this permit application. For information that is addressed in another portion of this permit application, a statement indicating which section the information can be found in is provided. Any additional information that is not covered in other portions of this permit application is presented in this document.

Table 1
Table of Information Requirements for Miscellaneous Units

Regulatory Citation (40 CFR)	Description	Section Requirement is Addressed
§270.23(a)(1)	Physical characteristics, materials of construction, and dimensions of the unit	Section 2.6
§270.23(a)(2)	Description of how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of §264.601 and §264.602	Section 1.0
§270.23(a)(3)	For disposal units, plans for post-closure requirements	N/A
§270.23(b)	Hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site	Section 1.0
§270.23(c)	Information on potential pathways of exposure and on the potential magnitude and nature of such exposures	Section 4.0
§270.23(d)	For any treatment unit, a demonstration of the effectiveness of the treatment based on laboratory or field data	Section 2.8
§270.23(e)	Additional information determined by the Director to be necessary	N/A
§264.601(a)	Prevention of releases due to migration of waste constituents in the groundwater or subsurface environment	Section 4.2
§264.601(b)	Prevention of releases of due to migration of waste constituents in surface water, or wetlands, or on the soil surface	Section 4.2
§264.601(c)	Prevention of releases due to migration of waste constituents in the air	Section 4.1
§264.602	Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies	Section 2.7 Section 6.0

2.0 DESCRIPTION OF THE HYBRID BURN CHAMBER SYSTEM

Energetic materials are transferred from the storage magazines to the Rocket Motor Ops Building, where they are prepared for processing in the HBC. The HBC provides demilitarization for numerous munition items such as rocket motors, flares, smoke munitions, and other munitions that are ignitable and non-mass detonating. After the materials are prepared for processing, they are transferred through the Rocket Motor Ops Building to the feed sled of the HBC. The HBC system is a contained burn system followed by air pollution control equipment.

The HBC system was designed by El Dorado Engineering (EDE). EDE has designed other thermal treatment facilities which are currently in operation. Examples of these facilities include the Ammonium Perchlorate Rocket Motor Destruction (ARMD) facility at Letterkenny Army Depot in PA and the Camp Minden M6/CBI Bulk Propellant facility at Camp Minden, LA. EDE designs have proven control technologies. The ESD HBC system is a hybrid-like version of the EDE ARMD and Camp Minden designs.

Contained burn technology can be thought of as "open burning indoors." This proven technology provides a modern and environmentally responsible alternative to replace open burning. These robust systems are designed to be simple, safe, and flexible from an operations standpoint, while limiting pollution and potentially harmful emissions which are a concern from open burning operations.

Materials are prepared in batches and are ignited in a manner similar to traditional open burning operations, maintaining simplicity and flexibility. The exhaust gasses, however, are contained and cleaned prior to release to protect human health and the environment. The design of the air pollution control system (APCS) to scrub the off gases is tailored to the chemistry of the materials being processed.

The basic components of the contained burn system include the feed system, the HBC, an ignition system and an APCS. Ancillary systems include an HBC wash system and utilities. The components and systems presented in the following sections are used to achieve energetic destruction and pollution abatement.

2.1 Feed System

The feed system design is customized based on the type and quantity of material to be processed to maximize throughput, waste type flexibility, and minimize personnel handling of the waste material, thus minimizing risk. All feeding into the HBC is performed by operators in the control room (Range Control) which is separated from the HBC by a substantial barricade wall designed

to prevent injury to operators. Safety systems throughout the HBC include a series of interlocks and alarms for abnormal conditions.

The feed system operates in a batch feed mode. Bulk materials are prepared for processing and are placed into a removable burn pan. Rocket motor components or other items that create thrust when burned are secured using a holding fixture to restrain the motor during firing. The burn pan or rocket motor is then remotely loaded into the HBC using an automated loading system. The material is ignited remotely. After thermal processing is complete, the burn pan is remotely extracted from the HBC.

2.2 Hybrid Burn Chamber (HBC)

The HBC is a steel pressure vessel specially designed and sized to contain the exhaust products generated from burning. It is designed to ensure both the safety of personnel and to protect equipment in the case of a maximum credible event. It is sized to provide proper combustion of the waste materials and to withstand the process operating pressures and temperatures.

2.3 Ignition System

An electrically actuated ignition source is incorporated in the contained burn system so that materials loaded for processing can be ignited remotely by an operator. The ignition system has several safety interlocks incorporated so ignition is only enabled when the system verifies that the material has been loaded, the HBC loading door is closed and sealed, and the APCS is operational. Once the chamber is closed and ignition initiated, the operators have no further active control.

2.4 Air Pollution Control System (APCS)

After processing of the energetic materials within the HBC, emissions are exhausted through a series of air pollution control equipment that make up the APCS. The APCS is tailored to the exact waste profile being processed. The APCS is designed to achieve low/non-detectable emission levels and is made up of the following components.

2.4.1 Afterburner

The purpose of the high temperature afterburner is to raise the temperature of the exhaust gases to provide complete combustion of any partially reacted species, volatile or semi-volatile organic compounds, or carbon monoxide. EDE's afterburner is designed to heat the exhaust up to the required minimum setpoint temperature with a minimum residence time of two seconds.

2.4.2 Evaporative Quench

An evaporative quench system is used to cool the exhaust gases downstream of the afterburner to the required temperature for subsequent pollution control elements, such as low temperature filtration units (e.g., baghouse). The evaporative quench operates by the controlled spray of water into the exhaust gas stream, which is metered to cool the gases to the desired temperature setpoint. The gas cooling system is designed with a well proven automated cleaning system and designed specifically for challenging applications to prevent bridging or plugging with particulate.

2.4.3 Cyclone Separator

A cyclone separator is used to remove larger particulate matter. Particulate is collected below the cyclone's hopper in a sealed disposable drum for convenient disposal.

2.4.4 Dry Sorbent Injection

A dry sorbent injection system is used when processing materials which produce significant quantities of acid gases. The dry sorbent injection system injects metered powdered caustic material upstream of the baghouse to remove and neutralize acid gases. Neutral salts are then collected as solid particulate in the baghouse. This system is not operational when processing materials which do not produce significant amounts of acid gas.

2.4.5 Baghouse

The baghouse is a fabric-filtration collector, used for efficient particulate cleansing of the gas stream. The baghouse is automatically cleaned via a reverse pulse air jet to ensure proper operation and low maintenance. Particulate is collected below the hopper in a sealed drum for convenient disposal.

2.4.6 HEPA Filter

A high efficiency particulate air (HEPA) filter is located downstream of the baghouse to provide ultra-high efficient >99.9 % particulate filtration. This also acts as a guard for downstream equipment (e.g., SCR) in the unlikely case a bag ruptures upstream. This removes particulate matter to levels below what normally exist in a home or office. This type of filtration is used in manufacturing clean rooms and hospitals.

2.4.7 Selective Catalytic Reduction (SCR) System

A selective catalytic reduction (SCR) system utilizes ammonia injection with a proprietary catalyst formulation to achieve better than 90% NOx reduction. The proprietary design used by EDE provides high-activity catalyst and low pressure drop resulting in more efficient NOx removal with lower energy consumption when compared to other commercial SCR NOx control technologies.

The catalyst provides for efficient removal of NOx at relatively low temperatures. This approach also provides an extra benefit of reducing dioxin or furan emissions, if they are present, which are actually reacted and eliminated by the catalyst in this system rather than collected as with other alternative technologies.

2.4.8 Induced Draft Fan/Stack

The induced draft (ID) fan provides negative pressure throughout the entire system and draws exhaust gases through the pollution control system to exit out the stack. When the fan is placed at the end of the equipment train, all vessels, joints, and equipment operate at negative pressure to minimize fugitive emissions. The gases are exhausted through a stack of appropriate height to protect personnel. The stack also includes sampling ports for continuous or periodic emission sampling.

2.5 HBC Wash System

This system provides for automated remote washing of the interior of the chamber to periodically remove ash or condensate materials from the chamber. The spray water is drained from the HBC and passes through a neutralization system to neutralize any acid present and a filter press system to remove solids. The filtered liquid stream can then be re-used for future HBC wash cycles or pumped into the evaporative quench system. Non-reused products from the wash process are characterized prior to final disposal off-site.

2.6 Physical Characteristics, Materials of Construction, and Dimensions

The HBC is a steel pressure vessel specially designed and sized to contain the exhaust products generated from burning. The specific design information for the HBC is considered CONFIDENTIAL information and more details, including a process flow diagram, are contained in *Appendix XIII – Confidential Material*. Non-confidential information is shown in Attachment V.K – HBC.

2.7 Operation, Monitoring, and Maintenance

Standard operating procedures will be developed by the facility and the manufacturer for the HBC and the associated air pollution control system (APCS). As part of the design process, the manufacturer is expected to perform a design hazards analysis on the unit and the anticipated operations. This analysis will identify scenarios that could result in a safety incident. From this design hazard analysis, appropriate administrative controls, procedures, and training will be identified and used in developing the standard operating procedures.

Operation

Operation for both the HBC and the associated APCS is performed in accordance with the manufacturer recommendations. Operating instructions, start-up and shutdown procedures, preventive maintenance, servicing instructions, and troubleshooting methods are based on manufacturer recommendations, processing needs, and ensure protection of human health and the environment.

The HBC feed process is fed by batch. Items are fed to the chamber and are allowed to consume themselves (in the manner in which they were originally designed) inside of the chamber. When operating conditions are within the specified ranges, the items are then removed to be replaced by the next batch or item. If conditions are incorrect for another batch based on the chamber sensors or APCS sensors, the batch is not fed or processed until conditions are remedied.

After being processed, the output stream from the HBC consist of inert motor casings and some recyclable materials. The inert motor casings are sent to an appropriate landfill off-site and recyclable materials are sent off-site for recycling.

A general overview of normal operation is provided below:

1. Materials are prepared for processing and placed into a burn pan or holding fixture.
2. The material to be processed for a given burn cycle is remotely loaded into the HBC.
3. The ignition source is activated remotely to promote combustion of the materials.
4. The materials burn inside the HBC which contains the exhaust gases.
5. The exhaust gases are metered through the APCS via induced draft from the (ID) fan and the HBC vent valve which meters exhaust gas flow.
6. When HBC pressure is confirmed to be negative relative to ambient, the HBC loading door is remotely opened. Fresh air is drawn into the HBC by the ID fan.
7. The processed materials can be inspected remotely via closed circuit television (CCTV).
8. Operators are allowed to remove the burn pan or rocket motor case from the loading system and place the next load for processing.
9. The cycle is repeated.

Monitoring

Since the HBC is subject to 40 CFR Part 264 Subpart X (40 CFR §264.600-§264.603) – Miscellaneous Units, other requirements for 40 CFR Part 264 Subpart O (Incinerators) or 40 CFR Part 63 Subpart EEE (HWC MACT) do not apply. However, continuous process monitoring, including monitoring of the operating parameter limits (OPLs) discussed in Section 3.0, is

conducted through the Human Machine Interface (HMI) located in the Range Control room. A series of computers and monitors displays information on the temperatures, pressures, and general process conditions of the HBC and APCS. The HMI has alarms and interlocks for normal and abnormal conditions of the equipment. By procedure, HBC process cycles are not allowed to commence if all safe conditions are not met or remedied.

Maintenance

Maintenance for both the HBC and the associated APCS is performed in accordance with the manufacturer recommendations.

2.8 Effectiveness of Treatment

Based on experience with similar techniques conducted at other facilities, there are no explosive components left after processing and the remaining material is no longer considered to carry the reactive waste code.

3.0 EMISSIONS TESTING AND COMPLIANCE STRATEGY

The HBC is not an incinerator and there is no controlled flame combustion. The HBC operation most closely resembles open burning/open detonation, but is more environmentally responsible. As opposed to open burning/open detonation, the HBC has the advantage of containing and cleaning the exhaust gases. Since ESD's technologies are non-incineration (RCRA 40 CFR Part 264 Subpart X) as opposed to incineration (40 CFR Part 264 Subpart O), the requirements of 40 CFR Part 63 Subpart EEE (HWC MACT) do not apply.

Tables V.K.2, V.K.3, V.K.4, and V.K.5 provide compliance information for the HBC. ESD will conduct a performance verification test on the HBC and the associated APCS in order to prove compliance with the emission limitations specified in Table V.K.4. The constituent feedrate limits will be established based on performance verification testing data and the operating parameter limits (OPLs) will be based on manufacturer's recommendations or design and safety information. These limits will ensure compliance with the emission limitations.

The constituent feedrate limits specified in Table V.K.3 will be in effect during the shakedown period (no more than 720 hours of operating before the performance verification test), during the performance verification test, and during the period of time after the performance verification test until the permit can be modified to reflect the results of the performance verification test. The constituent feedrate limits will be updated in Table V.K.2 based on performance verification testing and these constituent feedrate limits will be implemented at the time the performance verification test report is submitted.

A performance verification test plan will outline the purpose of the test, the operating conditions of the test, and the basis for how the constituent feedrate limits will be established. ESD will conduct the performance verification test before the HBC operates a total of 720 hours (shakedown period).

4.0 PATHWAYS OF EXPOSURE

The possibility for release exists at any facility that handles hazardous wastes. However, multiple precautions have been taken to minimize risks, exposure, and releases. Due to the nature of the wastes, the manner in which hazardous wastes are stored and handled, the equipment used, the building designs, and the operational practices of the facility, the likelihood of a release of hazardous wastes or hazardous waste constituents is remote. Training on the proper methods of packaging, storing and transporting energetic materials is provided to employees who handle energetic materials. Inspections are conducted on a regular basis to ensure that all areas where energetic materials are stored or handled are safe and that facility operating procedures are being followed.

4.1 Air Pathway of Exposure

One potential pathway of exposure to humans or environmental receptors is through the emissions of hazardous constituents from the HBC into the air. However, because the extensive APCS equipment is designed to provide minimum removal efficiencies of 99% for particulate matter, 98% for NOx, 99% for CO, 99% for VOCs, 99% for HCl, 90% for SO_2, and 99% for metals, these potential effects are minimized to the maximum extent possible. Additionally, the facility operates under an air Permit by Rule (PBR) issued by the Texas Commission on Environmental Quality (TCEQ) Air Permits Division.

4.2 Surface Water, Groundwater, or Soil Pathways of Exposure

Another potential pathway of exposure to humans or environmental receptors is through surface water, groundwater, or soil. Surface water, groundwater, or soil could be affected if hazardous wastes were spilled or if run-off from hazardous waste areas occurred. However, the potential for exposure from spills and/or runoff is minimized due to the types of materials handled and effective management and handling procedures, as described below.

Spills

The energetic materials sent to the HBC are not in liquid form. They are solid parts or powders that are enclosed in additional packaging. The HBC concrete pad is routinely inspected to ensure that no spillage has occurred. If spillage does occur, the concrete pad prevents the material from contaminating the soil. Any spills will be cleaned up immediately.

Precipitation Run-on or Runoff

The HBC is set into a large concrete foundation that completely contains the chamber. The HBC APCS has a concrete pad with an apron to capture rainwater runoff through a filter. These measures guard against the release of hazardous waste to the surface water, groundwater, or soil.

5.0 SECONDARY CONTAINMENT

As discussed in *Appendix IV.D – Waste Analysis Plan*, the information used to characterize the energetic materials demonstrates that no free liquids are present. Therefore, there is no potential for liquid spills or leaks and secondary containment is not a concern.

As previously mentioned, the HBC is set into a large concrete foundation that completely contains the chamber. The HBC APCS has a concrete pad with an apron to capture rainwater runoff through a filter.

The process tanks do not contain hazardous waste or hazardous liquid; however, the ammonia feed tank which provides ammonia to the APCS, has secondary containment.

6.0 INSPECTIONS

Inspections related to the HBC and APCS are described in the Inspection Schedule in *Appendix III.D – Inspection Schedule*. The inspections cover the following components:

- Hybrid Burn Chamber
- Air Pollution Control System
- Monitoring Equipment
- Operational and Structural Equipment
- Safety and Emergency Equipment

The frequency of inspections were selected based on regulatory requirements or based on the timeframe determined to be adequate to identify problems in time to correct them before they harm human health or the environment, whichever is shorter. A checklist of inspected items will be created and inspections will be recorded and filed as described in Section 4.0 of *Appendix III.D – Inspection Schedule*.

7.0 HANDLING OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

Ignitable and reactive waste are handled at this facility and are separated and protected from open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant

heat. "No smoking" signs are conspicuously placed wherever there is a hazard from reactive waste. In accordance with 40 CFR §264.176, the HBC is located at least 15 meters (50 feet) from the facility's property line. Figure V.A.1 in *Appendix V.A – General Engineering Reports* shows the distance from the HBC to the nearest property line.

The energetic materials are not incompatible with each other. Each type of energetic material is stored in its own sealed container and is not mixed with another type of energetic material.

8.0 CLOSURE

The HBC will be closed to comply with the requirements of 40 CFR §264.601 and §264.602 in a manner that will ensure protection of human health and the environment. The information on closure of the HBC can be found in *Appendix VII.A - Closure Plan*.

9.0 CONSTRUCTION SCHEDULE

A general construction schedule is included below.

Tasks	Days from Permit Issuance
Permit Issuance	0
HBC installation	1-365 days
APCS installation	1-365 days
Ancillary equipment installation	1-365 days
HBC construction complete	365 days

Table V.K.2. – Maximum Constituent Feed Rates
Hybrid Burn Chamber (HBC)

[RESERVED - TO BE UPDATED AFTER THE PERFORMANCE VERIFICATION TEST]

The total feed rate of constituents shall not exceed the following limitations. The limitations are based upon the emission limits shown in Table V.K.4. The removal efficiencies demonstrated during the performance verification test were used to determine the maximum allowable constituent feedrate. Constituent concentration information (see note a) is used to ensure that the maximum allowable feed rate is not exceeded.

Constituent	Maximum Allowable Feed Rate In All Feedstreams Hourly Basis (g/hr)	Maximum Allowable Feed Rate in All Pumpable Feedstreams Hourly Basis (g/hr)	Maximum Allowable Feed Rate in All Feedstreams Annual Basis (T/yr)
Ash	[RESERVED]	Not applicable [b]	[RESERVED]
Chlorine	[RESERVED]	Not applicable [b]	[RESERVED]
Lead	[RESERVED]	Not applicable [b]	[RESERVED]

Notes:

[a] Military munitions are characterized by information identified by the Department of Defense Identification Codes (DODICs) provided by the military or information in the Munitions Item Disposition Action System (MIDAS). The U.S. Government provides information about the munitions to disposition. Documentation from manufacturers, suppliers, or reliable resources will be used to characterize industrial munitions.

[b] No pumpable wastes are fed.

Table V.K.3. – Maximum Constituent Feed Rates – Short Term Operation
Hybrid Burn Chamber (HBC)

The total feed rate of constituents shall not exceed the following limitations. The limitations are based upon the emission limits shown in Table V.K.4. The minimum removal efficiencies specified by the manufacturer were used to determine the maximum allowable constituent feedrate. Constituent concentration information (see note a) is used to ensure that the maximum allowable feed rate is not exceeded.

Constituent	Maximum Allowable Feed Rate In All Feedstreams Hourly Basis (g/hr)	Maximum Allowable Feed Rate in All Pumpable Feedstreams Hourly Basis (g/hr)	Maximum Allowable Feed Rate in All Feedstreams Annual Basis (T/yr)
Ash	1,361	Not applicable [b]	13.1
Chlorine	907	Not applicable [b]	8.8
Lead	209	Not applicable [b]	2.0

Notes:

[a] Military munitions are characterized by information identified by the Department of Defense Identification Codes (DODICs) provided by the military or information in the Munitions Item Disposition Action System (MIDAS). The U.S. Government provides information about the munitions to disposition. Documentation from manufacturers, suppliers, or reliable resources will be used to characterize industrial munitions.

[b] No pumpable wastes are fed.

Table V.K.4. – Maximum Allowable Emission Rates
Hybrid Burn Chamber (HBC)

Constituent	Maximum Allowable Emission Rate [a]	Units
Volatile organic compounds (VOC)	1.26	lb/hr
	5.53	tpy
Nitrogen oxides (NOx)	1.47	lb/hr
	6.17	tpy
Carbon monoxide (CO)	0.48	lb/hr
	2.11	tpy
Particulate matter (PM_{10} / $PM_{2.5}$)	0.03	lb/hr
	0.13	tpy
Sulfur dioxide (SO_2)	0.36	lb/hr
	1.58	tpy
Lead (Pb)	4.60E-03	lb/hr
	2.05E-02	tpy
Hydrogen Chloride (HCl)	0.02	lb/hr
	0.09	tpy

Notes:

[a] These emission limits are from the facility's Permit by Rule (PBR) issued by the Air Permits Division of the Texas Commission on Environmental Quality, Registration Number 170884.

Table V.K.5. – Miscellaneous Unit Operating Parameter Limits
Hybrid Burn Chamber (HBC)

Parameter	Monitoring Device	Device Location	Operating Parameter Limits [a]	Basis for Limit
Maximum Feed Rate (measured as lb NEW fed)	Operating logs; Constituent information [b]	HMI display	**HD 1.3 and 1.4 NEW**: 440 lbs NEW per batch; 2 batches per hour **HD 1.1 and 1.2 NEW**: 5 lbs NEW per batch; 2 batches per hour	Design and Safety Information
Maximum Stack Gas Flowrate	Pitot tube and differential pressure transmitter	Stack	6,500 SCFM	Manufacturer recommendation
Minimum Afterburner Temperature	Thermocouple	APCS	1,000 °F	Manufacturer recommendation
Maximum Evaporative Quench Outlet Temperature	Thermocouple	Evaporative Quench Outlet	500 °F	Manufacturer recommendation
Maximum Pressure Drop Across Baghouse	Differential pressure transmitter	Inlet and outlet of baghouse	9 in w.c.	Manufacturer recommendation
Minimum Pressure Drop Across Baghouse	Differential pressure transmitter	Inlet and outlet of baghouse	1 in w.c.	Manufacturer recommendation
Maximum Pressure Drop Across HEPA Filter	Differential pressure transmitter	Inlet and outlet of filter	4 in w.c.	Manufacturer recommendation
Minimum Pressure Drop Across HEPA Filter	Differential pressure transmitter	Inlet and outlet of filter	1 in w.c.	Manufacturer recommendation
Minimum Dry Sorbent (Sodium Bicarbonate) Feedrate	Mass flowmeter	Outlet of Dry Sorbent Tank	0 lb/hr	Manufacturer recommendation

Notes:

[a] The HBC does not utilize a traditional automatic waste feed cutoff (AWFCO) system. However, the ignition system has several safety interlocks incorporated so ignition is only enabled when the system verifies that the material has been loaded, the HBC loading door is closed and sealed, and the APCS is within the appropriate operating ranges. A Human Machine Interface (HMI) displays information on the temperatures, pressures, and general process conditions of the HBC and APCS. The HMI has alarms and interlocks for normal and abnormal conditions of the equipment. HBC process cycles are not allowed to commence if all safe conditions are not met or remedied.

[b] Military munitions are characterized by information identified by the Department of Defense Identification Codes (DODICs) provided by the military or information in the Munitions Item Disposition Action System (MIDAS). The U.S. Government provides information about the munitions to disposition. Documentation from manufacturers, suppliers, or reliable resources will be used to characterize industrial munitions.

ATTACHMENT V.K - HBC

Contained Burn System
"Hybrid Burn Chamber" © (HBC)
Basic Process Description

System Overview: EnviroSafe Demil's contained burn system is known as the "Hybrid Burn Chamber"© (HBC). The HBC provides a modern and environmentally responsible alternative to open burning. These robust systems are designed to be simple, safe, and flexible from an operations standpoint, while eliminating pollution and the potentially harmful emissions of open burn operations.

Materials are prepared in batches and are remotely ignited or activated in a manner to ensure simplicity, flexibility, and safety. The exhaust gases are collected and treated by an air pollution control system (APCS). The design of the APCS to scrub the off gases is specific to the chemistry of the treated materials.

Basic Process Operations:

1. Materials are prepared for treatment and loaded into the HBC.
2. Materials are remotely ignited and destroyed inside the HBC.
3. The exhaust gas is metered from the HBC through the APCS via induced draft from the ID fan.
4. After processing is complete in the HBC and negative pressure is assured, the loading door is remotely opened and the treated materials can be inspected remotely via CCTV.
5. Operators remove the treated burn pan or case from the loading system and place the next load for treatment.
6. The cycle is repeated.

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Pollution Control System

The PCS is tailored to the exact material profile being processed.

Afterburner: The purpose of the high temperature afterburner is to raise the temperature of the exhaust gases to provide complete combustion of any partially reacted species, volatile or semi-volatile organic compounds, and carbon monoxide. ESD's afterburner is designed to heat the exhaust to the required minimum setpoint temperature with a minimum residence time of two seconds.

Evaporative Quench: An evaporative quench system is used to cool the exhaust gases downstream of the afterburner to the required temperature for subsequent pollution control elements. It operates by the controlled spray of water into the exhaust gas stream, which is metered to cool the gases to the design temperature setpoint.

Cyclone: A cyclone separator is used to remove larger particulate matter. Particulate is collected below the cyclone's hopper in a sealed disposable drum for convenient disposal.

Dry Sorbent Injection: A dry sorbent injection system is used, when treating materials which produce significant quantities of acid gases, by metering powdered caustic material injected upstream of the baghouse to remove and neutralize acid gases. Neutral salts are then collected as solid particulate in the baghouse. This system is not operational when treating materials which do not produce significant acid gas.

Gas Cooler: The gas cooling system is designed to cool gases to the design temperature for downstream pollution control elements, such as low temperature filtration units (e.g., baghouse). The gas cooler has an automated cleaning system designed for challenging applications to prevent bridging or plugging of the gas cooler with particulate. Particulate is collected below the hopper in a sealed disposable drum for disposal.

Baghouse: The baghouse is a fabric-filtration collector, used for efficient particulate removal from the gas stream. The baghouse is automatically cleaned via a reverse pulse air jet. Particulate is collected below the hopper in a sealed drum for disposal.

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HEPA Filter: A HEPA filter is installed downstream of the baghouse to provide >99.9 % particulate removal. The HEPA filter guards for downstream equipment (e.g., SCR) in the event of a bag rupture upstream. This removes particulate matter to levels below what normally exist in a home or office. This type of filtration is used in manufacturing clean rooms and hospitals, and far exceeds regulatory standards.

Selective Catalytic Reduction: elective Catalytic Reduction: A selective catalytic reduction (SCR) system also utilizes ammonia injection with a catalyst formulation to achieve 90%+ NOx reduction. The catalyst used by ESD provides high-activity catalyst and low pressure drop resulting in more efficient NOx removal with lower energy consumption when compared to other SCR NOx control technologies. The catalyst provides for efficient removal of NOx at relatively low temperatures, reducing heating demand and minimizing the formation of dioxin/furan compounds. The removal of any dioxin/furan compounds are also reacted and eliminated by the catalyst system rather than collected by alternative technologies.

ID Fan/Stack: The Induced Draft (ID) fan provides negative pressure throughout the entire system and draws exhaust gases through the APCS to exit the stack. When the fan is placed at the end of the equipment train, all vessels, joints and equipment operate at negative pressure to minimize fugitive emissions. The gases are exhausted through a stack of appropriate height to protect personnel. The stack also includes sampling ports for continuous or periodic emission sampling.

HBC Wash System: This system provides for automated remote washing of the interior of the chamber to periodically remove ash or condensate materials from the chamber. The spray water is drained from the HBC and passes through a neutralization system to neutralize any acid present and a filter press system to remove solids. The filtered liquid stream can then be re-used for future HBC wash cycles or pumped into the quench system described above.

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HBC Throughput Objectives

1. Single rocket Motor/burn cycle (previously demonstrated, threshold objective)
2. Two rocket Motors/burn cycle (target objective)
3. RM segment up to 440 lbs propellant (previously demonstrated, threshold objective)

PAS Objectives

- TOTAL PM: estimated removal 99%
- NOX: estimated removal 98%
- CO: estimated removal 99%
- VOC: estimated removal 99%
- HCL: estimated removal: 90%
- SO2: estimated removal: 90%
- Pb: not present

* as modeled and analyzed by Redhorse Corporation

Appendix V.L – Containment Buildings
Not Applicable
ESD has no containment buildings.

VI. Geology Report

Provide all Part B responsive information in Appendix VI. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

This portion of the application applies to owners or operators of new hazardous waste management facilities; areal and/or capacity expansions of existing hazardous waste management facilities; and existing industrial solid waste facilities that store, process or dispose of hazardous waste in surface impoundments, landfills, land treatment units, waste piles (except those waste piles that meet the requirements of Section V.E.10.b. of this application), and tanks or drip pads which require a contingent post-closure plan.

For a new Compliance Plan or modification/amendment to an existing Compliance Plan of Section XI of this application, submit a Geology Report which contains updated site geologic information derived from on-going investigations since submittal of the last Permit modification/amendment application.

Submit a Geology Report which includes at a minimum the following information. This report and all specifications, details, calculations/estimates and each original sheet of plans, drawings, maps, cross-sections, other graphics, such as limits of contamination maps, etc. or any other geoscientific work must be signed and sealed by a Professional Geoscientist licensed in the State of Texas under the Professional Geoscientists Practice Act.

A. Geology and Topography

Information addressing the requirements below is included in Appendix VI.A – Geology and Topography. The Geology information has been signed and sealed by a Professional Geoscientist licensed in the State of Texas under the Professional Geoscientist Practice Act. Table VI.A.1. - Major Geologic Formations is included.

1. Active Geologic Processes

Provide a description and interpretation of the active geologic processes in the vicinity of the facility. This description should include:

a. An identification of any faults (active or otherwise) in the area of the facility. The preparer should determine which Holocene sediments or man-made structures have been displaced. The report should contain a description of the investigation techniques used to identify faults and should assess the degree, if any, to which a particular fault increases the long-term potential for waste migration. The clearance required from active faults to ensure that liner systems will not be disrupted will be based upon site specific factors such as the zone of significant surface deformation, uncertainty in locating the fault, activity of the fault, and a distance to provide a reasonable margin of safety. These issues should be addressed when discussing the offset of an industrial solid waste facility unit from an active fault.

To satisfy the requirements of 30 TAC 305.50(a)(4)(D) and 305.50(a)(10)(E), for a proposed hazardous waste management facility or a modification or amendment of a permit which includes a capacity expansion of an existing hazardous waste management facility, submit the following.

(1) A geologic literature review should be conducted, from which useful information on the possibility of faulting at a given site may be revealed. This includes, but is not limited to, maps of surface faults, subsurface

structure, and field investigations by the author(s).

(2) Descriptions and maps of faulting, fracturing, and lineations in the area are necessary. An aerial photo with lineation interpretations is suggested.

(3) The maps and cross-sections are to be constructed using an amount of data necessary to adequately describe the geology of the area. Surface data, including data regarding known surface expressions, such as surface faults, gas seeps, lineations, etc., should be accounted for in the subsurface interpretations. A surface structure map should be prepared, incorporating all of the subsurface data as well as known surface features.

(4) A minimum of two structural cross-sections, utilizing available oil field and/or water well electric log data, shall be made perpendicular to each other, crossing at the proposed surface unit location. These cross-sections should define geologic units, indicating especially Holocene sediments and Underground Sources of Drinking Water (USDWs), as well as lithology. The cross-sections should be constructed from the surface, down through the shallowest major structure or the base of the Holocene, whichever is deeper. These cross-sections need to be on a scale necessary to depict the local geology (3000' radius from the site location minimum). If needed to adequately describe the local geology, then a larger radius or deeper area of review may be necessary.

(5) A minimum of two structural subsurface maps need to be prepared. One map should be made on the shallowest mappable subsurface marker, the other on a deeper horizon that shows the underlying major structure. Additional maps may be necessary.

(6) Field surveillance will be necessary to check the area of the facility for surface features, such as lineations, and to investigate potential surface faults as indicated by, but not limited to, aerial photos, topographic maps, and seismic and subsurface structural maps.

(7) The above requirements do not limit the use of any additional information, such as seismic data, isopach maps, or potentiometric maps, that may help in defining the geology of the area of review.

(8) If faulting exists within 3000 feet of the surface unit, it must be demonstrated that the fault has not had displacement within Holocene time. If such a fault does exist, it cannot pass within 200 feet of the surface unit.

(9) If a fault that has been active within the Holocene is located within 3000 feet of the surface unit, it must be demonstrated that, a.) the fault is not transmissive, i.e., it will not provide for groundwater movement that would result in endangerment to human health or the environment, and b.) there is no actual and/ or potential problem of subsidence, which could endanger the stability of the surface unit.

b. A discussion of the extent of land surface subsidence in the vicinity of the facility including total recorded subsidence and past and projected rates of subsidence. For facilities located at low elevations along the coast which have experienced appreciable rates of subsidence, the potential for future submergence beneath Gulf water should be addressed.

c. A discussion of the degree to which the facility is subject to erosion. The potential for erosion due to surface water processes such as overland flow, channeling, gullying, and fluvial processes such as meandering streams and

undercut banks should be evaluated. If the facility is located in a low-lying coastal area, historical rates of shoreline erosion should also be provided.

d. Complete Table VI.A.1. - Major Geologic Formations

2. **Applicable to Land Based Units Only.** Regional Physiography and Topography (applicable only to owners or operators of facilities that store, process, or dispose of hazardous waste in surface impoundments, landfills, land treatment units, waste piles, except waste piles exempt from groundwater monitoring requirements, and tanks which require a contingent post-closure plan)

This section is N/A. There are no land based units.

a. Distance and direction to nearest surface water body
b. Slope of land surface
c. Direction of slope
d. Maximum elevation of facility
e. Minimum elevation of facility

3. **Applicable to Land Based Units Only.** Regional Geology (applicable only to owners or operators of facilities that store, process, or dispose of hazardous waste in surface impoundments, landfills, land treatment units, waste piles, except waste piles exempt from groundwater monitoring requirements, and tanks which require a contingent post-closure plan)

This section is N/A. There are no land based units.

Provide a description of the regional geology of the area. This section should include:

a. A geologic map of the region with text describing the stratigraphic and lithologic properties of the map units. An appropriate section of a published map series such as the Geologic Atlas of Texas prepared by the Bureau of Economic Geology is acceptable.

b. A description of the generalized stratigraphic column in the facility area from the base of the lowermost aquifer capable of providing usable groundwater to the land surface. At least the uppermost 1,000 feet of section below the facility should be described. The geologic age, lithology, variation in lithology, thickness, depth, geometry, hydraulic conductivity, and depositional history of each geologic unit should be described based upon available geologic information. Regional stratigraphic cross sections should be provided, where available.

4. Subsurface Soils Investigation Report **(Applicable to land based units or units requiring contingent closure and post-closure).**

This section is N/A. There are no land based units or units requiring contingent closure and post-closure.

This section should contain the results of an investigation of subsurface conditions for each land based unit and/or unit which requires contingent closure and post-closure care. If several units are in close proximity, a single investigation for the area will suffice. This report should include:

a. The logs of borings performed at the waste management area. All borings must be conducted in accordance with established field exploration methods. Investigation procedures should be discussed in the report. A sufficient number of borings should be performed to establish subsurface stratigraphy and to identify and allow assessment of potential pathways for pollution migration. Borings must be sufficiently deep to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. Borings should penetrate through the uppermost aquifer and all deeper hydraulically interconnected aquifers, deep enough to identify the aquiclude at the lower boundary. Borings should be completed to a depth at least 30 feet below the deepest excavation planned at the waste management area.

b. A text which describes the investigator's interpretations of the subsurface stratigraphy based upon the field investigation. If appropriate, soils may be assigned to generalized strata to aid in the discussion.

c. A text which describes the investigator's interpretations of the subsurface stratigraphy based upon the field investigation. If appropriate, soils may be assigned to generalized strata to aid in the discussion.

d. Complete Table VI.A.4. - Waste Management Area Subsurface Conditions and provide in the report data which describes the geotechnical properties of the subsurface soil materials. All laboratory and field tests must be performed in accordance with recognized procedures. A brief discussion of test procedures should be included. All major strata encountered during the field investigation phase should be characterized with regard to: Unified Soil Classification, moisture content, percent less than number 200 sieve, Atterberg limits (liquid limit, plastic limit, and plasticity index), and coefficient of permeability. Field permeability tests should be used to determine the coefficient of permeability of sand or silt units and should also be used to supplement laboratory tests for more clay-rich soils. In addition, particle size distribution and relative density based upon penetration resistance should be determined for coarse-grained soils. For fine-grained soils the following parameters should also be determined: cohesive shear strength based upon either penetrometer or unconfined compression tests, dry unit weight, and degree of saturation(s). For the major soil strata encountered, the maximum, minimum, and average for each of these variables should be compiled.

e. For land treatment units, provide a description of the surficial soils at the site which includes:

(1) The name and description of the soil series at the site;
(2) Important physical properties of the series such as depth, permeability, available water capacity, soil pH, and erosion factors;
(3) Engineering properties and classifications such as USDA texture, Unified Soil Classification, size gradation, and Atterberg limits (liquid limit, plastic limit, and plasticity index); and
(4) The cation exchange capacity (CEC) of the soil(s) expressed in units of meq/100g.

Much of this information may be obtained by consulting the county soil survey published by the United States Department of Agriculture, Soil Conservation Service. If available, a copy of an aerial photograph showing soil series units on the land treatment area should be provided.

If an aerial photograph is not available, include a soil series map as an attachment to this subsurface soils investigation report.

B. Facility Groundwater - RESERVED

C. Exemption from Groundwater Monitoring for an Entire Facility - RESERVED

D. Unsaturated Zone Monitoring - RESERVED

Section VI – Geology Report

Appendix VI.A – Geology and Topography

Active Geologic Processes

Table VI.A.1 – Major Geologic Formations is included in this appendix. The facility's location falls into the Tertiary age Midway Group. Attachment VI.A.1 includes a geologic atlas of the area and geologic maps showing the location of the ESD site in relation to the geologic units. On these maps, "Emi" represents the Midway Group. There are no active geological processes in the area of the ESD facility.

The following figures are included in Attachment VI.A.1:

- Figure VI.A.1-1 - Geologic Atlas
- Figure VI.A.1-2 - Geologic Units
- Figure VI.A.1-3 - Geologic Units with Description

Topographic Maps

Topographic maps are included in Attachment C to the Part A Application Form.

Faults

There are no faults within 3,000 feet of the facility. Any fault zones are several miles away from the facility. The nearest fault is shown on the first page of Attachment VI.A.2 and is approximately 2.5 miles south-southeast of the facility. It is designated as a normal fault within the undivided Midway Group.

Section 3.5.4 of the *U.S. Army BRAC 2005; Environmental Condition of Property Report, Lone Star Army Ammunition Plant, Texarkana, TX; Final, 20 November 2006* (ECP Report) states that the east-west Luling-Mexia-Talco Fault system is in the vicinity of LSAAP. However, no displacement is believed to be in the Tertiary or Recent sediments (*United States Army Toxic and Hazardous Materials Agency (USATHAMA). 1978. Installation Assessment of Lone Star Army Ammunition Plant, Report No. 124. July*). An excerpt of this report can be found in *Attachment II.1* of this Part B Permit Application. A map showing the Luling Fault Zone, the Mexia Fault Zone, and the Talco Fault Zone is shown in Attachment VI.A.2. A second page is included where the facility site is labeled on a zoomed in section of the map. As the map shows, while the facility is in the vicinity of the fault system mentioned above, it is still several miles away from the facility. This map was accessed on December 5, 2022 and can be found at the following website: Fault Tectonics of the East Texas Basin. PDF (utexas.edu) <https://store.beg.utexas.edu/geologic-circulars/2875-gc8204.html>.

A USGS map showing the U.S. Quaternary Faults is shown in Attachment VI.A.2. A second page is included where the facility site is labeled on zoomed in section of the map. As the map shows, the facility is not within the fault area. This map was accessed on December 5, 2022 and can be found at the following website: Faults | U.S. Geological Survey (usgs.gov); U.S. Quaternary Faults (arcgis.com). <https://www.usgs.gov/programs/earthquake-hazards/faults>.

The following figures are included in Attachment VI.A.2:

- Figure VI.A.2-1 – Nearest Faults to Facility
- Figure VI.A.2-2 - Luling, Mexia, and Talco Fault Zones
- Figure VI.A.2-3 - Luling, Mexia, and Talco Fault Zones in Relation to Facility
- Figure VI.A.2-4 - U.S. Quaternary Faults
- Figure VI.A.2-5 - U.S. Quaternary Faults in Relation to Facility
- Figure VI.A.3-1 - Frequency of Damaging Earthquake Shaking Around the U.S.

Earthquakes

A map titled the "Figure VI.A.3-1 - Frequency of Damaging Earthquake Shaking Around the U.S." is included in Attachment VI.A.3 and shows that the expected number of occurrences of damaging earthquake shaking in 10,000 years is 2-4 occurrences. This map was accessed on December 5, 2022 and can be found at the following website: https://www.usgs.gov/media/images/frequency-damaging-earthquake-shaking-around-us.

Subsidence and Erosion

There are no areas that would be prone to anomalous erosion or land subsidence due to the fact that there are no abrupt changes in land surface elevation and there are no major fluvial environments in the immediate area. The facility is not located in a low-lying coastal area, so historical rates of shoreline erosion are not included.

Regional Physiography and Topography

Not Applicable

This section is only applicable to land based units. There are no land based units at the facility.

Regional Geology

Not Applicable

This section is only applicable to land based units. There are no land based units at the facility.

Subsurface Soils Investigation Report

Not Applicable

This section is only applicable to land based units or units requiring contingent and post-closure. There are no land based units at the facility and no units requiring contingent and post-closure care.

Table VI.A.1. – Major Geologic Formations

Names Of Major Geologic Formation(s) Beneath The Facility	Lithology Of The Major Geologic Formation	Formation Thickness (Feet)	Depth To Top Of Formation	
			Feet/MSL[(1)]	Feet/BGS[(2)]
Tertiary age Midway Group	The Midway Group is described as massive blocky clay that locally contains glauconitic sand. It contains calcareous clay and clay-shale and is grey to bluish gray in color with reddish-brown iron stained lenses of sands and silts. More information on the Midway Group can be found in Section 3.5.4 of the ECP Report, which is included as *Attachment II.1* of *Appendix II – Facility Siting Criteria*.	600 feet	300-450 (Source: Section 3.5.2 of the ECP Report)	

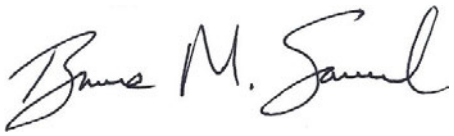
(1) MSL: Mean Sea Level
MLGL: Mean Low-tide Gulf Level
(2) BGS: Below Grade Surface

Certification

I certify under penalty of law that this appendix, *Appendix VI.A – Geology and Topography*, *Attachment VI.A.1 – Geologic Information*, *Attachment VI.A.2 – Fault Information*, and *Attachment VI.A.3 – Earthquake Information* and the geologic information in *Appendix II – Facility Siting Criteria* were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the units, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Bruce M. Samuel, Texas P.G. # 10865

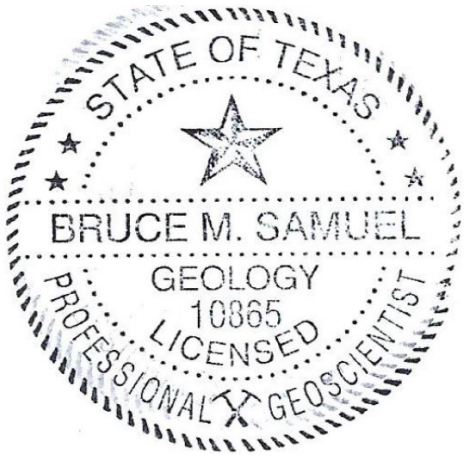
Name of Professional Geoscientist licensed in the State of Texas under the Professional Geoscientists Practice Act



Signature

7/19/2023

Date



Seal

ATTACHMENT VI.A.1

GEOLOGIC INFORMATION

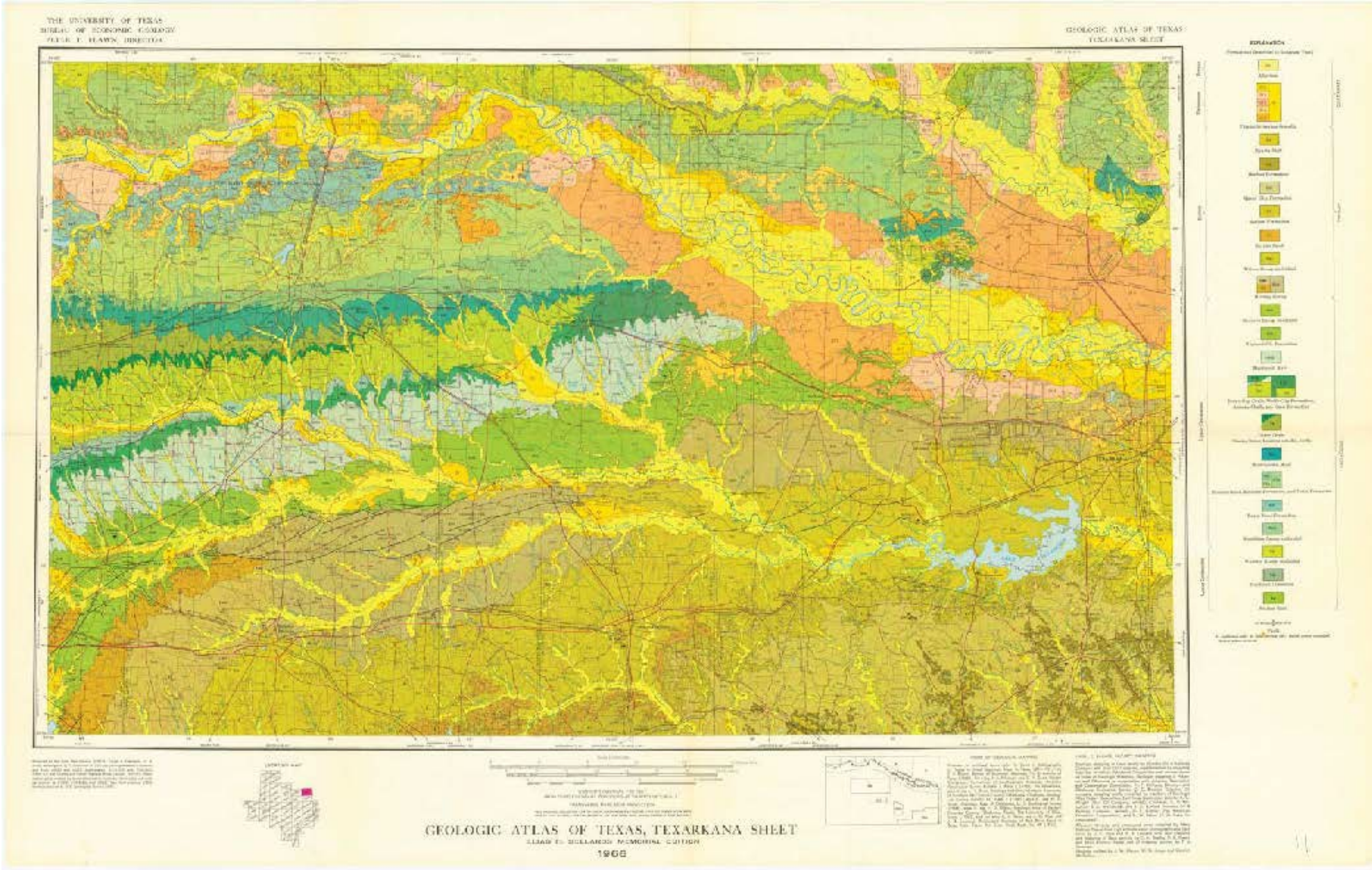


Figure VI.A.1-1 - Geologic Atlas

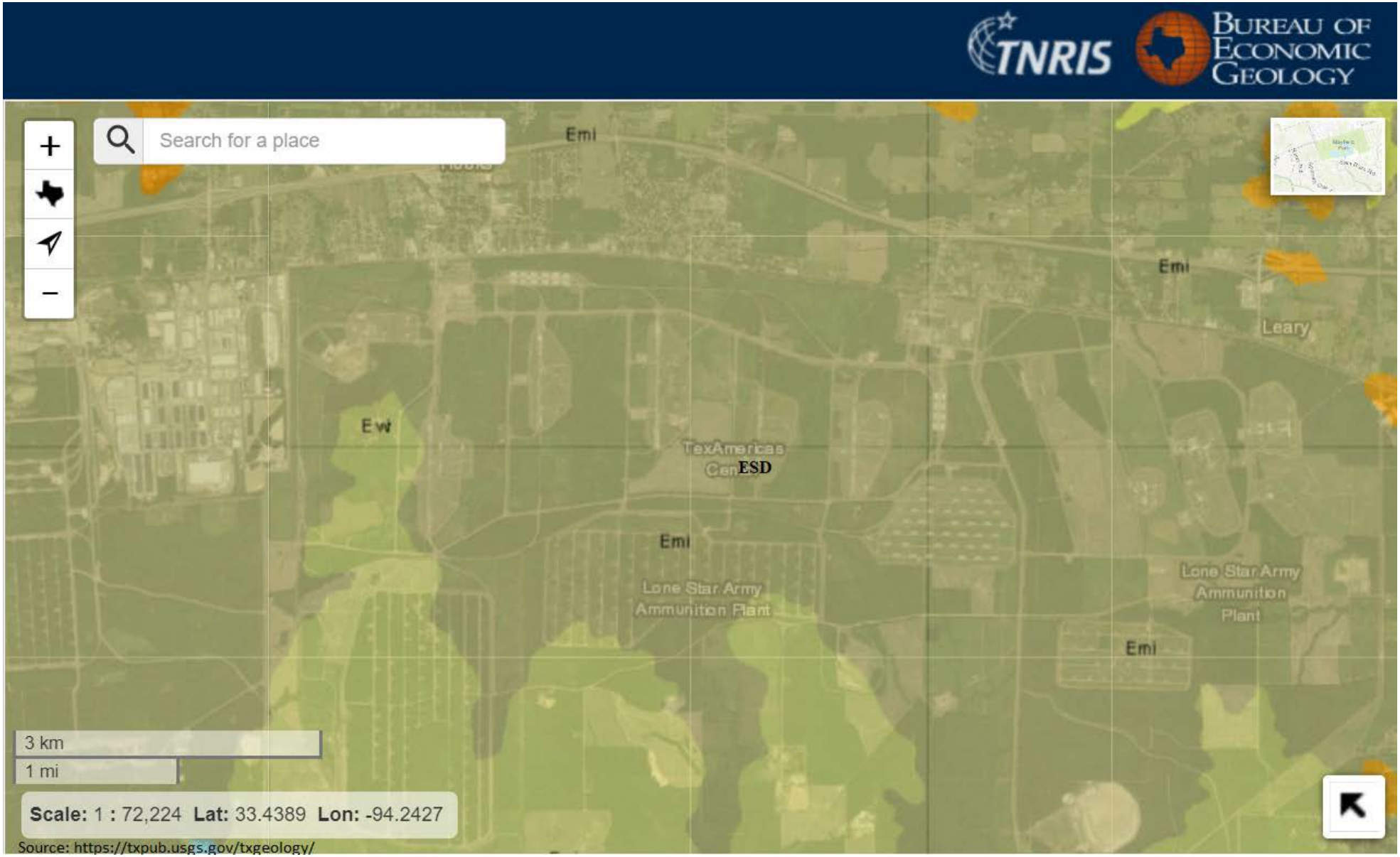


Figure VI.A.1-2 - Geologic Units

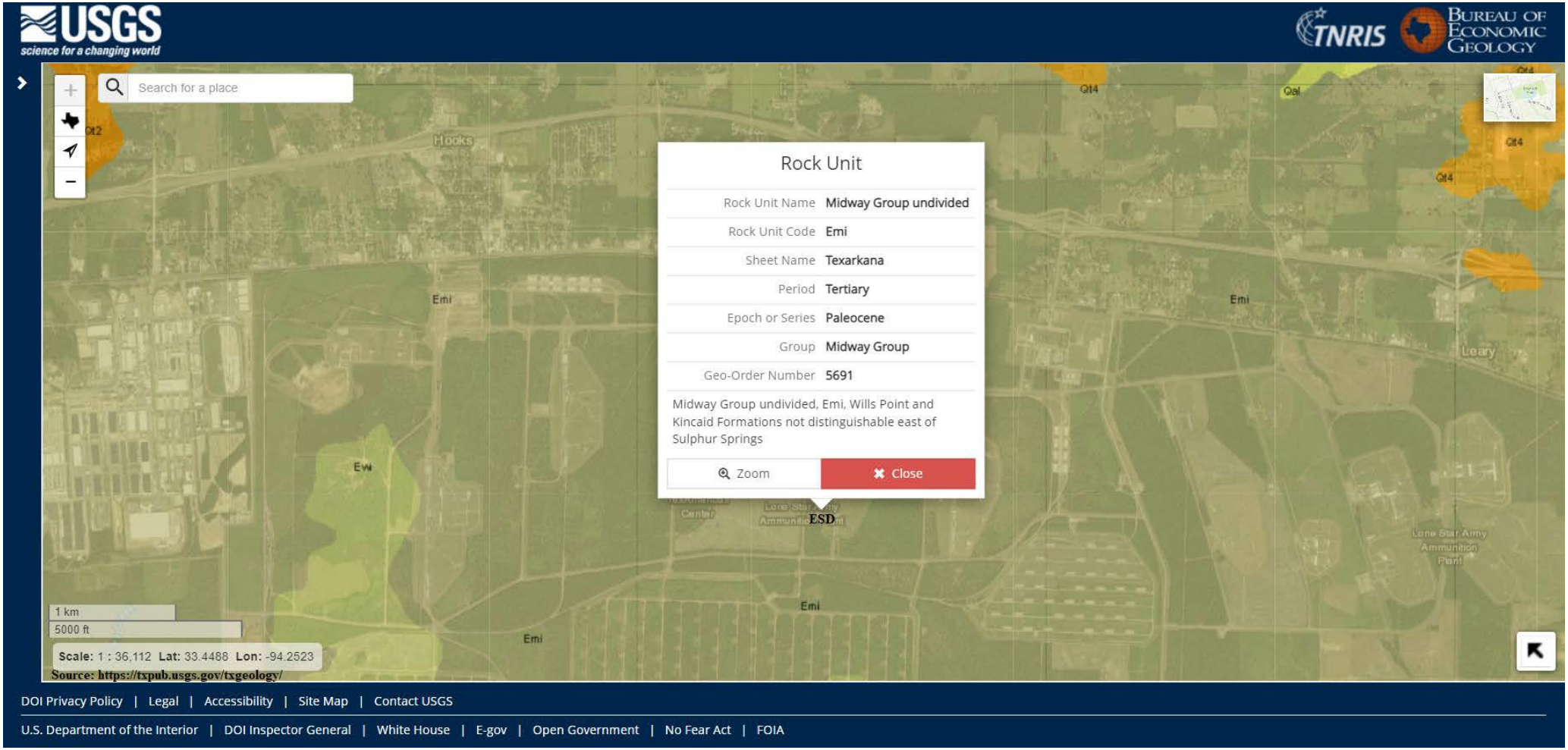
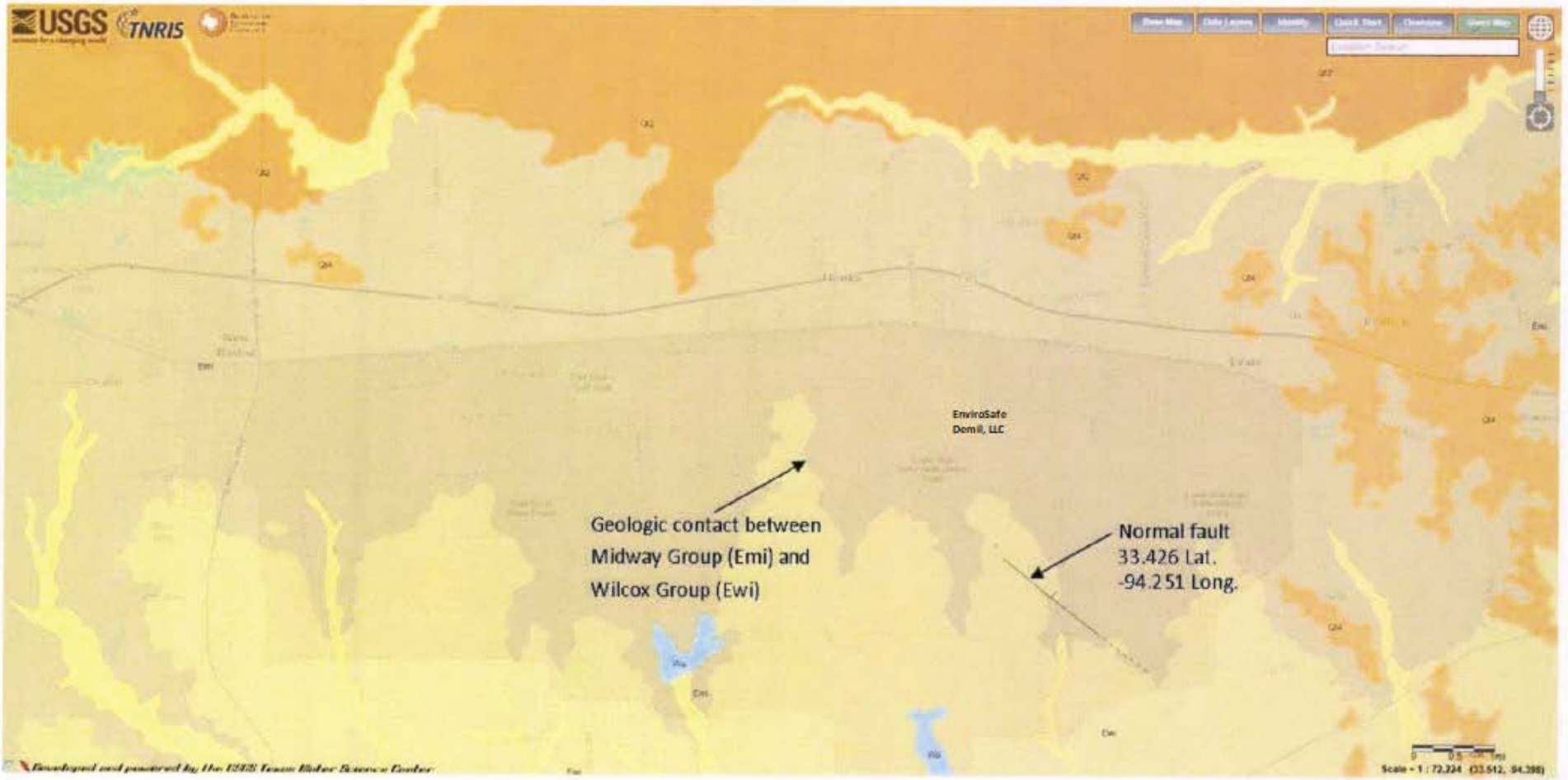


Figure VI.A.1-3 - Geologic Units with Description

ATTACHMENT VI.A.2

FAULT INFORMATION



Source: http://txpub.usgs.gov/RDM/i3C4WC8WC5WCiWC

Figure VI.A.2-1 – Nearest Faults to Facility

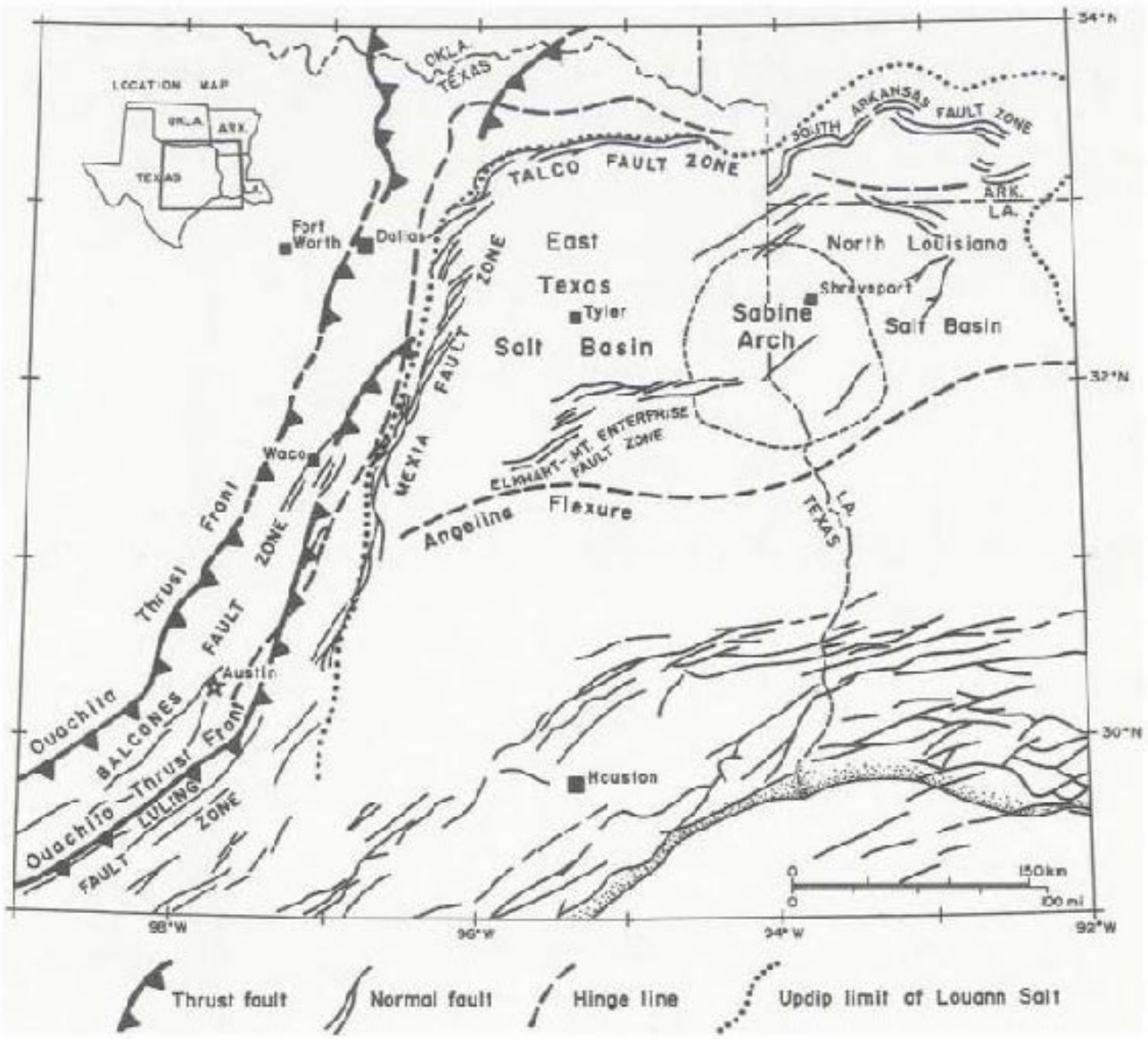


Figure 2. Regional tectonic setting of the East Texas Basin. Position of Angelina Flexure is mapped at base of Austin Chalk. Adapted from Martin (1978).

Figure VI.A.2-2 - Luling, Mexia, and Talco Fault Zones

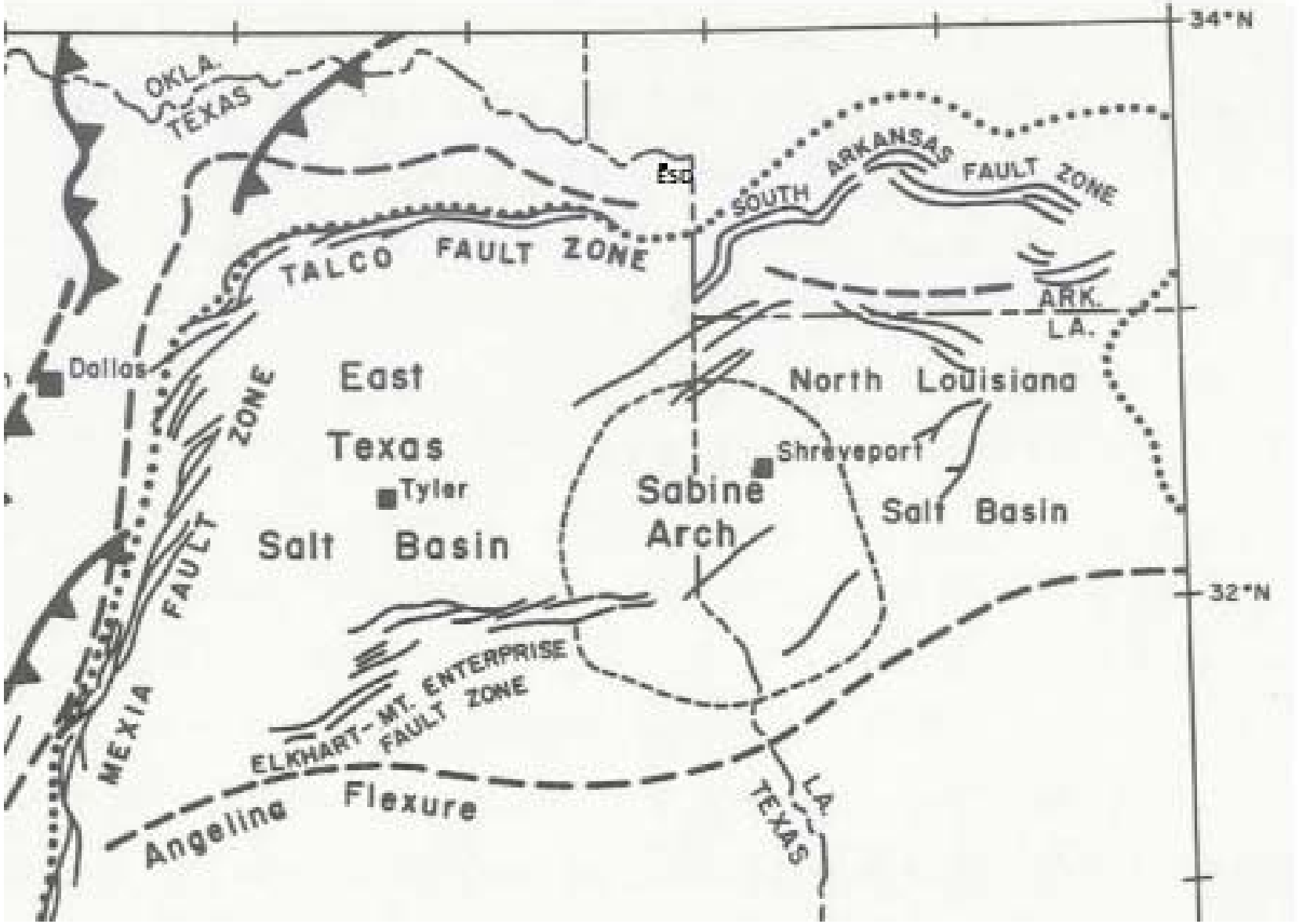


Figure VI.A.2-3 - Luling, Mexia, and Talco Fault Zones in Relation to Facility

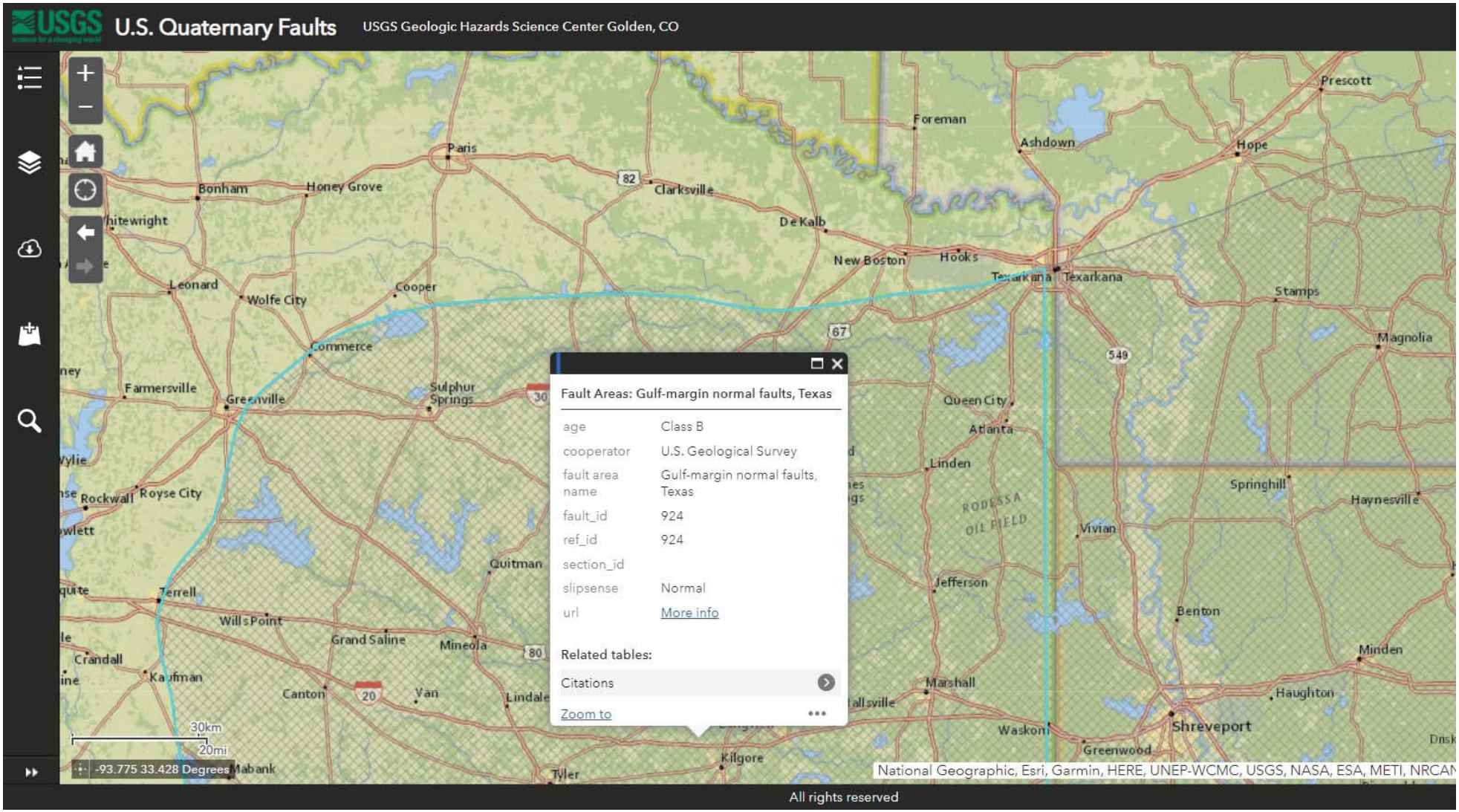


Figure VI.A.2-4 - U.S. Quaternary Faults

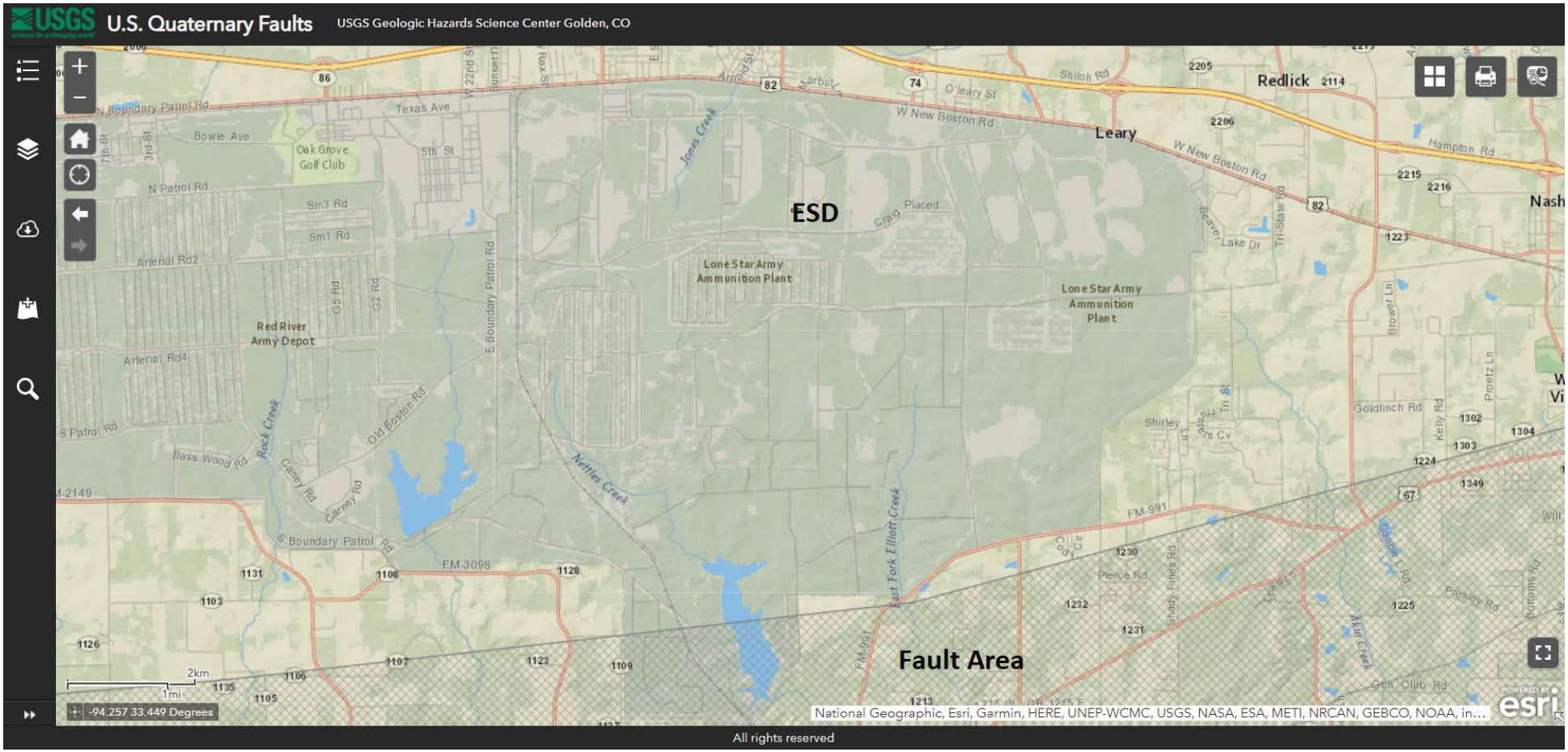


Figure VI.A.2-5 - U.S. Quaternary Faults in Relation to Facility

ATTACHMENT VI.A.3

EARTHQUAKE INFORMATION

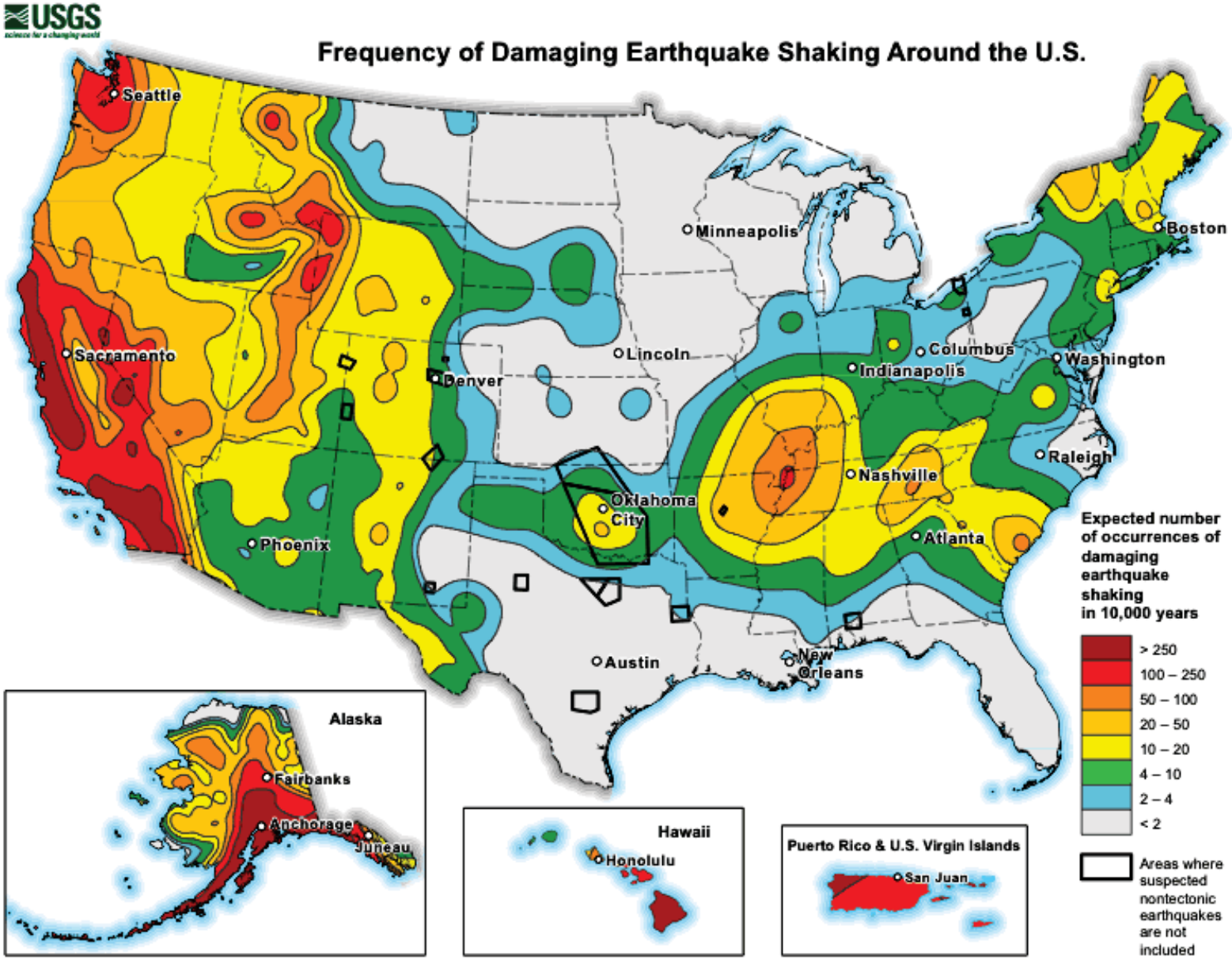


Figure VI.A.3-1 - Frequency of Damaging Earthquake Shaking Around the U.S.

Section VI - Geology Report

Appendix VI.B - Appendix VI.D

Appendix VI.B - Facility Groundwater

Not Applicable

No past monitoring has shown the presence of hazardous constituents in the groundwater.

Appendix VI.C - Exemption from Groundwater Monitoring for an Entire Facility

Not Applicable

ESD is not requesting any exemption. Groundwater monitoring is not required.

Appendix VI.D - Unsaturated Zone Monitoring

Not Applicable

This section is only applicable to land treatment units. There are no land treatment units at the facility.

VII. Closure and Post-Closure Plans

Provide all Part B responsive information in Appendix VII. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

For multiple units provide an include all Part B responsive information in a separate Appendix for each unit.

Submit a full closure plan and post-closure plan, if applicable, which contains all the information required by 30 TAC 335.8, 335.169, 335.172, 335.174, 335.177, 335.178, 335.551-335.569, 30 TAC Chapter 350, 40 CFR 264.112, 264.118, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, 264.351, 264.575, 264.601, 264.603, 264.1102, 270.14(b)(13), 270.17(f), 270.18(h), 270.20(f), 270.21(e), 270.23(a)(2) & (3), and 270.26(c)(16) where applicable. The owner of property on which an existing disposal facility is located must also submit documentation that a notation has been placed in the deed to the facility that will in perpetuity notify any potential purchasers of the property that the land has been used to manage hazardous wastes and its use is restricted (see 30 TAC 335.5). For hazardous waste disposal units that were closed before submission of the application, the applicant should submit documentation to show that plats and notices required under 40 CFR 264.116 and 264.119 have been filed.

A. Closure

This section applies to the owners and operators of all hazardous waste management facilities to be permitted. The applicant must close the facility in a manner that minimizes need for further maintenance and controls, or eliminates, to the extent necessary to protect human health and the environment, the post-closure release of hazardous waste, hazardous constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface waters, or to the atmosphere.

The facility type and type of unit to be closed can determine the level of detail sufficient for a closure plan.

For each unit to be permitted, complete Table VII.A. - Unit Closure and list the facility components to be decontaminated, possible methods of decontamination, and possible methods of disposal of wastes and waste residues generated during unit closure. All ancillary components must be included in calculating closure cost estimates.

Appendix VII.A – Closure Plan is included and addresses the closure of the facility. Table VII.A – Unit Closure is included.

Additionally, if the applicant plans to close a surface impoundment in accordance with 30 TAC 335.169(a)(1) and the impoundment does not comply with the liner requirements of 30 TAC Section 335.168(a) then the closure plan for the impoundment must include both a plan for complying with 30 TAC 335.169(a)(1) and a contingent plan for complying with 30 TAC 335.169(a)(2).

N/A – there will be no surface impoundments at the facility.

Guidance on design of a closure cap and final cover for landfills is given in TCEQ Technical Guideline No. 3, and EPA publication 530-SW-85-014 presents guidance on construction quality assurance of liner construction.

N/A – there will be no landfills at the facility.

If a waste pile does not comply with the liner requirements of 30 TAC Section 335.170(a)(1) then the closure plan for the waste pile must include both a plan for complying with 40 CFR 264.258(a) and a contingent plan for complying with 40 CFR 264.258(b).

N/A – there will be no waste piles at the facility.

The final certification of closure of a land treatment unit may be prepared by an independent licensed Professional Geoscientist in lieu of an independent licensed Professional Engineer. [30 TAC 335.172(b)]

N/A – there will be no land treatment units at the facility.

B. Closure Cost Estimate (including contingent closure) [30 TAC 335.178, 40 CFR 264.142]

This section applies to owners or operators of all hazardous waste facilities, except state and federal agencies. A detailed estimate, in current dollars, of the cost of closing the facility should be included in the report. The cost estimate must include the cost of closure at the point in the facilities operating life when the extent and manner of its operation would make closure the most expensive. The TCEQ has published Technical Guideline No. 10, Closure and Post-Closure Cost Estimates, for calculating closure costs which should be consulted. Closure costs should be developed on the basis of abandonment of the site at full capacity and closure activities to be conducted by a third party with no operable on-site equipment. The costs for closing each unit must be detailed.

Appendix VII.B – Closure Cost Estimate is included and addresses the closure costs of the facility. Table VII.B. - Unit Closure Cost Estimate is included.

1. If closure costs are based on contractor bids, the applicant should submit a copy of the bid specification and each contractor's response.

2. If closure costs are based on a detailed analysis, the applicant should submit details of item costs and number of each item, and details of costs for equipment rental, third party labor and supervision, transportation, analytical costs, etc. Provide an itemized cost on Table VII.B. - Unit Closure Cost Estimate for a complete, third party permitted facility closure.

   As units are added or deleted from these tables through future permit amendments or modifications, the remaining itemized unit costs should be updated for inflation when re-calculating the revised total cost in current dollars.

3. The closure plan may propose on-site disposal of wastes, residues, etc. during closure of a unit, and this may be executed if on-site capacity exists in other units during closure of a unit. However, the cost estimate for closure must be based on off-site shipment and disposal during closure of all wastes, waste residues, wastes generated by decontamination, contaminated stormwater, and leachate.

4. For each surface impoundment, waste pile, or tank system required to have a contingent closure plan, the cost for closure under the contingent closure

plan should be detailed, as well as the cost of proposed closure. The more expensive of the cost of the proposed closure of a unit versus the cost of the contingent closure of the unit should be used in the total facility closure cost estimate.

C. Post-closure - RESERVED

D. Post-closure Cost Estimate [40 CFR 264.144] - RESERVED

E. Closure and Post-Closure Cost Summary

Please Complete Table VII.E.1. - Permitted Unit Closure Cost Summary
Please Complete Table VII.E.2. - Permitted Unit Post-Closure Cost Summary

Table VII.E.1 – Permitted Unit Closure Cost Summary is included.
Table VII.E.2 – Permitted Unit Post-Closure Cost Summary is not applicable.

Section VII – Closure and Post-Closure Plans

Appendix VII.A – Closure Plan

30 TAC 335.8, 335.169, 335.172, 335.174, 335.177, 335.178, 335.551-335.569, 30 TAC Chapter 350, 40 CFR 264.112, 264.118, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, 264.351, 264.575, 264.601, 264.603, 264.1102, 270.14(b)(13), 270.17(f), 270.18(h), 270.20(f), 270.21(e), 270.23(a)(2) & (3), and 270.26(c)(16) where applicable.

1.0 FACILITY DESCRIPTION

EnviroSafe Demil, LLC (ESD) is located in Hooks, Texas. A facility map is included in *Attachment B – Legal Description of the Facility* of the Part A Application Form.

The facility's RCRA permitted units consist of 3 storage magazines (2 additional storage magazines are reserved for future use), 1 preparation building, and 1 processing unit with air pollution control systems (APCS). The Rocket Motor Ops Building, the Hybrid Burn Chamber (HBC), and the associated APCS equipment will be located on the southern portion of the main facility. The storage magazines are adjacent to the main facility. The earth covered magazines (ECMs) are located at LSAAP's former line V-13 and an above ground magazine (AGM) is located at LSAAP's Beech #10 location.

2.0 FINAL VS. PARTIAL CLOSURE

The facility will be closed in a manner that minimizes the need for further maintenance and controls necessary to protect human health and the environment. Groundwater contamination or surface water contamination from this facility are unlikely because of the type of the materials handled, operating practices, and the design of the equipment where the materials are processed. Because all wastes will be removed during closure, there will be no possibility of post-closure releases of hazardous waste, hazardous constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, subsurface environment, surface waters, or to the atmosphere.

Final closure constitutes taking all equipment used to store, prepare, and process hazardous materials on-site out of hazardous waste service. Final closure will be commenced based on this Closure Plan. The decontamination procedures and criteria used in this Closure Plan are expressed in terms of final closure.

Partial closure is defined as removing a particular storage magazine, preparation building, or processing unit from hazardous waste service. For example, closure of only one storage magazine

would constitute partial closure. If it is decided that a partial closure will be commenced, only the sections of this Closure Plan that are applicable to the unit being closed will be performed.

Table VII.A – Unit Closure lists the facility components to be decontaminated, possible methods of decontamination, and possible methods of disposal of wastes and waste residues generated during unit closure.

3.0 MAXIMUM EXTENT OF OPERATIONS

3.1 Estimate of Maximum Inventory of Hazardous Waste

The maximum inventory of hazardous waste at closure is conservatively estimated as shown in Table 3-1. The storage magazines are not kept completely full and the values shown in Table 3-1 assume all of the storage magazines are filled to capacity. Therefore, this estimate represents a worst-case scenario for wastes on-site at any time.

3.2 Management of Maximum Hazardous Waste Inventory

Once the notification of intent to close has been submitted, the facility will ensure that all hazardous materials stored in the magazines are either shipped off-site for processing and disposal or is promptly processed in the HBC prior to the commencement of closure of that unit. Any energetic materials remaining and any debris resulting from cleanup activities will be shipped off-site for processing and disposal.

The ash/debris from the HBC and the wastes from the APCS will be removed, containerized, and disposed of off-site at either a landfill (if determined to be non-hazardous) or at a Treatment, Storage, and Disposal Facility (TSDF) (if determined to be hazardous). For the purposes of calculating the worst-case closure cost estimate, these materials are assumed to be hazardous.

Table 3-1
Estimate of Maximum Inventory of Hazardous Waste

Description	Maximum Inventory [a]
Storage Magazines	
Above Ground Magazine (AGM)	100,000 lbs HD 1.3 NEW 333,333 lbs Total Weight of Energetic Materials and Packaging [b]
Earth Covered Magazine (ECM) V-13-1	300,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW 1,000,000 lbs Total Weight of Energetic Materials and Packaging [b]
Earth Covered Magazine (ECM) V-13-2	200,000 lbs HD 1.1 NEW 150,000 lbs HD 1.2.1 NEW 200,000 lbs HD 1.2.2 NEW 200,000 lbs HD 1.3 NEW Unlimited HD 1.4 NEW 666,667 lbs Total Weight of Energetic Materials and Packaging [b]
Earth Covered Magazine (ECM) V-13-3 (reserved for future use) [c]	None; reserved for future use [c]
Earth Covered Magazine (ECM) V-13-4 (reserved for future use) [c]	None; reserved for future use [c]
Preparation Building	
Rocket Motor Ops Building	None; Materials are not stored in the Rocket Motor Ops Building
Processing Unit	
Hybrid Burn Chamber (HBC)	None; Materials are not stored in the HBC

Notes:

[a] NEW stands for Net Explosive Weight.

[b] This is calculated assuming the maximum numerical explosive limit (of any HD class) is present at closure. An average NEW of 30% is assumed for all packaged energetic material.

[c] These storage magazines are reserved for future use. However, in the event they are placed into service, the same methods used to close the other earth covered magazines (V-13-1 and V-13-2) will be used.

4.0 DECONTAMINATION METHODS

4.1 Equipment, Structures and Facilities

Decontamination of the following areas is addressed in this Closure Plan:

- Storage Magazines
  - Above Ground Magazine
  - Earth Covered Magazine V-13-1
  - Earth Covered Magazine V-13-2
  - Earth Covered Magazine V-13-3 (reserved for future use)
  - Earth Covered Magazine V-13-4 (reserved for future use)
- Preparation Building
  - Rocket Motor Ops Building
- Processing Unit
    - Hybrid Burn Chamber (HBC) and the associated APCS

The less than 180 day hazardous waste accumulation areas will be closed in accordance with 40 CFR §264.111 and §264.114. The requirement to have a written Closure Plan does not apply to areas designated as less than 180 day hazardous waste accumulation areas. Therefore, these areas are not addressed by this document.

4.2 General Procedures for Facility Decontamination

The procedures for decontamination of equipment will follow a combination of 40 CFR §268.45 (Table 1) and DOD Ammunition and Explosive Safety Standards. In general, the procedures described herein are also consistent with the "Guide for Decontaminating Buildings, Structures and Equipment at Superfund Sites," US EPA, Office of Research and Development, EPA/600/2-85/028, March 1985.

The decontamination plan that follows is based on subsequent "restricted/industrial use" of all decontaminated equipment, structures and facilities either at the facility or at off-site industrial facilities.

Decontamination is expected to proceed by emptying the storage magazines of any energetic materials by either shipping the materials off-site or by processing the materials in the HBC, if the HBC is still operating. The storage magazines, preparation building, HBC, and its associated APCS will then be decontaminated. While decontaminating the HBC by flashing the burn pan, as described in Section 4.5, the air pollution control systems will be in operation to control any potential air emissions from this step in the decontamination process.

No equipment in hazardous waste service nor any equipment used in the closure will be removed from the facility or returned to other service until it is decontaminated and verified clean. All equipment including mobile equipment which comes into contact with hazardous waste will be decontaminated. Any hazardous residues generated during decontamination will be disposed at appropriately permitted off-site facilities that are able to handle these types of wastes. After full decontamination, the structures and equipment may continue in non-hazardous waste service for the remainder of their useful lives. Alternatively, equipment may be dismantled and scrapped or sold as used equipment.

During decontamination operations, personnel will use personal protective equipment (PPE) appropriate to each task. Clean up procedures will follow all OSHA requirements as specified in 29 CFR §1910.120, Hazardous Waste Operations and Emergency Response.

All equipment or structures in hazardous waste service at the start of closure will be emptied as thoroughly as possible before cleaning begins. Any personnel who must enter confined spaces in order to clean them will follow OSHA "Confined Space Entry" procedures (29 CFR §1910.146).

The majority of the equipment to be cleaned is made of mild steel and the structures to be cleaned are made from concrete. Hydroblasting or steam cleaning may be used to clean this equipment and the concrete. These methods are appropriate for removing explosives and heavy metal contamination from either concrete or metal surfaces according to the Guide for Decontaminating Buildings, Structures and Equipment at Superfund Sites, EPA/600/2-85/028, page 12. Hydroblasting and steam cleaning (physical extraction) are also appropriate "Alternative Treatment Standards for Hazardous Debris" for metal or concrete surfaces as listed under 40 CFR §268.45 (Table 1) and constitutes “Physical Extraction: *High Pressure Steam and Water Sprays*."

In the event that hydroblasting or steam cleaning fails to achieve satisfactory results as described in Section 5.0, an aqueous cleaner may be selected based on its ability to dissolve the particular hazardous wastes that have been handled by each piece of equipment. If this method is used, this would constitute "Chemical Extraction: *Liquid Phase Solvent Extraction*" as defined under 40 CFR §268.45 (Table 1) which is also an appropriate "alternate treatment technology" for metal or concrete surfaces.

All wash water will be collected from cleaning operations and will be stored temporarily on-site in drums or containers and will be handled as described in Section 6.1.

4.3 Procedures for Closing the Storage Magazines

The storage magazines (Above Ground Magazine and Earth Covered Magazines) will be closed in accordance with 40 CFR §264.1202. In accordance with DOD Ammunition and Explosive Safety Standards, DoD 6055.9-STD, storage facilities no longer used to store ammunition and explosives must follow the process described below to ensure that that no threats to human health or the environment remain when the unit is no longer to be used to store ammunition and explosives.

1. Empty the storage facility of all ammunition and explosives and related materials.
2. Clean the storage facility, as required, to remove any visible explosives residue.
3. Visually inspect the storage facility for the presence of remaining ammunition and explosives or visible explosives residue by a knowledgeable individual.
4. Remove all fire and chemical hazard symbols and mark the storage facility as empty.
5. Secure the storage facility to prevent inadvertent use or access.
6. Notify the applicable emergency response and regulatory authorities of the change in the storage facility's use.
7. Record the date the storage facility was inspected, the name and position of the inspector, and the results in permanent real estate records.

In addition to the requirements above, the storage magazines will also be decontaminated in order to ensure there is no threat to human health or the environment.

Inventory Removal

When closure commences, no additional energetic materials will be added to the storage magazines. The storage magazines will be emptied of any energetic materials by either shipping the material off-site to an approved TSDF or by processing the material in the HBC, if the HBC is still operating.

Decontamination

The floor will be swept clean of all loose debris and the sweepings will be placed in antistatic bags, soaked with a desensitizing agent and sealed. The antistatic bag containing the floor sweepings will be shipped to an approved hazardous waste TSDF facility. After sweeping the loose debris from the floor surface, the concrete floors and walls of the storage magazines will be decontaminated by hydroblasting or steam cleaning. The wash water will be contained and collected from the building floor and will be pumped into drums or containers so that possible contamination is not spread. The wash water will be handled as described in Section 6.1. The

concrete surfaces of the storage magazines will be considered adequately decontaminated when they meet the criteria described in Section 5.2.

Securing the Magazine(s)

The storage magazines will be left in place after closure. All fire and chemical hazard symbols may be removed and the magazines will be locked to prevent inadvertent use or access.

Certification of Closure

The storage magazine(s) will be certified closed as described in Section 9.0.

4.4 Procedures for Closing the Preparation Building

The preparation building (Rocket Motor Ops Building) will be closed in accordance with 40 CFR §264.601.

Inventory Removal

When closure commences for the preparation building, there will be no inventory in the building. Therefore, there is no need for inventory removal.

Decontamination

The floor will be swept clean of all loose debris and the sweepings will be placed in antistatic bags, soaked with a desensitizing agent and sealed. The antistatic bag containing the floor sweepings will be shipped to an approved hazardous waste TSDF facility. After sweeping the loose debris from the floor surface, any equipment, work benches, tables, concrete floors, and concrete and brick walls of the building will be decontaminated by hydroblasting or steam cleaning. The wash water will be contained and collected from the building floor and will be pumped into drums or containers so that possible contamination is not spread. The wash water will be handled as described in Section 6.1. The metal surfaces of equipment, work benches, or tables will be considered adequately decontaminated when they meet the criteria described in Section 5.1. The concrete surfaces of the building will be considered adequately decontaminated when they meet the criteria described in Section 5.2.

Dismantling of Equipment

The equipment within the preparation building may be left in place for other service, it may be dismantled and sent for scrap metal recycling, or it may be sold as used equipment. If the equipment cannot be cleaned to the required standards, it will be disposed of at an approved hazardous waste TSDF facility. The building will be left in place after closure.

Certification of Closure

The preparation building will be certified closed as described in Section 9.0.

4.5 Procedures for Closing the HBC and the Associated APCS

The HBC will be closed in accordance with 40 CFR §264.601. If possible, the HBC will be closed after all materials in the storage magazines have been processed in the HBC.

The wash water for the HBC and all the associated APCS components will be contained and collected and will be pumped into drums or containers so that possible contamination is not spread. The wash water will be handled as described in Section 6.1. Any equipment surface will be considered adequately decontaminated when it meets the criteria described in Section 5.1.

Inventory Removal

When closure commences for the HBC, there will be no inventory in the HBC. Therefore, there is no need for inventory removal.

Flashing the HBC Burn Pan

It is unlikely that explosives will remain on surfaces inside the HBC. To ensure that this is not the case upon closure, the HBC burn pan will be flashed (with no energetic material present) with an appropriate fuel and oxidizer to heat the burn pan to a temperature that exceeds the decomposition temperature of the explosive materials processed in the unit. Flashing the burn pan in the HBC ensures that all explosives have been consumed. The exhaust gas from the HBC will then be sent through the APCS. When the HBC pressure is confirmed to be negative relative to ambient, the HBC loading door will be opened and the HBC and APCS will be shutdown.

HBC Wash System Activation

Next, facility procedures for the HBC Wash System will be used to initially clean the interior of the HBC of ash or condensate materials. The wash system water from this initial cleaning step will be collected in drums or containers for shipment off-site for proper disposal. The filter press system solids will be placed in drums for shipment off-site for proper disposal. The amount of material removed and where it was sent will be recorded and maintained in the operating record.

After the HBC Wash System has completed its' cycle, if any remaining ash or debris remains inside the HBC, it will be removed using facility procedures. This waste will be placed in drums for shipment off-site.

HBC Decontamination

Cleaning of the HBC surfaces will be accomplished by hydroblasting or steam cleaning. As mentioned in Section 4.2, these methods are appropriate for cleaning metal surfaces of explosives or heavy metal contamination. All ancillary components, including piping and ductwork, to the HBC and the associated APCS will also be hydroblasted or steam cleaned.

HBC Wash System Decontamination

Prior to the HBC and APCS being cleaned, the caustic storage tank will be emptied of the caustic material used in the neutralization system during normal operations. This will be done in order to avoid getting the material wet.

As previously mentioned, the wash system water from the initial cleaning step of the HBC will be collected in drums or containers for shipment off-site for proper disposal and the filter press system solids will be placed in drums for shipment off-site for proper disposal. After that, the HBC Wash System will be cleaned by hydroblasting or steam cleaning, as described in Section 4.2.

Air Pollution Control System (APCS) Decontamination

In general, the APCS equipment will be left in-place and cleaned in-place. Dismantling before cleaning would risk release of contaminants and exposure of workers. Cleaning will typically be conducted by workers on undisturbed equipment using a hand-held lance. Holes may have to be cut into some equipment and fittings or attachments made to accommodate workers and equipment. Cleaned equipment may be used in subsequent non-hazardous operations or dismantled and scrapped or sold as used equipment.

Prior to the HBC and the associated APCS being hydroblasted or steam cleaned, the following steps will be taken to prepare the equipment for cleaning:

- The fuel train supplying the afterburner will be emptied of any remaining fuel.
- The drum below the cyclone separator's hopper used to collect particulate will be sealed and sent off-site for disposal. Another drum or container will be placed below the hopper and will be used to collect the wash water from cleaning the equipment. The drum or container will be fitted with discharge piping that will send the water to a collection tank or additional drums where it will be handled as described in Section 6.1.
- The dry sorbent injection system will be emptied of the caustic material used during normal operations in order to avoid getting the material wet.
- The drum below the baghouse used to collect particulate will be sealed and sent off-site for disposal. Another drum or container will be placed below the baghouse and will be used

to collect the wash water from cleaning the equipment. The drum or container will be fitted with discharge piping that will send the water to a collection tank or additional drums where it will be handled as described in Section 6.1.

- The selective catalytic reduction system and the ammonia tank will be emptied of the ammonia used during normal operations.
- All filters (baghouse and HEPA) will be removed and disposed of as potential hazardous waste. If the unit will be used in subsequent non-hazardous operations, new filters will be installed before commencing operations.

As described in Section 4.2, the APCS equipment will be cleaned by hydroblasting or steam cleaning the areas where the exhaust gases would have contacted the equipment. The APCS equipment that will be cleaned includes:

- Afterburner
- Evaporative quench
- Cyclone separator
- Dry sorbent injection system
- Baghouse housing
- HEPA filter housing
- Selective catalytic reduction system

ID Fan / Stack Decontamination

The interior metals surfaces of the ID fan, ductwork sections, and stack will be hydroblasted or steam cleaned, as described in Section 4.2. If necessary, holes will be cut at appropriate locations in the ductwork and stack to facilitate "snakes" to be inserted. Low point drains will be cut in the ductwork where appropriate to drain the wash water. The resulting wash water will be sent to a collection tank or drums where it will be handled as described in Section 6.1.

Concrete Pad Decontamination

The concrete pad around the HBC and the associated APCS will be decontaminated by hydroblasting or steam cleaning or by using mechanical methods (chiseling, scarification, etc.) where deemed appropriate. The concrete underneath the area where materials are placed into the unit and the concrete underneath the area where dust is removed from the APCS will be focal points for cleaning. The wash water will be contained and collected and will be pumped into drums or containers so that possible contamination is not spread. The wash water will be handled as described in Section 6.1. The concrete surfaces will be adequately decontaminated when they meet the criteria described in Section 5.2.

Dismantling of Equipment

The equipment may be left in place for other service, it may be dismantled and sent for scrap metal recycling, or it may be sold as used equipment. If the equipment cannot be cleaned to the required standards, it will be disposed of at an approved hazardous waste TSDF facility.

Certification of Closure

The HBC and the associated APCS will be certified closed as described in Section 9.0.

4.6 Procedures for Decontaminating Cleaning Equipment

4.6.1 Non-Porous Equipment

All non-porous machinery, equipment, and tools used during closure/cleaning operations will be decontaminated before being returned to other service. Decontamination of this equipment will be conducted only when all permanent equipment, structures and facilities have been decontaminated.

Non-porous items such as forklifts, temporary containers, drums, sprayers, non-porous PPE (such as goggles, boots and hardhats), portable pumps, plastic sheeting, etc. will be thoroughly water washed after use but before being allowed to leave the facility. Equipment will remain inside the facility until decontamination is complete. When non-porous equipment is cleaned, it shall be done on a containment slab such that all wash water is contained. The wash water will be collected in drums or containers and handled as described in Section 6.1.

Non-porous equipment will be adequately decontaminated when it meets the criteria described in Section 5.3.

4.6.2 Porous Equipment

Porous equipment such as rags, porous PPE, and absorbents that cannot be effectively cleaned will be containerized and sent off-site for proper processing and disposal. See Section 6.2 for a description of disposal practices for solid waste.

5.0 CRITERIA FOR DETERMINING WHEN DECONTAMINATION IS COMPLETE

5.1 Metal Surfaces

Metal surfaces will be cleaned until surfaces meet the definition of "clean debris surface" as defined in 40 CFR §268.45 (Table 1) after surface cleaning by "Physical Extraction: *High Pressure Steam and Water Sprays*." Where feasible, the ductwork will be visually inspected. Where visual inspection is not possible, the ductwork will be considered clean when wash water exiting at the drain is clear. If one cleaning technique such as steam cleaning fails to achieve "clean debris surface," then another method such as hydroblasting may be tried.

It should be noted that metal surfaces may be rusted or discolored due to age, extreme heat, and long service. Therefore, metal surfaces will be considered to have achieved "clean debris surface" when coloration is consistent and uniform on a localized basis even though surfaces may not be returned to white metal.

5.2 Concrete Surfaces

The concrete surfaces will be considered decontaminated when the upper surface meets the definition of "clean debris surface" contained in 40 CFR §268.45 (Table 1) after surface cleaning by "Physical Extraction: *High Pressure Steam and Water Sprays*" or by "Physical Extraction: *Scarification, Grinding, and Planing.*"

5.3 Non-Porous Decontamination Equipment

Most of the non-porous decontamination equipment used to clean units for closure will be equipment currently in use at the facility or owned by a contractor. As such, much of it will be stained or rusted from prior use. Non-porous equipment used to decontaminate the facility will be inspected before starting decontamination work and areas of staining, rust or discoloration will be noted and recorded in the final closure report. These areas cannot be expected to achieve the "clean debris surface" definition of 40 CFR §268.45 (Table 1, Footnotes 3 and 9).

Except for areas discussed in the preceding paragraph, non-porous equipment will be cleaned until surfaces meet the definition of "clean debris surface" as defined in 40 CFR §268.45 (Table 1) after surface cleaning by "physical extraction: high pressure steam and water sprays." If one cleaning technique such as steam cleaning fails to achieve "clean debris surface," then another method such as hydroblasting may be tried.

Alternatively, equipment may be sent off-site for processing and disposal without decontamination as hazardous waste.

6.0 DISPOSAL OF WASH WATER AND WASTES FROM DECONTAMINATION OPERATIONS

6.1 Wash Water

The wash water obtained from decontamination and from cleaning operations will be temporarily stored on-site in drums or containers until it can be sampled for Toxic Characteristic Leaching Procedure (TCLP) metals and explosive compounds to verify that it is not hazardous. If analytical results indicate that the wash water is hazardous, it will be shipped off-site to an approved TSDF.

6.2 Non-Liquid Wastes

Solids such as dirt, ash, debris, ground concrete from scarification or grinding, and any porous items that cannot be effectively cleaned will be containerized and sent off-site for processing and disposal. Other items such as electrical wiring, insulation, pallets and contaminated clean up equipment such as brooms, clothing, porous PPE, cloth wipes, rags, and scrapers will be handled in the same manner. The filters removed from the APCS equipment will be containerized and sent off-site for processing and disposal.

7.0 RUN-ON and RUN-OFF CONTROL

Any precipitation that falls within the facility boundaries is diverted away from storage, preparation, or processing areas by ditches and culvert systems. There is no uncontrolled run-off from the areas that handle hazardous materials. Run-off from the areas that handle hazardous materials is prevented as follows:

- Storage magazines – materials are is stored in covered and enclosed magazines
- Preparation building operations – preparation of materials is conducted inside a covered building
- Processing unit operations – operations are conducted inside the enclosed HBC which is located on a concrete pad

8.0 GROUNDWATER AND SOIL MONITORING

Once the equipment, structures and areas are decontaminated, there will be no hazardous waste remaining on the site. Therefore, no groundwater monitoring should be required.

All equipment in hazardous waste service is located on concrete or asphalted areas or is within a building. Therefore, there is no soil exposed to waste spills or releases and there are no other known or suspected areas of soil contamination.

9.0 CLOSURE CERTIFICATION

Within 60 days of completion of final closure, the facility will submit a certification that the hazardous waste management unit or facility was closed in accordance with the specifications of the approved Closure Plan (40 CFR §264.115). This certification will be made to the Regional Administrator's office and the Texas Commission on Environmental Quality (TCEQ) Industrial and Hazardous Waste (IHW) Section by registered mail and will be signed by the owner or operator and by an independent registered Professional Engineer.

The independent registered Professional Engineer will submit a report to the Regional Administrator and the TCEQ IHW Section documenting work activities associated with closure. Submittal of this document will constitute final closure. The independent registered Professional Engineer will, as much as feasible, observe the work activities listed in the Closure Schedule (see Section 10.2). When work schedules conflict such that it is not feasible for the independent registered Professional Engineer to observe closure activities, the facility will provide to the independent registered Professional Engineer with documentation sufficient to evaluate adherence to this Closure Plan for the work in question. The report submitted will list notable observations, pertinent details, a brief summary of work activities and certification that, in the opinion of the independent registered Professional Engineer, a clean debris surface for the equipment being cleaned has been achieved.

The clean debris surface definitions listed in 40 CFR §268.45 (Table 1) is obviously a matter of some interpretation. It is important to note that metal surfaces may be rusted or discolored due to age, extreme heat, and long service and not due to hazardous residue. Therefore, cleaning operations will be considered to have achieved "clean debris surface" when coloration is consistent and uniform on a localized basis even though surfaces may not be returned to white metal.

10.0 FINAL CLOSURE SCHEDULE

10.1 Expected Year of Final Closure

The facility has no plans to shut down in the foreseeable future. However, for the purpose of compliance with the hazardous waste management regulations, an estimate of the expected year of closure is in 30 years.

10.2 Expected Closure Schedule

A projected general final closure schedule is described in Table 10-1. The estimated active time to conduct the final closure is 16 weeks. The closure must be completed within 180 days after receiving the final energetic material shipment.

The facility will submit the notification of intent to close to the Regional Administrator at least 45 days prior to the date on which final closure is expected to begin. After the facility receives the last shipment of energetic material, it has 30 days to commence closure operations.

Within 90 days of receipt of the last shipment of energetic materials, no hazardous waste inventory will be allowed to remain on-site, unless approved by the Regional Administrator.

As described in Section 9.0, within 60 days after completion of final closure, a certification of closure will be submitted.

Table 10-1
Proposed Closure Schedule

Activity	Week																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-25
Inventory Removal																	
Evaluate inventory for on-site processing or shipment	X	X															
Process materials in HBC, if available, or ship materials off-site		X	X	X	X	X	X	X									
Ensure all materials have been processed in the HBC or shipped off-site (ensure storage magazines are empty)								X									
Closure of Storage Magazines																	
Sweep floors of loose debris								X									
Steam clean floors and walls (collect wash water)									X	X							
Containerize wash water for sampling and analysis									X	X							
Analyze wash water from steam cleaning										X	X	X					
After verifying the magazines are clean, remove fire and chemical hazard symbols													X				
Secure the magazines with locks													X				
Closure of Preparation Building																	
Sweep floors of loose debris								X									
Steam clean floors and walls (collect wash water)									X	X							
Containerize wash water for sampling and analysis									X	X							
Analyze wash water from steam cleaning										X	X	X					
After verifying the equipment is clean, dismantle equipment (or leave in place)													X	X			

Notes:

This is an example of a possible schedule. Actual timeframes for certain activities may vary.

Table 10-1
Proposed Closure Schedule (continued)

Activity	Week																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-25
Closure of the HBC																	
Preparing Equipment for Decontamination:																	
Flash the HBC burn pan (APCS in operation)									X								
Activate the HBC Wash System per facility procedures									X								
Collect HBC Wash System water for off-site disposal									X								
Collect HBC Wash System filter press solids for off-site disposal									X								
Containerize any remaining ash or debris in the HBC										X							
Empty the caustic storage tank supplying the HBC Wash System neutralization system										X							
Empty afterburner fuel train of any remaining fuel										X							
Seal drum below cyclone's hopper for off-site disposal										X							
Remove caustic material from dry sorbent injection system										X							
Seal drum below the baghouse for off-site disposal										X							
Remove baghouse filters and HEPA filters and containerize for off-site disposal										X							
Empty ammonia tank and selective catalytic reduction system of ammonia										X							
Set up water collection drums or containers										X							
Ship containerized materials to off-site facility										X							
Decontamination of HBC and APCS:																	
Steam clean or hydroblast all HBC surfaces											X	X					
Steam clean or hydroblast all HBC Wash System surfaces											X	X					
Steam clean or hydroblast the afterburner components												X					
Steam clean or hydroblast the evaporative quench												X					
Steam clean or hydroblast cyclone separator												X					
Steam clean or hydroblast dry sorbent injection system													X				

Notes:

This is an example of a possible schedule. Actual timeframes for certain activities may vary.

Table 10-1
Proposed Closure Schedule (continued)

Activity	Week																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-25
Steam clean or hydroblast baghouse filter housing													X				
Steam clean or hydroblast HEPA filter housing													X				
Steam clean or hydroblast ammonia tank, selective catalytic reduction system, and associated piping													X				
Steam clean or hydroblast ID fan, ductwork, and stack													X				
Containerize wash water for sampling and analysis											X	X	X				
Analyze wash water from steam cleaning or hydroblasting												X	X	X			
Final hazardous waste shipment containing PPE, wash water, clean up materials, etc., as applicable														X	X	X	
Closure Certification																	
Independent Registered Professional Engineer prepares Closure Report (submitted within 60 days of completion of final closure)																	X

Notes:

This is an example of a possible schedule. Actual timeframes for certain activities may vary.

Table VII.A. - Unit Closure

For each unit to be permitted, list the facility components to be decontaminated, the possible methods of decontamination, and the possible methods of disposal of wastes and waste residues generated during unit closure:

Equipment or HWM Unit	Possible Methods of Decontamination[1]	Possible Methods of Disposal[1]
Above Ground Magazine	-remove all stored material -sweep floors -steam clean or hydroblast floors and walls	-on-site processing of materials in HBC or ship materials off-site to an approved TSDF -ship floor sweepings off-site to an approved TSDF -ship wash water to an approved TSDF if determined to be hazardous
Earth Covered Magazine V-13-1	-remove all stored material -sweep floors -steam clean or hydroblast floors and walls	-on-site processing of materials in HBC or ship materials off-site to an approved TSDF -ship floor sweepings off-site to an approved TSDF -ship wash water to an approved TSDF if determined to be hazardous
Earth Covered Magazine V-13-2	-remove all stored material -sweep floors -steam clean or hydroblast floors and walls	-on-site processing of materials in HBC or ship materials off-site to an approved TSDF -ship floor sweepings off-site to an approved TSDF -ship wash water to an approved TSDF if determined to be hazardous
Earth Covered Magazine V-13-3 (reserved for future use)	-remove all stored material -sweep floors -steam clean or hydroblast floors and walls	-on-site processing of materials in HBC or ship materials off-site to an approved TSDF -ship floor sweepings off-site to an approved TSDF -ship wash water to an approved TSDF if determined to be hazardous

Note:
[1] Applicants may list more than one appropriate method.

Table VII.A. - Unit Closure (continued)

Equipment or HWM Unit	Possible Methods of Decontamination[1]	Possible Methods of Disposal[1]
Earth Covered Magazine V-13-4 (reserved for future use)	-remove all stored material -sweep floors -steam clean or hydroblast floors and walls	-on-site processing of materials in HBC or ship materials off-site to an approved TSDF -ship floor sweepings off-site to an approved TSDF -ship wash water to an approved TSDF if determined to be hazardous
Rocket Motor Ops Building	-sweep floors -steam clean or hydroblast floors and walls	-ship floor sweepings off-site to an approved TSDF; -ship wash water to an approved TSDF if determined to be hazardous
Hybrid Burn Chamber (HBC) and APCS	-flash the HBC burn pan while APCS is operating -containerize debris and filters -steam clean or hydroblast equipment and concrete pads	-cleaned equipment will be left in place to be used in subsequent non-hazardous operation or dismantled and scrapped or sold as used equipment -filters will be disposed of off-site -wash water from steam cleaning or hydroblasting will be sent to an approved TSDF if determined to be hazardous -debris from cleanup activities will be shipped off-site

Note:
[1] Applicants may list more than one appropriate method.

Section VII – Closure and Post-Closure Plans

Appendix VII.B – Closure Cost Estimate

30 TAC 335.178, 40 CFR §264.142

1.0 INTRODUCTION

EnviroSafe Demil, LLC (ESD) has developed a closure cost estimate in accordance with 30 TAC 335.178 and 40 CFR §264.142. The Closure Plan is included as *Appendix VII.A - Closure Plan* of the permit application and the closure cost estimate is included in this document. Closure activities in this estimate are consistent with those described in the Closure Plan, plus several worst-case assumptions have been made in accordance with TCEQ's Technical Guidance No. 10 document.

The closure cost estimate will be adjusted annually for inflation in accordance with 40 CFR §264.142(b). If the Closure Plan requires revisions that result in an increased closure cost estimate, the closure cost estimate will be revised as specified in 40 CFR §264.142(c). The most current closure cost estimate will be kept at the facility in accordance with 40 CFR §264.142(d).

2.0 METHODOLOGY

The methodology used in developing these closure costs involved determining the specific activities to be performed based on the Closure Plan. Once these activities were defined, the information was input into the U.S. Environmental Protection Agency's CostPro software, Version 6.1. This software is used to support financial assurance requirements related to closure activities at Resource Conservation and Recovery Act (RCRA) facilities. CostPro software provides a consistent, accurate and rapid method of evaluating cost estimates for closure.

The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

3.0 ASSUMPTIONS

As required by 40 CFR §264.142(a)(1), this cost estimate includes the cost of closure at the point in the facility's active life when the extent and manner of its' operation would make closure most expensive. The Closure Plan lists the maximum inventory of hazardous waste that is permitted at the facility. The storage magazines are not kept completely full and the values shown in the

Closure Plan assume all of the storage magazines are filled to capacity. Therefore, this estimate represents a worst-case scenario for wastes on-site at any time.

It is expected that the HBC will be available to process energetic materials prior to and during closure. However, for the purposes of this cost estimate, it is assumed that the HBC is inoperative and that all inventory will be shipped off-site. It assumed that 50% of the energetic materials will be sent to Expal USA in Hooks, Texas and 50% will be sent to Clean Harbors in Coalfax, Louisiana.

As required by 40 CFR §264.142(a)(2) and 30 TAC 335.178, it is assumed for the purpose of this cost estimate that at the time of closure, a third party will execute all closure activities. In reality, facility personnel may perform the majority of these activities and the cost of closure activities would be lower. However, this conservative assumption was made to ensure that adequate funds were reserved in the event that all activities were performed by a third party.

As a worst-case scenario, it is assumed that all of the wash water is collected in drums or containers and is shipped off-site for processing and disposal. It is assumed that the wash water is sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

As required by 40 CFR §264.142(a)(3), this closure cost estimate does not incorporate any salvage value that may be realized with the sale of hazardous waste, facility structures, equipment, land, or any other assets associated with the facility.

Personal protective equipment will be utilized as necessary during all closure activities with potential for contamination and/or injury. CostPro accounts for the cost of appropriate PPE in the labor and equipment cost rates.

Additionally, as a conservative assumption, this closure cost estimate was calculated assuming that each storage magazine, the preparation building, and the processing unit would be closed independently and not at the same time. If they were closed at the same time, the cost of the closure could be lower due to shared expenses for rental equipment, equipment and crew mobilization, shared expenses for clean-up waste and debris being shipped offsite, etc.

4.0 COST ESTIMATE INFORMATION

The CostPro worksheets are included in *Attachment VII.B – CostPro Closure Cost Estimates*. The closure cost estimates are divided by area of the facility as follows:

Storage Magazines

Above Ground Magazine
Earth Covered Magazine (V-13-1)
Earth Covered Magazine (V-13-2)

HBC Area

Rocket Motor Ops Building
Hybrid Burn Chamber (HBC)

The facility chose to use the "Container Storage Area" worksheets for both the storage magazines and the preparation building. These worksheets cover all the required closure steps and closure costs associated with the closure of the storage magazine and the preparation building. In order to account for cleaning the walls of the Above Ground Magazine and the Rocket Motor Ops Building, the height of the walls for each building was entered for "secondary containment system berm" height. From this entry, CostPro calculated the surface area of the walls to be cleaned and the costs to clean the wall were included in the cost estimate. The walls of the Earth Covered Magazines are a half-cylinder shape. CostPro is not set up to calculate the surface area for this shape, so the surface area for the walls of the Earth Covered Magazines was entered directly into CostPro under "Surface Area of Other Structures." CostPro then calculated the costs to clean the walls based on the surface area entered.

The facility chose to use the "Incinerators and BIFs" program in the CostPro software to calculate the closure costs for the HBC. While the HBC is not an incinerator or BIF, this program was the closest program the CostPro software had available to calculate the closure costs. The "User Defined Activity" worksheets were added to the standard "Incinerators and BIFs" worksheets in order to add the cost of flashing the HBC burn pan to the closure cost estimate.

The CostPro software calculates all aspects of closure. The costs for removal of wastes, decontamination, sampling and analysis, transportation, and off-site processing and disposal of the wastes and wash water generated during closure are all included in the CostPro cost estimate. Additionally, the CostPro software includes the costs of engineering expenses, certification of closure, and a 10% contingency.

The closure cost estimate assumes that offsite management is required to oversee the closure activities. A value of 5% of the direct capital costs of the project was selected to cover supervisory engineering and administrative expenses related to overseeing the closure activities per the

approved Closure Plan. This percentage was selected based on information from the EPA's guidance on closure costs for a facility having an existing approved Closure Plan.

An independent registered Professional Engineer will certify that the facility is closed in accordance with the specifications of the Closure Plan. This requires the Professional Engineer to review the Closure Plan, make site visits throughout the closure process and to prepare a final certification document. Costs associated with closure certification are included in this cost estimate.

In order to ensure that adequate funds are available for tasks that may be determined at the actual time of closure, an overall 10% contingency has been added to the total closure cost estimate, in accordance with TCEQ's Technical Guidance No. 10 document.

5.0 CONCLUSION

The closure cost estimates are based on pricing calculated by the CostPro software, Version 6.1, in 2009 dollars. The closure cost estimates have been adjusted to current dollars using the Implicit Price Deflator values for Gross National Product as specified in 40 CFR §264.142(b). The total closure cost estimate in 2023 dollars is shown in Table 5-1.

Table VII.B. - Unit Closure Cost Estimate shows the itemized costs for the closure of each unit. *Table VII.E.1 – Permitted Unit Closure Cost Summary* shows a summary of closure cost estimates for the whole facility.

This closure cost estimate should be updated periodically using inflation factors or by recalculating the costs in current dollars.

Table 5-1
Closure Cost Estimate (CCE) Summary

Unit	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Above Ground Magazine															
CCE based on CostPro Version 6.1 (2009 cost basis)	$89,718	-	-	-	-	-	-	-	-	-	-	-	-		-
Calculated CCE (using inflation factor)	-	$90,811	$92,689	$94,413	$96,018	$97,690	$98,588	$99,523	$101,284	$103,537	$105,271	$106,661	$111,544	$119,398	$123,747
IPD for Gross National Product [a]	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309	110.130	117.885	122.179
Inflation Factor [b]	-	1.01	1.02	1.02	1.02	1.02	1.01	1.01	1.02	1.02	1.02	1.01	1.05	1.07	1.04
Earth Covered Magazine (V-13-1)															
CCE based on CostPro Version 6.1 (2009 cost basis)	$145,867	-	-	-	-	-	-	-	-	-	-	-	-		-
Calculated CCE (using inflation factor)	-	$147,643	$150,696	$153,501	$156,109	$158,828	$160,288	$161,808	$164,670	$168,334	$171,153	$173,413	$181,351	$194,121	$201,192
IPD for Gross National Product [a]	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309	110.130	117.885	122.179
Inflation Factor [b]	-	1.01	1.02	1.02	1.02	1.02	1.01	1.01	1.02	1.02	1.02	1.01	1.05	1.07	1.04
Earth Covered Magazine (V-13-2)															
CCE based on CostPro Version 6.1 (2009 cost basis)	$103,161	-	-	-	-	-	-	-	-	-	-	-	-		-
Calculated CCE (using inflation factor)	-	$104,417	$106,577	$108,560	$110,405	$112,327	$113,360	$114,435	$116,459	$119,051	$121,044	$122,642	$128,257	$137,288	$142,289
IPD for Gross National Product [a]	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309	110.130	117.885	122.179
Inflation Factor [b]	-	1.01	1.02	1.02	1.02	1.02	1.01	1.01	1.02	1.02	1.02	1.01	1.05	1.07	1.04

Notes:

[a] The Implicit Price Deflator (IPD) values for Gross National Product are from: U.S. Bureau of Economic Analysis, "Table 1.1.9. Implicit Price Deflators for Gross Domestic Product" (accessed Thursday, March 28, 2024). <https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=13&_gl=1*ki9q7t*_ga*MTU2NzY3NjUwMi4xNjc3NjAzMzE0*_ga_J4698JNNFT*MTcxMTE0NDQ1Ny4yLjEuMTcxMTE0NDQ2Mi41NS4wLjA.#eyJhcHBpZCI6MTksInN0ZXBzIjpbMSwyLDMsM10sImRhdGEiOltbIk5JUEFfVGFibGVfTGlzdCIsIjEzIl0sWyJDYXRlZ29yaWVzIiwiU3VydmV5Il0sWyJGaXJzdF9ZZWFyIiwiMjAwOSJdLFsiTGFzdF9ZZWFyIiwiMjAyMyJdLFsiU2NhbGUiLCIwIl0sWyJTZXJpZXMiLCJBIl1dfQ==>

[b] The inflation factors are calculated as specified in 40 CFR §264.142(b).

Table 5-1
Closure Cost Estimate (CCE) Summary (continued)

Unit	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Rocket Motor Ops Building															
CCE based on CostPro Version 6.1 (2009 cost basis)	$83,786	-	-	-	-	-	-	-	-	-	-	-	-		-
Calculated CCE (using inflation factor)	-	$84,806	$86,560	$88,171	$89,669	$91,231	$92,070	$92,943	$94,587	$96,691	$98,310	$99,608	$104,168	$111,503	$115,565
IPD for Gross National Product [a]	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309	110.130	117.885	122.179
Inflation Factor [b]	-	1.01	1.02	1.02	1.02	1.02	1.01	1.01	1.02	1.02	1.02	1.01	1.05	1.07	1.04
Hybrid Burn Chamber (HBC)															
CCE based on CostPro Version 6.1 (2009 cost basis)	$65,451	-	-	-	-	-	-	-	-	-	-	-	-		-
Calculated CCE (using inflation factor)	-	$66,248	$67,618	$68,877	$70,047	$71,267	$71,922	$72,604	$73,888	$75,533	$76,797	$77,811	$81,373	$87,103	$90,276
IPD for Gross National Product [a]	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309	110.130	117.885	122.179
Inflation Factor [b]	-	1.01	1.02	1.02	1.02	1.02	1.01	1.01	1.02	1.02	1.02	1.01	1.05	1.07	1.04
Total Closure Cost Estimate	$487,982	$493,926	$504,140	$513,521	$522,247	$531,343	$536,229	$541,314	$550,888	$563,145	$572,577	$580,135	$606,693	$649,414	$673,070
TOTAL CLOSURE COST ESTIMATE IN CURRENT DOLLARS (2023)		**$673,070**													

Notes:

[a] The Implicit Price Deflator (IPD) values for Gross National Product are from: U.S. Bureau of Economic Analysis, "Table 1.1.9. Implicit Price Deflators for Gross Domestic Product" (accessed Thursday, March 28, 2024). <https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=13&_gl=1*ki9q7t*_ga*MTU2NzY3NjUwMi4xNjc3NjAzMzE0*_ga_J4698JNNFT*MTcxMTE0NDQ1Ny4yLjEuMTcxMTE0NDQ2Mi41NS4wLjA.#eyJhcHBpZCI6MTksInN0ZXBzIjpbMSwyLDMsM10sImRhdGEiOltbIk5JUEFfVGFibGVfTGlzdCIsIjEzIl0sWyJDYXRlZ29yaWVzIiwiU3VydmV5Il0sWyJGaXJzdF9ZZWFyIiwiMjAwOSJdLFsiTGFzdF9ZZWFyIiwiMjAyMyJdLFsiU2NhbGUiLCIwIl0sWyJTZXJpZXMiLCJBIl1dfQ==>

[b] The inflation factors are calculated as specified in 40 CFR §264.142(b).

Table VII.B. - Unit Closure Cost Estimate

Task	Cost [a]
Above Ground Magazine	
Inventory removal	$1,030.80
Decontamination by steam cleaning	$30,050.31
Sampling and analysis	$1,968.12
Transportation	$7,284.06
Treatment and disposal	$33,422.71
Subtotal of closure costs	*$73,756.00*
Engineering expenses (5% of subtotal of closure costs)	$3,687.80
Certification of Closure	$4,118.00
Subtotal	*$81,561.80*
Contingency (10%)	$8,156.18
Total Closure Cost (2009 dollars)	$89,717.98
Total Closure Cost (2023 dollars) [a]	**$123,747**

Notes:

[a] The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The Total Closure Cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

Table VII.B. - Unit Closure Cost Estimate
(continued)

Task	Cost [a]
Earth Covered Magazine (V-13-1)	
Inventory removal	$2,078.94
Decontamination by steam cleaning	$6,110.03
Sampling and analysis	$1,968.12
Transportation	$16,262.94
Treatment and disposal	$95,949.42
Subtotal of closure costs	*$122,369.45*
Engineering expenses (5% of subtotal of closure costs)	$6,118.47
Certification of Closure	$4,118.00
Subtotal	*$132,605.92*
Contingency (10%)	$13,260.59
Total Closure Cost (2009 dollars)	$145,866.51
Total Closure Cost (2023 dollars) [a]	**$201,192**

Notes:

[a] The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The Total Closure Cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

Table VII.B. - Unit Closure Cost Estimate
(continued)

Task	Cost [a]
Earth Covered Magazine (V-13-2)	
Inventory removal	$1,399.14
Decontamination by steam cleaning	$6,110.03
Sampling and analysis	$1,968.12
Transportation	$11,773.50
Treatment and disposal	$64,144.02
Subtotal of closure costs	*$85,394.81*
Engineering expenses (5% of subtotal of closure costs)	$4,269.74
Certification of Closure	$4,118.00
Subtotal	*$93,782.55*
Contingency (10%)	$9,378.25
Total Closure Cost (2009 dollars)	$103,160.80
Total Closure Cost (2023 dollars) [a]	**$142,289**

Notes:

[a] The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The Total Closure Cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

Table VII.B. - Unit Closure Cost Estimate
(continued)

Task	Cost [a]
Rocket Motor Ops Building	
Inventory removal	$741.00
Decontamination by steam cleaning	$61,106.91
Sampling and analysis	$1,968.12
Transportation	$2,233.44
Treatment and disposal	$2,570.36
Subtotal of closure costs	*$68,619.83*
Engineering expenses (5% of subtotal of closure costs)	$3,430.99
Certification of Closure	$4,118.00
Subtotal	*$76,168.82*
Contingency (10%)	$7,616.88
Total Closure Cost (2009 dollars)	$83,785.70
Total Closure Cost (2023 dollars) [a]	**$115,565**

Notes:

[a] The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The Total Closure Cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

Table VII.B. - Unit Closure Cost Estimate
(continued)

Task	Cost [a]
Hybrid Burn Chamber (HBC)	
Inventory removal	$827.71
Decontamination of unit	$27,761.52
Decontamination of concrete	$7,175.51
Sampling and analysis	$3,936.24
Transportation	$2,233.44
Treatment and disposal	$3,698.13
Other tasks (disassembly of ancillary piping)	$5,958.40
Other tasks (flashing HBC burn pan)	$1,154.82
Subtotal of closure costs	*$52,745.77*
Engineering expenses (5% of subtotal of closure costs)	$2,637.29
Certification of Closure	$4,118.00
Subtotal	*$59,501.06*
Contingency (10%)	$5,950.11
Total Closure Cost (2009 dollars)	$65,451.17
Total Closure Cost (2023 dollars) [a]	**$90,276**

Notes:

[a] The most recent version of the U.S. EPA's CostPro software, Version 6.1, has pricing values from 2009, so the closure costs resulting from the CostPro software must be adjusted from 2009 dollars to current dollars. The Total Closure Cost is adjusted by applying an inflation factor derived from the most recent Implicit Price Deflator (IPD) values for Gross National Product as specified in 40 CFR §264.142(b).

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

Existing Unit Closure Cost Estimate	
Unit	**Cost**
Not Applicable	N/A
Total Existing Unit Closure Cost Estimate [1]	**N/A**

Proposed Unit Closure Cost Estimate	
Unit	**Cost (2023 dollars)**
Above Ground Magazine	$123,747
Earth Covered Magazine (V-13-1)	$201,192
Earth Covered Magazine (V-13-2)	$142,289
Rocket Motor Ops Building	$115,565
Hybrid Burn Chamber (HBC)	$90,276
Total Proposed Unit Closure Cost Estimate (2023 dollars) [1]	**$673,070**

[1] As units are added or deleted from these tables through future permit amendments or modifications, the remaining itemized unit costs should be updated for inflation when recalculating the revised total cost in current dollars.

ATTACHMENT VII.B

COSTPRO CLOSURE COST ESTIMATES

COSTPRO CLOSURE COST ESTIMATES

STORAGE MAGAZINES

Above Ground Magazine
Earth Covered Magazine (V-13-1)
Earth Covered Magazine (V-13-2)

EnviroSafe Demil, LLC

Address: 401 N Montague Street
Hooks
TEXAS
75561

Contact: TJ Ogden 206-999-8684
Michael Wentz 360-480-9320

Comments: STORAGE MAGAZINES:
Above Ground Magazine
Earth Covered Magazine (V-13-1)
Earth Covered Magazine (V-13-2)

Activity	Units	Closure Cost
Container Storage Area	3	$338,745.29
		$338,745.29
Additional Costs		$0.00
Total Estimated Cost		**$338,745.29**

Container Storage Areas Summary (CS_02-1)

Removal of Waste (CS-03)	$1,030.80	
Demolition and Removal of Pads (CS-04)	$0.00	
Removal of Process Equipment (CS-05)	$0.00	
Removal of Soil (CS-06)	$0.00	
Backfill and Grading (BF-01)	$0.00	
Decontamination (DC-01)	$30,050.31	
Sampling and Analysis (SA-02)	$1,968.12	
Monitoring Well Installation (MW-01)	$0.00	
Transportation (TR-01)	$7,284.06	
Treatment and Disposal (TD-01)	$33,422.71	
User Defined Cost (UD-01)	$0.00	
Subtotal of Closure Costs	$73,756.00	
Percentage of Engineering Expenses	5.0	%
Engineering Expenses	$3,687.80	
Certification of Closure (CS-07)	$4,118.00	
Subtotal	$81,561.80	
Percentage of Contingency Allowance	10.0	%
Contingency Allowance	$8,156.18	
Landfill Closure (Cover Installation) (CI-02)	$0.00	
TOTAL COST OF CLOSURE	$89,717.98	

Container Storage Areas Inventory (CS_01-1)

MAXIMUM PERMITTED CAPACITY

Volume of liquid waste	0.0	gal
Volume of solid waste	330.0	yd3
Percent of loose solid debris	100.0	%
Percent of drummed solid waste	0.0	%
Percent of baled waste or other monolithic waste	0.0	%
Volume of loose solid debris	330.0	yd3
Volume of solid waste in drums	0.0	yd3
Volume of monolithic waste	0.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM PAD

Length (excluding any curbs or berm)	225.0	ft
Width (excluding any curbs or berm)	60.0	ft
Surface Area of Containment System Pad	13,500.0	ft2
Surface Area of Containment System Pad in yd2	1,500.0	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM PAD

Thickness	1.0	ft
Volume of Containment System Pad	13,500.0	ft3
Volume of Containment System Pad in yd3	500.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM

Inside Perimeter	570.0	ft
Height	16.0	ft
Surface Area of Containment System Berm	9,120.0	ft2
Surface Area of Containment System Berm in yd2	1,013.3	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM

Thickness	1.0	ft
Volume of Containment System Berm	9,120.0	ft3
Volume of Containment System Berm in yd3	337.8	yd3

SURFACE AREA OF OTHER STRUCTURES

Surface Area of Other Structures	0.0	ft2
Surface Area of Other Structures in yd2	0.0	yd2

VOLUME OF OTHER STRUCTURES

Volume of Other Structures	0.0	yd3

VOLUME OF CONTAMINATED SOIL TO BE REMOVED

Facility: EnviroSafe Demil, LLC **Unit:** Above Ground Magazine 03/17/2023

Length	0.0	ft
Width	0.0	ft
Depth	0.0	ft
Volume of Contaminated Soil to be Removed	0.0	ft3
Volume of Contaminated Soil to be Removed in yd3	0.0	yd3

AREA OF SITE TO BE GRADED WITHOUT SOIL REMOVAL

Length	0.0	ft
Width	0.0	ft
Area of Site to be Graded Without Soil Removal	0.0	ft2
Area of Site to be Graded Without Soil Removal in yd2	0.0	yd2

Notes: Above Ground Magazine
Dimensions: 225 feet x 60 feet with 16 feet walls

The maximum inventory of energetic wastes in this storage magazine is 100000 lbs NEW. The maximum total weight of the packaging and energetic material is calculated to be 333333 lbs. CostPro calculates the costs to remove and treat wastes in yd3 rather than lbs so the average density of pine (37.45 lb/ft3) which is used in the palleting/packaging was used to convert the weight to yd3. The “volume of solid waste” includes the packaging and energetic material and is 330 yd3.

Container Storage Areas Removal of Waste (CS_03-1)

REMOVAL OF LOOSE SOLID DEBRIS

Volume of loose debris waste	330.0	yd3
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per yd3	$2.06	per yd3
Cost to Remove Loose Solid Debris	$679.80	

REMOVAL OF DRUMMED WASTE

Number of Drums	0	Drums
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per drum	$3.57	
Cost to Remove Waste in Drums	$0.00	

REMOVAL OF SOLID MONOLITHIC WASTE

Number of monolithic forms	0.0	Forms
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per form	$14.26	per Form
Cost to Remove Monolithic Waste	$0.00	

DRY SWEEP STORAGE PROCESS, HANDLING AREA

Surface area to dry sweep	13,500.0	ft2
Surface area to dry sweep in thousand square feet (MSF)	13.5	MSF
Labor and equipment cost per ft2	$26.00	per MSF
Cost to Dry Sweep Area	$351.00	
TOTAL COST OF WASTE REMOVAL	$1,030.80	

Container Storage Areas Certification of Closure (CS_07-1)

Number of units requiring certification of closure	1	Units
Cost of certification of closure per unit	$4,118.00	
TOTAL COST OF CERTIFICATION OF CLOSURE	$4,118.00	

Decontamination Summary (DC_01-1)

Decontamination of Unit by Steam Cleaning or Pressure Washing (DC-02)	$30,050.31
Decontamination of Unit by Sandblasting (DC-03)	$0.00
Decontamination of Heavy Equipment (DC-04)	$0.00
TOTAL COST OF DECONTAMINATION	$30,050.31

Decontamination by Steam Cleaning or Pressure Wash (DC_02-1)

Area of unit to be decontaminated	22,620.0	ft2
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$65.77	per Work Hour
Work rate to steam clean or pressure wash one ft2	0.0202	Work hr per ft2
Number of hours required to steam clean or pressure wash the unit	456.9	Work hrs
Subtotal of labor and equipment costs to decontaminate unit by steam cleaning or pressure washing	$30,050.31	
Ratio of decontamination fluid to area	0.1	gals per ft2
Volume of decontamination fluid generated	2,262.0	gal
Decontamination fluid container type:	Bulk	
Number of drums required to contain decontamination fluid for removal	0	Drums
Cost of one drum	$83.85	per Drum
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING	$30,050.31	

Sampling and Analysis Inventory (SA_01-1)

Number of Drilling and Subsurface Soil Samples (2.5-inch boring)	0	Samples
Number of Drilling and Subsurface Soil Samples (4-inch boring)	0	Samples
Number of Concrete Core Samples	0	Samples
Number of Wipe Sample Locations	0	Sample Location
Number of Surface Water and Liquid Sample Locations	3	Sample Location
Number of Soil, Sludge, and Sediment Soil Samples	0	Sample Location
Number of Groundwater Sample Locations	0	Sample Location
Number of Lysimeters to be Sampled	0	Lysimeters

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Sampling and Analysis Summary (SA_02-1)

Drilling and Subsurface Soil Sample - 2.5-Inch-Diameter-Holes (SA-03)	$0.00
Drilling and Subsurface Soil Sample - 4-Inch-Diameter-Holes (SA-04)	$0.00
Concrete Core Sample (SA-05)	$0.00
Wipe Sample (SA-06)	$0.00
Surface Water and Liquid Sample (SA-07)	$1,968.12
Soil, Sludge, and Sediment Sample (SA-08)	$0.00
Groundwater Sample (SA-09)	$0.00
Soil-Pore Liquid Sample (SA-10)	$0.00
Analysis of Subsurface Soil Sample (SA-11)	$0.00
TOTAL SAMPLING AND ANALYSIS COST	$1,968.12

Surface Water and Liquid Samples (SA_07-1)

COLLECTION OF SURFACE WATER AND LIQUID SAMPLES		
Number of sampling locations	3	Sample Location
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$91.88	per Work Hour
Work rate required to collect samples from one sampling location	0.5000	Work hrs per Sample
Number of hours required to collect all samples	1.5	Work hrs
Cost of Collection per Sampling Event	$137.82	per Event
ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES		
Cost of Analysis per Sampling Event	$1,830.30	per Event
SAMPLING EVENTS		
Number of sampling events	1	Events
TOTAL COST OF SAMPLING AND ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES	$1,968.12	

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Facility: EnviroSafe Demil, LLC **Unit:** Above Ground Magazine 03/17/2023

Surface Water and Liquid Samples (SA_07)
Cost of Analysis per Sampling Event

Method		Standard	Qty	Quick	Qty	Total
Targeted TCLP (metals, volatiles, semivolatiles only)	Both	$610.10	3	$1,220.20	0	$1,830.30

Treatment and Disposal Summary (TD_01-1)

Treatment and Disposal of Wastes (TD-02)	$32,311.40
Treatment and Disposal of Decontamination Fluids (TD-03)	$1,111.31
Total Cost of Treatment and Disposal	$33,422.71

Treatment and Disposal of Waste (TD_02-1)

SOLID WASTE TREATMENT AND DISPOSAL

Solid Waste Type (Optional: Enter Name)	Packaged Energetic Material	
Volume in yd3 of solid waste to be treated and disposed of	330.0	yd3
Treatment and disposal costs per yd3	$96.38	per yd3
Cost to Treat and Dispose of Solid Waste	$31,805.40	

LIQUID WASTE TREATMENT AND DISPOSAL

Liquid Waste Type (Optional: Enter Name)	0	
Volume in gallons of liquid waste to be treated and disposed of	0.0	gal
Treatment and disposal costs per gallon	$0.00	per Gallon
Cost to Treat and Dispose of Liquid Waste	$0.00	

DRUMMED WASTE TREATMENT AND DISPOSAL

Drummed Waste Type (Optional: Enter Name)	Floor Sweeping	
Number of drums to be treated and disposed of	2	Drums
Treatment and disposal costs per drum	$253.00	per Drum
Cost to Treat and Dispose of Drummed Waste	$506.00	
TOTAL COST FOR TREATMENT AND DISPOSAL OF WASTE	$32,311.40	

Notes: Assumption: 2 drums of floor sweepings

Treatment and Disposal of Decon Fluid (TD_03-1)

Volume of decontamination fluid generated from closure activities

Volume of decontamination fluid from Primary Unit	0.0	gal
Volume of decontamination fluid generated by steam cleaning or pressure washing (DC-02)	2,262.0	gal
Volume of decontamination fluid from heavy equipment (DC-04)	0.0	gal
Total Volume of Decontamination Fluid	2,262.0	gal
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$77.41	per Work Hour
Work rate to pump decontamination fluid to a holding tank	0.0001	Work hr per gal
Number of hours required to pump decontamination fluid to a holding tank	0.2262	Work hrs
Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank	$17.51	
Number of days required to rent a holding tank	1	Days
Holding tank rental fee (10,000 gal tank per day)	$189.00	per Day
Number of tanks required	1	Tanks
Subtotal of tank rental costs	$189.00	
Cost for treatment and disposal	$0.40	per Gallon
Treatment and disposal costs for bulk liquid	$904.80	
TOTAL COST TO TREAT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID	$1,111.31	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.

Transportation of Waste (TR_01-1)

TRANSPORTATION OF WASTE IN DRUMS

Number of drums of waste	2	Drums
Number of truckloads needed to transport waste in drums	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of 55-gallon drums	$1,116.72	per Truckload
Cost to Transport Waste in Drums	$1,116.72	

TRANSPORTATION OF BULK LIQUID

Gallons of liquid waste	2,262.0	gal
Number of truckloads needed to transport bulk free liquid waste	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk liquids	$1,116.72	per Truckload
Cost to Transport Bulk Liquid Wastes	$1,116.72	

TRANSPORTATION OF BULK WASTE

Number of waste debris boxes	9	Containers
Number of truckloads needed to transport bulk waste	9	Truckloads
Type of waste	Hazardous	
Number of miles	99.5	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk waste	$561.18	per Truckload
Cost to Transport Bulk Waste	$5,050.62	
TOTAL COST OF TRANSPORTATION OF WASTE	$7,284.06	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.
Mileage is shown from the facility to Clean Harbors in Coalfax Louisiana for the transportation of waste in drums (floor sweepings) and the transportation of bulk liquid (wash water).
It is assumed that 50% of the energetic materials will be sent to Expal USA in Hooks Texas (1 mile distance) and 50% will be sent to Clean Harbors in Coalfax Louisiana (198 miles distance). Therefore an average mileage of 99.5 miles is included for transportation of bulk waste (energetic materials).

Container Storage Areas Summary (CS_02-1)

Removal of Waste (CS-03)	$2,078.94	
Demolition and Removal of Pads (CS-04)	$0.00	
Removal of Process Equipment (CS-05)	$0.00	
Removal of Soil (CS-06)	$0.00	
Backfill and Grading (BF-01)	$0.00	
Decontamination (DC-01)	$6,110.03	
Sampling and Analysis (SA-02)	$1,968.12	
Monitoring Well Installation (MW-01)	$0.00	
Transportation (TR-01)	$16,262.94	
Treatment and Disposal (TD-01)	$95,949.42	
User Defined Cost (UD-01)	$0.00	
Subtotal of Closure Costs	$122,369.45	
Percentage of Engineering Expenses	5.0	%
Engineering Expenses	$6,118.47	
Certification of Closure (CS-07)	$4,118.00	
Subtotal	$132,605.92	
Percentage of Contingency Allowance	10.0	%
Contingency Allowance	$13,260.59	
Landfill Closure (Cover Installation) (CI-02)	$0.00	
TOTAL COST OF CLOSURE	$145,866.51	

Container Storage Areas Inventory (CS_01-1)

MAXIMUM PERMITTED CAPACITY

Volume of liquid waste	0.0	gal
Volume of solid waste	989.0	yd3
Percent of loose solid debris	100.0	%
Percent of drummed solid waste	0.0	%
Percent of baled waste or other monolithic waste	0.0	%
Volume of loose solid debris	989.0	yd3
Volume of solid waste in drums	0.0	yd3
Volume of monolithic waste	0.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM PAD

Length (excluding any curbs or berm)	60.0	ft
Width (excluding any curbs or berm)	27.0	ft
Surface Area of Containment System Pad	1,620.0	ft2
Surface Area of Containment System Pad in yd2	180.0	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM PAD

Thickness	1.0	ft
Volume of Containment System Pad	1,620.0	ft3
Volume of Containment System Pad in yd3	60.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM

Inside Perimeter	0.0	ft
Height	0.0	ft
Surface Area of Containment System Berm	0.0	ft2
Surface Area of Containment System Berm in yd2	0.0	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM

Thickness	0.0	ft
Volume of Containment System Berm	0.0	ft3
Volume of Containment System Berm in yd3	0.0	yd3

SURFACE AREA OF OTHER STRUCTURES

Surface Area of Other Structures	2,981.0	ft2
Surface Area of Other Structures in yd2	331.2	yd2

VOLUME OF OTHER STRUCTURES

Volume of Other Structures	0.0	yd3

Facility: EnviroSafe Demil, LLC **Unit:** Earth Covered Magazine (V-13-1) 03/17/2023

VOLUME OF CONTAMINATED SOIL TO BE REMOVED

Length	0.0	ft
Width	0.0	ft
Depth	0.0	ft
Volume of Contaminated Soil to be Removed	0.0	ft3
Volume of Contaminated Soil to be Removed in yd3	0.0	yd3

AREA OF SITE TO BE GRADED WITHOUT SOIL REMOVAL

Length	0.0	ft
Width	0.0	ft
Area of Site to be Graded Without Soil Removal	0.0	ft2
Area of Site to be Graded Without Soil Removal in yd2	0.0	yd2

Notes: Earth Covered Magazine
Dimensions: 60 feet long x 27 feet wide; arched-shaped with a midline height of 13 feet
Surface Area of Other Structures is the surface area of the arched-shaped walls/ceiling.

The maximum inventory of energetic wastes in this storage magazine is 300000 lbs NEW. The maximum total weight of the packaging and energetic material is calculated to be 1000000 lbs. CostPro calculates the costs to remove and treat wastes in yd3 rather than lbs so the average density of pine (37.45 lb/ft3) which is used in the palleting/packaging was used to convert the weight to yd3. The “volume of solid waste” includes the packaging and energetic material and is 989 yd3.

Container Storage Areas Removal of Waste (CS_03-1)

REMOVAL OF LOOSE SOLID DEBRIS

Volume of loose debris waste	989.0	yd3
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per yd3	$2.06	per yd3
Cost to Remove Loose Solid Debris	$2,037.34	

REMOVAL OF DRUMMED WASTE

Number of Drums	0	Drums
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per drum	$3.57	
Cost to Remove Waste in Drums	$0.00	

REMOVAL OF SOLID MONOLITHIC WASTE

Number of monolithic forms	0.0	Forms
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per form	$14.26	per Form
Cost to Remove Monolithic Waste	$0.00	

DRY SWEEP STORAGE PROCESS, HANDLING AREA

Surface area to dry sweep	1,620.0	ft2
Surface area to dry sweep in thousand square feet (MSF)	1.6	MSF
Labor and equipment cost per ft2	$26.00	per MSF
Cost to Dry Sweep Area	$41.60	
TOTAL COST OF WASTE REMOVAL	$2,078.94	

Container Storage Areas Certification of Closure (CS_07-1)

Number of units requiring certification of closure	1	Units
Cost of certification of closure per unit	$4,118.00	
TOTAL COST OF CERTIFICATION OF CLOSURE	$4,118.00	

Decontamination Summary (DC_01-1)

Decontamination of Unit by Steam Cleaning or Pressure Washing (DC-02)	$6,110.03
Decontamination of Unit by Sandblasting (DC-03)	$0.00
Decontamination of Heavy Equipment (DC-04)	$0.00
TOTAL COST OF DECONTAMINATION	$6,110.03

Decontamination by Steam Cleaning or Pressure Wash (DC_02-1)

Area of unit to be decontaminated	4,601.0	ft2
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$65.77	per Work Hour
Work rate to steam clean or pressure wash one ft2	0.0202	Work hr per ft2
Number of hours required to steam clean or pressure wash the unit	92.9	Work hrs
Subtotal of labor and equipment costs to decontaminate unit by steam cleaning or pressure washing	$6,110.03	
Ratio of decontamination fluid to area	0.1	gals per ft2
Volume of decontamination fluid generated	460.1	gal
Decontamination fluid container type:	Bulk	
Number of drums required to contain decontamination fluid for removal	0	Drums
Cost of one drum	$83.85	per Drum
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING	$6,110.03	

Sampling and Analysis Inventory (SA_01-1)

Number of Drilling and Subsurface Soil Samples (2.5-inch boring)	0	Samples
Number of Drilling and Subsurface Soil Samples (4-inch boring)	0	Samples
Number of Concrete Core Samples	0	Samples
Number of Wipe Sample Locations	0	Sample Location
Number of Surface Water and Liquid Sample Locations	3	Sample Location
Number of Soil, Sludge, and Sediment Soil Samples	0	Sample Location
Number of Groundwater Sample Locations	0	Sample Location
Number of Lysimeters to be Sampled	0	Lysimeters

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Sampling and Analysis Summary (SA_02-1)

Drilling and Subsurface Soil Sample - 2.5-Inch-Diameter-Holes (SA-03)	$0.00
Drilling and Subsurface Soil Sample - 4-Inch-Diameter-Holes (SA-04)	$0.00
Concrete Core Sample (SA-05)	$0.00
Wipe Sample (SA-06)	$0.00
Surface Water and Liquid Sample (SA-07)	$1,968.12
Soil, Sludge, and Sediment Sample (SA-08)	$0.00
Groundwater Sample (SA-09)	$0.00
Soil-Pore Liquid Sample (SA-10)	$0.00
Analysis of Subsurface Soil Sample (SA-11)	$0.00
TOTAL SAMPLING AND ANALYSIS COST	$1,968.12

Surface Water and Liquid Samples (SA_07-1)

COLLECTION OF SURFACE WATER AND LIQUID SAMPLES

Number of sampling locations	3	Sample Location
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$91.88	per Work Hour
Work rate required to collect samples from one sampling location	0.5000	Work hrs per Sample
Number of hours required to collect all samples	1.5	Work hrs
Cost of Collection per Sampling Event	$137.82	per Event

ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES

Cost of Analysis per Sampling Event	$1,830.30	per Event

SAMPLING EVENTS

Number of sampling events	1	Events
TOTAL COST OF SAMPLING AND ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES	$1,968.12	

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Facility: EnviroSafe Demil, LLC **Unit:** Earth Covered Magazine (V-13-1) 03/17/2023

Surface Water and Liquid Samples (SA_07)
Cost of Analysis per Sampling Event

Method		Standard	Qty	Quick	Qty	Total
Targeted TCLP (metals, volatiles, semivolatiles only)	Both	$610.10	3	$1,220.20	0	$1,830.30

Treatment and Disposal Summary (TD_01-1)

Treatment and Disposal of Wastes (TD-02)	$95,572.82
Treatment and Disposal of Decontamination Fluids (TD-03)	$376.60
Total Cost of Treatment and Disposal	$95,949.42

Treatment and Disposal of Waste (TD_02-1)

SOLID WASTE TREATMENT AND DISPOSAL

Solid Waste Type (Optional: Enter Name)	Packaged Energetic Material	
Volume in yd3 of solid waste to be treated and disposed of	989.0	yd3
Treatment and disposal costs per yd3	$96.38	per yd3
Cost to Treat and Dispose of Solid Waste	$95,319.82	

LIQUID WASTE TREATMENT AND DISPOSAL

Liquid Waste Type (Optional: Enter Name)	0	
Volume in gallons of liquid waste to be treated and disposed of	0.0	gal
Treatment and disposal costs per gallon	$0.00	per Gallon
Cost to Treat and Dispose of Liquid Waste	$0.00	

DRUMMED WASTE TREATMENT AND DISPOSAL

Drummed Waste Type (Optional: Enter Name)	Floor Sweepings	
Number of drums to be treated and disposed of	1	Drums
Treatment and disposal costs per drum	$253.00	per Drum
Cost to Treat and Dispose of Drummed Waste	$253.00	
TOTAL COST FOR TREATMENT AND DISPOSAL OF WASTE	$95,572.82	

Notes: Assumption: 1 drum of floor sweepings

Treatment and Disposal of Decon Fluid (TD_03-1)

Volume of decontamination fluid generated from closure activities

Volume of decontamination fluid from Primary Unit	0.0	gal
Volume of decontamination fluid generated by steam cleaning or pressure washing (DC-02)	460.1	gal
Volume of decontamination fluid from heavy equipment (DC-04)	0.0	gal
Total Volume of Decontamination Fluid	460.1	gal
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$77.41	per Work Hour
Work rate to pump decontamination fluid to a holding tank	0.0001	Work hr per gal
Number of hours required to pump decontamination fluid to a holding tank	0.04601	Work hrs
Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank	$3.56	
Number of days required to rent a holding tank	1	Days
Holding tank rental fee (10,000 gal tank per day)	$189.00	per Day
Number of tanks required	1	Tanks
Subtotal of tank rental costs	$189.00	
Cost for treatment and disposal	$0.40	per Gallon
Treatment and disposal costs for bulk liquid	$184.04	
TOTAL COST TO TREAT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID	$376.60	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.

Transportation of Waste (TR_01-1)

TRANSPORTATION OF WASTE IN DRUMS

Number of drums of waste	1	Drums
Number of truckloads needed to transport waste in drums	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of 55-gallon drums	$1,116.72	per Truckload
Cost to Transport Waste in Drums	$1,116.72	

TRANSPORTATION OF BULK LIQUID

Gallons of liquid waste	460.1	gal
Number of truckloads needed to transport bulk free liquid waste	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk liquids	$1,116.72	per Truckload
Cost to Transport Bulk Liquid Wastes	$1,116.72	

TRANSPORTATION OF BULK WASTE

Number of waste debris boxes	25	Containers
Number of truckloads needed to transport bulk waste	25	Truckloads
Type of waste	Hazardous	
Number of miles	99.5	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk waste	$561.18	per Truckload
Cost to Transport Bulk Waste	$14,029.50	
TOTAL COST OF TRANSPORTATION OF WASTE	$16,262.94	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.
Mileage is shown from the facility to Clean Harbors in Coalfax Louisiana for the transportation of waste in drums (floor sweepings) and the transportation of bulk liquid (wash water).
It is assumed that 50% of the energetic materials will be sent to Expal USA in Hooks Texas (1 mile distance) and 50% will be sent to Clean Harbors in Coalfax Louisiana (198 miles distance). Therefore an average mileage of 99.5 miles is included for transportation of bulk waste (energetic materials).

Container Storage Areas Summary (CS_02-1)

Removal of Waste (CS-03)	$1,399.14	
Demolition and Removal of Pads (CS-04)	$0.00	
Removal of Process Equipment (CS-05)	$0.00	
Removal of Soil (CS-06)	$0.00	
Backfill and Grading (BF-01)	$0.00	
Decontamination (DC-01)	$6,110.03	
Sampling and Analysis (SA-02)	$1,968.12	
Monitoring Well Installation (MW-01)	$0.00	
Transportation (TR-01)	$11,773.50	
Treatment and Disposal (TD-01)	$64,144.02	
User Defined Cost (UD-01)	$0.00	
Subtotal of Closure Costs	$85,394.81	
Percentage of Engineering Expenses	5.0	%
Engineering Expenses	$4,269.74	
Certification of Closure (CS-07)	$4,118.00	
Subtotal	$93,782.55	
Percentage of Contingency Allowance	10.0	%
Contingency Allowance	$9,378.25	
Landfill Closure (Cover Installation) (CI-02)	$0.00	
TOTAL COST OF CLOSURE	$103,160.80	

Container Storage Areas Inventory (CS_01-1)

MAXIMUM PERMITTED CAPACITY

Volume of liquid waste	0.0	gal
Volume of solid waste	659.0	yd3
Percent of loose solid debris	100.0	%
Percent of drummed solid waste	0.0	%
Percent of baled waste or other monolithic waste	0.0	%
Volume of loose solid debris	659.0	yd3
Volume of solid waste in drums	0.0	yd3
Volume of monolithic waste	0.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM PAD

Length (excluding any curbs or berm)	60.0	ft
Width (excluding any curbs or berm)	27.0	ft
Surface Area of Containment System Pad	1,620.0	ft2
Surface Area of Containment System Pad in yd2	180.0	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM PAD

Thickness	1.0	ft
Volume of Containment System Pad	1,620.0	ft3
Volume of Containment System Pad in yd3	60.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM

Inside Perimeter	0.0	ft
Height	0.0	ft
Surface Area of Containment System Berm	0.0	ft2
Surface Area of Containment System Berm in yd2	0.0	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM

Thickness	0.0	ft
Volume of Containment System Berm	0.0	ft3
Volume of Containment System Berm in yd3	0.0	yd3

SURFACE AREA OF OTHER STRUCTURES

Surface Area of Other Structures	2,981.0	ft2
Surface Area of Other Structures in yd2	331.2	yd2

VOLUME OF OTHER STRUCTURES

Volume of Other Structures	0.0	yd3

Facility: EnviroSafe Demil, LLC **Unit:** Earth Covered Magazine (V-13-2) 03/17/2023

VOLUME OF CONTAMINATED SOIL TO BE REMOVED

Length	0.0	ft
Width	0.0	ft
Depth	0.0	ft
Volume of Contaminated Soil to be Removed	0.0	ft3
Volume of Contaminated Soil to be Removed in yd3	0.0	yd3

AREA OF SITE TO BE GRADED WITHOUT SOIL REMOVAL

Length	0.0	ft
Width	0.0	ft
Area of Site to be Graded Without Soil Removal	0.0	ft2
Area of Site to be Graded Without Soil Removal in yd2	0.0	yd2

Notes: Earth Covered Magazine
Dimensions: 60 feet long x 27 feet wide; arched-shaped with a midline height of 13 feet
Surface Area of Other Structures is the surface area of the arched-shaped walls/ceiling.

The maximum inventory of energetic wastes in this storage magazine is 200000 lbs NEW. The maximum total weight of the packaging and energetic material is calculated to be 666667 lbs. CostPro calculates the costs to remove and treat wastes in yd3 rather than lbs so the average density of pine (37.45 lb/ft3) which is used in the palleting/packaging was used to convert the weight to yd3. The “volume of solid waste” includes the packaging and energetic material and is 659 yd3.

Container Storage Areas Removal of Waste (CS_03-1)

REMOVAL OF LOOSE SOLID DEBRIS

Volume of loose debris waste	659.0	yd3
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per yd3	$2.06	per yd3
Cost to Remove Loose Solid Debris	$1,357.54	

REMOVAL OF DRUMMED WASTE

Number of Drums	0	Drums
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per drum	$3.57	
Cost to Remove Waste in Drums	$0.00	

REMOVAL OF SOLID MONOLITHIC WASTE

Number of monolithic forms	0.0	Forms
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per form	$14.26	per Form
Cost to Remove Monolithic Waste	$0.00	

DRY SWEEP STORAGE PROCESS, HANDLING AREA

Surface area to dry sweep	1,620.0	ft2
Surface area to dry sweep in thousand square feet (MSF)	1.6	MSF
Labor and equipment cost per ft2	$26.00	per MSF
Cost to Dry Sweep Area	$41.60	
TOTAL COST OF WASTE REMOVAL	$1,399.14	

Container Storage Areas Certification of Closure (CS_07-1)

Number of units requiring certification of closure	1	Units
Cost of certification of closure per unit	$4,118.00	
TOTAL COST OF CERTIFICATION OF CLOSURE	$4,118.00	

Decontamination Summary (DC_01-1)

Decontamination of Unit by Steam Cleaning or Pressure Washing (DC-02)	$6,110.03
Decontamination of Unit by Sandblasting (DC-03)	$0.00
Decontamination of Heavy Equipment (DC-04)	$0.00
TOTAL COST OF DECONTAMINATION	$6,110.03

Decontamination by Steam Cleaning or Pressure Wash (DC_02-1)

Area of unit to be decontaminated	4,601.0	ft2
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$65.77	per Work Hour
Work rate to steam clean or pressure wash one ft2	0.0202	Work hr per ft2
Number of hours required to steam clean or pressure wash the unit	92.9	Work hrs
Subtotal of labor and equipment costs to decontaminate unit by steam cleaning or pressure washing	$6,110.03	
Ratio of decontamination fluid to area	0.1	gals per ft2
Volume of decontamination fluid generated	460.1	gal
Decontamination fluid container type:	Bulk	
Number of drums required to contain decontamination fluid for removal	0	Drums
Cost of one drum	$83.85	per Drum
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING	$6,110.03	

Sampling and Analysis Inventory (SA_01-1)

Number of Drilling and Subsurface Soil Samples (2.5-inch boring)	0	Samples
Number of Drilling and Subsurface Soil Samples (4-inch boring)	0	Samples
Number of Concrete Core Samples	0	Samples
Number of Wipe Sample Locations	0	Sample Location
Number of Surface Water and Liquid Sample Locations	3	Sample Location
Number of Soil, Sludge, and Sediment Soil Samples	0	Sample Location
Number of Groundwater Sample Locations	0	Sample Location
Number of Lysimeters to be Sampled	0	Lysimeters

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Sampling and Analysis Summary (SA_02-1)

Drilling and Subsurface Soil Sample - 2.5-Inch-Diameter-Holes (SA-03)	$0.00
Drilling and Subsurface Soil Sample - 4-Inch-Diameter-Holes (SA-04)	$0.00
Concrete Core Sample (SA-05)	$0.00
Wipe Sample (SA-06)	$0.00
Surface Water and Liquid Sample (SA-07)	$1,968.12
Soil, Sludge, and Sediment Sample (SA-08)	$0.00
Groundwater Sample (SA-09)	$0.00
Soil-Pore Liquid Sample (SA-10)	$0.00
Analysis of Subsurface Soil Sample (SA-11)	$0.00
TOTAL SAMPLING AND ANALYSIS COST	$1,968.12

Surface Water and Liquid Samples (SA_07-1)

COLLECTION OF SURFACE WATER AND LIQUID SAMPLES

Number of sampling locations	3	Sample Location
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$91.88	per Work Hour
Work rate required to collect samples from one sampling location	0.5000	Work hrs per Sample
Number of hours required to collect all samples	1.5	Work hrs
Cost of Collection per Sampling Event	$137.82	per Event

ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES

Cost of Analysis per Sampling Event	$1,830.30	per Event

SAMPLING EVENTS

Number of sampling events	1	Events
TOTAL COST OF SAMPLING AND ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES	$1,968.12	

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Facility: EnviroSafe Demil, LLC **Unit:** Earth Covered Magazine (V-13-2) 03/17/2023

Surface Water and Liquid Samples (SA_07)
Cost of Analysis per Sampling Event

Method		Standard	Qty	Quick	Qty	Total
Targeted TCLP (metals, volatiles, semivolatiles only)	Both	$610.10	3	$1,220.20	0	$1,830.30

Treatment and Disposal Summary (TD_01-1)

Treatment and Disposal of Wastes (TD-02)	$63,767.42
Treatment and Disposal of Decontamination Fluids (TD-03)	$376.60
Total Cost of Treatment and Disposal	$64,144.02

Treatment and Disposal of Waste (TD_02-1)

SOLID WASTE TREATMENT AND DISPOSAL

Solid Waste Type (Optional: Enter Name)	Packaged Energetic Material	
Volume in yd3 of solid waste to be treated and disposed of	659.0	yd3
Treatment and disposal costs per yd3	$96.38	per yd3
Cost to Treat and Dispose of Solid Waste	$63,514.42	

LIQUID WASTE TREATMENT AND DISPOSAL

Liquid Waste Type (Optional: Enter Name)	0	
Volume in gallons of liquid waste to be treated and disposed of	0.0	gal
Treatment and disposal costs per gallon	$0.00	per Gallon
Cost to Treat and Dispose of Liquid Waste	$0.00	

DRUMMED WASTE TREATMENT AND DISPOSAL

Drummed Waste Type (Optional: Enter Name)	Floor Sweepings	
Number of drums to be treated and disposed of	1	Drums
Treatment and disposal costs per drum	$253.00	per Drum
Cost to Treat and Dispose of Drummed Waste	$253.00	
TOTAL COST FOR TREATMENT AND DISPOSAL OF WASTE	$63,767.42	

Notes: Assumption: 1 drum of floor sweepings

Treatment and Disposal of Decon Fluid (TD_03-1)

Volume of decontamination fluid generated from closure activities

Volume of decontamination fluid from Primary Unit	0.0	gal
Volume of decontamination fluid generated by steam cleaning or pressure washing (DC-02)	460.1	gal
Volume of decontamination fluid from heavy equipment (DC-04)	0.0	gal
Total Volume of Decontamination Fluid	460.1	gal
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$77.41	per Work Hour
Work rate to pump decontamination fluid to a holding tank	0.0001	Work hr per gal
Number of hours required to pump decontamination fluid to a holding tank	0.04601	Work hrs
Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank	$3.56	
Number of days required to rent a holding tank	1	Days
Holding tank rental fee (10,000 gal tank per day)	$189.00	per Day
Number of tanks required	1	Tanks
Subtotal of tank rental costs	$189.00	
Cost for treatment and disposal	$0.40	per Gallon
Treatment and disposal costs for bulk liquid	$184.04	
TOTAL COST TO TREAT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID	$376.60	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.

Transportation of Waste (TR_01-1)

TRANSPORTATION OF WASTE IN DRUMS

Number of drums of waste	1	Drums
Number of truckloads needed to transport waste in drums	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of 55-gallon drums	$1,116.72	per Truckload
Cost to Transport Waste in Drums	$1,116.72	

TRANSPORTATION OF BULK LIQUID

Gallons of liquid waste	460.1	gal
Number of truckloads needed to transport bulk free liquid waste	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk liquids	$1,116.72	per Truckload
Cost to Transport Bulk Liquid Wastes	$1,116.72	

TRANSPORTATION OF BULK WASTE

Number of waste debris boxes	17	Containers
Number of truckloads needed to transport bulk waste	17	Truckloads
Type of waste	Non-Hazardous	
Number of miles	99.5	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk waste	$561.18	per Truckload
Cost to Transport Bulk Waste	$9,540.06	
TOTAL COST OF TRANSPORTATION OF WASTE	$11,773.50	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.
Mileage is shown from the facility to Clean Harbors in Coalfax Louisiana for the transportation of waste in drums (floor sweepings) and the transportation of bulk liquid (wash water).
It is assumed that 50% of the energetic materials will be sent to Expal USA in Hooks Texas (1 mile distance) and 50% will be sent to Clean Harbors in Coalfax Louisiana (198 miles distance). Therefore an average mileage of 99.5 miles is included for transportation of bulk waste (energetic materials).

COSTPRO CLOSURE COST ESTIMATES

HBC AREA

Rocket Motor Ops Building
Hybrid Burn Chamber (HBC)

EnviroSafe Demil, LLC

Address: 401 N Montague Street
Hooks
TEXAS
75561

Contact: TJ Ogden 206-999-8684
Michael Wentz 360-480-9320

Comments: HBC AREA:
Rocket Motor Ops Building is included as "Container Storage Area"
Hybrid Burn Chamber (HBC) is included as "Incinerators/BIFs"

Activity	Units	Closure Cost
Container Storage Area	1	$83,785.70
Incinerators/BIFs	1	$65,451.17
		$149,236.87
Additional Costs		$0.00
Total Estimated Cost		**$149,236.87**

Container Storage Areas Summary (CS_02-1)

Removal of Waste (CS-03)	$741.00	
Demolition and Removal of Pads (CS-04)	$0.00	
Removal of Process Equipment (CS-05)	$0.00	
Removal of Soil (CS-06)	$0.00	
Backfill and Grading (BF-01)	$0.00	
Decontamination (DC-01)	$61,106.91	
Sampling and Analysis (SA-02)	$1,968.12	
Monitoring Well Installation (MW-01)	$0.00	
Transportation (TR-01)	$2,233.44	
Treatment and Disposal (TD-01)	$2,570.36	
User Defined Cost (UD-01)	$0.00	
Subtotal of Closure Costs	$68,619.83	
Percentage of Engineering Expenses	5.0	%
Engineering Expenses	$3,430.99	
Certification of Closure (CS-07)	$4,118.00	
Subtotal	$76,168.82	
Percentage of Contingency Allowance	10.0	%
Contingency Allowance	$7,616.88	
Landfill Closure (Cover Installation) (CI-02)	$0.00	
TOTAL COST OF CLOSURE	$83,785.70	

Container Storage Areas Inventory (CS_01-1)

MAXIMUM PERMITTED CAPACITY

Volume of liquid waste	0.0	gal
Volume of solid waste	0.0	yd3
Percent of loose solid debris	0.0	%
Percent of drummed solid waste	0.0	%
Percent of baled waste or other monolithic waste	0.0	%
Volume of loose solid debris	0.0	yd3
Volume of solid waste in drums	0.0	yd3
Volume of monolithic waste	0.0	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM PAD

Length (excluding any curbs or berm)	407.0	ft
Width (excluding any curbs or berm)	70.0	ft
Surface Area of Containment System Pad	28,490.0	ft2
Surface Area of Containment System Pad in yd2	3,165.6	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM PAD

Thickness	1.0	ft
Volume of Containment System Pad	28,490.0	ft3
Volume of Containment System Pad in yd3	1,055.2	yd3

SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM

Inside Perimeter	1,094.0	ft
Height	16.0	ft
Surface Area of Containment System Berm	17,504.0	ft2
Surface Area of Containment System Berm in yd2	1,944.9	yd2

VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM

Thickness	1.0	ft
Volume of Containment System Berm	17,504.0	ft3
Volume of Containment System Berm in yd3	648.3	yd3

SURFACE AREA OF OTHER STRUCTURES

Surface Area of Other Structures	0.0	ft2
Surface Area of Other Structures in yd2	0.0	yd2

VOLUME OF OTHER STRUCTURES

Volume of Other Structures	0.0	yd3

VOLUME OF CONTAMINATED SOIL TO BE REMOVED

Facility: EnviroSafe Demil, LLC **Unit:** Rocket Motor Ops Building 03/17/2023

Length	0.0	ft
Width	0.0	ft
Depth	0.0	ft
Volume of Contaminated Soil to be Removed	0.0	ft3
Volume of Contaminated Soil to be Removed in yd3	0.0	yd3

AREA OF SITE TO BE GRADED WITHOUT SOIL REMOVAL

Length	0.0	ft
Width	0.0	ft
Area of Site to be Graded Without Soil Removal	0.0	ft2
Area of Site to be Graded Without Soil Removal in yd2	0.0	yd2

Notes: Rocket Motor Ops Building
Dimensions: 407 feet x 70 feet with 16-foot walls with 2 separate areas:
407+407+70+70+70+70 = 1094 ft inside perimeter

Container Storage Areas Removal of Waste (CS_03-1)

REMOVAL OF LOOSE SOLID DEBRIS

Volume of loose debris waste	0.0	yd3
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per yd3	$2.06	per yd3
Cost to Remove Loose Solid Debris	$0.00	

REMOVAL OF DRUMMED WASTE

Number of Drums	0	Drums
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per drum	$3.57	
Cost to Remove Waste in Drums	$0.00	

REMOVAL OF SOLID MONOLITHIC WASTE

Number of monolithic forms	0.0	Forms
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per form	$14.26	per Form
Cost to Remove Monolithic Waste	$0.00	

DRY SWEEP STORAGE PROCESS, HANDLING AREA

Surface area to dry sweep	28,490.0	ft2
Surface area to dry sweep in thousand square feet (MSF)	28.5	MSF
Labor and equipment cost per ft2	$26.00	per MSF
Cost to Dry Sweep Area	$741.00	
TOTAL COST OF WASTE REMOVAL	$741.00	

Container Storage Areas Certification of Closure (CS_07-1)

Number of units requiring certification of closure	1	Units
Cost of certification of closure per unit	$4,118.00	
TOTAL COST OF CERTIFICATION OF CLOSURE	$4,118.00	

Decontamination Summary (DC_01-1)

Decontamination of Unit by Steam Cleaning or Pressure Washing (DC-02)	$61,106.91
Decontamination of Unit by Sandblasting (DC-03)	$0.00
Decontamination of Heavy Equipment (DC-04)	$0.00
TOTAL COST OF DECONTAMINATION	$61,106.91

Decontamination by Steam Cleaning or Pressure Wash (DC_02-1)

Area of unit to be decontaminated	45,994.0	ft2
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$65.77	per Work Hour
Work rate to steam clean or pressure wash one ft2	0.0202	Work hr per ft2
Number of hours required to steam clean or pressure wash the unit	929.1	Work hrs
Subtotal of labor and equipment costs to decontaminate unit by steam cleaning or pressure washing	$61,106.91	
Ratio of decontamination fluid to area	0.1	gals per ft2
Volume of decontamination fluid generated	4,599.4	gal
Decontamination fluid container type:	Bulk	
Number of drums required to contain decontamination fluid for removal	0	Drums
Cost of one drum	$83.85	per Drum
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING	$61,106.91	

Sampling and Analysis Inventory (SA_01-1)

Number of Drilling and Subsurface Soil Samples (2.5-inch boring)	0	Samples
Number of Drilling and Subsurface Soil Samples (4-inch boring)	0	Samples
Number of Concrete Core Samples	0	Samples
Number of Wipe Sample Locations	0	Sample Location
Number of Surface Water and Liquid Sample Locations	3	Sample Location
Number of Soil, Sludge, and Sediment Soil Samples	0	Sample Location
Number of Groundwater Sample Locations	0	Sample Location
Number of Lysimeters to be Sampled	0	Lysimeters

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Sampling and Analysis Summary (SA_02-1)

Drilling and Subsurface Soil Sample - 2.5-Inch-Diameter-Holes (SA-03)	$0.00
Drilling and Subsurface Soil Sample - 4-Inch-Diameter-Holes (SA-04)	$0.00
Concrete Core Sample (SA-05)	$0.00
Wipe Sample (SA-06)	$0.00
Surface Water and Liquid Sample (SA-07)	$1,968.12
Soil, Sludge, and Sediment Sample (SA-08)	$0.00
Groundwater Sample (SA-09)	$0.00
Soil-Pore Liquid Sample (SA-10)	$0.00
Analysis of Subsurface Soil Sample (SA-11)	$0.00
TOTAL SAMPLING AND ANALYSIS COST	$1,968.12

Surface Water and Liquid Samples (SA_07-1)

COLLECTION OF SURFACE WATER AND LIQUID SAMPLES		
Number of sampling locations	3	Sample Location
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$91.88	per Work Hour
Work rate required to collect samples from one sampling location	0.5000	Work hrs per Sample
Number of hours required to collect all samples	1.5	Work hrs
Cost of Collection per Sampling Event	$137.82	per Event
ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES		
Cost of Analysis per Sampling Event	$1,830.30	per Event
SAMPLING EVENTS		
Number of sampling events	1	Events
TOTAL COST OF SAMPLING AND ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES	$1,968.12	

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Facility: EnviroSafe Demil, LLC **Unit:** Rocket Motor Ops Building 03/17/2023

Surface Water and Liquid Samples (SA_07)
Cost of Analysis per Sampling Event

Method		Standard	Qty	Quick	Qty	Total
Targeted TCLP (metals, volatiles, semivolatiles only)	Both	$610.10	3	$1,220.20	0	$1,830.30

Treatment and Disposal Summary (TD_01-1)

Treatment and Disposal of Wastes (TD-02)	$506.00
Treatment and Disposal of Decontamination Fluids (TD-03)	$2,064.36
Total Cost of Treatment and Disposal	$2,570.36

Treatment and Disposal of Waste (TD_02-1)

SOLID WASTE TREATMENT AND DISPOSAL		
Solid Waste Type (Optional: Enter Name)	0	
Volume in yd3 of solid waste to be treated and disposed of	0.0	yd3
Treatment and disposal costs per yd3	$0.00	per yd3
Cost to Treat and Dispose of Solid Waste	$0.00	
LIQUID WASTE TREATMENT AND DISPOSAL		
Liquid Waste Type (Optional: Enter Name)	0	
Volume in gallons of liquid waste to be treated and disposed of	0.0	gal
Treatment and disposal costs per gallon	$0.00	per Gallon
Cost to Treat and Dispose of Liquid Waste	$0.00	
DRUMMED WASTE TREATMENT AND DISPOSAL		
Drummed Waste Type (Optional: Enter Name)	Floor Sweeping	
Number of drums to be treated and disposed of	2	Drums
Treatment and disposal costs per drum	$253.00	per Drum
Cost to Treat and Dispose of Drummed Waste	$506.00	
TOTAL COST FOR TREATMENT AND DISPOSAL OF WASTE	$506.00	

Notes: Assumption: 2 drums of floor sweepings

Treatment and Disposal of Decon Fluid (TD_03-1)

Volume of decontamination fluid generated from closure activities

Volume of decontamination fluid from Primary Unit	0.0	gal
Volume of decontamination fluid generated by steam cleaning or pressure washing (DC-02)	4,599.4	gal
Volume of decontamination fluid from heavy equipment (DC-04)	0.0	gal
Total Volume of Decontamination Fluid	4,599.4	gal
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$77.41	per Work Hour
Work rate to pump decontamination fluid to a holding tank	0.0001	Work hr per gal
Number of hours required to pump decontamination fluid to a holding tank	0.45994	Work hrs
Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank	$35.60	
Number of days required to rent a holding tank	1	Days
Holding tank rental fee (10,000 gal tank per day)	$189.00	per Day
Number of tanks required	1	Tanks
Subtotal of tank rental costs	$189.00	
Cost for treatment and disposal	$0.40	per Gallon
Treatment and disposal costs for bulk liquid	$1,839.76	
TOTAL COST TO TREAT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID	$2,064.36	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.

Transportation of Waste (TR_01-1)

TRANSPORTATION OF WASTE IN DRUMS

Number of drums of waste	2	Drums
Number of truckloads needed to transport waste in drums	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of 55-gallon drums	$1,116.72	per Truckload
Cost to Transport Waste in Drums	$1,116.72	

TRANSPORTATION OF BULK LIQUID

Gallons of liquid waste	4,599.4	gal
Number of truckloads needed to transport bulk free liquid waste	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk liquids	$1,116.72	per Truckload
Cost to Transport Bulk Liquid Wastes	$1,116.72	

TRANSPORTATION OF BULK WASTE

Number of waste debris boxes	0	Containers
Number of truckloads needed to transport bulk waste	0	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk waste	$1,116.72	per Truckload
Cost to Transport Bulk Waste	$0.00	
TOTAL COST OF TRANSPORTATION OF WASTE	$2,233.44	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.
Mileage is shown from the facility to Clean Harbors in Coalfax Louisiana

Incinerators and BIFs Summary (IB_02-1)

Removal of Waste Residue (IB-03)	$827.71	
Decontamination of the Unit (IB-04)	$27,761.52	
Disassembly of Ancillary Piping (IB-05)	$5,958.40	
Demolition and Removal (IB-06)	$0.00	
Removal of Soil (IB-07)	$0.00	
Backfill and Grading (BF-01)	$0.00	
Decontamination (DC-01)	$7,175.51	
Sampling and Analysis (SA-02)	$3,936.24	
Monitoring Well Installation (MW-01)	$0.00	
Transportation (TR-01)	$2,233.44	
Treatment and Disposal (TD-01)	$3,698.13	
User Defined Cost (UD-01)	$1,154.82	
Subtotal of Closure Costs	$52,745.77	
Percentage of Engineering Expenses	5.0	%
Engineering Expenses	$2,637.29	
Certification of Closure (IB-08)	$4,118.00	
Subtotal	$59,501.06	
Percentage of Contingency Allowance	10.0	%
Contingency Allowance	$5,950.11	
Landfill Closure (Cover Installation) (CI-02)	$0.00	
TOTAL COST OF CLOSURE	$65,451.17	

Incinerators and BIFs Inventory (IB_01-1)

UNIT DESCRIPTION

Type of incinerator or BIF	HBC	
Type of Air Pollution Control Device (APCD)	See Notes	
Type of heat recovery system	0	
Length of ancillary piping	0.0	ft

MAXIMUM VOLUME OF SCRUBBER LIQUID

Maximum Volume of Scrubber Liquid	0.0	gal

MAXIMUM VOLUME OF NONLIQUID WASTE

Volume of incinerator or BIF ash	1.6	yd3
Volume of baghouse/cyclone/ESP dust	1.1	yd3
Volume of Nonliquid Waste	2.7	yd3

SURFACE AREA OF INCINERATOR OR BIF

Surface area of combustion chamber(s)	3,387.0	ft2
Surface area of APCD	4,238.0	ft2
Surface area of heat recovery equipment	0.0	ft2
Surface area of exhaust gas duct	0.0	ft2
Surface area of stack	455.0	ft2
Surface Area of Incinerator or BIF	8,080.0	ft2

SURFACE AREA OF ANCILLARY PIPING AND CONTAINMENT AREAS

Surface area of ancillary piping	853.0	ft2
Surface area of containment areas	0.0	ft2
Surface area of other structures	1,489.0	ft2
Surface Area of Ancillary Piping and Containment Areas	2,342.0	ft2

VOLUME OF MATERIAL TO BE DEMOLISHED AND REMOVED

Volume of materials constituting the incineration system	0.0	ft3
Volume of ancillary piping materials	0.0	ft3
Volume of other miscellaneous materials (such as containment areas) to be removed	0.0	ft3
Volume of Materials to be Demolished and Removed	0.0	ft3
Volume of Materials to be Demolished and Removed in yd3	0.0	yd3

VOLUME OF CONTAMINATED SOIL TO BE REMOVED

Length	0.0	ft
Width	0.0	ft
Depth	0.0	ft

Facility: EnviroSafe Demil, LLC **Unit:** Hybrid Burn Chamber 03/17/2023

Volume of Contaminated Soil to be Removed	0.0	ft3
Volume of Contaminated Soil to be Removed in yd3	0.0	yd3

Notes: The APCS system is composed of the following equipment:
•Afterburner
•Evaporative quench
•Cyclone separator
•Dry sorbent injection system
•Baghouse housing
•HEPA filter housing
•Selective catalytic reduction system
•ID Fan
•Stack

The "Maximum Volume of Nonliquid Wastes" includes an assumption of a total of 6 55-gallon drums of ash/debris from the HBC system / filter cakes and 4 55-gallon drums of used baghouse and HEPA filters / particulate dust from the APCS.

The "Surface area of other structures" includes the surface area of the HBC feed system.

Incinerators and BIFs Rem. of Waste Residue (IB_03-1)

REMOVAL, TREATMENT, AND DISPOSAL OF SCRUBBER LIQUID

Maximum volume of scrubber liquid	0.0	gal
Cost to remove, treat, and dispose of scrubber liquid per gallon	$1.16	per Gallon
Total Cost to Remove, Treat, and Dispose of Scrubber Liquid	$0.00	

REMOVAL, TREATMENT, AND DISPOSAL OF NONLIQUID WASTE RESIDUE

Maximum volume of nonliquid waste	2.7	yd3
Maximum volume of nonliquid waste converted to tons	1.8	Tons
Volume Conversion Factor	0.6750	
Cost to remove, treat, and dispose of nonliquid waste per ton	$459.84	per Ton
Total Cost to Remove, Treat, and Dispose of Nonliquid Waste	$827.71	
TOTAL COST OF REMOVAL OF WASTE RESIDUE	$827.71	

Incinerators and BIFs Decontamination of the Unit (IB_04-1)

Surface area of unit to be cleaned	10,422.0	ft
Choose the appropriate level of PPE:	Protection Level D	
Labor and equipment cost per work hour	$65.77	per Work Hour
Work rate required to clean the unit	0.0405	Work hr per ft2
Number of hours required to clean the unit	422.1	Work hrs
Subtotal of labor and equipment cost to clean unit by steam cleaning	$27,761.52	
Rate	0.1	gals per ft2
Volume of decontamination fluid	1,042.2	gal
Decontamination fluid is contained in:	Bulk	
Number of drums required to contain decontamination fluid	0	Drums
Cost of one drum	$83.85	
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF THE UNIT	$27,761.52	

Notes: The "Surface area of unit to be cleaned" includes the surface area of the feed system and the HBC plus the APCS components.

The APCS system is composed of the following equipment:
•Afterburner
•Evaporative quench
•Cyclone separator
•Dry sorbent injection system
•Baghouse housing
•HEPA filter housing
•Selective catalytic reduction system
•ID Fan
•Stack

Disassembly of Ancillary Piping (IB_05-1)

Length of ancillary piping to be disassembled	853.0	ft
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$46.55	per Work Hour
Work rate required to disassemble one foot of ancillary piping	0.1500	Work hr per Ft
Number of hours required to disassemble ancillary piping	128.0	Work hrs
TOTAL COST OF DISASSEMBLY OF ANCILLARY PIPING	$5,958.40	

Incinerators and BIFs Certification of Closure (IB_08-1)

Number of units requiring certification of closure	1	Units
Cost of certification of closure per unit	$4,118.00	
TOTAL COST OF CERTIFICATION OF CLOSURE	$4,118.00	

Decontamination Summary (DC_01-1)

Decontamination of Unit by Steam Cleaning or Pressure Washing (DC-02)	$7,175.51
Decontamination of Unit by Sandblasting (DC-03)	$0.00
Decontamination of Heavy Equipment (DC-04)	$0.00
TOTAL COST OF DECONTAMINATION	$7,175.51

Decontamination by Steam Cleaning or Pressure Wash (DC_02-1)

Area of unit to be decontaminated	5,400.0	ft2
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$65.77	per Work Hour
Work rate to steam clean or pressure wash one ft2	0.0202	Work hr per ft2
Number of hours required to steam clean or pressure wash the unit	109.1	Work hrs
Subtotal of labor and equipment costs to decontaminate unit by steam cleaning or pressure washing	$7,175.51	
Ratio of decontamination fluid to area	0.1	gals per ft2
Volume of decontamination fluid generated	540.0	gal
Decontamination fluid container type:	Bulk	
Number of drums required to contain decontamination fluid for removal	0	Drums
Cost of one drum	$83.85	per Drum
Cost of drums needed to contain decontamination fluid	$0.00	
TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING	$7,175.51	

Notes: The "Area of unit to be decontaminated" includes the surface area of the concrete pad. The surface areas of the HBC system components to be decontaminated are included on worksheet IB_04-1.

Sampling and Analysis Inventory (SA_01-1)

Number of Drilling and Subsurface Soil Samples (2.5-inch boring)	0	Samples
Number of Drilling and Subsurface Soil Samples (4-inch boring)	0	Samples
Number of Concrete Core Samples	0	Samples
Number of Wipe Sample Locations	0	Sample Location
Number of Surface Water and Liquid Sample Locations	6	Sample Location
Number of Soil, Sludge, and Sediment Soil Samples	0	Sample Location
Number of Groundwater Sample Locations	0	Sample Location
Number of Lysimeters to be Sampled	0	Lysimeters

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal. The number of samples includes the drums of water collected from decontaminating the HBC system equipment and the HBC concrete pad.

Sampling and Analysis Summary (SA_02-1)

Drilling and Subsurface Soil Sample - 2.5-Inch-Diameter-Holes (SA-03)	$0.00
Drilling and Subsurface Soil Sample - 4-Inch-Diameter-Holes (SA-04)	$0.00
Concrete Core Sample (SA-05)	$0.00
Wipe Sample (SA-06)	$0.00
Surface Water and Liquid Sample (SA-07)	$3,936.24
Soil, Sludge, and Sediment Sample (SA-08)	$0.00
Groundwater Sample (SA-09)	$0.00
Soil-Pore Liquid Sample (SA-10)	$0.00
Analysis of Subsurface Soil Sample (SA-11)	$0.00
TOTAL SAMPLING AND ANALYSIS COST	$3,936.24

Surface Water and Liquid Samples (SA_07-1)

COLLECTION OF SURFACE WATER AND LIQUID SAMPLES		
Number of sampling locations	6	Sample Location
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per work hour	$91.88	per Work Hour
Work rate required to collect samples from one sampling location	0.5000	Work hrs per Sample
Number of hours required to collect all samples	3.0	Work hrs
Cost of Collection per Sampling Event	$275.64	per Event
ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES		
Cost of Analysis per Sampling Event	$3,660.60	per Event
SAMPLING EVENTS		
Number of sampling events	1	Events
TOTAL COST OF SAMPLING AND ANALYSIS OF SURFACE WATER AND LIQUID SAMPLES	$3,936.24	

Notes: The wash water will be collected in containers and will be sampled and analyzed for proper characterization before being shipped off-site for processing and disposal.

Facility: EnviroSafe Demil, LLC **Unit:** Hybrid Burn Chamber 03/17/2023

Surface Water and Liquid Samples (SA_07)
Cost of Analysis per Sampling Event

Method		Standard	Qty	Quick	Qty	Total
Targeted TCLP (metals, volatiles, semivolatiles only)	Both	$610.10	6	$1,220.20	0	$3,660.60

Treatment and Disposal Summary (TD_01-1)

Treatment and Disposal of Wastes (TD-02)	$2,864.00
Treatment and Disposal of Decontamination Fluids (TD-03)	$834.13
Total Cost of Treatment and Disposal	$3,698.13

Treatment and Disposal of Waste (TD_02-1)

SOLID WASTE TREATMENT AND DISPOSAL

Solid Waste Type (Optional: Enter Name)	0	
Volume in yd3 of solid waste to be treated and disposed of	0.0	yd3
Treatment and disposal costs per yd3	$253.00	per yd3
Cost to Treat and Dispose of Solid Waste	$0.00	

LIQUID WASTE TREATMENT AND DISPOSAL

Liquid Waste Type (Optional: Enter Name)	HBC Wash System Water	
Volume in gallons of liquid waste to be treated and disposed of	200.0	gal
Treatment and disposal costs per gallon	$1.67	per Gallon
Cost to Treat and Dispose of Liquid Waste	$334.00	

DRUMMED WASTE TREATMENT AND DISPOSAL

Drummed Waste Type (Optional: Enter Name)	Ash/debris from HBC; used filters; particulate dust; etc.	
Number of drums to be treated and disposed of	10	Drums
Treatment and disposal costs per drum	$253.00	per Drum
Cost to Treat and Dispose of Drummed Waste	$2,530.00	
TOTAL COST FOR TREATMENT AND DISPOSAL OF WASTE	$2,864.00	

Notes: The "Liquid Waste Treatment and DIspsoal" includes an assumption of 200 gallons of HBC wash water from the HBC wash system activation step of closure.
The "Drummed Waste Treatment and Disposal" includes an assumption of a total of 6 55-gallon drums of ash/debris from the HBC system / filter cakes and 4 55-gallon drums of used baghouse and HEPA filters / particulate dust from the APCS.

Treatment and Disposal of Decon Fluid (TD_03-1)

Volume of decontamination fluid generated from closure activities

Volume of decontamination fluid from Primary Unit	1,042.2	gal
Volume of decontamination fluid generated by steam cleaning or pressure washing (DC-02)	540.0	gal
Volume of decontamination fluid from heavy equipment (DC-04)	0.0	gal
Total Volume of Decontamination Fluid	1,582.2	gal
Choose the appropriate level of PPE	Protection Level D	
Labor and equipment cost per hour	$77.41	per Work Hour
Work rate to pump decontamination fluid to a holding tank	0.0001	Work hr per gal
Number of hours required to pump decontamination fluid to a holding tank	0.15822	Work hrs
Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank	$12.25	
Number of days required to rent a holding tank	1	Days
Holding tank rental fee (10,000 gal tank per day)	$189.00	per Day
Number of tanks required	1	Tanks
Subtotal of tank rental costs	$189.00	
Cost for treatment and disposal	$0.40	per Gallon
Treatment and disposal costs for bulk liquid	$632.88	
TOTAL COST TO TREAT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID	$834.13	

Notes: The "Total volume of decontamination fluid" includes the fluid generated from cleaning the HBC system equipment and the concrete pad.

Transportation of Waste (TR_01-1)

TRANSPORTATION OF WASTE IN DRUMS

Number of drums of waste	10	Drums
Number of truckloads needed to transport waste in drums	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of 55-gallon drums	$1,116.72	per Truckload
Cost to Transport Waste in Drums	$1,116.72	

TRANSPORTATION OF BULK LIQUID

Gallons of liquid waste	1,582.2	gal
Number of truckloads needed to transport bulk free liquid waste	1	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk liquids	$1,116.72	per Truckload
Cost to Transport Bulk Liquid Wastes	$1,116.72	

TRANSPORTATION OF BULK WASTE

Number of waste debris boxes	0	Containers
Number of truckloads needed to transport bulk waste	0	Truckloads
Type of waste	Hazardous	
Number of miles	198.0	Mi
Cost per mile	$5.64	per Mile
Cost to transport one truckload of bulk waste	$1,116.72	per Truckload
Cost to Transport Bulk Waste	$0.00	
TOTAL COST OF TRANSPORTATION OF WASTE	$2,233.44	

Notes: Costs to ship the collected wash water off-site for processing and disposal are included as a worst-case scenario.
Mileage is shown from the facility to Clean Harbors in Coalfax Louisiana.

User Defined Activity (UD_01-2)

NAME OF CLOSURE OR POST-CLOSURE ACTIVITY	Flashing the HBC Burn Pan	
Number of units of work to be performed	1	
Type of unit	Tons	
Appropriate level of PPE	Protection Level B	
Labor, material, and equipment cost per work hour	$77.41	
Work rate to perform one unit of activity	2.0000	Work hrs per Unit
Number of hours required to perform activity	2.0	Work hrs
Additional cost per unit	$0.00	per Unit
Cost to conduct activity	$154.82	

Other cost(s) associated with this activity

Description of other costs	Fuel and Oxidizer
Cost	$1,000.00
Description of other costs	0
Cost	$0.00
Description of other costs	0
Cost	$0.00
Description of other costs	0
Cost	$0.00
Description of other costs	0
Cost	$0.00
TOTAL COST OF USER DEFINED ACTIVITY	$1,154.82

Notes: Costs to flash the HBC burn pan

U.S. BUREAU OF ECONOMIC ANALYSIS

IMPLICIT PRICE DEFLATORS FOR GROSS NATIONAL PRODUCT

Table 1.1.9. Implicit Price Deflators for Gross Domestic Product,
Line 27, Gross National Product
Last Revised on: March 28, 2024

Table 1.1.9. Implicit Price Deflators for Gross Domestic Product

[Index numbers, 2017=100]

Last Revised on: March 28, 2024 - Next Release Date April 25, 2024

Line		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Line													
1	**Gross domestic product**	**88.556**	**89.632**	**91.481**	**93.185**	**94.771**	**96.421**	**97.316**	**98.241**	**100.000**	**102.291**	**104.008**	**105.381**
2	**Personal consumption expenditures**	**88.921**	**90.514**	**92.804**	**94.534**	**95.781**	**97.121**	**97.299**	**98.284**	**100.000**	**102.047**	**103.513**	**104.635**
3	Goods	99.084	100.533	104.325	105.620	105.049	104.542	101.350	99.710	100.000	100.811	100.427	99.646
4	Durable goods	116.081	113.946	113.023	111.595	109.551	106.771	104.617	102.337	100.000	98.633	97.679	96.782
5	Nondurable goods	92.000	94.791	100.417	102.831	102.895	103.409	99.735	98.405	100.000	101.935	101.853	101.137
6	Services	84.432	86.077	87.742	89.648	91.659	93.795	95.462	97.629	100.000	102.626	104.972	107.054
7	**Gross private domestic investment**	**95.278**	**93.782**	**94.699**	**95.850**	**96.586**	**98.242**	**98.950**	**98.737**	**100.000**	**101.545**	**102.965**	**104.049**
8	Fixed investment	94.494	93.026	93.991	95.241	96.160	97.923	98.582	98.550	100.000	101.568	103.014	104.292
9	Nonresidential	98.488	96.695	97.756	99.130	99.229	100.170	100.345	99.380	100.000	100.427	101.457	102.092
10	Structures	84.186	83.502	86.244	90.209	91.474	96.213	97.719	97.668	100.000	101.174	105.258	106.811
11	Equipment	106.354	102.543	102.518	103.088	102.857	102.124	101.499	100.206	100.000	99.921	99.980	99.502
12	Intellectual property products	98.877	98.593	99.807	100.292	99.948	100.326	100.626	99.453	100.000	100.582	100.882	102.208
13	Residential	79.930	79.643	80.236	81.006	85.095	89.986	92.454	95.699	100.000	105.640	108.656	112.280
14	Change in private inventories	---	---	---	---	---	---	---	---	---	---	---	---
15	**Net exports of goods and services**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
16	Exports	93.484	97.378	103.508	104.298	104.457	104.515	99.455	97.457	100.000	103.325	102.814	100.247
17	Goods	98.820	103.284	110.868	111.092	110.344	109.207	101.423	97.467	100.000	103.545	101.851	97.870
18	Services	83.622	86.495	89.957	91.790	93.610	95.880	95.849	97.440	100.000	102.910	104.649	104.917
19	Imports	98.532	104.108	112.041	112.359	110.894	110.067	101.283	97.825	100.000	102.662	100.987	98.870
20	Goods	100.768	107.081	116.289	116.442	114.181	112.660	102.053	97.810	100.000	102.709	100.452	97.756
21	Services	88.378	91.228	94.172	95.134	96.886	98.954	97.966	97.888	100.000	102.464	103.341	103.972
22	**Government consumption expenditures and gross investment**	**86.836**	**89.149**	**91.861**	**93.460**	**95.634**	**97.578**	**97.581**	**97.766**	**100.000**	**103.619**	**105.235**	**107.516**
23	Federal	89.279	91.394	93.900	94.783	95.597	97.215	97.609	98.205	100.000	102.775	104.560	105.599
24	National defense	90.352	92.273	94.979	95.990	96.459	97.850	98.053	98.419	100.000	102.642	104.312	105.458
25	Nondefense	87.637	90.094	92.262	92.927	94.307	96.287	96.968	97.897	100.000	102.968	104.923	105.806
26	State and local	85.201	87.642	90.494	92.579	95.654	97.804	97.567	97.505	100.000	104.126	105.640	108.689
	Addendum:												
27	Gross national product	88.581	89.660	91.514	93.217	94.801	96.452	97.339	98.262	100.000	102.225	103.937	105.309

Line		2021	2022	2023
Line				
1	**Gross domestic product**	**110.213**	**117.973**	**122.273**
2	**Personal consumption expenditures**	**109.001**	**116.043**	**120.384**
3	Goods	104.572	113.548	114.919
4	Durable goods	102.112	108.621	107.685
5	Nondurable goods	105.826	116.245	118.993
6	Services	111.103	117.066	122.978
7	**Gross private domestic investment**	**107.711**	**115.936**	**119.547**
8	Fixed investment	108.162	116.754	120.821
9	Nonresidential	103.458	109.624	113.586
10	Structures	110.459	126.692	134.130
11	Equipment	100.066	106.238	110.876
12	Intellectual property products	103.235	104.978	106.886
13	Residential	124.605	141.785	146.089
14	Change in private inventories	---	---	---
15	**Net exports of goods and services**	**---**	**---**	**---**
16	Exports	111.801	122.767	120.901
17	Goods	111.693	124.796	119.692
18	Services	111.584	117.948	122.946
19	Imports	106.023	113.623	111.478
20	Goods	105.203	113.034	109.622
21	Services	109.539	115.945	119.650
22	**Government consumption expenditures and gross investment**	**113.181**	**121.153**	**124.226**
23	Federal	109.024	115.108	119.652
24	National defense	109.181	116.038	120.201
25	Nondefense	108.835	113.924	118.956
26	State and local	115.792	124.970	127.111
	Addendum:			
27	Gross national product	110.130	117.885	122.179

Appendix VII.C – Post-Closure
Not Applicable
ESD is not a hazardous waste disposal facility and does not have any waste piles, tanks, or surface impoundments.

Appendix VII.D – Post-Closure Cost Estimate
Not Applicable
ESD is not a hazardous waste disposal facility and does not have any waste piles, tanks, or surface impoundments.

VIII. Financial Assurance

Provide all Part B responsive information in Appendix VI. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

A. Financial Assurance Information Requirements for all Applicants (30 TAC Chapter 37, Subchapter P, 305.50(a)(4)(A-E), 335.152(a)(6) and 335.179)

1. Financial Assurance for Closure

An owner or operator must establish financial assurance for the closure of the facility no later than 60 days prior to the first receipt of waste [30 TAC Section 37.31(a)]. Please refer to 30 TAC Chapter 37, Subchapter P, for the financial assurance requirements for closure and provide a signed statement from an authorized signatory per 30 TAC 305.44 regarding how the owner or operator will comply with this provision.

If a financial mechanism has been obtained, provide a copy of the mechanism.

For applications involving a permit transfer, the new owner or operator must provide a financial assurance mechanism (in original form) satisfactory to the TCEQ executive director. Prior to the executive director issuing the permit modification transferring the permit, the new owner or operator must provide proof of financial assurance in compliance with 30 TAC Section 305.64 (g) and Chapter 37, Subchapter P.

ESD will establish financial assurance for the closure of the facility no later than 60 days prior to the first receipt of RCRA hazardous waste. A signed statement regarding how ESD will comply with this provision is provided in Appendix VIII.

2. Financial Assurance for Post-Closure Care (applicable to disposal facilities and contingent post-closure care facilities only)

An owner or operator subject to post-closure monitoring or maintenance requirements must establish financial assurance for the post-closure care of the facility no later than 60 days prior to the first receipt of waste [30 TAC Section 37.31(a)]. Please refer to 30 TAC Chapter 37, Subchapter P for the financial assurance requirements for post-closure and provide a signed statement from an authorized signatory per 30 TAC 305.44 regarding how the owner or operator will comply with this provision.

If a financial mechanism has been obtained, provide a copy of the mechanism.

For applications involving a permit transfer, the new owner or operator must provide a financial assurance mechanism (in original form) satisfactory to the TCEQ executive director. Prior to the executive director issuing the permit modification transferring the permit, the new owner or operator must provide proof of financial assurance in compliance with 30 TAC Section 305.64 (g) and Chapter 37, Subchapter P.

Not Applicable.

3. Financial Assurance for Corrective Action

An owner or operator must establish financial assurance for corrective action of the facility no later than 60 days after the permit or order requiring the corrective action financial assurance is signed by the executive director or commission [30 TAC Section 37.31(b)]. Please refer to 30 TAC Chapter 37, Subchapter P, for the financial assurance requirements for closure and provide a signed statement from an authorized signatory per 30 TAC 305.44 regarding how the owner or operator will comply with this provision and indicate below the type of financial assurance mechanism to cover corrective action for the

facility.

If a financial mechanism has been obtained, provide a copy of the mechanism.

For applications involving permit transfers, the new owner or operator must provide a financial assurance mechanism (in original form) satisfactory to the TCEQ executive director. Prior to the executive director issuing the permit modification transferring the permit, the new owner or operator must provide proof of financial assurance in compliance with 30 TAC Section 305.64 (g) and Chapter 37, Subchapter P.

Not Applicable.

4. Liability Requirements (not required for post-closure care)

All owners or operators must establish financial assurance for third party sudden liability coverage of the facility no later than 60 days prior to the first receipt of waste [30 TAC Section 37.31(a)]. Owners or operators of disposal facilities must establish financial assurance for third party sudden and nonsudden liability coverage of the facility no later than 60 days prior to the first receipt of hazardous waste. Please refer to 30 TAC Chapter 37, Subchapter P, for the financial assurance requirements for liability coverage, and provide a signed statement from an authorized signatory per 30 TAC 305.44 regarding how the owner or operator will comply with this provision.

If a financial mechanism has been obtained, provide a copy of the mechanism.

For applications involving a permit transfer, the new owner or operator must provide a financial assurance mechanism (in original form) satisfactory to the TCEQ executive director. Prior to the executive director issuing the permit modification transferring the permit, the new owner or operator must provide proof of financial assurance in compliance with 30 TAC Section 305.64 (g) and Chapter 37, Subchapter P.

Nonsudden liability coverage is not required because the facility will not operate any disposal facilities.

ESD will establish financial assurance for third party sudden liability coverage of the facility no later than 60 days prior to the first receipt of RCRA hazardous waste. The financial assurance will be in the amount of $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. A signed statement regarding how ESD will comply with this provision is provided in Appendix VIII.

B. Applicant Financial Disclosure Statements for a new permit, permit amendment, or permit modification, or permit renewal (30 TAC 305.50(a)(4))

Refer to the Supplemental Technical Information Guidance for Applicants Subject to Financial Capability Requirements, included in Section VIII.B., and the requirements listed below as you complete this section.

1. Provide information required in 30 TAC 305.50(a)(4), as applicable to the application request.

   Financial information demonstrating that ESD has sufficient financial resources to operate and close the facility in a safe manner in compliance with the permit and all applicable rules and information about how ESD intends to obtain financing for construction of the facility is included in Appendix VIII.

2. Complete Table VIII.B. if requesting capacity expansion or new construction.

   Table VIII.B is included.

3. For new commercial hazardous waste management facility applications, a written statement signed by an authorized signatory per 30 TAC 305.44 explaining how the applicant intends to provide emergency response financial assurance per 30 TAC 305.50(a)(12)(C) or (D).

   A written statement signed by an authorized signatory per 30 TAC 305.44 explaining how the applicant intends to provide emergency response financial assurance per 30 TAC 305.50(a)(12)(D)(i) is included in Appendix VIII.

4. For renewal applications with no capacity expansion, please complete and submit the attached Financial Disclosure Letter.

   Not Applicable.

Information for Applicants Subject to Financial Capability Requirements

Certain applications involving Hazardous Waste facilities are subject to review of the applicant's financial ability to construct, operate, and/or close the facility, perform post-closure care and corrective action at the facility in accordance with State law as specified in

Section 361.085 of the Texas Health and Safety Code. TCEQ refers to these reviews as financial capability reviews. This document summarizes and clarifies the information required in an application to meet the TCEQ requirements of 30 Texas Administrative Code (TAC) 305.50.

Information requirements vary depending on the type of financial information available to applicants, primarily whether audited financial statements are available as well as the type of application submitted. For each scenario described below, financial information must be provided for the specific applicant.

ESD has included the required financial capability information listed below for Item I.C – "Entities without audited financial statements or entities choosing not to provide the information listed above." The required financial capability information is provided in Appendix VIII.

I. New Facilities, Facility Expansions and Permit Transfers

A. Publicly traded Entities

1. Securities and Exchange Commission (SEC) Form 10-Ks

   This portion of the requirement calls for the two most recent 10-K reports filed.

2. SEC Form 10-Q

   This portion of the requirement calls for a copy of the most recent quarterly report.

3. Explanation statement

   This portion of the requirement calls for a statement signed by an authorized signatory [as described in 30 TAC 305.44(a)] explaining in detail how the applicant demonstrates sufficient financial resources to construct, safely operate, properly close, perform post-closure care, perform corrective action and provide adequate liability coverage for the facility. This statement must also address how the closure, post-closure, corrective action, and liability coverage financial assurance requirements of Chapter 37, Subchapter P will be met. (ie. which financial assurance mechanism is or will be used).

4. Construction capital cost estimates

   This portion of the requirement calls for estimates of capital costs for expansion and/or initial construction if the application encompasses facility expansion, capacity expansion, or new construction.

B. Privately held entities with audited financial statements

1. Audited financial statements

   This portion of the requirement calls for complete copies of the audited financial statements for each of the most recent two fiscal years. If an audit has not been completed for one of the previous two years, a complete copy of the fiscal year end financial statement and federal tax return may be substituted in lieu of the audit not performed. The tax return must be certified by original signature of an authorized signatory as being a "true and correct copy of the return filed with the Internal Revenue Service." Financial statements must be prepared consistent with generally accepted accounting principles and include a balance sheet, income statement, cash flow statement, notes to the financial statement, and an accountant's opinion letter.

2. Quarterly financial statement

   This portion of the requirement calls for a complete copy of the most current quarterly financial statement prepared consistent with generally accepted accounting principles. Internally prepared statements are

satisfactory.

3. Supplementary information statement

   This portion of the requirement calls for a written statement detailing the information that would normally be found in SEC's Form 10-K including descriptions of the business and its operations; identification of any affiliated relationships; credit agreements and terms; any legal proceedings involving the applicant; contingent liabilities; and significant accounting policies.

4. Construction capital cost estimates

   This portion of the requirement calls for estimates of capital costs for expansion and/or initial construction if the application encompasses facility expansion, capacity expansion, or new construction.

5. Explanation statement

   This portion of the requirement calls for a statement signed by an authorized signatory [as described in 30 TAC 305.44(a)] explaining in detail how the applicant demonstrates sufficient financial resources to construct, safely operate, properly close, perform post-closure care, perform corrective action and provide adequate liability coverage for the facility. This statement must also address how the closure, post-closure, corrective action, and liability coverage financial assurance requirements of Chapter 37, Subchapter P will be met (ie. which financial assurance mechanism is or will be used).

C. Entities without audited financial statements or entities choosing not to provide the information listed above

1. Financial Plan

   This portion of the requirement calls for a financial plan (including balance sheets listing assets, liabilities and capital accounts) sufficiently detailed to clearly demonstrate that the applicant will be in a position to readily secure financing for construction, operation, and closure, post-closure, and corrective action if the permit is issued. At least 3 balance sheets should be included as of:
   a) approximately the date of the permit application, b) 12 months after any construction is completed (or assumption of operational control for a permit transfer), and c) 24 months after any construction is completed (or assumption of operational control for a permit transfer).

2. Letters of opinion

   The submitted financial plan must be accompanied by original letters of opinion from two financial experts, not otherwise employed by the applicant, who have the demonstrated ability to either finance the facility or place the required financing. If the permit action sought involves construction of a new facility or expansion of an existing facility, the opinion letters must certify that financing is obtainable within 180 days of permit approval and include the time schedule contingent upon permit finality for securing the financing as well as certify the financial plan is reasonable. Even if the application does not involve a facility or capacity expansion, the opinion letters must certify that the financial plan is reasonable. Only one opinion letter from a financial

expert, not otherwise employed by the applicant, is required if the letter renders a firm commitment to provide all the necessary financing.

Letters of opinion are usually issued by investment or commercial bankers but there could be additional sources. Applicants are encouraged to verify the adequacy of the credentials of their chosen financial expert with TCEQ's financial assurance unit prior to a formal engagement. Financial experts should describe their qualifications and disclose their independence from the applicant and/or any entity or person affiliated with the applicant.

3. Operating and cash flow statement

   This portion of the requirement calls for a written detail of the annual operating costs of the facility and a projected cash flow statement including the period of construction and first two years of operation. The cash flow statement must demonstrate the financial resources to meet operating costs, debt service, and provide financial assurance for closure, post-closure care, and liability coverage requirements. A list of the assumptions made to forecast cash flow must also be provided.

4. Explanation statement

   This portion of the requirement calls for a statement addressing how the closure, post-closure, corrective action, and liability coverage financial assurance requirements of Chapter 37, Subchapter P will be met (ie. which financial assurance mechanism is or will be used).

5. Construction capital cost estimates

   This portion of the requirement calls for estimates of capital costs for expansion and/or initial construction if the application encompasses facility expansion, capacity expansion, or new construction.

D. Entities with a resolution from a governing body approving or agreeing to approve the issuance of bonds to satisfy financial assurance requirements (e.g. a city or county)

1. Explanation statement

   This portion of the requirement calls for a statement signed by an authorized signatory [as described in 30 TAC30 305.44(a)] explaining in detail how the applicant demonstrates sufficient financial resources to construct, safely operate, properly close, perform post-closure, perform corrective action and provide adequate liability coverage for the facility. This statement must also address how the closure, post-closure, corrective action, and liability coverage

   financial assurance requirements of Chapter 37, Subchapter P will be met (ie. which financial assurance mechanism is or will be used).

2. Certified copy of the resolution from the governing body.

3. Certification by the governing body of passage of the resolution.

II. Permit Renewals

Complete the **Financial Disclosure Letter** letter with applicable information inserted into the parentheses. *Note that additional information must be provided if requested by TCEQ.*

Not Applicable. This application is for a new permit.

Section VIII – Financial Assurance

Appendix VIII – Financial Assurance

This appendix includes information regarding the financial assurance requirements. The information included in this appendix is shown in the table below.

Section VIII.A – Financial Assurance Information Requirements for All Applicants

Type of Financial Assurance	Information Included
Financial Assurance for Closure	Signed Statement: Financial Assurance for Closure
Financial Assurance for Post-Closure Care	Not Applicable
Financial Assurance for Corrective Action	Not Applicable
Liability Requirements	Signed Statement: Liability Requirements

Section VIII.B – Applicant Financial Disclosure Statements for a New Permit

Requirement	Information Included
Provide information required in 30 TAC 305.50(a)(4)	Financial Capability Information
Complete Table VIII.B	Table VIII.B
A written statement signed by an authorized signatory per 30 TAC 305.44 explaining how the applicant intends to provide emergency response financial assurance per 30 TAC 305.50(a)(12)(C) or (D)	Signed Written Statement: Financial Assurance for Emergency Response

FINANCIAL ASSURANCE FOR CLOSURE

Signed Statement: Financial Assurance for Closure

ESD intends to establish financial assurance for the closure of the facility no later than 60 days prior to the first receipt of RCRA hazardous waste. 60 days prior to the first receipt of RCRA hazardous waste, one of the required mechanisms specified in Texas Administrative Code, Title 30, Part 1, Chapter 37, Subchapter C will be in place. The chosen mechanism will be decided at a later date. The financial assurance for closure coverage amount is based on the Closure Cost Estimate submitted with this permit application in Appendix VII.

Signature of Responsible Official

12/3/2024
Date

Michael Wentz
Printed Name

President, EnviroSafe Demil, LLC
Title

LIABILITY REQUIREMENTS

Signed Statement: Liability Requirements

ESD intends to establish financial assurance for third party sudden liability coverage of the facility no later than 60 days prior to the first receipt of RCRA hazardous waste. The financial assurance will be in the amount of $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. 60 days prior to the first receipt of RCRA hazardous waste, one of the required mechanisms specified in Texas Administrative Code, Title 30, Part 1, Chapter 37, Subchapter F will be in place. The chosen mechanism will be decided at a later date.

Signature of Responsible Official

12/3/2024
Date

Michael Wentz
Printed Name

President, EnviroSafe Demil, LLC
Title

FINANCIAL CAPABILITY INFORMATION

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

Financial Capability

Executive Summary

EnviroSafe Demil LLC (ESD) is the *clean alternative to open burning* that solves the problem of disposing of explosives, energetic materials, military munitions, and almost any combustible material in an environmentally-friendly manner. ESD is located at a former ~175 acre U.S. Army ammunition manufacturing facility located in Hooks, TX that was once a RCRA site and has since been through closure and is now being used for similar commercial/industrial purposes. ESD is owned and managed by a team that is highly experienced in demilitarization, explosives handling, safety, security, government contracts, and business leadership.

Between 2021 and 2022, ESD was awarded multiple contracts from the U.S. Government as well as the Canadian Military for the demilitarization of munition items up to rocket motors totaling **~$363MM** in contract values. ESD is also in the strongest position for the award of a further **~$100MM+** from both the US Government and the Canadian Military for additional demilitarization of conventional ammunition demilitarization. ESD is also situated perfectly to perform commercial workload as the process of open burning is sun downed across the country, which will add significant additional revenues to ESD in the future.

ESD is on-track for rapid explosive growth and is poised to be the future of the industry.

ESD's Solution

ESD's contained demilitarization systems eliminate the need for open burning by employing state-of-the-art pollution abatement systems (PAS) that reduce and eliminate polluting and harmful toxins. ESD is deploying two state-of-the-art systems for different types of needs. The first system is ESD's non-RCRA system called the Energetic Activation Unit (EAU) which is a revolutionary, fully transportable demilitarization system that can render a wide range of munitions inert for safe recycling. The EAU was delivered and installed to ESD in early 2023 and became fully operational in June 2023 with U.S. Army approval for full-rate demilitarization operations and prior TCEQ determination approval. Based on current projections, EAU operations account for approximately $10MM in projected annual ESD revenues.

The second state-of-the-art demilitarization system is our Hybrid Burn Chamber (HBC) which is a large, contained burn chamber capable of clean demilitarization of a wide variety of munitions up to and including large rocket motors. The HBC is associated with approximately ~$30MM-$40MM in projected annual ESD revenues.

ESD is deploying both systems at our facility in Hooks, TX. ESD's flagship facility sets the U.S. standard for clean demilitarization and related technologies. ESD has been awarded multiple contracts from the U.S. Government for demilitarizing munitions in these systems.

Assessing the Market for the Financial Plan

The demilitarization, open burning, and combustible disposables market is worth ~$6B annually. The U.S. Army budget is projected to be worth an additional $1-2B over the next 5 years with an additional $500M-$1B in sector growth, resulting in a combined CAGR of ~5.4%. The current ESD annual revenue projections sit at approximately $10MM annually and will grow to ~$40MM with the install of the Hybrid Burn Chamber. Even more growth is possible through other opportunities, commercial growth, and international expansion. Primary customers for ESD includes the U.S. Army, local, state, and federal agencies, international companies and foreign governments, and companies involved in munitions manufacturing and hazardous waste disposal. By providing two options (transportable EAU and fixed-location HBC), ESD is strategically positioned to handle all customer needs.

Financial Snapshot

- **Awarded ~$363MM** in USG and Canadian Military demilitarization contracts
- **Assets** in excess of **~$8MM** with solid and very healthy balance sheet fundamentals
- **~$10MM** projections based on only the EAU and other supporting revenue streams
- **~$30MM-$40MM in additional annual** projections based on the HBC and rocket motor demilitarization
- **Gross margins in excess of ~30-40%** projected and verified by third-party feasibility consultant to ESD's lender
- **Forward Looking Statement:** ESD is capable of unlimited growth potential with valuation poised to reach into the hundreds of millions of dollars

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

Financial Capability Detailed Information

1. **Financial Plan –** Included below is an outline of ESD's current and projected future financial capabilities. Projections are based on current revenue generated through ongoing company operations. Future projections are based on revenue from currently awarded contracts where ESD has guaranteed contract value based on performance of the RCRA permitted equipment (primarily ESD's Hybrid Burn Chamber for rocket motor demilitarization). Capital for construction is a blend of cashflow and debt service from government secured loans which ESD has secured and is in the process of closing via USDA B&I Loan from West Town Bank.
    a. **Current Balance Sheet –** Combined balance sheet of the assets of EnviroSafe Demil LLC and F Line Holdings LLC (holding company for the property assets of EnviroSafe Demil LLC)
        i. **Explanation:** ESD current balance sheet reflects a very healthy company that is currently holding in excess of ~$8M in assets, only ~$4M in liabilities, and ~$2M in accounts.
    b. **12-Months Post-Construction Balance Sheet**
        i. **Explanation:** ESD projects its 12-month post-construction balance sheet to increase the company holdings substantially up to ~$47M in assets, ~$29M in liabilities, and ~$15M in accounts. This substantial increase over 12-months is a result of ESD operating its rocket motor demilitarization chamber at a full-rate for the currently awarded contracts and realizing awarded values.
    c. **24-Months Post-Construction Balance Sheet**
        i. **Explanation:** ESD projects its 24-month post-construction balance sheet to increase the company holdings even more substantially up to ~$63M in assets, ~$14M in liabilities, and ~$35M in accounts. This substantial increase over 24-months is a result of ESD operating its rocket motor demilitarization chamber at a full-rate for the currently awarded contracts and realizing awarded values. The decrease in liabilities is a direct result of ESD using substantial revenues to pay down existing loans.

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

a. Current Balance Sheet

EnviroSafe Demil LLC					Oct 4, 23
ASSETS					
	Current Assets				
		Checking/Savings			
			CNB Checking		19,330.21
			CNB Money Market		856,142.32
			ESD Checking		822,413.03
		Total Checking/Savings			1,697,885.56
		Accounts Receivable			
			Accounts Receivable		325,487.14
		Total Accounts Receivable			325,487.14
		Other Current Assets			
			*Inventory Asset		2,966.92
		Total Other Current Assets			2,966.92
	Total Current Assets				2,026,339.62
	Fixed Assets				
		Equipment			
			Accumulated Depreciation		-137,235.44
			Air Compressor		2,493.75
			Equipment Engineering/Design		557,925.74
			Forklift		56,420.28
			Infrastructure		1,273,321.61
			Equipment - Other		4,264,070.56
		Total Equipment			6,016,996.50
		Land			58,294.80
		Small Decon Burn Chamber			2,570.94
		Startup Costs			
			Accumulated Amortization		-29,179.50
			Inventory Control Software		28,277.45
			Land Permitting		176,127.89
			Loan Fees		127,300.00
			Texas Land Permitting		248,785.24
			Startup Costs - Other		553.55
		Total Startup Costs			551,864.63
	Total Fixed Assets				6,629,726.87
	Other Assets				
		Construction Costs			8,297.72
	Total Other Assets				8,297.72
TOTAL ASSETS					8,664,364.21
LIABILITIES & EQUITY					
	Liabilities				
		Current Liabilities			
			Accounts Payable		
				Accounts Payable	39,802.34
			Total Accounts Payable		39,802.34
			Other Current Liabilities		
				West Town B&T Loan	4,177,732.42
			Total Other Current Liabilities		4,177,732.42
		Total Current Liabilities			4,217,534.76
		Long Term Liabilities			
			MHW Ventures LLC Loan		10,000.00
			Michael Fleck Loan		30,000.00
			N/P - Navitas Credit (Fishbowl)		20,327.65
			N/P - Star Capital Group		37,036.47
			TKO Unlimited LLC Loan		50,100.00
		Total Long Term Liabilities			147,464.12
	Total Liabilities				4,364,998.88
	Equity				
		Alex Bernhard			91,132.87
		Anderson Fam Revocable Trust			123,029.38
		B&J Wentz Trust Owners Equity			42,454.25
		Dan & Brenda Larkin Fam Trust			318,965.04
		Dick Campagni			91,132.87
		FiveK LLC Owner's Equity			56,958.04
		GW Larkin Living Trust			318,965.04
		Jeff Campagni			91,132.87
		Jorge Peralta			91,132.87
		Knotable LLC Owners Equity			60,648.93
		Mark Turner			455,664.35
		Michael Fleck Owners Equity			36,389.35
		Northern Nevada Land LLC			596,920.30
		NV ESD, LLC			524,014.00
		Opening Balance Equity			100.00
		Opening Balance Equity			-100.00
		Retained Earnings			270,247.16
		Sam & Tara Landis Living Trust			223,275.53
		Typhon One Demil LLC Owner's Eq			56,958.04
		V & K Sciarrotta Fam Trust			132,142.66
		William Miles			273,398.61
		Net Income			444,803.17
	Total Equity				4,299,365.33
TOTAL LIABILITIES & EQUITY					8,664,364.21

F Line Holdings LLC			Oct 4, 23
ASSETS			
	Fixed Assets		
		F Line Property	348,750.00
	Total Fixed Assets		348,750.00
TOTAL ASSETS			348,750.00
LIABILITIES & EQUITY			
	Equity		
		Alex Bernhard AV Trust	8,867.13
		Anderson Family Revocable Trust	11,970.62
		B&J Wentz Family Trust	4,130.75
		D&B Larkin Trust	31,034.96
		Dick Campagni	8,867.13
		FiveK LLC	5,541.96
		GL Revocable Living Trust	31,034.96
		Jeff Campagni	8,867.13
		Jorge Peralta	8,867.13
		Knotable LLC	5,901.07
		Mark Turner	44,335.65
		Michael Fleck	3,540.65
		Nevada ESD LLC	50,986.00
		Northern Nevada Land LLC	58,079.70
		Sam and Tara Landis Trust	21,724.47
		Typhon One Demil LLC	5,541.96
		V&K Sciarrotta Trust	12,857.34
		W&A Miles Family Trust	26,601.39
	Total Equity		348,750.00
TOTAL LIABILITIES & EQUITY			348,750.00

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

b. 12 Months Post-Construction Balance Sheet

EnviroSafe Demil LLC					Oct 4, 24		F Line Holdings LLC			Oct 4, 24
ASSETS							ASSETS			
	Current Assets							Fixed Assets		
		Checking/Savings							F Line Property	1,356,269.78
			CNB Checking		1,019,330.21			Total Fixed Assets		1,356,269.78
			CNB Money Market		14,968,826.57		TOTAL ASSETS			1,356,269.78
		Total Checking/Savings			15,988,156.78		LIABILITIES & EQUITY			
		Accounts Receivable						Equity		
			Accounts Receivable		1,900,000.00				Alex Bernhard AV Trust	34,483.28
		Total Accounts Receivable			1,900,000.00				Anderson Family Revocable Trust	46,552.43
		Other Current Assets							B&J Wentz Family Trust	16,064.04
			*Inventory Asset		2,966.92				D&B Larkin Trust	120,691.50
		Total Other Current Assets			2,966.92				Dick Campagni	34,483.28
	Total Current Assets				17,891,123.70				FiveK LLC	21,552.05
	Fixed Assets								GL Revocable Living Trust	120,691.50
		Equipment							Jeff Campagni	34,483.28
			Accumulated Depreciation		-548,941.76				Jorge Peralta	34,483.28
			Air Compressor		2,493.75				Knotable LLC	22,968.43
			Equipment Engineering/Design		2,550,314.74				Mark Turner	172,416.42
			Forklift		56,420.28				Michael Fleck	13,769.18
			Infrastructure		3,539,523.61				Nevada ESD LLC	198,278.89
			Equipment - Other		13,815,156.56				Northern Nevada Land LLC	225,865.51
			HBC Equipment		8,456,981.00					
		Total Equipment			27,871,948.18				Sam and Tara Landis Trust	84,484.05
		Land			58,294.80				Typhon One Demil LLC	21,552.05
		Small Decon Burn Chamber			2,570.94				V&K Sciarrotta Trust	50,000.76
		Startup Costs							W&A Miles Family Trust	103,449.85
			Accumulated Amortization		-116,718.00			Total Equity		1,356,269.78
			Inventory Control Software		28,277.45		TOTAL LIABILITIES & EQUITY			1,356,269.78
			Land Permitting		176,127.89					
			Loan Fees		127,300.00					
			Texas Land Permitting		660,103.24					
			Startup Costs - Other		300,553.55					
		Total Startup Costs			1,175,644.13					
	Total Fixed Assets				29,108,458.05					
	Other Assets									
		Construction Costs			8,297.72					
	Total Other Assets				8,297.72					
TOTAL ASSETS					47,007,879.47					
LIABILITIES & EQUITY										
	Liabilities									
		Current Liabilities								
			Accounts Payable							
				Accounts Payable	0.00					
			Total Accounts Payable		0.00					
			Other Current Liabilities							
				West Town B&T Loan	4,000,000.00					
				USDA Loan	19,400,000.00					
			Total Other Current Liabilities		23,400,000.00					
		Total Current Liabilities			23,400,000.00					
		Long Term Liabilities								
			MHW Ventures LLC Loan		0.00					
			Michael Fleck Loan		0.00					
			N/P - Navitas Credit (Fishbowl)		0.00					
			N/P - Star Capital Group		0.00					
			TKO Unlimited LLC Loan		0.00					
		Total Long Term Liabilities			0.00					
	Total Liabilities				23,400,000.00					
	Equity									
		Alex Bernhard			65,516.72					
		Anderson Fam Revocable Trust			88,447.57					
		B&J Wentz Trust Owners Equity			30,520.96					
		Dan & Brenda Larkin Fam Trust			229,308.50					
		Dick Campagni			65,516.72					
		FiveK LLC Owner's Equity			40,947.95					
		GW Larkin Living Trust			229,308.50					
		Jeff Campagni			65,516.72					
		Jorge Peralta			65,516.72					
		Knotable LLC Owners Equity			43,601.37					
		Mark Turner			327,583.58					
		Michael Fleck Owners Equity			26,160.82					
		Northern Nevada Land LLC			429,134.49					
		NV ESD, LLC			376,721.11					
		Sam & Tara Landis Living Trust			160,515.95					
		Typhon One Demil LLC Owner's Eq			40,947.95					
		V & K Sciarrotta Fam Trust			94,999.24					
		William Miles			196,550.15					
		Opening Balance Equity			100.00					
		Opening Balance Equity			-100.00					
		Retained Earnings			3,000,000.00					
		Net Income			15,297,791.00					
	Total Equity				20,874,606.02					
TOTAL LIABILITIES & EQUITY					44,274,606.02					

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

c. 24 Months Post-Construction Balance Sheet

EnviroSafe Demil LLC					Oct 4, 24
ASSETS					
	Current Assets				
		Checking/Savings			
			CNB Checking		1,019,330.21
			CNB Money Market		32,078,241.57
		Total Checking/Savings			33,097,571.78
		Accounts Receivable			
			Accounts Receivable		1,900,000.00
		Total Accounts Receivable			1,900,000.00
		Other Current Assets			
			*Inventory Asset		2,966.92
		Total Other Current Assets			2,966.92
	Total Current Assets				35,000,538.70
	Fixed Assets				
		Equipment			
			Accumulated Depreciation		-1,097,883.52
			Air Compressor		2,493.75
			Equipment Engineering/Design		2,550,314.74
			Forklift		56,420.28
			Infrastructure		3,539,523.61
			Equipment - Other		13,815,156.56
			HBC Equipment		8,456,981.00
		Total Equipment			27,323,006.42
		Land			58,294.80
		Small Decon Burn Chamber			2,570.94
		Startup Costs			
			Accumulated Amortization		-233,436.00
			Inventory Control Software		28,277.45
			Land Permitting		176,127.89
			Loan Fees		127,300.00
			Texas Land Permitting		660,103.24
			Startup Costs - Other		300,553.55
		Total Startup Costs			1,058,926.13
	Total Fixed Assets				28,442,798.29
	Other Assets				
		Construction Costs			8,297.72
	Total Other Assets				8,297.72
TOTAL ASSETS					63,451,634.71
LIABILITIES & EQUITY					
	Liabilities				
		Current Liabilities			
			Accounts Payable		
				Accounts Payable	0.00
			Total Accounts Payable		0.00
			Other Current Liabilities		
				West Town B&T Loan	0.00
				USDA Loan	14,000,000.00
			Total Other Current Liabilities		14,000,000.00
		Total Current Liabilities			14,000,000.00
		Long Term Liabilities			
			MHW Ventures LLC Loan		0.00
			Michael Fleck Loan		0.00
			N/P - Navitas Credit (Fishbowl)		0.00
			N/P - Star Capital Group		0.00
			TKO Unlimited LLC Loan		0.00
		Total Long Term Liabilities			0.00
	Total Liabilities				14,000,000.00
	Equity				
		Alex Bernhard			65,516.72
		Anderson Fam Revocable Trust			88,447.57
		B&J Wentz Trust Owners Equity			30,520.96
		Dan & Brenda Larkin Fam Trust			229,308.50
		Dick Campagni			65,516.72
		FiveK LLC Owner's Equity			40,947.95
		GW Larkin Living Trust			229,308.50
		Jeff Campagni			65,516.72
		Jorge Peralta			65,516.72
		Knotable LLC Owners Equity			43,601.37
		Mark Turner			327,583.58
		Michael Fleck Owners Equity			26,160.82
		Northern Nevada Land LLC			429,134.49
		NV ESD, LLC			376,721.11
		Sam & Tara Landis Living Trust			160,515.95
		Typhon One Demil LLC Owner's Eq			40,947.95
		V & K Sciarrotta Fam Trust			94,999.24
		William Miles			196,550.15
		Opening Balance Equity			100.00
		Opening Balance Equity			-100.00
		Retained Earnings			3,000,000.00
		Net Income			33,361,020.00
	Total Equity				38,937,835.02
TOTAL LIABILITIES & EQUITY					52,937,835.02

F Line Holdings LLC			Oct 4, 24
ASSETS			
	Fixed Assets		
		F Line Property	1,356,269.78
	Total Fixed Assets		1,356,269.78
TOTAL ASSETS			1,356,269.78
LIABILITIES & EQUITY			
	Equity		
		Alex Bernhard AV Trust	34,483.28
		Anderson Family Revocable Trust	46,552.43
		B&J Wentz Family Trust	16,064.04
		D&B Larkin Trust	120,691.50
		Dick Campagni	34,483.28
		FiveK LLC	21,552.05
		GL Revocable Living Trust	120,691.50
		Jeff Campagni	34,483.28
		Jorge Peralta	34,483.28
		Knotable LLC	22,968.43
		Mark Turner	172,416.42
		Michael Fleck	13,769.18
		Nevada ESD LLC	198,278.89
		Northern Nevada Land LLC	225,865.51
		Sam and Tara Landis Trust	84,484.05
		Typhon One Demil LLC	21,552.05
		V&K Sciarrotta Trust	50,000.76
		W&A Miles Family Trust	103,449.85
	Total Equity		1,356,269.78
TOTAL LIABILITIES & EQUITY			1,356,269.78

2. **Letters of Opinion –** ESD has obtained a Letter of Opinion from ESD's lender (West Town Bank) via the 3rd-Party responsible for ESD's USDA Feasibility Study. This study was commissioned by the bank and provided to the USDA to justify ESD's loan for this project. The Feasibility Study was extremely comprehensive and reviewed all aspects of ESD's business. The result was positive with the following conclusion: "*Based on the resulting findings, ESD met the requirements for financial feasibility."* The author of the study was Mike Levine, Principal Financial Consultant of the firm. ESD also has an executed commitment letter/term sheet for the loan with West Town Bank that can additionally be provided, if required.

3. **Operating and cash flow statement**
   EnviroSafe Demil LLC conducted a cashflow analysis based on historic cashflow numbers and future cashflow predictions based on current contracts with the US Government and Canadian Government for demilitarization of munitions. ESD has signed contracts in the following amounts:

   USG Demilitarization:
   - ~$25M - 20mm, Fuzes, and Flares
   - ~$315M - Rocket Motors (sole source contract and RCRA required)
   - ~$1M - US Dept. of Justice

   Canadian Demilitarization:
   - ~$20M - CRV-7 Rocket motors

   Based on these contracts and several long-term commercial contracts that ESD is working on securing, a conservative estimate of $30-40M annual revenue is not only achievable but expected. ESD secured debt financing via ~$4M SBA loan for the initial build out and completed phase 1 of facility construction in mid-2023. Phase 2 will begin with further financing by the USDA shown in the cashflow worksheet below. Based on previous operating figures ESD is operating on an average 40-50% gross margin. Cash will be held in reserve for unexpected operating costs, closure costs, and liabilities.

   Assumptions in the cashflow statement:

- ESD will continue operating current contractual workload for the contractual timeline of 5 years
- After building the next phase of equipment ESD will begin earning revenues of $1.5-2.5MM monthly from contracted workload
- Current and future quoted liability rates will be honored by ESD's insurance providers

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

Current Operating and cash flow statement

					Oct 1 2024
		OPERATING ACTIVITIES			
			Net Income		15,297,791.00
			Adjustments to reconcile Net Income		
			to net cash provided by operations:		
				Accounts Receivable	-1,900,729.00
				*Inventory Asset	-2,966.92
				Uncategorized Asset	0.02
				Accounts Payable	453,591.00
				USDA Loan	19,400,000.00
		Net cash provided by Operating Activities			33,247,686.10
		INVESTING ACTIVITIES			
			Equipment		-2,855,273.72
			Burn Chamber Process and Control Equip		-8,456,981.00
			Auxiliary Equipment		-9,436,340.00
			Equipment:Accumulated Depreciation		89,507.37
			Equipment:Air Compressor		-2,493.75
			Equipment:Equipment Engineering/Design		-2,027,925.00
			Equipment:Forklift		-56,420.28
			Equipment:Infrastructure		-1,178,796.54
			Startup Costs:Accumulated Amortization		10,721.67
			Startup Costs:Inventory Control Software		-28,277.45
			Startup Costs:Land Permitting		-3,570.00
			Startup Costs:Texas Land Permitting		-157,342.74
			Construction Costs		-419,615.72
		Net cash provided by Investing Activities			-24,522,807.16
		FINANCING ACTIVITIES			
			Alex Bernhard		91,132.87
			Anderson Fam Revocable Trust		123,029.38
			B&J Wentz Trust Owners Equity		-4,130.75
			Dan & Brenda Larkin Fam Trust		318,965.04
			Dick Campagni		91,132.87
			FiveK LLC Owner's Equity		-5,541.96
			GW Larkin Living Trust		318,965.04
			Jeff Campagni		91,132.87
			Jorge Peralta		91,132.87
			Knotable LLC Owners Equity		-5,901.07
			Mark Turner		455,664.35
			Michael Fleck Owners Equity		-3,540.65
			Northern Nevada Land LLC		-58,079.70
			NV ESD, LLC		524,014.00
			Sam & Tara Landis Living Trust		223,275.53
			Typhon One Demil LLC Owner's Eq		-5,541.96
			V & K Sciarrotta Fam Trust		132,142.66
			William Miles		273,398.61
		Net cash provided by Financing Activities			2,651,250.00
	Net cash increase for period				11,376,128.94
	Cash at beginning of period				221,213.31
Cash at end of period					**11,597,342.25**

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

12 Months Post-Construction Operating and cash flow statement

			Oct 1 2025
OPERATING ACTIVITIES			
	Net Income		15,297,791.00
	Adjustments to reconcile Net Income		
	to net cash provided by operations:		
		Accounts Receivable	-1,900,729.00
		*Inventory Asset	-2,966.92
		Uncategorized Asset	0.02
		Accounts Payable	453,591.00
		USDA Loan	19,400,000.00
Net cash provided by Operating Activities			33,247,686.10
INVESTING ACTIVITIES			
	Equipment		-2,855,273.72
	Burn Chamber Process and Control Equip		-8,456,981.00
	Auxiliary Equipment		-9,436,340.00
	Equipment:Accumulated Depreciation		89,507.37
	Equipment:Air Compressor		-2,493.75
	Equipment:Equipment Engineering/Design		-2,027,925.00
	Equipment:Forklift		-56,420.28
	Equipment:Infrastructure		-1,178,796.54
	Startup Costs:Accumulated Amortization		10,721.67
	Startup Costs:Inventory Control Software		-28,277.45
	Startup Costs:Land Permitting		-3,570.00
	Startup Costs:Texas Land Permitting		-157,342.74
	Construction Costs		-419,615.72
Net cash provided by Investing Activities			-24,522,807.16
FINANCING ACTIVITIES			
Net cash provided by Financing Activities			0.00
		Net cash increase for period	8,724,878.94
		Cash at beginning of period	221,213.31
		Cash at end of period	8,946,092.25

EnviroSafe Demil LLC
401 N. Montague St
Hooks, TX 75561
430-200-2292

24 Months Post-Construction Operating and cash flow statement

			Oct 1 2026
OPERATING ACTIVITIES			
	Net Income		38,010,450.00
	Adjustments to reconcile Net Income		
	to net cash provided by operations:		
		Accounts Receivable	-3,801,045.00
		*Inventory Asset	-2,966.92
		Uncategorized Asset	0.02
		Accounts Payable	453,591.00
		USDA Loan	0.00
Net cash provided by Operating Activities			34,660,029.10
INVESTING ACTIVITIES			
	Equipment		-250,000.00
	Burn Chamber Process and Control Equip Wear Parts		-350,000.00
	Auxiliary Equipment		-100,000.00
	Equipment:Accumulated Depreciation		89,507.37
	Equipment:Infrastructure		-200,000.00
	Startup Costs:Accumulated Amortization		10,721.67
	Startup Costs:Land Permitting		-3,570.00
	Startup Costs:Texas Land Permitting		-20,000.00
	Construction Costs		-220,000.00
Net cash provided by Investing Activities			-1,043,340.96
FINANCING ACTIVITIES			
Net cash provided by Financing Activities			0.00
		Net cash increase for period	33,616,688.14
		Cash at beginning of period	221,213.31
		Cash at end of period	**33,837,901.45**

4. **Explanation Statement**

This portion of the requirement calls for a statement addressing how the closure, post-closure, corrective action, and liability coverage financial assurance requirements of Chapter 37, Subchapter P will be met. ESD will utilize an insurance policy in order to meet closure financial requirements. ESD intends to establish financial assurance for third party sudden liability coverage of the facility no later than 60 days prior to the first receipt of RCRA hazardous waste. The wording of the Endorsement of Insurance for Liability will be identical to the wording specified in 30 TAC §37.641.

5. **Construction Capital Cost Estimates**

This portion of the requirement calls for estimates of capital costs for expansion and/or initial construction if the application encompasses facility expansion, capacity expansion, or new construction.

Task	Cost
Site preparation, fencing, paving, curbing, lighting, roadways	338,303
Foundations, buildings, other structures, utilities and connections, drainage system, HVAC system, electrical system, wastewater system	1,427,899
Process and control equipment	6,956,981
Auxiliary equipment, including but not limited to exhaust hoods, fans, ducting, pumps, piping, conveyors, stacks, storage tanks, process tanks, waste disposal facilities, pollution control equipment, and fire protection system	6,480,196
Process integration and instrumentation	1,456,144
Emergency response equipment	20,000
Transportation equipment	58,830
Office equipment	35,916
Engineering design, supervision, overhead	1,492,389
Construction expenses including permits, insurance, temporary facilities, and clean-up	411,318
Contractor's fees and overhead	300,000
Contingency	1,048,898
Total Cost	20,026,874

The estimates above are from the following sources:

- Previous experience
- Estimation/bids from contractors
- Actual costs already incurred.

October 23, 2023

Mr. Isaac Vela
Manager, Industrial and Hazardous Waste Permits Section
Texas Commission on Environmental Quality
Building F, MC 130
12100 Park 35 Circle
Austin, Texas 78753

Re: Letter of Opinion From Financial Expert for EnviroSafe Demil LLC
RCRA Permit Application
Hazardous Waste EPA ID No. #**TXR000086289**
Industrial Solid Waste Registration (SWR) No. #**98470**

Dear Mr. Vela:

This letter is furnished to you in response to financial disclosure requirements as applicable under Texas Health and Safety Code Section 361.085 and Title 30, Texas Administrative Code (30 TAC), Section 305.50 to provide assurance that EnviroSafe Demil LLC has sufficient financial resources.

The Texas Commission on Environmental Quality (TCEQ) is relying upon my opinion expressed regarding EnviroSafe Demil LLC (ESD) financial plan which includes balance sheets and forward looking proforma financial statements.

In keeping with the above law and rule requirements please allow this letter to serve as my acknowledgment that I have recently reviewed the following documents:

- EnviroSafe Demil LLC current financial statement dated September 2023;
- EnviroSafe Demil LLC proforma business plan;
- The most recent copy of EnviroSafe Demil LLC's two-year projected balance sheet, cash flow as well as income/expense statements September 2023 that was submitted to the TCEQ.

AdvantEdge Resources
2950 North Loop West, Suite 500,
Houston, TX 77092

866-200-6627
www.advantedgeresources.com

Brief Analysis of ESD's Financial Strength: ESD is a fast-growing company with an order book of over $350 million in government contracts from the US and Canada. To complete its expansion and fulfill its large and growing order book, the company is in the process of raising ~$20 million in debt and equity for the completion of its flagship Hybrid Burn Chamber (HBC) system and minor facility improvement for its Hooks, TX property. The company is in the final phases of a USDA Business and Industry (B&I) Guaranteed Loan Program and has secured the Letter of Commitment from West Town Bank.

Brief Explanation of How ESD has Sufficient Financial Resources to Operate Through Closure/Post-Closure Facility Care: As part of the USDA Loan Program, ESD underwent a rigorous financial and business review called a "Feasibility Study". As part of this process, we (AdvantEdge Resources, via West Town Bank) assessed and analyzed ESD financial statements in addition to the following: (1) Project underwriting; (2) Management's assumptions; (3) Funds; (4) Accounting policies and cost accounting system; (5) Dependency on other entities; 6) Market demand and forecast; (7) Peer industry comparison; (8) Availability of short-term credit; (9) Adequacy of raw materials and supplies; (10) Projected financial statements; (11) Sensitivity analysis; (12) Key financial ratios; and (13) Other secured funding. In addition, we analyzed economic impacts, assessed the market, evaluated the technology, and reviewed company management. Based on the resulting findings, ESD met the requirements for financial feasibility.

I conducted a thorough feasibility study at the request of West Town Bank as part of EnviroSafe Demil LLC's USDA guaranteed loan application and have concluded that the projections seem ***reasonable and attainable if the RCRA Permit is granted***.

Sincerely,

Mike Levine
Principal Consultant
Mike Levine
Office: 866-200-6627
Mobile: 980-777-9787
[redacted]

Enclosures: **Feasibility Study Abstract**

Mike Levine

[redacted] 9807779787

Summary

Management Consultant professional with extensive executive, start-up, and business development experience.

Experience

Principal Consultant

AdvantEdge Resources

Mar 2023 - Present (10 months)

Assistance in fundraising for SME and startups. Business Plan and Strategy Development. Feasibility Studies for SBA and USDA-guaranteed loans. Financial Modeling. CRE Feasibility Studies.

Partner

August Brown

Jan 2022 - Mar 2023 (1 year 3 months)

Business Development, Project Lead for Industrial Sector and Materials Consulting, Financial Analysis, Coaching, Strategy Development, Private Equity

Chief Executive Officer

Mafic SA

Nov 2016 - Dec 2021 (5 years 2 months)

Negotiated and successfully closed over $100 million in multiple equity and debt funding rounds;
Managed construction of the largest basalt fiber reinforcement manufacturing facility in the Western World;
Built a lean and highly functional organization transforming the company from an early-stage startup to a fast-growing advanced material manufacturer;
Established and developed banking relationships, corporate finance strategy;

Chief Operating Officer

Mafic SA

Jan 2013 - Oct 2016 (3 years 10 months)

Negotiated and secured IP rights for advanced materials manufacturing technologies;
Built North American and European operations from the ground up;
Led product and business development for new product and new product category.

Business Development Manager - US

Windowmaker Software Ltd

Aug 2011 - Feb 2012 (7 months)

Led business development efforts for a specialty international software developer into the US market;

Director of International Sales

Inline Fiberglass Ltd.
1996 - 2009 (13 years)
Successfully negotiated establishment of two joint ventures in China;
Managed IP transfers and construction of multi-million dollar greenfield manufacturing facilities in Asia and Europe;
Built a dealer network in the United States for a Canadian building materials manufacturer;

Education

University of Toronto - Rotman School of Management
Master of Business Administration - MBA
1999 - 2001

Seneca Polytechnic
Marketing with Honors

Moscow State Technological University "Stankin"
Mechanical Engineering and Automation
1990 - 1992

Skills

Sales Management • Business Development • Direct Sales • International Sales • Management • Account Management • Fundraising • Startups • Financial Modeling • Leadership

February 7, 2024

EnviroSafe Demil, LLC
F-Line Holdings, LLC
Mr. Thomas J Ogden
12763 Lovelock Hwy
Fallon, NV 89406

Re: Conditional Letter of Intent ("LOI")

Dear Mr. Ogden:

West Town Bank & Trust (the "Bank" or "WTBT") has reviewed your company's financing opportunity and based upon our review of the project and the request for funding under the USDA Business & Industry program, we are pleased to let you know that the project meets preliminary guidelines for the loan program and submittal of a full USDA guaranteed loan application.

At this time, a full USDA application has been submitted and is currently under final reviews by the USDA national office. As presented in our preliminary term sheet and executed by you, it is our intent to continue toward a project funding and loan closing utilizing the preliminary terms outlined. While we intend to move forward to a financial closing, this conditional LOI does not constitute full project and loan approval by USDA. We anticipate such approvals to be forthcoming but cannot guarantee that approval. In addition, our Bank will make its final credit approval decision upon approval by USDA.

Please note that some final project approvals can come with additional, and in some cases, modified terms required by USDA and potentially our Bank's full approval. Once we receive formal notification from USDA on the status of the guaranteed loan, we will let you know. If approved by USDA, we will go through the terms of their approval and detail any modifications or changes from the anticipated scope of the financing, if any. From there, we will start the process to close and fund the loan as soon as possible. We feel that a decision is being made on the loan application at the national office any day now and would hope to hear back from USDA in the next 7-10 business days; however, USDA never relays any potential approval until a formal decision is made.

If you have any questions, please do not hesitate to contact me. Again, once we hear back from USDA, I will be in touch.

Many thanks,

Michael Kirby
Senior Vice President &
Director of Government Lending
West Town Bank & Trust

February 15, 2023

EnviroSafe Demil, LLC
Mr. Michael Wentz
Mr. Thomas J Ogden
12763 Lovelock Hwy
Fallon, NV 89406

Re: USDA Business & Industry Guaranteed Loan Program Proposal

Dear Mr. Wentz & Mr. Ogden:

Thank you for allowing West Town Bank & Trust (the "Bank" or "WTBT") to review your company's financing opportunity. Based on our review of the project and the request for funding under the USDA Business & Industry program, we are pleased to present this preliminary financing proposal to you ("Proposal"). This Proposal is not inclusive of all terms and conditions and is subject to our formal credit approval. It is, however, a strong indication of our interest and willingness to provide credit. This Proposal is contingent upon receipt of additional documentation necessary to complete our analysis as well as the USDA loan application. Please find below the preliminary terms and requirements.

Lender: West Town Bank & Trust

Program: USDA Business & Industry Guaranteed Loan Program

Borrower(s): ESD New Entity, LLC ("Borrower") to be established
EnviroSafe Demil, LLC ("Co-Borrower")

Guarantor(s): Any individual or entity owning 20% or more of the borrowing entity(ies)

Loan Amount: Estimated at $19,400,000 (estimated based upon final firm price, turn-key rocket motor burn chamber and equipment contract, along with the real estate and improvements of +/-175 acre site) advanced at an aggregate loan-to-value/loan-to-cost not to exceed 75%.

Funds for the turn-key burn chamber system will be drawn based upon the design, engineering, manufacturing, delivery and installation schedules proposed in the burn chamber procurement contract.

Amortization: 16 years total, with 12 months interest only, then 15 years fully amortizing.

Interest Rate: Chamber Manufacture Period: 10-year United States Treasury yield plus 5.00% per annum (current rate of 8.53% as of 02/03/2023) variable, resetting quarterly until funds have been fully drawn and equipment is delivered and installed. Loan rate will be set based upon the 10-year US Treasury yield settled the business day prior to closing.

Post Chamber Delivery & Installation: 10-year United States Treasury yield plus 5.00% per annum (current rate of 8.53% as of 02/03/2023) fixed for the remaining term of the loan. Loan rate will be set based upon the 10-year US Treasury yield once loan funds are fully drawn and equipment is delivered and installed (rate conversion). Rate floor of 6.50%.

Repayment Terms: Interest only, paid monthly, for the first twelve (12) months, then converting to monthly principal and interest payments for the remaining fifteen (15) years.

Loan Fees: 1.00% origination fee of the total USDA Guaranteed loan amount.

3.00% of the guaranteed portion payable to USDA upon issuance of the guarantee.

Purpose of Loan / Use of Proceeds

Proceeds will be used to acquire new turn-key rocket motor burn chamber and equipment, fund capitalized interest and pay costs associated with the financing and loan closing. The estimated sources and uses table is presented below.

EnviroSafe LLC - Rocket Motor Burn Chamber Project				
Sources of Funds			**Uses of Funds**	
USDA Guaranteed Loan	$	19,400,000	El Dorado Burn Chamber - Turnkey System	$ 23,270,000
Other Source of Funds / Borrower Injection	$	5,191,000	Capitalized Interest (12 months)	$ 450,000
			Closing Costs (estimated)	$ 150,000
			USDA Guarantee Fee	$ 465,600
			Banking Fees	$ 194,000
			Third-Party Reports (Appr, Env, Feasibility, est.)	$ 60,000
	$	-	Misc	$ 1,400
Total Sources	**$**	**24,591,000**	**Total Uses**	**$ 24,591,000**

Capitalized interest was calculated based on a simple draw scehdule over a 12 month period. Once final details of the turn-key burn chamber are procured, the draw schedule may be refined to match the anticipated draw schedule. If the amount of capitalized interest should change, an updated sources and uses of funds chart will be developed by the Bank and Borrower.

Prepayment Penalty: In the event of loan prepayment, **in whole or in part**, a prepayment penalty shall be assessed as follows:

- If the prepayment occurs on or before the sixth anniversary date of the loan, the prepayment penalty will equal five percent (5%) of the principal amount prepaid.
- If the prepayment occurs on or before the seventh anniversary date of the loan, the prepayment penalty will equal four percent (4%) of the principal amount prepaid.
- If the prepayment occurs on or before the eighth anniversary date of the loan, the prepayment penalty will equal three percent (3%) of the principal amount prepaid.
- If the prepayment occurs on or before the ninth anniversary date of the loan, the prepayment penalty will equal two percent (2%) of the principal amount prepaid.
- If the prepayment occurs on or before the tenth anniversary date of the loan, the prepayment penalty will equal one percent (1%) of the principal amount prepaid.
- There is no prepayment penalty after the conclusion of the tenth year of the loan term.

Expenses: Origination fee, Bank's Attorney fees and out-of-pocket costs for filing fees, recording fees, searches, tax service, appraisals, feasibility study, title work, lien searches, closing fees, 3rd-party construction inspection fees, etc. The Borrower will be responsible for all the Bank's normal and customary costs related to, and expenses associated with, closing this transaction. All out of pocket expenses of the Bank shall be paid by the Borrower whether or not the transaction closes.

Good Faith Deposit: A check or wire in the amount of $20,000 to be deposited (the "Good Faith Deposit") is required upon return of this letter of intent and payable to West Town Bank and Trust. The Good Faith Deposit is to be paid to the Bank to cover expenses for the transaction. If the Bank or the USDA does not approve the request, the unused portion of the Good Faith Deposit will be refunded less any portion used by Bank for items such as appraisals, environmental reports, feasibility reports, credit reports, loan underwriting, loan packaging and any other third-party expenses.

Should the costs of third-party required reports costs in excess of the Good Faith Deposit, Borrower agrees to pay or deposit additional funds to cover the full costs of such reports in advance of the execution of the report proposal.

Collateral: Collateral will include, but not limited to the following:

1) First priority lien & deed of trust on the +/-130 acre parcel and all improvements
2) First priority lien & deed of trust on the +/-45 acre parcel and all improvements owned by EnviroSafe Demil, LLC
3) First priority lien on the new rocket motor burn chamber and equipment secured by UCC-1 filing or other such required filing documentation.
4) First priority lien on all business assets of the Borrower owned, acquired or acquired in the future.

5) Pledge of all revenues of the Borrower.
6) Pledge of US Army contract for rocket motor demilitarization, as allowable by law.
7) Assignment of contracts (as allowable).
8) Assignment of any Lease, Rents and Profits.
9) First priority lien on the capitalized interest account, held at the Bank.
10) Any other collateral deemed necessary by the Bank to fully secure the loan.

Appraisal Requirements: Independent 3rd party appraisal to be performed, ordered by the bank, on all real estate and improvements showing an appraised value acceptable to the Bank. The Bank must follow all Federal Banking guidelines for requesting a completed appraisal. Collateral value must ensure the loan is fully secured and meets the requirements of USDA, including their review and approval. New equipment value is normally valued based upon the turn-key equipment invoice.

Financial Covenants: Any financial covenants required of USDA and Bank at levels to be determined and typically include debt service coverage, equity ratios, among others.

Financial Reporting: Requirements for financial reporting will include, but not limited to the following:

- Annual financial audit for all Borrowers due within 120 days of fiscal year end.
- Annual financial statements within 120 days of year end for any corporate guarantors.
- Annual financial statements within 30 days of year end for any personal Guarantors.
- Annual tax returns for any personal Guarantors within 30 days of filing, including any extension filed (extension documentation delivered upon filing).
- Any additional required reporting from the USDA.

Other Conditions: Depository banking relationship with the Bank.

Expiration: This Proposal expires five (5) business days from the date listed above.

Upon receipt by Bank of (i) the signed Proposal, (ii) the necessary application information, (iii) the necessary USDA loan package and other information, the Bank will submit the Proposed Loan for credit consideration.

Please understand this letter is not a commitment by Bank to make the Proposed Loan or provide other financing to you. It is intended to provide the general parameters by which the Bank will consider your application for financing. Any future commitment by Bank to make the Proposed Loan is subject to final approval of the USDA and Bank, in their sole and absolute discretion, plus full compliance with any and all conditions that Bank and the USDA may require in connection with the Proposed Loan.

Confidentiality:

This Proposal is provided for your information and is delivered to you with the understanding that neither it nor its substance shall be disclosed to any third person, except those who are in a confidential relationship with you, or where the same is required by law.

This Proposal shall expire five (5) business days from the date hereof if it has not been acknowledged and returned. Any and all extensions to this Proposal may be granted by Bank at its absolute and sole discretion. After execution of this Proposal, the Proposed Loan application must be submitted to Bank within thirty (30) days hereof or this Proposal shall be null and void and of no further force or effect, unless otherwise extended by West Town Bank & Trust.

Sincerely,



Michael Kirby
Senior Vice President &
Director of Government Lending
West Town Bank & Trust

Acknowledgement:

If you agree to these terms and conditions, please so indicate by signing and returning an original copy of this letter to the Bank at the address below within **5** days of the date of this letter with a check or wire transfer in the amount of $20,000 for the aforementioned Good Faith. A check should be made payable to West Town Bank & Trust.

CHECK:
West Town Bank & Trust
Attn: USDA/SBA Department – ESD Rocket Motor Demil
8450 Fall of Neuse Road Suite 202
Raleigh, NC 27615

WIRE:

Receiving Financial Institution:	**West Town Bank & Trust Receiving**
ABA#	**271971599**
Beneficiary Financial Institution:	**West Town Bank & Trust Account**
Number:	**110106409**
Department/Reference:	**USDA – ESD Rocket Motor Demil**

I have reviewed this Proposal and fully understand the contents and conditions of it and agree to proceed with the proposed financing as outlined herein.

EnviroSafe Demil, LLC, for itself and the new entity to be established

By:_____ Acceptance Date: _____

Its: _____

TABLE VIII.B.

ESTIMATED CAPITAL COSTS

Table VIII.B. – Estimated Capital Costs

Task	Cost
Site preparation, fencing, paving, curbing, lighting, roadways	$338,303
Foundations, buildings, other structures, utilities and connections, drainage system, HVAC system, electrical system, wastewater system	$1,427,899
Process and control equipment	$6,956,981
Auxiliary equipment, including but not limited to exhaust hoods, fans, ducting, pumps, piping, conveyors, stacks, storage tanks, process tanks, waste disposal facilities, pollution control equipment, and fire protection system	$6,480,196
Process integration and instrumentation	$1,456,144
Emergency response equipment	$20,000
Transportation equipment	$58,830
Office equipment	$35,916
Engineering design, supervision, overhead	$1,492,389
Construction expenses including permits, insurance, temporary facilities, and clean-up	$411,318
Contractor's fees and overhead	$300,000
Contingency	$1,048,898
Total Cost	$20,026,874

The estimates above are from the following sources:

- Previous experience
- Estimation/bids from contractors
- Actual costs already incurred

SIGNED WRITTEN STATEMENT:
FINANCIAL ASSURANCE FOR
EMERGENCY RESPONSE

Signed Written Statement: Financial Assurance for Emergency Response:

ESD intends to provide emergency response financial assurance per 30 TAC 305.50(a)(12)(D)(i) by including documentation showing agreements with the local fire department, police department, and hospital. These agreements are located in Section III of the Part B Application, Appendix III.E, *Attachment III.E.1 – Agreement Letters*.

Signature of Responsible Official

12/3/2021
Date

Michael Wentz
Printed Name

President, EnviroSafe Demil, LLC
Title

IX. Releases from Solid Waste Units and Corrective Action

Provide all Part B responsive information in Appendix IX. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

Appendix IX – Releases from Solid Waste Units and Corrective Action includes the Preliminary Review Facility Checklist and the Preliminary Review Unit Checklist.

The Texas Solid Waste Disposal Act, 30 TAC 335.167, 40 CFR 270.14(d) and Section 3004(u) of the Hazardous and Solid Waste Amendments of 1984 (HSWA) *require that each hazardous waste management permit application review shall address corrective action for all releases of hazardous waste and hazardous constituents* listed in 40 CFR 261, Appendix VIII, 40 CFR Part 264, Appendix IX, and/or other constituents of concern from any solid waste management unit (SWMU) and/ or Areas of Concern (AOCs) at a facility, regardless of the time at which waste was placed in such unit[2]. For the purposes of HSWA Corrective Action, a SWMU may include, but is not limited to, any landfill, surface impoundment, land treatment unit, waste pile, underground injection well, incinerator, boiler, industrial furnace, tank, container storage area, drip pad, containment building, miscellaneous unit; any units exempt from hazardous waste permitting requirements, such as wastewater treatment units, elementary neutralization units, totally enclosed treatment units, waste recycle/reuse units, and 90-day accumulation time units; or process units or areas which may have routine and/or systematic releases to the environment (e.g., process drainage ditches or product storage tanks). Current EPA interpretation of this requirement has resulted in a Corrective Action process that begins with a RCRA Facility Assessment (RFA) to determine if corrective action is necessary.

[2]For the purposes of HSWA Corrective Action, a SWMU may include, but is not limited to, any landfill, surface impoundment, land treatment unit, waste pile, underground injection well, incinerator, boiler, industrial furnace, tank, container storage area, drip pad, containment building, miscellaneous unit; any units exempt from hazardous waste permitting requirements, such as wastewater treatment units, elementary neutralization units, totally enclosed treatment units, waste recycle/reuse units, and 90-day accumulation time units; or process units or areas which may have routine and/or systematic releases to the environment (e.g., process drainage ditches or product storage tanks).

The first step in the RFA is the development of a Preliminary Review (PR) from all available documentation for a facility (including but not limited to all facility documents, Part A, and Part B of the permit application, TCEQ correspondence files and inspection reports, etc.). The PR compiles available information on every SWMU and/or AOC that has ever existed at the facility. A unit checklist is completed for each SWMU and/ or AOC. On a unit-by-unit basis, the PR may recommend no further action for:

- well-designed and well-managed units
- units that have not managed hazardous wastes or wastes containing hazardous constituents;
- units already under corrective action by enforcement order; or
- units scheduled to be addressed in a compliance plan.

In addition, the unit checklists are summarized in a *Facility Checklist*. If there is a known release or potential for a release of hazardous waste or hazardous constituents from a unit/area, the PR may recommend a *RCRA Facility Investigation* (RFI), or an *Affected Property Assessment* (APA), if 30 TAC Chapter 350, Texas Risk Reduction Program (TRRP) applies, to determine the extent of the release for future corrective action, or stabilization as an appropriate and immediate corrective action.

The second step is a *Visual Site Inspection* (VSI) of the entire facility. The RFA is the combination of the PR and VSI documentation and any sample results. The RFA process should be scheduled so as to be completed during the latter stages of the Technical Review process or no later than one month in advance of the preparation of an initial draft permit for the facility. The RFA includes recommendations for whether further investigation or corrective action is warranted.

The requirements for an RFI or any other corrective action will be included in the permit, in the associated compliance plan which is mandatory for facilities with known groundwater contamination, or pursuant to 40 CFR 270.14(d)(3), the applicant may be required to start the RFI or other corrective action before the permit is issued. The RFI shall comply with all the applicable items contained in the U.S. EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994, unless an alternate investigation approach is approved by the Executive Director. An RFI workplan may typically include a soil boring program, installation of monitoring wells, and sampling and analysis for 40 CFR 261 Appendix VIII and 40 CFR 264 Appendix IX hazardous constituents for surface soils, subsurface strata, surface water, groundwater, and/or air.

The permittee shall perform the RFI or APA and report the results. Corrective Action under 30 TAC Chapter 350 consists of an 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 report according to 30 TAC Chapter 350.

If the RFI report indicates releases of hazardous waste or hazardous constituents for SWMUs and/or AOCs that have been grandfathered under 30 TAC Chapter 335 Subchapters A and S, Corrective Action shall consists of, if necessary, Interim Corrective Measures, *Baseline Risk Assessment* (BLRA)/*Corrective Measures Study* (CMS) Report, 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, Subchapter A and S, provided the permittee complies with the notification and schedule requirements pursuant to 30 TAC 335.8 and 350.(2)(m).

This report shall evaluate the risk, identify and evaluate corrective measure alternatives, and recommend appropriate corrective measure(s) to protect human health and the environment. The BLRA/CMS Report shall address all of the applicable items in 30 TAC 350, 30 TAC 335 Subchapter S, and the U.S. EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994.

Upon approval of the BLRA/CMS Report by the TCEQ, the permittee shall submit a CMI Workplan to address all of the items for CMI Workplan contained in the U.S. EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994. For projects conducted under TRRP, the risk assessment process shall be addressed in the *Affected Property Assessment Report* (APAR), and the evaluation of corrective measures shall be

conducted as part of the remedy standard selection process provided in the *Response Action Plan* (RAP). If the CMI or RAP does not propose a permanent remedy, then a CMI Workplan or RAP shall be submitted as part of a new compliance plan application or as a modification/ amendment application to an existing compliance plan. The workplan or RAP shall contain detailed final engineering design, monitoring plans, and schedules necessary to implement the selected remedy. Implementation of the corrective measures shall be addressed through a new and/or a modified/amended compliance plan. Upon installation of a corrective action system based upon the approved CMI Workplan or RAP, the permittee shall submit a CMI Report or RAP which includes as-built drawings of the corrective action system. To report the progress of the corrective measures, the permittee shall submit periodic CMI Progress Reports or Response Action Effectiveness Reports to the TCEQ in accordance with the schedule specified in the compliance plan. Upon completion of the corrective action requirements, the permittee shall submit CMI Report or Response Action Completion Reports for review and approval.

Please note that the applicant/permittee may perform voluntary corrective action, stabilization, or "interim measures" at any time prior to or during the RFA/RFI/CMS/CMI or the APAR/RAP process without prior TCEQ approval. The TCEQ strongly supports these actions when undertaken to mitigate releases or reduce or minimize exposure and releases to human health and the environment.

A. Preliminary Review Checklists

For Applications for a New Hazardous Waste Permit:

- For all facility Solid Waste Management Units (SWMUs) and/or Areas of Concern (AOCs), complete the accompanying forms entitled "Preliminary Review Facility Checklist" and "Preliminary Review Unit Checklist". Make additional copies as necessary.

Appendix IX – Releases from Solid Waste Units and Corrective Action includes the Preliminary Review Facility Checklist and the Preliminary Review Unit Checklist.

For Applications for a Renewal/Amendment/Modification of an Existing Hazardous Waste Permit:

Not Applicable

- Update the Preliminary Review Facility Checklist to include any newly identified SWMUs and/or AOCs that were not incorporated into the previous permit issuance (new, amendment, modification, or renewal), and to update the status of all previously identified SWMUs or AOCs which are incorporated into the existing permit under either Section IX - Corrective Action for Solid Waste Management Units, or Section XI - Compliance Plan. Status updates should include notes regarding whether the SWMU or AOC has been incorporated into a compliance plan, has received approval of no further action (NFA), has had changes in its corrective action status, or has had other determinations issued by the TCEQ. Include the date of the status change in the updated checklist;
- Complete the Preliminary Review Unit Checklists for any newly identified SWMUs or AOCs that were not incorporated into the previous permit issuance (new, amendment, modification, or renewal);
- Update the status on the Preliminary Review Unit Checklists for all previously

identified SWMUs or AOCs that had not yet received TCEQ approval of NFA at the time of the previous permit issuance;

- Provide copies of the letters from the TCEQ approving NFA or other determinations that were issued since the previous permit issuance;

- For previously identified SWMUs and/or AOCs which are incorporated into the existing permit and are included in Section XI - Compliance Plan of this application, you may forego filling out the Preliminary Review Unit Checklists for these units. Briefly note on the Preliminary Review Facility Checklist that the SWMUs or AOCs are addressed in

  Section XI. Provide the location where the SWMU's and addressed in Section XI. ; or

- If all previously identified SWMUs and/or AOCs reached NFA status at or before the last permit issuance you may forego filling out the Preliminary Review Unit Checklists, indicate Not Applicable, and provide a brief explanation of the facts.

Complete Preliminary Review Facility Checklist (located in attachments)

Instructions for Preliminary Review Unit Checklist

Preliminary Review Facility Checklist

Preliminary Review Unit Checklist

Appendix IX –
Releases from Solid Waste Units and Corrective Action

This appendix includes the following information:

- Preliminary Review Facility Checklist
- Texas Commission on Environmental Quality, *Response Action Completion Report*, March 22, 2016
- Preliminary Review Unit Checklist

Preliminary Review Facility Checklist

Facility:	EnviroSafe Demil, LLC	City	Hooks, Texas
ISW Reg. No:	98470	Date	
Permit No.		Reviewer:	
EPA ID No.	TXR000086289		

A. Waste Management Units:

RCRA Regulated Units:

NOR. No.	Description	Status
100	Rocket Motor Ops Building	Proposed
101	Hybrid Burn Chamber (HBC)	Proposed
300	Above Ground Magazine (AGM)	Proposed
301	Earth Covered Magazine (ECM) (V-13-1)	Proposed
302	Earth Covered Magazine (ECM) (V-13-2)	Proposed
TBD	Earth Covered Magazine (ECM) (V-13-3)	Proposed (reserved for future use)
TBD	Earth Covered Magazine (ECM) (V-13-4)	Proposed (reserved for future use)
	Remove Last Row	Add Row

Solid Waste Management Units:

NOR. No.	Description	Status
	Remove Last Row	Add Row

B. Reviewed Documents

RCRA:

Part A ☐

Part B ☐

Permit ☐

CERCLA:

Inspection Reports:	
Enforcement Actions	
Exposure Infomation	
Other Infomation:	Texas Commission on Environmental Quality, Response Action Completion Report, March 22, 2016

C. Summary:

Other than the storage magazines, the proposed units have not handled hazardous waste previously. The storage magazines previously held explosives. There is no evidence of any hazardous waste releases in the area of the proposed units from previous operations.

The attached report "Response Action Completion Report" dated March 22, 2016 covers asbestos removal from the property as part of a corrective action program. All of the asbestos was successfully removed from the areas of concern and was properly disposed. The report states that "exposure to and cross-contamination from the deteriorated ACM on the ground surface and in the surface soil is no further concern at Load Line F."

D. Recommended Action::

No further action.

Preliminary Review Unit Checklist

Facility:	EnviroSafe Demil, LLC	City	Hooks, Texas
ISW Reg. No:	98470	Date	
Permit No.		Reviewer:	
EPA ID No.	TXR000086289		

Waste Management Unit(s):

A. NOR No.:	100
B. Description:	Miscellaneous Unit - Subpart X (X99) - Rocket Motor Ops Building
C. Dates of Operation:	Future
Wastes Managed:	Texas Waste Codes: 5001315H, 5002315H EPA Waste Codes: D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030
Evidence of Release:	None
Pollutant Dispersal Pathways:	Not applicable
Summary:	See information provided in Appendix V.K - Rocket Motor Ops Building
Recommended Action:	No further action
A. NOR No.:	101
B. Description:	Miscellaneous Unit - Subpart X (X03) - Hybrid Burn Chamber
C. Dates of Operation:	Future
Wastes Managed:	Texas Waste Codes: 5001315H, 5002315H EPA Waste Codes: D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030
Evidence of Release:	None
Pollutant Dispersal Pathways:	Not applicable
Summary:	See information provided in Appendix V.K - Hybrid Burn Chamber
Recommended Action:	No further action
A. NOR No.:	300
B. Description:	Other Storage (S99) Above Ground Magazine

C. Dates of Operation:	Future
Wastes Managed:	Texas Waste Codes: 5001315H, 5002315H EPA Waste Codes: D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030
Evidence of Release:	None
Pollutant Dispersal Pathways:	Not applicable
Summary:	See information provided in Appendix V.B - Container Storage Areas
Recommended Action:	No further action
A. NOR No.:	301
B. Description:	Other Storage (S99) Earth Covered Magazine (V-13-1)
C. Dates of Operation:	Future
Wastes Managed:	Texas Waste Codes: 5001315H, 5002315H EPA Waste Codes: D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030
Evidence of Release:	None
Pollutant Dispersal Pathways:	Not applicable
Summary:	See information provided in Appendix V.B - Container Storage Areas
Recommended Action:	No further action
A. NOR No.:	302
B. Description:	Other Storage (S99) Earth Covered Magazine (V-13-2)
C. Dates of Operation:	Future
Wastes Managed:	Texas Waste Codes: 5001315H, 5002315H EPA Waste Codes: D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D030
Evidence of Release:	None
Pollutant Dispersal Pathways:	Not applicable
Summary:	See information provided in Appendix V.B - Container Storage Areas
Recommended Action:	No further action

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Response Action Completion Report

Cover Page

Regulatory ID number (Solid waste registration number, VCP ID number, etc) TCEQ SWR 30991
check one: X Initial RACR submittal for this on-site property ___ Subsequent RACR submittal
Report date: _____ TCEQ Region No.: 5 - Tyler

TCEQ Program (check one)

X Corrective Action (Mail Code 127)
___ Voluntary Cleanup Program (Mail Code 221)
___ Petroleum Storage Tank Program (Mail Code 137)
___ Superfund PRP Lead (Mail Code 143)
___ Municipal Solid Waste Permits (Mail Code 124)

On-Site Property Information

On-Site Property Name: Load Line F of the former Lone Star Army Ammunition Plant
Street no. _____ Pre dir: _____ Street name: _____ Street type: _____ Post dir: ___
City: Hooks County: Bowie County Code: 19 Zip: 75505-9101
Nearest street intersection or location description: Site entrance is on an unnamed service road 0.09-mile east of Madison Avenue. The unnamed service road starts 0.71-mile south of the intersection of Madison Avenue & Oak Street (formerly Fourth Street).

Latitude: ~~Degrees, Minutes, Seconds~~ OR Decimal Degrees (circle one) North 33°27'3.24"
Longitude: ~~Degrees, Minutes, Seconds~~ OR Decimal Degrees (circle one) West 94°15'14.65"

Off-Site Affected Property Information

Off-Site Affected Property Name: _____
Street no. _____ Pre dir: ___ Street name: _____ Street type: _____ Post dir: ___
City: _____ County: _____ County Code: _____ Zip: _____

√ Check if there are no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: U.S. Army
Contact Person: John Medlock Title: Commander's Representative
Mailing Address: Highway 82 West
City: Texarkana State: TX Zip: 75505 E-mail address [redacted]
Phone: (903)-255-2857 Fax: _____

By my signature below, I acknowledge the requirement of §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person _____ Name, print: _____ Date: _____

Check the reports/forms submitted:

Remedy Standard A

___ Self-Implementation Notice Submittal date: _____

√ Response Action Plan - Approval date: July 2, 2015 (via email correspondence)

Remedy Standard B

___ Response Action Plan - Approval date: _____

List all media (surface soil, subsurface soil, groundwater, sediment, surface water, air) that contained or contains a PCLE zone and specify the response action taken for each media. Indicate the type of removal, decontamination, physical control, or institutional control action that was used in the response action. If a media with a PCLE zone was not addressed in the response action, provide an explanation below.

Media	COCs[1]	Removal	Decontamination	Physical Control	Institutional Control	Modified Response Objective[2]		
						PMZ	WCU	TI
Surface Soil	Asbestos	Hand removal & Offsite Disposal	Worker Decontamination	NA	NA	NA	NA	NA

Is there a media that contains a PCLE zone that was not addressed in the response action? yes ___ √ no ___

If yes, provide justification for not addressing the PCLE zone in the response action.

Current land use of the on-site affected property: ___ Residential X Commercial/industrial

Projected future land use of the on-site property (if known): ___ Residential X Commercial/industrial

Explain why you believe the response action to be complete.

The response action removed all visible asbestos containing materials (ACM) from the surface soil around the perimeter of production area buildings at Load Line F within the former Lone Star Army Ammunition Plant (LSAAP). The response action included the surface removal of ACM by trained ACM workers and offsite disposal of the ACM waste at the New Boston Waste Management Landfill. In accordance with the Texas Commission on Environmental Quality (TCEQ)-approved ACM Work Plan, dated May 2015, all activities were conducted in accordance with the regulations contained in 30 Texas Administrative Code (TAC) §355.8 and 30 TAC §350 and all applicable Federal, State, and local regulations.

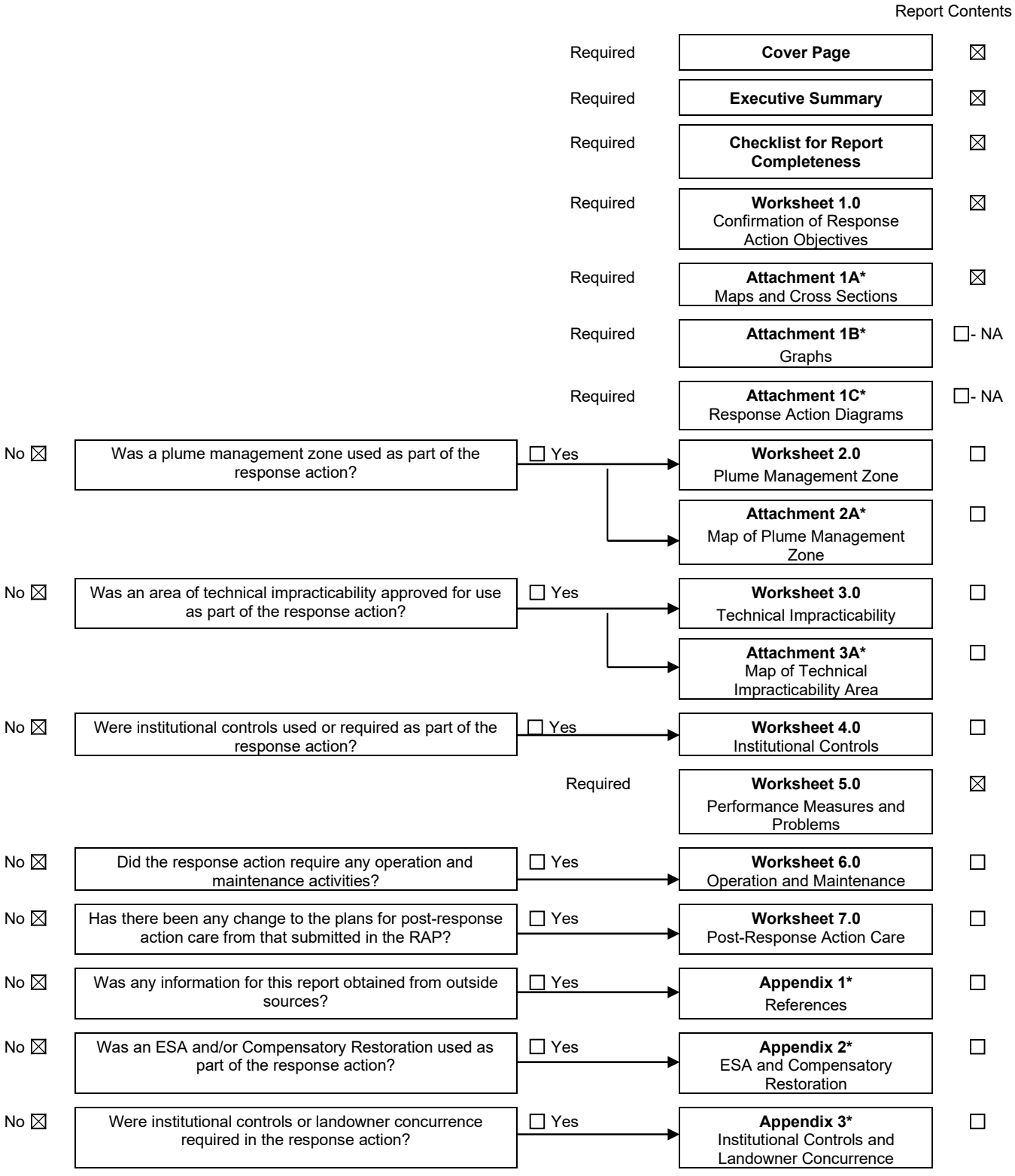
On January 7, 2016, iSi Environmental (iSi), a nationally-certified asbestos abatement contractor, visually inspected all buildings previously identified with Transite siding and/or roofing and ACM insulated steam lines and identified the location of all broken-off pieces of ACM, which was determined in the field to be limited to Transite, on the ground surface surrounding the buildings. The area of concern included the ground surface adjacent to approximately 2,200 linear feet of Transite-sided buildings with deteriorated Transite siding, specifically, buildings F-46, F-47, F-54, F-68, and ramps RF-1, RF-2, RF-3, RF-4, and RF-5. iSi hand removed all pieces of Transite from the ground surface and collected the pieces of ACM in the appropriate disposal containers, which consisted of double layered 6-millimeter polyethylene bags. The sealed bags of ACM waste were then temporary stored in a roll-off container at the LSAAP until all approved ACM abatement activities were complete, and transportation to the appropriate landfill was arranged. Subsequently, on January 11, 2016, the bags of collected ACM waste, which were collected in a roll-off container, were transported by Waste Management to the New Boston Waste Management Landfill in New Boston, TX (Permit No. MSW 576B).

[1] Specify either a specific COC or, if the response action is the same for all COCs in one type, specify the type of COC (for example, VOCs, SVOCs, metals).

[2] If a modified groundwater response objective was used, check the type(s) of modifications.

Checklist for Report Completeness

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.



				Report Contents
No ☐	Is there data or boring/monitor well information not previously submitted?	☒ Yes →	**Appendix 4*** Data Tables, Boring Logs, and Well Completions	☒-Photo Log
No ☒	Did sampling procedures differ from those described in the RAP?	☐ Yes →	**Appendix 5*** Sampling Procedures	☐
No ☒	Has any sampling been conducted for which the analytical results were not previously submitted?	☐ Yes →	**Appendix 6*** Laboratory Data Packages	☐
No ☒	Were statistics or geostatistics used in the response action?	☐ Yes →	**Appendix 7*** Statistical Methodology	☐
No ☐	Were any wastes generated that were not reported through STEERS?	☒ Yes →	**Appendix 8*** Waste Disposition	☒

Use this worksheet to describe the attainment of the response action objectives in each media.

Response Action Objectives

What was the selected remedy standard for this affected property? √ A ___ B

List the environmental media to which this applies Surface Soil
Repeat this section for each medium that had a different response action objective.

Provide a detailed description of the response action. Describe the removal actions, decontamination actions, treatment system(s), physical or institutional control actions, and any actions for ecological considerations (ecological services analysis and compensatory restoration plans) that were conducted in each media and indicate if there were any differences between the actions taken and the actions proposed in the SIN or RAP.

The TCEQ-approved response action for the Site included removal of all visible ACM from the surface soil, photo documentation, and disposal of the ACM waste material at a TCEQ-approved facility, New Boston Waste Management Landfill.

On January 7, 2016, two asbestos workers, Luiz Guzman and Elvin Serrano, of iSi Environmental (iSi), a nationally-certified asbestos abatement contractor, mobilized to the Site to complete the ACM removal from the ground surface. All response activities were completed on January 7, 2016, with the exception of transportation and disposal, which occurred on January 11, 2016. The area requiring response action included the surface soil, top 2-3 inches, adjacent to approximately 2,200 linear feet of former production buildings, including buildings F-46, F-47, F-54, and F-68 and ramps RF-1, RF-2, RF-3, RF-4, and RF-5, constructed with Transite siding and roofing panels.

All of the removal activities were conducted by iSi's nationally-certified asbestos workers using wet methods and hand removal. The pieces of ACM were first wetted down and then carefully removed from the surface soil to minimize breakage. The collected ACM was then immediately placed into a 6-millimeter polyethylene (poly) bag. When the ACM waste bags were approximately half full, the iSi workers removed excess air from the bag and twisted the top of the bag closed. The base of the twisted top was then wrapped in duct tape and the top of the twist was folded down before being sealed again with duct tape. The sealed bags were then placed in a second 6-mil poly bag and labeled with the OSHA-required asbestos warning label. The remediated areas were supervised and inspected by Matrix's competent person, Mr. Patrick Saveall. Mr. Saveall visually inspected the area of concern and verified that all visible ACM had been removed from the surface soil. Upon visually confirming completion of the removal activities, Mr. Saveall collected photo documentation of the remediated areas. The sealed bags of ACM waste were then placed in a lined 20-yard roll-off container stored at the High Explosives Burning Grounds located within the LSAAP, which was secured by the site's security fencing. On January 11, 2016, Waste Management (License No. 400023) transported the lined roll-off container to New Boston Waste Management Landfill (Permit No. MSW 576B) for final deposition.

Decontamination activities consisted of worker decontamination. Workers donned personal protective equipment (PPE) including disposable full-body outer protective suits with foot and head coverings, gloves, and half-face, HEPA-filtered respirators prior to commencing removal activities. Upon completing the removal activities and/or prior to exiting the work area, worker decontamination consisted of HEPA vacuuming a worker's outer layer of clothing, removing the outer protective suit and gloves, disposing of the suit, gloves, and respirator cartridges as asbestos-containing waste in double-bagged 6-mil poly, and wet wiping face, hands, and respirator prior to leaving the work area.

Describe how the response action achieved the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33, as applicable. Explain how the response action was appropriate based on the hydrogeologic and COC characteristics.

Describe any unprotective conditions that continued or resulted from the remedial actions and the actions taken to mitigate unprotective conditions.

The goals and objectives of the response action at Load Line F as identified in the TCEQ-approved ACM Work Plan and the U.S. Department of the Army-approved Technical Specifications and Requirements Statement (TSRS) were achieved. Specifically, the goals and objectives of the response action at Load Line F consisted of the removal and offsite disposal of ACM present on the ground surface or in the surface soil and photo documentation of the completed ACM removal. The response action achieved these objectives by utilizing trained ACM workers, ensuring the use of wet methods and careful handling of ACM pieces to minimize incidental exposure and/or breakage of ACM during the removal process, and performing safety and quality control inspections prior, during, and subsequent to the removal activities to verify the successful implementation of the TCEQ-approved ACM Work Plan. Furthermore, the QC inspections conducted by Matrix's competent person, Mr. Patrick Saveall, confirmed the removal of all ACM from the ground surface and surface soil in the Load Line F area, which was the stated and approved objective for the response action at the Site.

If different from the information provided in the RAP, explain how the COCs were handled, treated, disposed, or transferred to another media and document that the response action did not result in any additional exposure conditions due to response action activities.

N/A- COCs were handled and disposed in accordance with the TCEQ-approved RAP (ACM Work Plan).

Explain how the response action achieved the objectives within the reasonable time frame.

The response action removed all visible ACM from the ground surface and surface soil in the areas of concern and properly disposed of the ACM waste materials at a permitted landfill; therefore, exposure to and cross-contamination from the deteriorated ACM on the ground surface and in the surface soil is no further concern at Load Line F.

The response action was completed on schedule. The removal and transportation activities were each completed in less than a day. From mobilization to the Site to final deposition, the duration of the response action was five (5) days.

Were physical controls used as part of the response action? ___ Yes _X_ No
If yes, describe the type and purpose of the physical control and discuss how the physical control has proved effective.

Soil Response Action Objectives

When using removal and/or decontamination with controls or controls only, demonstrate that the physical control or combination of measures reliably contained COCs within and/or derived from the surface soil and subsurface soil PCLE zone materials over time.

NA- Physical controls were not used to contain COCs. Removal of all COCs in the surface soil was conducted at the Site.

Explain how the removal or decontamination action reduced the concentration of COCs to the critical surface soil and subsurface soil PCL throughout the soil PCLE zone and prevented COC concentrations above the critical soil PCLs from migrating beyond the original boundary of the soil PCLE zone.

The removal of the visible ACM from the surface soil effectively removed the COC. The successful reduction of the COC concentration was verified by a post-abatement inspection, which confirmed that all visible ACM in the surface soil was removed. Migration beyond the original boundary of the soil PCLE zone was prevented by implementation of work practices approved for Class II asbestos work as described in EPA 40 CFR Part 763, Subpart E and OSHA 1926-1101(g) including respiratory protection, protective clothing, worker decontamination, isolation of work areas, wet methods, and proper packing

and disposal of ACM waste materials.

Groundwater Response Action Objectives

Name of groundwater-bearing unit to which this information applies	NA – Non-friable ACM in the surface soil was the COC at the Site – Groundwater impact was not a concern.

Repeat this section for each groundwater-bearing unit for which a different response action was conducted.

Groundwater classification	1	2	3
	___	___	___

Was a modified groundwater response action used for any part of the groundwater PCLE zone (§350.33(f)(2), (3), or (4))? ___ Yes X **No**
If yes, complete the appropriate portions of this report.

Explain how the removal or decontamination actions reduced the concentration of COCs to the critical groundwater PCL throughout the groundwater PCLE zone and prevented COC concentrations above the critical groundwater PCL from migrating beyond the original boundary of the groundwater PCLE zone. If COC concentrations above the critical groundwater PCL ever migrated beyond the original boundary of the groundwater PCLE zone, explain the actions taken to address the increase in the PCLE zone.

NA

Explain how the response action prevented COCs from migrating to air at concentrations above the PCLs for air if the groundwater-to-air PCLs ($^{Air}GW_{Inh\text{-}V}$) were exceeded.

NA

Explain how the response action prevented COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water if surface water was a factor.

NA

Explain how the response action prevented human and ecological receptor exposure to the groundwater PCLE zone.

NA

Waste Management

Describe the volume and final disposition or reuse location of waste or environmental media that was removed from the affected property during the response action, if not previously reported under STEERS. Provide copies of all manifests, other documentation of disposition, and landowner consent for reuse of soil in Appendix 8.

In total, approximately 2.2 tons of ACM were collected from five sites within the former LSAAP. These sites included Load Line F as well as Area A and Load Lines B, C, and G. All collected ACM waste materials were transported to and disposed at New Boston Waste Management Landfill (Permit No. MSW 576B) located at 1030 Hwy 82 West, New Boston, TX 75570.

Performance Measures

List and describe the performance measures for each environmental medium containing a PCLE zone that were used to determine if reasonable progress is being made by the response action in a timely manner. Provide documentation that these performance measures were met. Attach additional information if necessary.

The performance measure for the removal of ACM from the ground surface and surface soil involved the results of the visual inspection of the areas of concern. This visual inspection of the areas of concern was conducted by Matrix's competent person, Mr. Patrick Saveall. The visual inspection was conducted on January 7, 2016, and did not result in the notation of areas requiring additional removal efforts; therefore, the removal effort was deemed complete. Once the ground surface and surface soil in the area of concern was verified to be devoid of all visible ACM, Mr. Saveall documented the successful ACM removal effort with photographs of the areas of concern. The photo documentation of the implemented response action is included in Appendix 4, Photographic Log.

The second performance measure included the lawful and documented disposal of the ACM waste materials at a landfill permitted for asbestos waste. This was completed on January 11, 2016, when Waste Management transported the collected ACM waste material to New Boston Waste Management Landfill for final deposition. The fulfillment of this second performance measure is documented through the waste manifest, which is included in Appendix 8, Waste Disposition.

Problems

Complete the table for the response action. When the response action consisted of several components or multiple actions, complete one table for each major component or action.

Response Action Name/Designation: N/A – No problems encountered during response action

List the problems that were encountered during the response action, describe the impact of each problem, and the response to the problem.

Description of the Problem	Impact	Did this cause a response action failure?		Corrective Response
		Yes	No	



Photo 1: Perimeter of ramp RF-5 south of Building F-23 prior to response action activities. Photo taken in July 2013.



Photo 2: Perimeter of Building F-47 following successful ACM removal from the ground surface.



Photo 3: Perimeter of Building F-54 following successful ACM removal from the ground surface.



Photo 4: Perimeter of Building F-68 following successful ACM removal from the ground surface.



Photo 5: Perimeter of ramp RF-2 south of Building F-2 (east side of ramp) following successful ACM removal from the ground surface.



Photo 6: Perimeter of ramp RF-4 south of Building F-18 following successful ACM removal from the ground surface.



Photo 7: Perimeter of ramp RF-1 south of Building F-1 (east side of ramp) following successful ACM removal from the ground surface.



Photo 8: Perimeter of ramp RF-3 south of Building F-15 following successful ACM removal from the ground surface.



Photo 9: Perimeter of ramp RF-5 south of Building F-23 following successful ACM removal from the ground surface.



Photo 10: Perimeter of Building F-46 following successful ACM removal from the ground surface.

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NA	Manifest Doc No.	2. Page 1 of	

GENERATOR

3. Generator's Mailing Address: TEXAMERICA CENTER 107 CHAPAL LANE NEW BOSTON, TX 75570 4. Generator's Phone 832-528-9979	Generator's Site Address (If different than mailing):	A. Manifest Number WMNA 4412901 B. State Generator's ID NA
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID D. Transporter's Phone 903-794-4111
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID F. Transporter's Phone
9. Designated Facility Name and Site Address NEW BOSTON RDF 1030 HWY 82 WEST NEW BOSTON, TX 75570	10. US EPA ID Number 576B	G. State Facility ID H. State Facility 903-628-6595

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. / Waste Code
a. NON FRIABLE ASBESTOS WM Profile # 972549TX				Y	NA
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above	K. Disposal Location			
	Cell		Level	
	Grid			

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

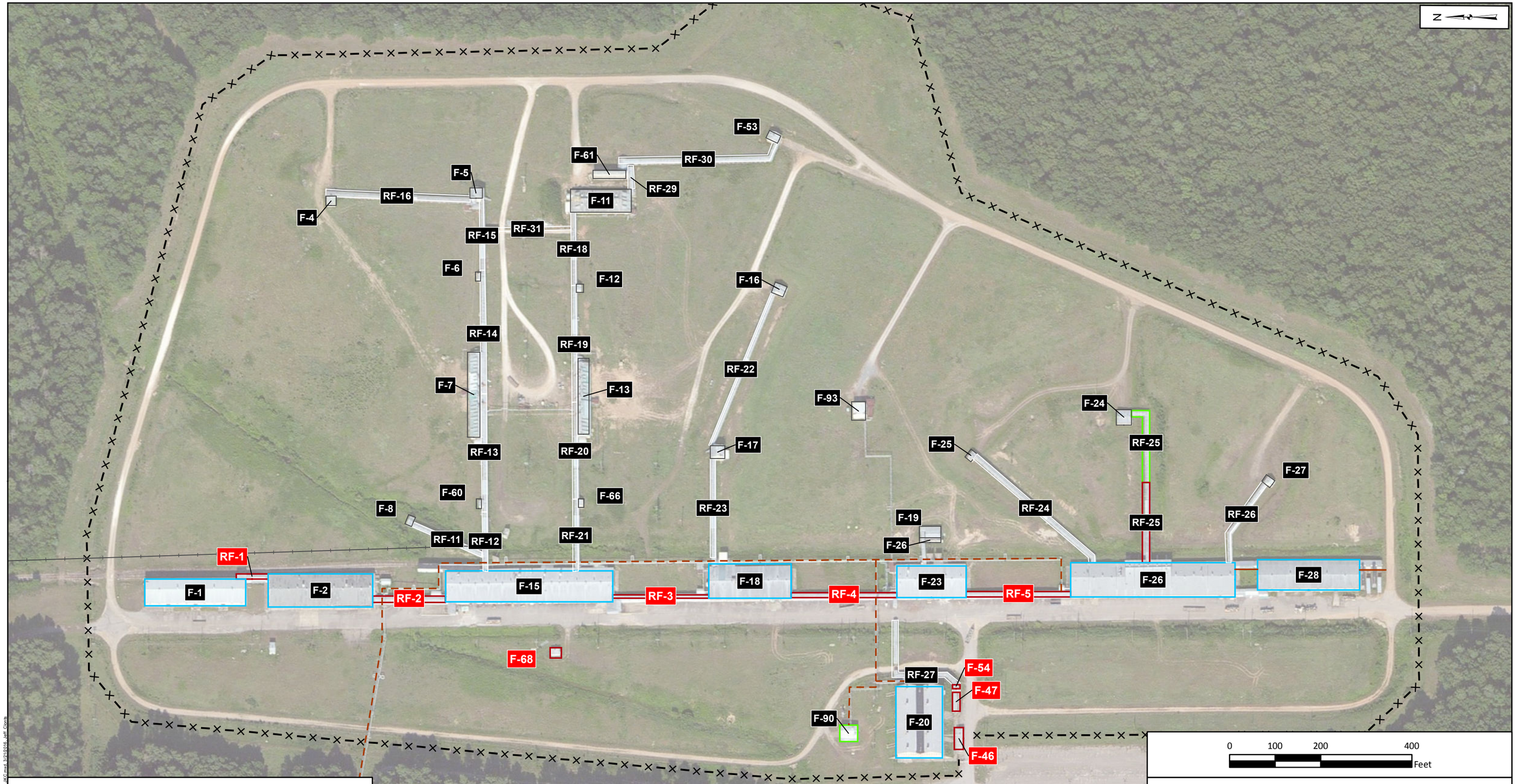
Printed Name	Signature	Month	Day	Year

White- ORIGINAL Blue- TREATMENT, STORAGE, DISPOSAL FACILITY COPY Yellow- TRANSPORTER #2 COPY

Pink- TRANSPORTER #1 COPY Gold- GENERATOR #1 COPY

Chronology of Load Line F

Date	Activity/Report
January 11, 2016	Offsite Disposal to New Boston Waste Management Landfill
January 7, 2016	Removal of ACM from ground surface soil around the perimeter of production area buildings in Load Line F
December 2014	Submittal of Draft Final Affected Property Assessment Report (APAR) for Load Line F
May 2013	Assessment of damaged ACM building materials (including Transite roofing and siding) in the soil or on the ground surface adjacent to the production area building by a professional engineer and a licensed asbestos inspector. Approximately 2,200 linear feet of Transite-sided buildings were identified with ACM on the ground.
June 2011	Submittal of Final Work Plan for Affected Property Assessment
September 1, 2010	Transfer of site ownership to TexAmericas Center-East (formerly Red River Redevelopment Authority)
2009	Deactivation of LSAAP
November 20, 2006	Submittal of Environmental Condition of Property Report for the LSAAP. Non-friable ACM including Transite roofing and siding and friable ACM including pipe insulation and joints were found throughout LSAAP. Additional ACM is also present at LSAAP including vinyl floor tiles, fire doors, linoleum flooring, tar roofing, and ceiling tiles.
2005	LSAAP selected for closure by Base Realignment and Closure (BRAC)
December 2003	Submittal of Draft Final Affected Property Assessment Report (APAR) for Load Line F
December 2, 1991	Plant Wide Asbestos Assessment Report completed by Pollution Management, Inc.
Mid-1941 to 1942	Construction of Lone Star Army Ammunition Plant (LSAAP)
Pre-1941	Various saw mills were present in the footprint of the future LSAAP



Legend

- Pipeline (Potential ACM)
- Area of Response Action
- Brick/Concrete Building
- Railroad
- Transite (ACM) Siding
- Fence
- Metal Siding/Buildings

Notes:
-Aerial imagery accessed from ArcGIS Online on 21 March 2016; image dates 14 August 2014 and provided by the United States Department of Agriculture Farm Service Agency.

Area F – Affected Property Map

Former Lone Star Army Ammunition Plant
Hooks, TX

Matrix Design Group, An Employee-Owned Company — Colorado Springs, Colorado

TexAmericas Center — January, 2016

1

FILE Output: protect\Lone Star\Work\Maps\APR_RAC\Area F_BuildingAssessment_APR.mxd 1/21/2016 Jeff Davis

X. Air Emission Standards

Provide all Part B responsive information in Appendix X. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

Section X.D. applies to Permittees with "one- stop" permits applying for an amendment, modification, or renewal of the Air Permits Division portions of their combined "one-stop" permit.

Appendix X.A – Process Vents, Appendix X.B – Equipment Leaks, and Appendix X.C – Tanks, Surface Impoundments, and Containers address the requirements in this section.

A. Process Vents

Does the facility have process vents and equipment subject to the requirements of 40 CFR Part 264, Subpart AA?

No. 40 CFR Part 264 Subpart AA applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw. This does not apply to ESD's facility.

If Yes: please provide a report that includes all of the information required by 40 CFR §270.24. Indicate on a facility plot plan the approximate location of process vents.

1. For incorporation into the permit, complete Table X.A - Process Vents for all vents on waste management units that manage hazardous waste with an annual average total organics concentration of 10 ppmw or greater ("process vents"). Specifically include:

   a. process vents on distillation, fractionation, thin-film evaporation, solvent extraction, air or steam stripping operations, and vents on condensers serving these operations; and

   b. process vents on tanks (e.g., distillate receivers, bottom receivers, surge control tanks, separator tanks, and hot wells) associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping processes if emissions from these process operations are vented through the tanks.

      Emissions caused by natural means such as daily temperature changes or by tank loading and unloading are not subject to control.

2. For process vents, include the following certification as part of the air emissions report:

   I,_____*[owner or operator]*___, certify that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

I further certify that the control device is designed to operate at an efficiency of 95 weight percent or greater.

OR

I further certify that the total organic emission limits of 40 CFR §264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

*[Signature]*_____*[Date]*_____.

B. Equipment Leaks

Does the facility have equipment subject to the requirements of 40 CFR Part 264, Subpart BB?

If No: please provide the regulatory exclusion/exemption(s):

No. 40 CFR Part 264 Subpart BB applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight. ESD's energetic materials do not contain organic concentrations of at least 10 percent by weight, so this does not apply.

If Yes: please provide a report that includes all of the information required by 40 CFR §270.25.

1. For incorporation into the permit, complete Table X.B. - Equipment Leaks for all valves, pumps, compressors, pressure relief devices, sampling connection systems, and open-ended valves or lines that contain or contacts hazardous waste streams with organic concentrations of 10% by weight or greater. Equipment in vacuum service is not subject to control if identified in the facility operating record.

2. For equipment, include the following statement as part of the air emissions report:

   I,_____*[owner or operator]*___, certify that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

   I further certify that the control device is designed to operate at an efficiency of 95 weight percent or greater.

   *[Signature]*_____*[Date]*_____.

C. Tanks, Surface Impoundments, and Containers

Does the facility have tanks subject to the requirements of 40 CFR Part 264, Subpart CC?

☐ Yes ☐ No **X Not Applicable (no permitted tanks)**

If No: provide the regulatory exception/exemption(s) for each tank subject to regulation under 40 CFR Part 264, Subpart J:

No. Not Applicable. 40 CFR Part 264 Subpart J applies to owners or operations of facilities that use tank systems for storing or treating hazardous waste. ESD does not use tank systems for storing or treating hazardous waste.

Does the facility have surface impoundments subject to the requirements of 40 CFR Part 264, Subpart CC?

☐ Yes ☐ No **X Not Applicable (no permitted surface impoundments)**

If No: provide the regulatory exception/exemption(s) for each permitted surface impoundment subject to regulation under 40 CFR Part 264, Subpart K:

No. Not Applicable. 40 CFR Part 264 Subpart K applies to owners and operations of facilities that use surface impoundments to treat, store, or dispose of hazardous waste. ESD has no surface impoundments.

Does the facility have containers subject to the requirements of 40 CFR Part 264, Subpart CC?

☐ Yes **X No** ☐ Not Applicable (no permitted container storage areas)

If No: provide the regulatory exception/exemption(s) applicable to the authorized containers subject to regulation under 40 CFR Part 264, Subpart I:

No. 40 CFR 264.1082(c)(1) says that if the container has an average volatile organic concentration of less than 500 ppmw, then it is exempt from the standards in §264.1084-§264.1087. The materials that will be stored in containers are solid energetic materials. No volatile organics are present in these materials.

If the facility contains tanks, surface impoundments, and containers subject to the requirements of 40 CFR Part 264 Subpart CC, please provide a report that includes all of the information required by 40 CFR §270.27.

1. For incorporation into the permit, complete Table X.C.

2. As applicable, include the following floating roof cover certification as part of the air emissions report for tanks:

   I,_____*[owner or operator]*___, certify that the floating roof cover meets the applicable design specifications as listed in 40 CFR §264.1084(e)(1) or 40 CFR §264.1084(f)(1).

   *[Signature]*_____*[Date]*_____.

3. As applicable, include the following floating membrane cover certification as part of the air emissions report for surface impoundments:

   I,_____*[owner or operator]*___, certify that the floating membrane cover meets the applicable design specifications listed in 40 CFR §264.1085(c)(1).

   *[Signature]*_____*[Date]*_____.

4. As applicable, include the following container certification as part of the air emissions report for containers:

   I,_____*[owner or operator]*___, certify that the requirements of 40 CFR Part §264, Subpart CC, are met for all containers subject to control.

*[Signature]*_____*[Date]*_____.

5. As applicable, include the following control device certification as part of the air emissions report:

   I,_____*[owner or operator]*___, certify that the control device is designed to operate at the performance level documented by a design analysis as specified in 40 CFR 264.1089 (e)(1)(ii) or by performance tests as specified in 40 CFR §264.1089(e)(1)(iii) when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

   *[Signature]*_____*[Date]*_____.

D. "One-Stop" Permits: - RESERVED

Section X – Air Emission Standards

Appendix X.A – Process Vents

40 CFR Part 264 Subpart AA

Does the facility have process vents and equipment subject to the requirements of 40 CFR Part 264, Subpart AA?

No. 40 CFR Part 264 Subpart AA applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw. This does not apply to ESD's facility.

Section X – Air Emission Standards

Appendix X.B – Equipment Leaks

40 CFR Part 264 Subpart BB

Does the facility have equipment subject to the requirements of 40 CFR Part 264, Subpart BB?

No. 40 CFR Part 264 Subpart BB applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight. ESD's energetic materials do not contain organic concentrations of at least 10 percent by weight, so this does not apply.

Section X – Air Emission Standards

Appendix X.C – Tanks, Surface Impoundments, and Containers

40 CFR Part 264 Subpart CC

Does the facility have tanks subject to the requirements of 40 CFR Part 264, Subpart CC?

No. Not Applicable. 40 CFR Part 264 Subpart J applies to owners or operations of facilities that use tank systems for storing or treating hazardous waste. ESD does not use tank systems for storing or treating hazardous waste.

Does the facility have surface impoundments subject to the requirements of 40 CFR Part 264, Subpart CC?

No. Not Applicable. 40 CFR Part 264 Subpart K applies to owners and operations of facilities that use surface impoundments to treat, store, or dispose of hazardous waste. ESD has no surface impoundments.

Does the facility have containers subject to the requirements of 40 CFR Part 264, Subpart CC?

No. 40 CFR 264.1082(c)(1) says that if the container has an average volatile organic concentration of less than 500 ppmw, then it is exempt from the standards in §264.1084-§264.1087. The materials that will be stored in containers are solid energetic materials. No volatile organics are present in these materials.

XI. Compliance Plan - RESERVED

XII. Hazardous Waste Permit Application Fee

Provide all Part B responsive information in Appendix XII. When preparing the physical format organize your submittal using the Format of Hazardous Waste permit Application and Instructions.

In accordance with 30 TAC 305.53, complete Tables XII.A. - Hazardous Waste Units (For Application Fee Calculations) and XII.B. - Hazardous Waste Permit Application Fee Worksheet. Use the following information in calculating your fee. The application fee will be non- refundable once an initial review of the application has been completed. The applicant's fees are subject to evaluation by the technical staff of the Texas Commission on Environmental Quality (TCEQ). However, the TCEQ reserves the right to assess further fees as may be necessary.

Table XII.A. - Hazardous Waste Units (For Application Fee Calculations) and Table XII.B. - Hazardous Waste Permit Application Fee Worksheet are attached.

A. The minimum permit application fee for a permit or a permit renewal for each hazardous waste facility to be used for Storage, Processing, Disposal, or Closure/Post-Closure Care (disposal has already occurred) of hazardous waste shall be $2,000, plus notice fee, and the maximum shall be $50,000, calculated according to these instructions:

1. Process Analysis - $1,000.00.

2. Management/Facility Analysis - $500.00.

3. A facility unit(s) analysis of $500 per unit is charged for the following:

   a. each cell of a landfill (note that multiple cells that are identical in type and use are subject to a single $500 fee);

   b. tanks and container storage areas (note that multiple tanks and container storage areas that are identical in type and use are subject to a single $500 fee)

   c. identical in type and use means the following:

      (1) made of the same material and same design;
      (2) the same size/capacity within + 10%;
      (3) store the same waste (as identified by USEPA hazardous waste number - 40 CFR 261 Subparts C & D); and
      (4) have the same management characteristics (e.g., storage only).

   d. Each incinerator, boiler/industrial furnace unit, surface impoundment, waste pile, land treatment unit, drip pad, miscellaneous unit, or containment building.

4. Site Evaluation - $100 per acre of surface used for hazardous waste management up to 300 acres. No additional fee thereafter. This shall be calculated as any acreage which will be permitted to manage hazardous waste. This shall include, for example, the entire area within the secondary containment of a tank farm, the area within a fence that surrounds individual units (other than the facility fence), or the area defined by the toe of the dike surrounding a landfill or impoundment, etc.

5. An applicant shall also include with each initial application a fee of $50 to be applied toward the cost of providing the required notice. An additional

notice
fee of $15 is required with each application for renewal.

B. The application fee for a major amendment or a Class 2 or 3 modification to a hazardous waste permit for operation, closure, or post-closure care is subject to the fees listed below:

1. A management/facility analysis fee of $500.

2. The notice fee is $50.

3. If a unit is added or a unit area is expanded for any purpose, $100 per additional acre is assessed, until the total additional acreage reaches 300 acres.

4. If one or more of the following reports are added or are significantly revised, the process analysis fee of $1000 is assessed:
   a. waste analysis plan;
   b. site-specific or regional geology report;
   c. site-specific or regional geohydrology report;
   d. groundwater and/or unsaturated zone monitoring;
   e. closure and/or post-closure care plan; or
   f. RCRA Facility Assessments (RFAs), or corrective action reports;
   g. Alternate Concentration Limit (ACL) demonstration or Development of Protective Concentration Limits (PCLs);
   h. Regulated Unit Facility Assessment, Corrective Action (CA) work plans or reports for Regulated Units; and/or
   i. RCRA Facility Investigation (RFI)/Affected Property Assessment (APA), Remedy Selection, Corrective Measure Implementation (CMI)/Remedial Action Plan for solid waste management units, and/or areas of concern;
   j. Facility Operations Area (FOA).

5. A unit analysis fee of $500 per unit is assessed if any of the following occur:
   a. if a unit is added (even if identical to units already in place, using the criteria discussed in A.3 above);
   b. if there are design changes in an existing unit; or
   c. if a unit status changes from closure to post-closure care;
   d. Changes in the number, location, depth, or design of wells approved in compliance plan or a permit (unless it is a replacement well);
   e. Changes in point of compliance and compliance monitoring program;
   f. Changes in Groundwater Protection Standards, indicator parameters, Alternate Concentration Limits or Protective Concentration Limits; and/or
   g. Changes in corrective action program.

C. The application fee for a minor amendment, a Class 1, or a Class 1^1 modification of a hazardous waste permit is $100 plus the notice fee of $50.

Table XII.A. - Hazardous Waste Units (For Application Fee Calculations)

Verbal Description of Unit	Rated Capacity	Surface Acreage[1]	# of Unit Types[2]	Identical Unit Justification[3]
Rocket Motor Ops Building	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4	0.65	1	
Hybrid Burn Chamber	80 lbs HD 1.1 NEW 1,500 lbs HD 1.2.2 NEW 10,000 lbs HD 1.3 NEW Unlimited HD 1.4	0.12	1	
Above Ground Magazine	5001 and 5002 100,000 lbs HD 1.3 NEW Unlimited HD 1.4	0.31	1	
Earth Covered Magazines	V-13-1: 300,000 lbs HD 1.3 NEW Unlimited HD 1.4 V-13-2: 200,000 lbs HD 1.1 NEW 150,000 lbs HD 1.2.1 NEW 200,000 lbs HD 1.2.2 NEW 200,000 lbs HD 1.3 NEW Unlimited HD 1.4	0.04	2	Identical storage magazines
		Total[4] 1.16	Total[4] 4	

1. Number of calculated acres.
2. Enter number of units except for units identical in type and use which only count toward a single $500.00 fee.
3. Explain justification for any units claimed as identical in type and use.
4. Enter these totals on the worksheet.

Table XII.B. - Hazardous Waste Permit Application Fee Worksheet

Name of Facility: EnviroSafe Demil, LLC

Solid Waste Registration Number: 98470

1. Process Analysis - $1,000..... $ 1,000

2. Facility Management Analysis - $500..... $ 500

3. Unit Analysis - _____4_____ units @ $500 per unit..... $ 2,000

4. Site Evaluation - _____1.16_____ acres @ $100 per acre..... $ 116

(Maximum of 300 acres)

5. Minor amendment, Class 1, or Class 1[1] modification - $100..... $ 0

6. Cost of Providing Notice - $50 (+ $15 for a renewal) ..... $ 50

Pay This Amount **Total** $_____$3,666.00_____

Make Checks Payable To:

Texas Commission on Environmental Quality - Fund
549 *(your canceled check will be your receipt)*

Complete And Return With Payment To:

Texas Commission on Environmental
Quality Financial Administration Division -
MC 214 P.O. BOX 13088
Austin, Texas 78711-3088

The applicant's fees are subject to evaluation by the technical staff of the Texas Commission on Environmental Quality (TCEQ). However, the TCEQ reserves the right to assess further fees as may be necessitated.

Please do not submit a photocopy of the check (or equivalent transaction submittal) with your application packet but provide only the following account information:

Check No.	Date of Check	Check Amount

ADDITIONAL INFORMATION SUBMITTED WITH THE PART B APPLICATION

PRE-APPLICATION PUBLIC MEETING

Pre-Application Public Meeting

Per 40 CFR §124.31(b) and 40 CFR §124.31(d)(1)(iv) (adopted under 30 TAC Section 39.503(b)(2)), EnviroSafe Demil, LLC conducted their RCRA pre-application public meeting on August 21, 2023 in order to solicit questions from the community and inform the community of proposed hazardous waste management activities. Public notice of the RCRA pre-application meeting was made at least 30 days prior to the meeting. A visible and accessible sign was placed at the facility. Notice to the permitting agency was made on July 19, 2023. The newspaper advertisement and the broadcast media announcement (radio advertisement) ran on July 20, 2023.

Per 40 CFR §124.31(c), the following information is included with this application:

- A summary of the meeting in agenda format.
- A list of attendees and their addresses (for attendees who volunteered this information).

No written comments or materials were submitted at the meeting.

ENVIROSAFE DEMIL LLC – RCRA PRE-APPLICATION PUBLIC MEETING

Meeting Agenda

ESD Call to Order and Opening Statements
Company Overview and History
ESD Current Activities and Benefits to the Community - Careers - Area Development - Economic Benefits - National Recognition & Leader in Clean Technology
Site Development and Facility Overview
ESD Brief Technology Overview
Current Environmental Permits and Status
RCRA Permit Application Information and Status
Open Discussion with Q/A
Closing Remarks
Adjourn

Public Meeting Roster

Meeting Name: EnviroSafe Demil LLC RCRA Pre-Application Meeting
Meeting Date(s): 08/21/2023
Time: 2:00 PM
Location: New Boston, Texas (Bowie County)

Meeting Content
EnviroSafe Demil LLC RCRA Pre-Application Meeting
Hosted by: Mike Wentz / President EnviroSafe Demil

#	Name	Phone Number	Address	Bowie Resident (Y or N)
1	Debbie Mobley	903-277-1723	738 FM 3378 New Boston TX	Y
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Additional Information - Page 4

New Boston
Property Management
PO Box 806
New Boston, TX 75570

9122

DATE 8/21/23

RECEIVED FROM Environmental Permit LLC.

$ 45.00 DOLLARS

FOR Thirty Six Months Community Room 8/21/23. Fee

☐ CASH ☐ CHECK ☐ M.O. ☑ CREDIT CARD

AMOUNT OF ACCOUNT $ 45.00

AMOUNT PAID $ 45.00

BALANCE DUE $ 0

BY [redacted]

Thank You!

NEW BOSTON PROPERTY
303 RICE STREET
NEW BOSTON, TX 75570

Ref #: 0001

Sale

XXXXXXXXXXX2009
AMEX Entry Method: Chip

Total: $ 45.00

08/21/23 14:39:21

[redacted]

Customer Copy

INFORMATION ON COMPACT DISKS (CDs)

Information on Compact Disks (CDs)

The following information is included on Compact Disks (CDs).

- Electronic mailing list of adjacent landowners.
- RCRA Part B Administrative and Technical Evaluation Electronic Checklist (Form #00136).