



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

Hazardous Waste Permit No. 50397
EPA ID. No. TXR000075788
ISWR No. 50397

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

Name of Permittee:	Waste Control Specialists LLC P.O. Box 1129 Andrews, Texas 79714
Site Owner:	Waste Control Specialists LLC P.O. Box 1129 Andrews, Texas 79714
Registered Agent for Service:	Corporation Service Company 211 East 7 Street, Suite 620 Austin, Texas 78701
Classification of Site:	Hazardous and Nonhazardous, Class 1 and Class 2 industrial solid waste, on-site/off-site storage, and disposal, commercial facility.

The permittee is authorized to manage wastes in accordance with the limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules of the Commission and other Orders of the Commission, and laws of the State of Texas. This permit does not exempt the permittee from compliance with the Texas Clean Air Act. This permit will be valid until canceled, amended, modified or revoked by the Commission, except that the authorization to store, process and dispose of wastes shall expire midnight, ten (10) years after the date of this renewal permit approval. This permit was originally issued on December 23, 2008.

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

Issued Date: July 29, 2021

A handwritten signature in cursive script, appearing to read "T. G. Baker".

For the Commission

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Permit/Compliance Plan Acronyms

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

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

I. Facility Description

A. Size and Location of Site

A permit is issued to Waste Control Specialists LLC (hereafter called the permittee), to operate a hazardous waste processing, storage, and disposal facility located at 9998 West State Highway 176 and approximately 800 feet East of the Texas-New Mexico state line and approximately 30 miles West of Andrews, in Andrews County, Texas, and within the drainage area of Upper Pecos River in Segment 2311 of the Rio Grande River Basin (North Latitude 32° 26' 27.4", West Longitude 103° 03' 22.7"). The legal description of the facility submitted in Permit No. 50397 application submittals dated May 31, 2018, and revised January 29, 2021, is hereby made a part of this permit as "Attachment A". The hazardous waste management facility as delineated by the permittee's application map is hereby made a part of this permit as "Attachment B".

B. Incorporated Application Materials

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

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

II. General Facility Standards

A. Standard Permit Conditions

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

1. Modification of Permitted Facilities

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

2. Duty to Comply

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

3. Severability

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

4. Definitions

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

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

5. Permit Expiration

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

6. Certification Requirements

For a new facility, the permittee may not commence storage, processing, or disposal of solid waste; and for a facility being modified, the permittee may not process, store or dispose of solid waste in the modified portion of the facility, except as provided in 30 TAC Section 305.69 (relating to Solid Waste Permit Modification at the Request of the Permittee) until the following has been accomplished [30 TAC Section 305.144]:

- a. The permittee has submitted to the Executive Director and the local Regional Office of the TCEQ, by certified mail or hand delivery, a letter signed by the permittee, and signed and sealed by a Texas Professional Engineer stating that the facility has been constructed or modified in compliance with the

permit. If the certification is being provided to document proper closure of a permitted unit, or to certify installation or repair of a tank system, then the certification must be signed and sealed by an independent Texas licensed Professional Engineer. Required certification shall be in the following form:

"This is to certify that the following activity (specify activity, e.g., construction, installation, closure, etc., of an item) relating to the following item (specify the item, e.g., the particular facility, facility unit, unit component, subcomponent part, or ancillary component), authorized or required by TCEQ Permit No. 50397 has been completed, and that construction of said facility component has been performed in accordance with and in compliance with good engineering practices and the design and construction specifications of Permit No. 50397."

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

* 7. Land Disposal Restrictions

The permittee shall comply with the land disposal restrictions as found in 40 Code of Federal Regulations (CFR) 268 and any subsequent applicable requirements promulgated through the Federal Register. Requirements include modifying/amending the permittee's waste analysis plan to include analyses to determine compliance with applicable treatment standards or prohibition levels, pursuant to 40 CFR 268.7(c) and 264.13(a).

8. Dust Suppression

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

9. Permit Reopener

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

10. Texas Coastal Management Program

Reserved

11. Monitoring of Commercial Hazardous Waste Management Facility Operations

Within the first year after Commission initial action on this permit and any subsequent amendment, modification, transfer, extension, or renewal of this permit, the permittee shall provide notice to affected persons of the intent to have an independent annual environmental audit of the facility performed. The notice shall be issued in accordance with the requirements of 30 TAC Section 305.147(1). If an affected party requests the audit, then the permittee must follow the requirements of 30 TAC Sections 305.147(2)-(6), and (8), for selecting an independent inspector, paying for the notice and audit, submission of a written report, and determining the scope of the inspection.

12. Failure to Submit Relevant Facts in Permit Application

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

13. Hazardous Waste Combustion Facility Provision

Reserved

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

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

- b. As applicable and except as provided in Provision II.A.14.c., the permittee shall pay waste management fees monthly. Monthly fee payments shall be due by the 25th day following the end of the month for which payment is due. [30 TAC Section 335.328(b)]
- c. If required, the permittee owes waste management fees in an amount less than \$500 for a calendar month or less than \$1,500 for a calendar quarter, the permittee may file a quarterly report and pay a quarterly fee. [30 TAC Section 335.328(c)]
- d. If required, the permittee shall document the basis for the assessment of any applicable waste management fees, including any adjustment to or exemption from assessment. [30 TAC Section 335.329(b)(4)]
- e. If required, the permittee shall submit a monthly report of on-site waste management activities subject to the assessment of waste management fees on forms furnished or approved by the Executive Director. This report shall be due by the 25th day following the end of the month (or quarter) for which a report is made. Monthly (or quarterly) reports shall be submitted, regardless of whether any storage, processing, or disposal was made during a particular month (or quarter), by preparing and submitting a summary indicating that no waste was managed during that month (or quarter). [30 TAC Section 335.329(b)(5)]
- f. As applicable, the permittee shall maintain the required records and reports in accordance with 30 TAC Sections 335.329(c) and (d).

15. Transfer of Ownership and/or Operational Control

The transfer of ownership and/or operational control of this permit is subject to the transfer requirements of 30 TAC Section 305.64 and permit modification requirements of 30 TAC Section 305.69. The new owner and/or operator seeking a transfer of ownership and/or operational control of this permit shall submit a Class 1¹ permit modification (with prior written approval by the Executive Director) at least 90 days prior to the scheduled transfer in accordance with 30 TAC Section 305.69(b)(2). Prior to the Executive Director issuing the permit modification transferring the permit, the new owner or operator shall provide a fully executed financial assurance mechanism satisfactory to the TCEQ Executive Director, for all existing units which have received waste and any corrective action required under this permit, in compliance with 30 TAC Chapter 37, Subchapter P. [30 TAC Section 305.64(g)]

B. Recordkeeping and Reporting Requirements

1. Monitoring and Records

- a. All data submitted to the TCEQ shall be in a manner consistent with the latest version of the "Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act and Underground Injection Control" (TCEQ QAPP).

- b. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity. The method used to obtain a representative sample of the material to be analyzed shall be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved in writing prior to use by the Executive Director of the TCEQ. Laboratory methods shall be the latest version specified in current edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846 (EPA SW-846); Standard Methods for the Examination of Water and Wastewater; RCRA Groundwater Monitoring: Draft Technical Guidance, 1992, OSWER Directive 9950.1, or an equivalent method; as specified in the Waste Analysis Plan, Section/Attachment IV of the Part B Application, and approved in writing prior to use by the Executive Director. [30 TAC Section 305.125(11)(A)]
- c. The permittee shall retain in an organized fashion and furnish to the Executive Director, upon request, records of all monitoring information, copies of all reports and records required by this permit, and the certification required by 40 CFR 264.73(b)(9), for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application. [30 TAC Section 305.125(11)(B)]
- d. Records of monitoring shall include the following [30 TAC Section 305.125(11)(C)]:
 - (1) The date, time, and place of sample or measurement;
 - (2) The identity of individual who collected the sample or measurement;
 - (3) The dates analyses were performed;
 - (4) The identity of individual and laboratory who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses or measurements.
- e. All engineering and geoscientific information submitted to the TCEQ shall be prepared by, or under the supervision of, a licensed professional engineer or licensed professional geoscientist, and shall be signed, sealed, and dated by qualified professionals as required by the Texas Engineering Practice Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts.

2. Operating Record

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

3. Retention of Application Data

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

4. Reporting of Noncompliance

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

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

5. Twenty-Four Hour Reporting

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

- a. Information concerning release of any solid waste that may cause an endangerment to public drinking water supplies; and
- b. Any information of a release or discharge of solid waste, or of a fire or explosion which could threaten the environment or human health or safety, outside the facility. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;

- (3) Date, time, and type of incident;
- (4) Name and quantity of material(s) involved;
- (5) The extent of injuries, if any;
- (6) An assessment of actual or potential hazards to the environment and human health or safety outside the facility, where this is applicable; and
- (7) Estimated quantity and disposition of recovered material that resulted from the incident.

6. Notice Waiver

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

7. Biennial Report

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

8. Pollution Prevention

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

9. Annual Detection Monitoring Report

The permittee shall submit an Annual Detection Monitoring Report as required by Section VI.G. of this permit by March 1st of each year.

10. Manifest Discrepancy Report

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

11. Unmanifested Waste Report

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

12. Monthly Summary

The permittee shall prepare a monthly report, of all manifests received during the month, summarizing the quantity, character, transporter identity, and the method of storage, processing and disposal of each hazardous waste or Class 1 waste shipment received, itemized by manifest document number. This monthly summary report shall be submitted to the TCEQ Registration and Reporting Section on or before the 25th day of each month for waste received during the previous month. [30 TAC Section 335.15(2)]

C. Incorporated Regulatory Requirements

1. State Regulations

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

- a. 30 TAC Chapter 37, Subchapter P: Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities;
- b. 30 TAC Chapter 305, Subchapter A: General Provisions;
- c. 30 TAC Chapter 305, Subchapter C: Application for Permit or Post-Closure Order;
- d. 30 TAC Sections 305.61 - 305.69 (regarding amendments, renewals, transfers, corrections, revocation and suspension of permits);
- e. 30 TAC Sections 305.121 - 305.125 (regarding permit characteristics and conditions);
- f. 30 TAC Sections 305.127 - 305.129 (regarding permit conditions, signatories and variance procedures);
- g. 30 TAC Chapter 305, Subchapter G: Additional Conditions for Hazardous and Industrial Solid Waste Storage, Processing or Disposal Permits;
- h. 30 TAC Chapter 335, Subchapter A: Industrial Solid Waste and Municipal Hazardous Waste in General;
- i. 30 TAC Chapter 335, Subchapter B: Hazardous Waste Management General Provisions;
- j. 30 TAC Chapter 335, Subchapter C: Standards Applicable to Generators of Hazardous Waste;

- k. 30 TAC Section 335.152, Standards;
- l. 30 TAC Sections 335.153 - 335.155 (regarding reporting of emergency situations and additional reports required);
- m. 30 TAC Sections 335.156 - 335.167 (regarding applicability of groundwater monitoring programs and corrective action requirements);
- n. 30 TAC Sections 335.168 - 335.169 (regarding the design and operating requirements and closure and post-closure care of surface impoundments);
- o. 30 TAC Sections 335.173 - 335.174 (regarding the design and operating requirements and closure and post-closure care of landfills);
- p. 30 TAC Sections 335.175 - 335.176 (regarding special requirements for containers and bulk and containerized waste);
- q. 30 TAC Sections 335.177 - 335.179 (regarding general performance standard, cost estimate for closure, and financial assurance);
- r. 30 TAC Sections 335.325, 335.328 and 335.329 (regarding waste management fee assessment, fee payment, and records and reports);
- s. 30 TAC Chapter 335, Subchapter Q: Pollution Prevention: Source Reduction and Waste Minimization; and
- t. 30 TAC Chapter 350, Texas Risk Reduction Program.

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

2. Federal Regulations

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

- a. Subpart B -- General Facility Standards;
- b. Subpart C -- Preparedness and Prevention;
- c. Subpart D -- Contingency Plan and Emergency Procedures;
- d. Subpart E -- Manifest System, Recordkeeping, and Reporting;
- e. Subpart G -- Closure and Post-Closure;
- f. Subpart H -- Financial Requirements;

- g. Subpart I -- Use and Management of Containers;
- h. Subpart J -- Tank Systems;
- i. Subpart N -- Landfills;
- j. Subpart AA -- Air Emission Standards for Process Vents;
- k. Subpart BB -- Air Emission Standards for Equipment Leaks;
- l. Subpart CC -- Air Emission Standards for Tanks, Surface Impoundments, and Containers;
- m. 40 CFR Part 268 -- Land Disposal Restrictions (LDR).

III. Facility Management

A. Operation of Facility

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

B. Personnel Training

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

C. Security

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

D. General Inspection Requirements

The permittee shall follow the inspection schedule contained in the permit application submittals identified in Section I.B. of this permit and as set out in Table III.D. - Inspection Schedule. The permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR 264.15(c). Records

of inspection shall be kept, as required by 40 CFR 264.15(d). Any remedial actions taken in response to facility inspections and the date of the remediation shall be included in the inspection records.

E. Contingency Plan

1. The permittee shall follow the Consolidated Emergency Response Plan (Contingency Plan), developed in accordance with 40 CFR Part 264 Subpart D, and contained in the permit application submittals identified in Section I.B. of this permit. Copies of this plan shall be available to all employees involved in waste management at the facility.
2. The permittee shall immediately initiate clean-up procedures for removal of any spilled hazardous or industrial nonhazardous wastes and waste residues and shall take all steps necessary to prevent surface water or groundwater contamination as a result of any spills.
3. Collected hazardous or industrial nonhazardous wastes, spills, leaks, clean-up residues, and contaminated rainfall runoff, including contaminated stormwater from the drainage control system(s) associated with the permitted units, shall be removed promptly after the spillage and/or rainfall event in as timely a manner as is necessary to prevent overflow of the system by the following method(s):
 - a. Removal to an on-site authorized facility unit;
 - b. Removal to an authorized industrial solid waste management facility or authorized off-site facility; or
 - c. Discharge in accordance with a wastewater discharge permit.
4. The permittee shall ensure that any equipment or vehicles which have come in contact with waste in the loading/unloading, storage, processing, and/or disposal areas have been decontaminated prior to their movement into designated uncontaminated areas of the site property. At a minimum, all contaminated equipment shall be externally decontaminated and contaminated vehicles shall have their undercarriages and tires or tracks decontaminated to remove all waste residues and to prevent contamination of uncontaminated areas. All wash water generated shall be collected and disposed of in accordance with Provision III.E.3.
5. Preparedness and Prevention
 - a. At a minimum, the permittee shall equip the facility with emergency equipment as required by 40 CFR 264.32 (see Table III.E.3 in Section III of the Part B permit application referenced in Provision I.B of this permit for the list of approved emergency equipment).
 - b. All sumps, pumps, fire- and spill-control equipment, decontamination equipment, and all other equipment and structures authorized or required through the Contingency Plan shall be tested and maintained, as necessary, to assure their proper operation in time of emergency, as required by 40 CFR 264.33.

- c. The permittee shall maintain access to the communications or alarm system, as required by 40 CFR 264.34.
- d. A trained emergency coordinator shall be available at all times in case of an emergency and will have the responsibility for coordinating all emergency response measures as required by 40 CFR 264.55 and 264.56. Emergency number(s) shall be posted in all waste management portions of the facility and all employees in those areas shall be trained in the location of those postings

F. Special Permit Conditions - Reserved

IV. Wastes and Waste Analysis

A. Waste Analysis Plan

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

B. Authorized Wastes

- 1. The permittee is authorized to manage hazardous and nonhazardous industrial solid wastes listed in Table IV.B. - Wastes Managed in Permitted Units, subject to the limitations provided herein.

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

- 2. Hazardous and Nonhazardous Waste Received From Off-Site Sources

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

- 3. The wastes authorized in Table IV.B. shall not contain any of the following:

- a. PCB waste, as defined by the Environmental Protection Agency (EPA) in regulations issued pursuant to the Toxic Substances Control Act under 40 CFR Part 761, unless the permittee is compliant with the federal requirements for PCB storage as specified in 40 CFR Part 761;
- b. Radioactive materials/wastes unless the permittee is authorized to store and process these wastes in compliance with specific licensing and permitting requirements under Chapter 401 of the Texas Health and Safety Code. In accordance with 30 TAC Section 336.203, no person shall dispose of radioactive material unless that person has a license or an exemption from the TCEQ under Texas Health and Safety Code, Section 401.106(a);
- c. Explosive material, as defined by the Department of Transportation under 49 CFR Part 173;

- d. Dioxin-containing wastes, identified by EPA as F020, F021, F022, F023, F026, and F027 wastes in 40 CFR 261.31;
 - e. Ignitable compressed gases except aerosol cans;
 - f. Garbage as defined in 30 TAC Section 330.3(56);
 - g. Municipal Solid Waste as defined in 30 TAC Section 330.3(90);
 - h. Putrescible Waste as defined in 30 TAC Section 330.3(122); or
 - i. Special Waste from Health-Care Related Facilities subject to 25 TAC Part 1 or 30 TAC Chapter 330.
- 4. Prior to accepting any additional wastes not authorized in Table IV.B., the permittee shall follow the permit amendment or modification requirements listed in 30 TAC Sections 305.62 and 305.69.
 - 5. The permittee may store wastes restricted under 40 CFR Part 268 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of 40 CFR 268.50(a)(2) including, but not limited to the following:
 - a. Clearly marking each container to identify its contents and the date each period of accumulation begins; and
 - b. Clearly marking each tank with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.

C. Sampling and Analytical Methods

- 1. Table IV.C. - Sampling and Analytical Methods, shall be used in conjunction with the Waste Analysis Plan referenced in Section IV.A. of this permit, in performing all waste analyses.
- 2. The permittee shall ensure that all waste analyses utilized for waste identification or verification have been performed in accordance with methods specified in the current editions of EPA SW-846, American Society for Testing and Materials (ASTM) or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control (QA/QC) program that is consistent with EPA SW-846 and the TCEQ QAPP.
- 3. In accordance with the sampling requirements set forth in the Waste Analysis Plan referenced in Provision IV.A the permittee shall test a sufficient number of representative waste samples to assure that free liquids are not placed in the landfill. All testing for free liquids shall be according to Test Method 9095 (Paint Filter Liquids Test - or the most current version) as described in EPA SW- 846 or according to the Waste Analysis Plan to assure that free liquids are not placed in the landfill.

4. If the sampling required in Provision IV.C.3. indicates that a waste contains free liquids, the waste shall not be accepted for disposal.
5. In accordance with the sampling requirements set forth in the Waste Analysis Plan referenced in Provision IV.A., and 40 CFR Part 268, the permittee shall test a sufficient number of representative waste samples to assure that waste meets the LDR standards.

Prior to first receipt of LDR wastes, the permittee shall perform corroborative sampling and analysis on the wastes, in accordance with the sampling requirements set forth in the Waste Analysis Plan referenced in Provision IV.A., for all applicable LDR constituents in accordance with 40 CFR Part 268. In lieu of corroborative sampling and analysis, the generator may provide a certification, including analytical results, as applicable, to the permittee verifying the waste meets all applicable LDR standards. Such analysis by the permittee or certification by the generator shall be repeated at least annually. Records shall be maintained demonstrating compliance with the above requirements and shall be kept on site and available for review by TCEQ representatives.

V. Authorized Units and Operations

A. Authorized Units

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

4. The permittee shall construct, operate, and maintain the facility to prevent washout of any hazardous waste by a 100-year flood, as required by 40 CFR 264.18(b)(1).

B. Container Storage Areas

1. Container storage areas are shown in Table V.B. - Container Storage Areas. The permittee is authorized to operate the facility container storage areas for storage and processing subject to the limitations contained herein.
2. Containers holding hazardous waste shall be managed in accordance with 40 CFR 264.171, Condition of containers; 40 CFR 264.172, Compatibility of waste with containers; and 40 CFR 264.173, Management of containers.
3. The permittee shall construct and maintain the containment systems for the container storage areas in accordance with the drawings and details included in the Part B Application identified in Section I.B. At a minimum, the containment system must meet the requirements of 40 CFR 264.175.
4. The permittee must comply with the requirements of 40 CFR Part 264, Subpart CC, as applicable.

C. Tanks and Tank Systems

1. The permitted tank units and their approved waste types are shown in Table V.C. - Tanks and Tank Systems. The permittee is authorized to operate the permitted tank units for storage and processing subject to the limitations contained herein.
2. The permittee shall not place hazardous waste or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)]
3. The permittee shall prevent spills and overflows from the tank or containment system as per the requirements of 40 CFR 264.194(b).
4. Secondary containment systems must be provided with a leak-detection system that is operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours.
5. The permittee shall report to the Executive Director within twenty-four (24) hours of detection when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste that is immediately contained and cleaned-up need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported.)
6. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the permittee shall report the following information to the Executive Director: [40 CFR 264.196(d)(3)]
 - a. Likely route of migration of the release;

- b. Characteristics of the surrounding soil (including soil composition, geology, hydrology, and climate);
 - c. Results of any monitoring or sampling conducted in connection with the release. If the permittee finds it will be impossible to meet this time period, the permittee shall provide the Executive Director with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires;
 - d. Proximity of downgradient drinking water, surface water, and populated areas; and
 - e. Description of response actions taken or planned.
7. The permittee shall submit to the Executive Director all certifications of major repairs to correct leaks within seven (7) days of returning the tank system to use. [40 CFR 264.196(f)]
8. The permittee must comply with the requirements of 40 CFR Part 264, Subpart CC, as applicable.

D. Surface Impoundments - Reserved

E. Waste Piles - Reserved

F. Land Treatment Units - Reserved

G. Landfills

1. The permittee may dispose of a total volume of 4.6 million cubic yards of hazardous waste in the Federal Waste Facility Landfill. The landfill cell shall meet the specifications listed in Table V.G.1. - Landfills, Table V.G.3. - Landfill Liner System and Table V.G.4. - Landfill Leachate Collection System. The permittee is authorized to operate the permitted landfill for waste disposal subject to the limitations contained herein.
2. Test Fill
- a. As necessary, prior to construction of any new landfill or landfill cell with changes in the design, specifications, materials, and/or construction specifications for the liner system, the permittee shall construct and evaluate a test fill(s) to verify that material specifications, and construction specifications, methodology and equipment proposed to construct a full-scale compacted clay liner achieve a field hydraulic conductivity of 1×10^{-7} cm/sec or less in the testfill(s). The test fill construction plans, specifications and documentation procedures shall conform with the guidance described in Section 2.3.4.1.2 (Test Fill Construction) of "Construction Quality Assurance for Hazardous Waste Land Disposal Facilities" (EPA Publication No. 530-SW-021, dated October, 1985) and/or "Quality Assurance and Quality Control for Waste Containment Facilities"

(EPA/600/R-93/182) and/or as approved in the Construction Quality Assurance (CQA) Plan in the Part B Permit Application. Hydraulic conductivity of the test fill pad shall be determined using the sealed double-ring infiltrometer (ASTM D 5093), or an equivalent method approved by the Executive Director.

The permittee shall complete construction and evaluation of the test fill in accordance with the terms of this permit and shall submit certification of proper construction and evaluation in accordance with Provision II.A.6. This certification shall be signed by both the permittee and a qualified, licensed Professional Engineer competent in geotechnical engineering with experience in construction of compacted clay liners and evaluation of field permeabilities of compacted clay liners.

b. The test fill certification report shall include the following information:

- (1) Results of all preconstruction, construction, and post construction quality assurance inspections and testing performed;
- (2) A summary of material specifications and construction specifications, methodology and equipment necessary to construct a full-scale compacted clay liner or cover achieving a field hydraulic conductivity of 1×10^{-7} cm/sec or less;
- (3) Complete documentation, including a summary of raw data, detailing how the field hydraulic conductivity of the compacted test fill clay liner was measured and calculated; and
- (4) The qualifications of the engineer certifying proper test fill construction and testing.

3. General Landfill Design and Construction Requirements

a. The landfill liner system shall consist of at least two liners which meet the requirements of 40 CFR 264.301(c)(1)(i)(A) and (B). In addition, a leachate collection/leak detection system which meets the requirements of 40 CFR 264.301(c)(2) and (3) shall be installed above and between the liners. The landfill liner system and leachate collection/leak detection system shall meet the specifications listed in Table V.G.3. - Landfill Liner System and Table V.G.4. - Landfill Leachate Collection System.

b. Soil Liner

All constructed clay-rich soil structures (liners, dikes, and cover) shall be constructed according to the specifications and methodologies established for the soil liner test fill and shall meet or exceed the following minimum specifications:

- (1) Materials for all constructed clay-rich structures shall be excavated, broken down, hydrated to the proper moisture content (if necessary) and then recompact in loose lifts not less than 6.0 inches nor greater than 9.0 inches in thickness. If the soils are significantly below optimum moisture content (>3% below optimum moisture content) the maximum

clod size of the soils will be reduced to less than 2 inches so that hydration can occur uniformly. Each lift shall be scarified to a depth no greater than 2.0 inches nor less than 0.5 inches prior to placement of the following lift;

- (2) Compaction shall be to at least 95% Standard Proctor Density at or slightly above optimum moisture content. The permittee shall compact each clay-rich structure with a sheepsfoot-type roller of the same drum diameter and length, empty and/or ballasted weight, length and face area of the feet, and yoking arrangement as used to construct the test fill required in this section. The permittee with the prior approval of the Executive Director may use a different roller of similar size and type that provides equivalent or greater compactive effort as the sheepsfoot-type roller. For areas inaccessible to a sheepsfoot roller, a tamping foot-type compactor, smooth-drum roller or vibrating-plate compactor having foot pressures of at least 250 psi shall be substituted;
- (3) The term "clay-rich soil", as described in this permit, shall be defined as soil exhibiting the following minimum characteristics:
 - (a) Plasticity index greater than or equal to 15;
 - (b) Liquid limit greater than or equal to 30; and
 - (c) Percent passing No. 200 sieve greater than or equal to 30.
- (4) Laboratory Standard Proctor Density and optimum moisture content tests performed in accordance with ASTM D-698 for a minimum of one (1) representative sample from each 2,630 cubic yards of soil;
- (5) Field density and moisture control tests on constructed soil liners performed in accordance with ASTM D-1556, ASTM D-2167, ASTM D-2922, or an equivalent method at a frequency of at least one per every 10,000 square feet of each lift placed;
- (6) Atterberg Limits performed in accordance with ASTM D-4318 at a frequency of at least one per every 1,000 cubic yards of soil and for a minimum of two (2) tests per layer per cell;
- (7) Percent passing No. 200 sieve performed in accordance with ASTM D-1140 at a frequency of at least one per every 650 cubic yards of soil and for a minimum of two (2) tests per layer per cell;
- (8) Soil liner thickness and slope determinations at a rate of at least one (1) determination by appropriate surveying techniques per every 10,000 square feet of soil liner installed; and
- (9) Hydraulic conductivity measurements expressed in terms of cm/sec for representative undisturbed core samples of the constructed soil liner system components at a frequency of one per acre per lift.

c. Geomembrane Liner

- (1) The following conditions shall be satisfied prior to the installation of any geomembrane liner:
 - (a) The upper four (4) inches of the supporting soil for the liner shall not contain any stones, roots, or foreign objects having a dimension greater than one (1) inch;
 - (b) The surface to be lined shall be prepared so as to provide a surface that is free of irregularities, loose earth, desiccation cracks, and abrupt changes in grade; and
 - (c) The compacted clay liner shall be maintained at or slightly above optimum moisture content and free of desiccation cracks prior to placement of any overlying geomembrane liner. Verification testing and modifications to moisture content shall be performed for the compacted clay liner during soil compaction activities and hence at least every seven (7) days until placement of the overlying component of the liner system. Final soil moisture content determinations must be performed for the clay liner within twenty-four (24) hours of placement of the overlying component of the liner system. At a minimum, soil moisture content shall be measured at six (6) inch depths at a minimum rate of one (1) test per 10,000 square feet of soil liner. The date, location, and results of all soil moisture measurements and the date and location of the synthetic liner placement shall be included in the required certification report. The results of a visual inspection made by the certifying engineer, noting the presence or absence of desiccation cracks and any remedial measures taken to remove these features, must also be included in the certification report for the landfill (cell).
- (2) During installation, all persons walking on the liner shall wear shoes which will not damage the liner.
- (3) The geomembrane shall not be installed during rainfall or in an area of pooled water.
- (4) The geomembrane shall be installed so that there will not be tension or wrinkles at the anticipated average temperature for its final use.
- (5) All personnel seaming the geomembrane shall have previous project experience in field seaming geomembrane liner using similar seaming methods.
- (6) An anchor trench having minimum dimensions of two (2) feet in width and two (2) feet in depth shall be constructed along the perimeter of the landfill trench.
- (7) The geomembrane panel shall be secured at the ground surface in the anchor trench specified in Provision V.G.3.c.(6) and shall be installed such that field seams, to the extent possible, are aligned parallel to the landfill sidewall slope.

- (8) Adjacent panels of the geomembrane shall be overlapped at least three (3) inches.
- (9) All seam areas of the geomembrane shall be clean and free of moisture, dust, dirt, and any other foreign material of any kind.
- (10) Each seaming unit for extrusion welding shall have temperature gauges that indicate the temperature of the extrudate in the machine and at the nozzle.
- (11) Field seaming shall not be done if the ambient temperature is below 34°F.
- (12) Field seaming shall not be done if the ambient temperature is below 50°F, but greater than 34°F, unless the geomembrane is preheated above that temperature by either the sun or a hot air device.
- (13) Prior to field seaming the geomembrane each day, all personnel responsible for seaming shall prepare a test seam of at least two (2) feet in length. These test seams shall be tested for adequate strength (seam peel stress equal to 100 percent of the tensile strength of the geomembrane used) prior to field seaming the geomembrane. All test seaming shall be performed under the same conditions as production seaming. Any problems with equipment or test seam strength shall be corrected prior to field seaming the geomembrane.
- (14) All seam and nonseam areas of the geomembrane shall be visually inspected for signs of defective seams, blisters, punctures, undispersed raw materials, and any sign of contamination by foreign matter. Any problems discovered shall be marked, repaired, and retested or re-evaluated. The geomembrane surface shall be clean at the time of these inspections.
- (15) All field seams shall be nondestructively tested over their entire length. Seam testing shall be performed as field seaming progresses. Any defects shall be marked, repaired, and retested.
- (16) Field seams shall be tested using, at a minimum, an ultrasonic tester, a pressure tester, or a vacuum tester suited for this purpose. All testing equipment shall be calibrated or properly adjusted prior to use each day.
- (17) All field seams shall be destructively tested at a minimum frequency of one sample for every 500 feet of weld for adequate strength as defined above. Areas of removed samples shall be patched and the patched seams non-destructively tested in accordance with Provision V.G.3.c.(15) above.
- (18) If any seam tested in accordance with Provisions V.G.3.c.(15), (16), and (17) is shown to be defective, the permittee shall evaluate the entire length of seam represented by the defective test results to determine the extent of the defect(s). The permittee shall replace or repair defective seams prior to progressing with field seaming operations.

d. Leachate Collection/Leak Detection System

- (1) Sieve analysis tests on non-synthetic material at a minimum rate of one (1) test per 400 cubic yards.
- (2) Hydraulic conductivity measurements expressed in units of cm/sec at a frequency of at least 4 representative samples collected from each compacted drainage layer.
- (3) Drainage layer thickness determinations at a rate of at least three (3) determination by appropriate surveying techniques per every cell or 10,000 square feet of drainage layer installed.
- (4) Drainage pipe slope determinations at a rate at least one determination by appropriate surveying techniques per every 20 feet of drainage pipe and an overall visual inspection of all pipes for sagging and improper bedding.

e. Run-On and Run-Off Control Systems

The permittee shall design and construct a run-on control system and a run-off management system as specified in the approved Part B Permit Application Section V.G., which is incorporated into this permit through Section I.B. [30 TAC Sections 335.173(g) and (h)]

- f. The permittee shall submit certification of proper landfill construction prior to the placement of waste in a landfill or landfill cell. The certification shall be submitted in accordance with Provision II.A.6. Within thirty (30) days of submittal of such certification, the permittee shall submit a certification report which contains the results of all tests conducted. The permittee shall conduct any tests, inspections, or measurements that are deemed necessary in the judgment of the registered professional engineer supervising the cell construction, for the engineer to certify that the landfill cell has been constructed in conformance with the design and construction specifications of this permit. The certification report shall, at a minimum, contain the following drawings and test results:
- (1) Scaled plan-view and cross-sectional drawings that accurately depict the areal boundaries and dimensions of the cell; separation distance(s) of the cell from the property boundary; minimum, maximum, and representative elevations of the excavation of the cell; minimum, maximum, and representative elevations of the cell as component parts of the liner system; location, site, volume, materials of construction, and slope, as applicable, of all soil and synthetic liners and leachate collection and leak detection system components; and
 - (2) For the soil liner, geomembrane liner, and leachate collection/leak detection system; all observations, tests, and analyses required to ensure that installation has been completed in accordance with the terms of this permit and the incorporated design plans.

4. General Landfilling Operations

The permittee shall conduct landfilling operations according to the following requirements:

- a. The initial two (2) feet of waste or soil placed in a landfill cell shall be placed with a tracked vehicle (D-6 Caterpillar size or smaller) and shall be composed of bulk or processed non-containerized waste. Rubber-tired vehicles and roller-type compaction equipment shall not drive on any portion of the leachate collection system in a landfill cell until the initial two (2) foot layer of waste or soil has been placed;
- b. Upon compliance with Provision V.G.4.a., all subsequent waste, except containerized waste, shall be applied in lifts not greater than eighteen (18) inches and compacted sufficiently to minimize settlement of landfilled waste;
- c. In areas of the landfill where placement of final cover will not occur when the wastes reach final grade elevation, the permittee shall install an interim cover of at least two foot of caliche and/or red bed clay soil when the wastes reach final grade elevation.; [30 TAC Section 335.173(k)];
- d. All collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems shall be maintained and must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system; [30 TAC Section 335.173(i)]
- e. All precipitation that collects in an active landfill cell, including water that drains into the landfill cell from interior access roads, shall be managed as contaminated water and disposed of accordingly at an authorized on-site waste management unit or at an authorized off-site facility;
- f. While a landfill cell is in operation, it must be inspected at least weekly and after storm events in accordance with 40 CFR 264.303(b);
- g. The permittee shall remove leachate from collection sumps as often as necessary to ensure that the leachate depth in the leachate collection/leak detection system is always less than the thickness of the drainage material and never exceeds 12 inches;
- h. The permittee shall inspect each leak detection system and record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period of the landfill;
- i. The liquids removed shall be classified in accordance with 30 TAC Chapter 335, Subchapter R (Waste Classification) and shall be managed accordingly at an authorized on-site waste management unit or at an authorized off-site facility;

j. Control of Wind Dispersal of Particulate Matter

The permittee shall cover or otherwise manage the landfill to control wind dispersal of particulate matter in accordance with the procedures described in Appendix V.J. of the permittee's approved permit application; [30 TAC Section 335.173(j)]

k. The permittee shall sequence the construction of an interim and/or final cover as the waste material reaches the final grade in accordance with the approved Part B Permit Application Attachment V.G., which is incorporated into this permit through permit Section I.B.;

l. Requirements for Ignitable, Reactive or Incompatible Wastes

The permittee shall manage ignitable, reactive incompatible wastes in accordance with the following conditions:

- (1) Ignitable or reactive wastes shall not be placed in a landfill, unless the waste and landfill meet all applicable requirements of 40 CFR 268, and the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 40 CFR 261.21 or 261.23; [40 CFR 264.312]
- (2) Ignitable wastes in containers may be disposed in the landfill cells in accordance with 40 CFR 264.312(b); and
- (3) Incompatible wastes, or incompatible wastes and materials must not be placed in the same landfill cell unless the permittee complies with 40 CFR 264.17(b);

m. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027

The permittee shall not place hazardous wastes F020, F021, F022, F023, F026, and F027 in the landfill.

n. Stabilization of Liquid Wastes

The permittee shall not place liquids or waste containing free liquids, whether or not sorbents have been added (except lab waste in overpacked containers, as described in 40 CFR 264.316) in landfill cells. "Free liquids" are liquids which readily separate from the solid portion of a waste when the waste mixture is at a temperature above 32°F and ambient pressure.

An absorbent is defined as a material that is capable of physically holding a liquid within pores or interstices by such physical forces as tension or capillary action. An adsorbent is defined as a material that is capable of physically adhering a liquid to its (the material's) surface(s) through molecular polar forces. The terms "absorbent" and "adsorbent" shall both be indicated whenever the term "sorbent" is used in this permit.

o. Stabilization of LDR Wastes

Appropriate stabilization methods shall be used for waste streams requiring treatment to meet the 40 CFR Part 268 treatment standards.

Successful stabilization is said to be achieved if post-treatment analyses demonstrate that applicable treatment standards will be achieved in accordance with the land disposal restrictions of 40 CFR Part 268;

p. Special Requirements for Containers

All containers, unless they are very small, such as an ampule, must be either at least 90 percent full when placed in the landfill, or crushed, shredded or similarly reduced in volume to the maximum practical extent before burial in the landfill [40 CFR 264.315];

q. Special Requirements for the Disposal of Lab Packs

The permittee shall not place containers holding liquid waste, or waste containing free liquids in a landfill, unless the following conditions apply [30 TAC Section 335.175(d)]:

- (1) The container is very small, such as an ampule,
- (2) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor, or
- (3) The container is a lab pack as defined and managed in accordance with 40 CFR 264.316;

r. Waste to Liner Compatibility

The permittee shall ensure that wastes to be landfilled will not impair the function of the synthetic liner. At a minimum, waste to liner compatibility testing shall be conducted for those wastes whose compatibility with the selected membrane liner has not been conducted and the effects are unknown. For wastes and liners upon which tests have been conducted and the results and/or effects are known (manufacturer's literature, other experimental literature, etc.), additional testing is not required. The permittee shall maintain test results and/or documentation that confirms waste to liner compatibility at the facility.

5. Action Leakage Rate and Response Action Plan [40 CFR 264.302 and 264.304].

The permittee shall establish an Action Leakage Rate (ALR) pursuant to 40 CFR 264.302. The permittee shall determine if the ALR, given in gallons per acre per day, for each sump has been exceeded by converting the weekly or monthly flow rate from the monitoring data obtained to an average daily flow rate (gallons per acre per day) for each sump. The permittee shall calculate the average daily flow rate for each landfill sump on a weekly basis during the active life and closure period. The ALR for the sumps in each landfill cell is given on Table V.G.1. - Landfills.

Prior to receipt of waste, the permittee shall have in place an approved Response Action Plan (RAP) which meets the requirements of 40 CFR 264.304. The RAP shall set forth the actions to be taken if the ALR is exceeded.

6. Cell Location Survey

The permittee shall maintain the following items in the operating record:

- a. A map with the exact location and dimensions (including depth) of each cell with respect to permanently surveyed benchmarks; and
- b. A record of the areal and vertical location of each waste placed into a landfill cell.

H. Incinerators - Reserved

I. Boilers/Industrial Furnaces - Reserved

J. Drip Pads - Reserved

K. Miscellaneous Units - Reserved

L. Containment Buildings - Reserved

VI. Groundwater Detection Monitoring

A. Groundwater Monitoring Program

The permittee shall design, construct and maintain a groundwater monitoring program to monitor area groundwater throughout the active life of the facility and any post-closure care period. Groundwater monitoring at the facility shall at a minimum consist of a Detection Monitoring System for the locally named "225-foot zone" of the Triassic Dockum Group of the Chinle Formation. In addition, observation wells will monitor the locally named "125-foot zone" of the Dockum Group. The Detection Monitoring System shall yield groundwater samples from the uppermost aquifer that represents the quality of background water and the quality of groundwater at the point of compliance.

1. Identification of Detection Monitoring Program Unit(s)/Area(s)

The Detection Monitoring Program is specific to the RCRA-regulated unit(s) or area(s) listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System and as authorized by Provision(s) by Provision V.G. (Landfills) for which groundwater monitoring requirements apply pursuant to 30 TAC Section 335.164.

2. Capabilities of Detection Monitoring Systems

The Detection Monitoring System shall yield groundwater samples from the uppermost aquifer/water-bearing zones that represent the quality of background

water that has not been affected by operation of the regulated unit(s) and that represent the quality of groundwater passing the point of compliance. This system shall be capable of detecting a release from the regulated unit to the groundwater.

3. Point of Compliance

The point of compliance for the Detection Monitoring System is defined by a vertical surface, located at the hydraulically downgradient limit of the waste management area (or permitted unit) that extends down into the uppermost aquifer/groundwater bearing zone underlying the regulated unit. The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of the regulated unit.

4. Detection Monitoring Program

The permittee is required to install and operate a Detection Monitoring System(s) subject to the limitations contained herein. The Detection Monitoring System wells for each unit/area are listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System. Wells identified as proposed in Table VI.B.3.b - Unit Groundwater Detection Monitoring System shall be installed in accordance with the compliance scheduling requirements of permit Section VI.I.

- a. A Detection Monitoring System shall, at a minimum, consist of three categories of wells, Background, Point of Compliance Wells, and Supplemental Wells which will be used to establish groundwater quality for each RCRA-regulated unit.

- (1) Background Well(s) are those wells that are unaffected by the operations of the unit. The Background Well(s) are depicted in "Attachment F" (Permit Application Detection Monitoring System Wells Map) and are also listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System.
- (2) Point of Compliance (POC) Wells are used to demonstrate compliance with the Detection Monitoring Parameters which are listed on Table VI.B.3.c. - Groundwater Detection Monitoring Parameters. POC Wells are designated in "Attachment F" (permit application Detection Monitoring System Wells Map) and are also listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System.
- (3) The Detection Monitoring System shall also include Observation Wells, as necessary, to establish groundwater quality and hydrogeologic conditions of the "125-foot zone", and any other water-bearing zone.

- b. The permittee shall determine groundwater quality in the uppermost aquifer throughout the active life of the facility and any post-closure care period in accordance with the parameter list and sampling schedule specified in Provisions VI.C.2. and VI.D.2., respectively.
- c. The design, construction, maintenance and operation of the authorized components of the Detection Monitoring Program must be in accordance with this permit and approved Part B Permit Application, Section VI, which is incorporated into this permit through Section I.B.

B. Construction, Certification, and Plugging

Wells shall be constructed and maintained so groundwater samples are representative of the aquifer's water quality. A record of drilling and construction details demonstrating compliance with the terms of this permit section shall be prepared in accordance with "Attachment G" (Well Design and Construction Specifications). Wells constructed prior to issuance of this permit may be utilized as groundwater monitoring wells if they meet the standards of "Attachment G."

1. Well Construction

- a. For all groundwater monitor wells to be constructed in accordance with this permit, the permittee shall notify the Executive Director to report the proposed monitor well location and screened interval at least thirty (30) days in advance of the anticipated date of installation or in accordance with an approved schedule for installation. Alternatively, a schedule for installation issued as part of an approved work plan shall constitute such notification. New well construction shall commence upon written approval of the Executive Director within the timeframes specified in this permit.
- b. The permittee shall install the wells of the Detection and Supplemental Monitoring System and submit certification of this installation within sixty (60) days of installation, as described in "Attachment G." The Detection and Supplemental monitoring Wells shall be installed in accordance with the specifications outlined in "Attachment G."

2. Replacement Wells

Prior to installation of a replacement well, the permittee shall submit to the Executive Director for approval, the replacement well specifications and an explanation of why the well is being replaced. For any Detection Monitoring System well to be considered a replacement well and not a new well, the well shall have no design changes from the well being replaced; shall be drilled within fifteen (15) feet of the well being replaced; and shall be installed in accordance with this Provision and "Attachment G."

3. Well Management Activities Requiring Permit Modification

- a. If the permittee or the Executive Director determines that the well integrity, materials of construction, or well placement no longer enable a well to yield samples representative of groundwater quality from the desired aquifer(s), then the permittee shall submit a permit modification or amendment request to the Executive Director in accordance with the provisions of 30 TAC Sections 305.62 and 305.69, respectively, describing actions the permittee will take to remedy the situation. The permittee shall also notify the Executive Director within fifteen (15) days of such determination regarding a well.
- b. The permittee shall submit a permit modification or amendment request to the Executive Director in accordance with the provisions of 30 TAC Sections 305.62 and 305.69, respectively, when new POC or Background

Wells are to be constructed after issuance of this permit (i.e., if the wells have not been included in the approved Part B Permit Application materials referenced in Section I.B.)

- c. The permittee shall submit a permit modification or amendment request, for installation of a new well, to the Executive Director in accordance with the provisions of 30 TAC Sections 305.62 and 305.69, respectively, when any wells being replaced do not meet the requirements of Provision VI.B.2.

4. Plugging and Abandonment Procedures

- a. If a Detection Monitoring Well listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System is plugged and abandoned and a replacement well is not installed in accordance with this permit, then a modification request shall be submitted in accordance with 30 TAC Section 305.69 within ninety (90) days of the plugging and abandonment procedure to update Table VI.B.3.b. - Unit Groundwater Detection Monitoring System of the permit.
- b. For all wells to be plugged and abandoned after issuance of this permit, the permittee shall follow the procedures specified in "Attachment G."

C. Detection Monitoring System Operation

1. Uppermost Aquifer/Water-Bearing Zone Monitored by the Detection Monitoring System

The Detection Monitoring System shall be designed to monitor the groundwater in the uppermost aquifer/water-bearing zone. The "uppermost aquifer", as referenced in this permit, refers to the locally named "225-foot zone" of the Triassic Dockum Group of the Chinle Formation. The "225 foot zone" of the Dockum Group ranges in elevation from approximately 3250 feet above Mean Sea Level (MSL) to 3215 above MSL. The top of the uppermost aquifer/water-bearing zone is approximately 225 feet below ground surface (BGS). Groundwater is typically encountered 225 feet BGS. A siltstone zone that occurs at a depth of 125 feet below ground surface and is locally named the "125-foot zone" of the Dockum Group shall also be monitored at the landfill in accordance with Provision VI.A.4.a.(3).

2. Groundwater Detection Monitoring Parameters and Compliance

- a. The permittee shall monitor well numbers identified in Provision VI.A.4. and Table VI.B.3.b. - Unit Groundwater Detection Monitoring System. The Uppermost Aquifer's groundwater quality will be evaluated based on the parameters listed in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters. Sampling and analysis for the Groundwater Detection Monitoring Parameters of Table VI.B.3.c. - Groundwater Detection Monitoring Parameters shall be conducted in accordance with Provision II.B.1.b. of this permit. [30 TAC Section 335.164(1)]

- b. Background groundwater quality for a monitoring parameter or constituent shall be based on a sequence of at least one sample. The permittee shall sample background monitoring wells regularly throughout the life of the facility, and periodically review and revise the background values as necessary in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance, U.S. EPA, March 2009. The permittee shall determine the concentrations of the detection monitoring parameters and water quality parameters listed in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters for each sample collected.
- c. Compliance with the Groundwater Detection Monitoring Parameters listed in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters is defined by the results of the data evaluation of Provision VI.D.4. wherein the groundwater monitoring data for each well do not exhibit evidence of contamination over background values. If any POC Well is determined to be noncompliant with Table VI.B.3.c. - Groundwater Detection Monitoring Parameters at any time during the Detection Monitoring Program, the permittee shall respond and report according to Provision VI.E.1.

3. Post-Closure Care Period

The units listed in Provision VI.A.1. shall remain in the Detection Monitoring Program during the active life of the unit(s) and during any applicable Post-Closure Care Period. After closure activities are completed for a specified unit and certification of closure is received by the Executive Director, any applicable Post-Closure Care Period shall begin. If the Post-Closure Care Period has expired and evidence of Statistically Significant Increase (SSI) of the Groundwater Detection Monitoring Parameters of Table VI.B.3.c. - Groundwater Detection Monitoring Parameters has not been confirmed in the groundwater, then the permittee shall notify the Executive Director in writing at least thirty (30) days prior to discontinuing the Detection Monitoring Program for the specified unit. Within ninety (90) days of the notification, the permittee shall submit a final report to the Commission for the specified unit. The final report shall include the information required by the annual report of Section VI.G.

4. Waste Management of Recovered Groundwater

- a. Recovered groundwater from a Detection Monitoring Well with no known contamination may be managed as uncontaminated prior to analysis. Following analysis, if the permittee determines that a Table VI.B.3.c. - Groundwater Detection Monitoring Parameter has an SSI over background value, the recovered groundwater shall be managed as contaminated water.
- b. Recovered groundwater with known contamination which exceeds the Table VI.B.3.c. - Groundwater Detection Monitoring Parameters shall be managed as contaminated water.

D. Sampling and Analysis

1. Sampling and Analysis

The permittee shall follow the methods set out in EPA's RCRA Groundwater Monitoring Draft Technical Guidance Document (November 1992) or an alternate method with prior written approval of the Executive Director to collect and preserve samples withdrawn from groundwater monitoring wells. The collected samples shall be managed (i.e., Chain of Custody and handling procedure), analyzed, and statistically evaluated (i.e., QA/QC) in accordance with the current edition of EPA SW-846 and ASTM Standard Test Methods or other equivalent methods with prior written approval of the Executive Director.

- a. All groundwater analyses required by this permit shall be performed using a QA/QC program where all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. All QA/QC program details shall be put in writing and assignments made to qualified personnel. At a minimum, the program shall conform to the QA/QC program details described in the current edition of EPA SW-846 and ASTM Standard Test Methods or other equivalent methods accepted in writing by the Executive Director.
- b. Groundwater analyses required by this permit shall utilize laboratory methods which are capable of measuring concentrations equal to or less than established background values.
- c. Wells shall be sampled according to the Sampling and Analysis Plan presented in Section VI of the approved Part B Permit Application, which is incorporated into this permit through Section I.B. The permittee or the Executive Director shall propose modifications, as necessary, to the Sampling and Analysis Plan in order to achieve the Detection Monitoring Program objectives. Any and all revisions to the plan shall become conditions of this permit at the beginning of the next full quarter after approval by the Executive Director.

2. Sampling and Analysis Frequencies and Parameters

- a. Frequencies of sampling shall be monthly, quarterly, semiannually or yearly, depending on the sampling objective. These periods of time are defined below:
 - (1) "Month" shall be a calendar month;
 - (2) "Quarter" shall be based on divisions of the calendar year (i.e., January through March, April through June, July through September, October through December);
 - (3) "Semiannual" shall be based on divisions of the calendar year (i.e., January through June, July through December) and consist of two consecutive quarters;
 - (4) "Annual" or "Year" shall be four consecutive quarters, beginning with the first quarter. Years shall be designated consecutively, beginning with the "first year", "second year", etc.; and
 - (5) "Calendar year" shall be based on divisions of the calendar (i.e. January through December).

- b. Sampling of wells shall commence during the first complete quarter after issuance of this permit, or during the first quarter of operation if the permit is issued for a new unit. Samples shall be collected during the first thirty (30) days of the specified sampling frequency.
- c. In the first and subsequent years of the Detection Monitoring Program, the wells of Table VI.B.3.b. - Unit Groundwater Detection Monitoring System shall be sampled and analyzed according to the Provision VI.D.2.d. and Table VI.B.3.c. - Groundwater Detection Monitoring Parameters.
- d. The permittee shall, during April and October of each year, sample the detection monitoring system wells. A sample shall be obtained from each of the even numbered upgradient wells and downgradient wells during the October sampling event, and a sample shall be obtained from each of the odd numbered upgradient wells and downgradient wells during the April sampling event. The permittee shall analyze each sample to determine the concentration of each detection monitoring parameter listed in Table VI.B.3.c.-Groundwater Detection Monitoring Parameters. The designated upgradient groundwater monitoring listed in Table VI.B.3.b.-Unit Groundwater Detection Monitoring System will only be analyzed for metal monitoring parameters listed in Table VI.B.3.c.- Groundwater Detection Monitoring Parameters.
- e. Field determination requirements for wells listed in Table VI.B.3.b. - Unit Groundwater Detection Monitoring System consist of the following measurements or observations for each well that will be sampled which shall be established during each sampling event:
 - (1) Water level measurements relative to MSL measured to within 0.01 foot.
 - (2) Determination of pH, temperature, specific conductivity and turbidity in Nephelometric Turbidity Units for each well.
 - (3) Descriptions of water sample appearance (clarity, color, etc.) shall be recorded.
 - (4) The total depth of each well, which is not equipped with a dedicated pump, shall be measured during each sampling event. The total depth of each well equipped with a dedicated pump shall be measured when pumps are removed for maintenance. At a minimum, the wells with dedicated pumps will be checked for silting every three (3) years. The measured total depth shall be compared to the total depth recorded on the well construction log. Should an analysis of the measured and the recorded total depth reveal that the well is silting in, the permittee shall perform such actions necessary (redevelopment, replacement, etc.) to enable the well to function properly.
 - (5) All wells specified in this permit shall be inspected during each sampling event. Repairs or a proposal for replacement for any affected well shall be performed within ninety (90) days of the routine sampling event inspection which identified the problem well.

3. Statistical Procedures for Data Evaluation

- a. For each POC Well sampled during each sampling event, the permittee shall determine whether there is evidence of a statistically significant increase (SSI) in the concentrations of each volatile and semivolatile organic monitoring Parameter listed Table VI.B.3.c.-Groundwater Detection Monitoring Parameters as outlined in Provision VI.D.3.b.
- b. The procedures that shall be used to determine if an increase has occurred over background values shall be direct comparison to the concentration limits listed in Table VI.B.3.c.-Groundwater Detection Monitoring Parameters for volatile and semivolatile organics, for the following waste management unit identified in Provision VI.A.1.: TCEQ Permit Unit No. 3. To employ the identified evaluation procedure, the permittee is required to collect a minimum of one sample from each unit's Background and POC Wells following the sampling schedule outlined in Provision VI.D.2.d. If a measured value exceeds the concentration limit, the permittee shall promptly resample monitoring well(s) in question, determine the concentration of the parameter(s) for which the exceedence was indicated and compare the results of the re-sampling event to the concentration limit(s). The permittee has determined an SSI has occurred if the re-sample analysis confirms the initial result.
- c. If it is determined that the selected statistical procedure is not appropriate to conduct data evaluation for a specified unit, then the permittee shall select an alternate statistical procedure. The permittee may propose alternate statistical procedures and data evaluation described in Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance, U.S. EPA, March 2009. Prior to using a statistical procedure which is different than the one identified in Provision VI.D.3.b. the permittee shall obtain approval from the Executive Director through a permit amendment or modification as specified in 30 TAC Sections 305.62 and 305.69, respectively.

4. Data Evaluation

- a. Data evaluations shall be completed within sixty (60) days of the sampling date unless QA/QC procedures show that data are unacceptable and re-analysis or re-sampling must be performed. In such cases, the Executive Director will be notified as soon as it becomes apparent that the sixty (60) day time limit to conduct data evaluation cannot be met.
- b. Data evaluation shall determine whether there is evidence of an SSI for Groundwater Detection Monitoring Parameters listed in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters each time groundwater quality is determined at the POC in accordance with 30 TAC Section 335.163(7).
- c. In addition to the statistical evaluation procedures established in Provision VI.D.3., the permittee shall evaluate the analytical data obtained for the metal monitoring parameters listed in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters. This data evaluation shall consist of a review of graphical representations of each of the metal parameter

concentrations in each well over time. This evaluation of the metals data shall be performed annually and included in the annual report required under Provision VI.G.

E. Response Requirements for SSI

1. If the permittee has determined an SSI over background values for any of the Groundwater Monitoring Parameters identified in Table VI.B.3.c. - Groundwater Detection Monitoring Parameters in accordance with statistical procedures authorized by Provision VI.D.3. and specified by the permittee, the permittee shall perform the following actions:
 - a. Notify the Executive Director in writing, within seven (7) days. The notification must indicate which Groundwater Detection Monitoring Parameter(s) of Table VI.B.3.c. - Groundwater Detection Monitoring Parameters has exhibited an SSI.
 - b. Immediately sample the groundwater in all wells of Table VI.B.3.b. - Unit Groundwater Detection Monitoring System which exhibit an SSI for the specified unit and determine whether constituents of Appendix IX of 40 CFR 264 are present, and if so, in what concentrations.
 - c. For any Appendix IX hazardous constituent found in the analysis pursuant to Provision VI.E.1.b., the permittee may re-sample for hazardous constituents within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these detected constituents will form the basis for a Compliance Monitoring Program. If the permittee does not re-sample for the constituents found pursuant to Provision VI.E.1.b., the hazardous constituents found during the initial Appendix IX analysis will form the basis for the Compliance Monitoring Program.
 - d. Upon establishing that a release has occurred from a unit(s), the permittee shall submit to the Executive Director a permit amendment or modification to modify the Detection Monitoring Program and a Compliance Plan application to initiate a Compliance Monitoring Program and/or a Corrective Action Program for the specified unit(s). The permit and Compliance Plan applications must be submitted based on the following schedule:
 - (1) If groundwater downgradient of the specified unit does not exceed the requirements in 30 TAC Section 335.158 for the proposed groundwater protection standard (GWPS), then within ninety (90) days, the permittee shall submit a permit amendment and a Compliance Plan application to establish a Compliance Monitoring Program for the specified unit;
 - (2) If groundwater downgradient of the specified unit exceeds the requirements in 30 TAC Section 335.158 for the proposed GWPS requested in the application for a specified unit, and an Alternate Concentration Limit (ACL) is not being proposed in the application in

accordance with 30 TAC Section 335.160(b) to establish the GWPS, then within 180 days, the permittee shall submit a permit amendment or modification and a compliance plan application to establish a Corrective Action Program for the specified unit; and

- (3) If groundwater downgradient of the specified unit exceeds the requirements in 30 TAC Section 335.158 for the proposed GWPS requested in the application for a specified unit, and an ACL is being proposed in the application in accordance with 30 TAC Section 335.160(b) to establish the GWPS, then within 180 days, the permittee shall submit a permit amendment or modification and a compliance plan application with an ACL demonstration to establish a Corrective Action Program for the specified unit.
2. If the permittee determines that there is an SSI above (or for pH, a statistically significant variation from) background values for the Groundwater Detection Monitoring Parameters specified in Table VI.B.3.c., the permittee may demonstrate a source other than the RCRA-regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In such cases, the permittee shall perform the following actions:
 - a. Notify the Executive Director in writing within seven (7) days that the permittee intends to make a demonstration;
 - b. Within ninety (90) days, submit a report to the Executive Director which demonstrates that a source other than a RCRA-regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation;
 - c. Submit to the Executive Director an application for a permit amendment or modification and a compliance plan application to make any appropriate changes to the Detection Monitoring Program at the facility. The applications shall be submitted in accordance with Provision VI.E.1.d.; and
 - d. Continue to monitor groundwater in accordance with the Detection Monitoring Program at the facility.

F. Revised Detection Monitoring Program

If the permittee or the Executive Director determines that the Detection Monitoring Program no longer satisfies the requirements of 30 TAC Section 335.164, the permittee must, within ninety (90) days of either the permittee's determination or Executive Director's notification, submit a permit amendment or modification request to make any appropriate changes to the Detection Monitoring Program which will satisfy the regulations.

G. Annual Detection Monitoring Reporting Requirements

The permittee shall submit an Annual Detection Monitoring Report which shall include the following information determined since the previously submitted report:

1. A statement whether an SSI has occurred over background values in any well during the previous calendar year period and the status of any SSI events;

2. The permittee shall include the results of all monitoring, testing, and analytical work obtained or prepared pursuant to the requirements of this permit, including a summary of background groundwater quality values, groundwater monitoring analyses, statistical calculations, graphical evaluation and drawings;
3. The groundwater flow rate and direction in the uppermost aquifer. The groundwater flow rate and direction of groundwater flow shall be established using the data collected during the preceding calendar year's sampling events from the monitoring wells of the Detection Monitoring Program. The permittee shall also include in the report all documentation used to determine the groundwater flow rate and direction of groundwater flow;
4. A contour map of piezometric water levels in the uppermost aquifer based at a minimum upon concurrent measurements in each detection monitoring system well sampled during each monitoring event. All data or documentation used to establish the contour map should be included in the report;
5. Recommendation for any changes; and
6. Any other items requested by the Executive Director.

H. Record Keeping Requirements

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

I. Compliance Scheduling Requirements

The permittee shall complete the installation of all wells for the landfill (Permit Unit No. 2) required by Table VI.B.3.b.-Unit Groundwater Detection Monitoring System prior to waste disposal in the corresponding landfill cell(s) as outlined in the Part B Application, Section VI, which is incorporated into this permit through permit Provision I.B.

VII. Closure and Post-Closure Requirements

A. Facility Closure

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

In addition, facility closure shall commence:

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

- b. Upon suspension, cancellation, or revocation of the terms and conditions of this permit concerning the authorization to receive, store, process, or dispose of waste materials; or
- c. Upon abandonment of the site; or
- d. Upon direction of the TCEQ for failure to secure and maintain an adequate bond or other financial assurance as required by Provision VII.B.1.

2. Request for Permit Modification or Amendment

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

3. Time Frames for Modification/Amendment Request Submittal

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

4. Closure Notice and Certification Requirements

- a. The permittee shall notify the Executive Director, in writing, at least sixty (60) days prior to the date on which he expects to begin partial or final closure of a surface impoundment, or landfill unit, or final closure of a facility with such a unit; or at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a facility with processing or storage tanks, container storage, or incinerator units; or at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier. A copy of the notice shall be submitted to the TCEQ Regional Office.
 - b. The permittee shall notify the TCEQ Regional Office at least ten (10) days prior to any closure sampling activity required by the permit in order to afford regional personnel the opportunity to observe these events and collect samples.
5. Unless the Executive Director approves an extension to the closure period, as per the requirements of 40 CFR 264.113(b), the permittee must complete partial and final closure activities within 180 days after receiving the final known volume of hazardous wastes at the hazardous waste management unit or facility.
6. As per the requirements of 40 CFR 264.115, within sixty (60) days of completion of closure of each permitted hazardous waste surface impoundment, or landfill unit, and within sixty (60) days of the completion of final closure, the permittee shall submit to the Executive Director, by registered mail, with a copy to the TCEQ Regional Office, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved Closure Plan and this permit. The certification, which shall be signed by the permittee and by a Professional Engineer licensed in Texas, must be in the form described in Provision II.A.6. A closure

certification report shall be submitted with the required certifications which includes a summary of the activities conducted during closure and the results of all analyses performed. The certification report shall contain the information required by Provision II.A.6. and as may be applicable, 30 TAC Section 350.32 (Texas Risk Reduction Program (TRRP) Remedy Standard A) and 30 TAC Section 350.33 (TRRP, Remedy Standard B) and 30 TAC Section 350.95 (Response Action Completion Report (RACR). Documentation supporting the licensed Professional Engineer's certification shall be furnished to the Executive Director upon request until the Executive Director releases the permittee from the financial assurance requirements for closure under 40 CFR 264.143(i).

7. For each disposal unit closed after permit issuance, the permittee shall submit documentation to demonstrate compliance with 40 CFR 264.116 (relating to survey plat) and 264.119 (relating to post-closure notices). Documentation to demonstrate compliance with survey plat requirements must be submitted to the TCEQ at the time of submission of the certification of closure. Documentation to show compliance with post-closure notices must be submitted to the TCEQ no later than sixty (60) days after certification of closure.
8. Final closure is considered complete when all hazardous waste management units at the facility have been closed in accordance with all applicable closure requirements so that hazardous waste management activities under 40 CFR Parts 264 and 265 are no longer conducted at the facility unless subject to the provisions in 40 CFR 262.17.
9. All units, sumps, pumps, piping and any other equipment or ancillary components which have come in contact with hazardous wastes shall either be decontaminated by removing all waste, waste residues, and sludges or be disposed of in a manner authorized at this facility or disposed of at an authorized off-site facility.
10. All contaminated equipment/structures and liners (i.e., debris) intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous debris contained in 40 CFR 268.45 or removed and managed at an authorized industrial solid waste management facility. All contaminated dikes and soils intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous soils contained in 40 CFR 268.49 or removed and managed at an authorized industrial solid waste management facility.
11. All hard-surfaced areas within the hazardous waste management unit areas shall be decontaminated and the wash water generated treated and/or disposed in a manner authorized at this facility or at an authorized off-site facility.
12. Verification of decontamination shall be performed by analyzing wash water, and as necessary, soil samples for the hazardous constituents which have been in contact with the particular item being decontaminated. In addition, the permittee shall perform visual inspections of the equipment/structures for visible evidence of contamination.

13. Unless it can be demonstrated that soil contamination has not occurred, soils shall be sampled and analyzed. Sufficiently detailed analyses of samples representative of soils remaining in non-hard-surfaced areas of the storage and processing facility area shall be performed to verify removal or decontamination of all waste and waste residues.
14. Soil and/or wash water samples shall be analyzed using laboratory methods specified in Provision II.B.1.b. Equivalent or modified methods must be specified in the Closure Plan and have written approval of the Executive Director prior to use. All data submitted to the TCEQ shall be in a manner consistent with the latest version of the TCEQ QAPP.
15. Decontamination shall be deemed complete when no visible evidence of contamination is observed and when the results from verification sampling and analyses for wash water and soil meet the following criteria:
 - a. Decontamination of hard-surfaced areas used for waste management (such as tank interiors, secondary containment structures, ancillary equipment, sumps, loading/unloading docks, etc.) shall be deemed complete when the concentration of each chemical of concern in the final rinsate sample(s) collected from the wash water is below the TCEQ TRRP, Remedy Standard A, Tier 1 Residential Class 1 Groundwater Protective Concentration Level (PCL); and
 - b. Unless it can be demonstrated that soil contamination has not occurred, underlying soils shall be decontaminated or removed to the TCEQ TRRP Remedy Standard A, Residential PCL, for no further action. If the underlying soils are decontaminated or removed to the PCL for Remedy Standard A, Commercial/Industrial Land use, the permittee shall comply with the institutional controls requirements of 30 TAC Section 350.111, as required.

B. Financial Assurance for Closure

1. The permittee shall provide total financial assurance for closure of all existing permitted units covered by this permit in an amount not less than \$21,135,764 (2018 dollars) as shown on Table VII.E.1. - Permitted Unit Closure Cost Summary and Attachment VII of the permit application. Financial assurance shall be secured and maintained in compliance with 30 TAC Chapter 37, Subchapter P; and 30 TAC Section 335.179. Financial assurance is subject to the following:
 - a. Adjustments to Financial Assurance Amount
 - (1) At least sixty (60) days prior to acceptance of waste in proposed permitted units listed in Table VII.E.1. - Permitted Unit Closure Cost Summary, the permittee shall increase the amount of financial assurance required for closure by the amounts listed in Table VII.E.1. and shall submit additional financial assurance documentation;
 - (2) The amount of financial assurance for closure of existing units, may be reduced by the amount listed in Table VII.E.1. - Permitted Unit Closure Cost Summary, upon certification of closure of an existing permitted unit, in accordance with Provisions VII.A.4. and VII.A.6., and upon written approval of the Executive Director.

b. Annual Inflation Adjustments

Financial assurance for closure, including any adjustments after permit issuance, shall be corrected for inflation according to the methods described by 30 TAC Sections 37.131 and 37.141.

2. The permittee shall submit to the Executive Director, upon request, such information as may be required to determine the adequacy of the financial assurance.
3. The financial assurance for any closure activity required under this permit may be satisfied, in whole or in part, by the maintenance of financial assurance for that activity pursuant to the requirements of other permits and/or licenses issued by the TCEQ, upon demonstration of equivalency to the Executive Director by the Permittee. Such demonstration shall be submitted as a written request for a permit modification or amendment to authorize a change in the approved financial assurance, in accordance with 30 TAC 305.69.

C. Storage, Processing, and Combustion Unit Closure Requirements

The permittee shall close the storage and processing unit(s) identified as TCEQ Permit Unit Nos. 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (container storage), 264.197 (tanks), the Texas Risk Reduction Program of 30 TAC Chapter 350 and the following requirements.

If all contaminated soils cannot be removed or decontaminated to TRRP Remedy Standard A (RSA), the permittee shall close the tank system and perform post-closure care in accordance with the closure and post-closure requirements for landfills, 30 TAC Section 335.152(a)(5) and 30 TAC Chapter 350, Subchapter B. A Contingent Closure and Post-Closure Plan must be submitted no later than sixty (60) days (Closure Plan) or ninety (90) days (Post-Closure Care Plan) from the date that the permittee or the Executive Director determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 30 TAC Section 335.174, or no later than sixty (60) days (Closure Plan) from that date if the determination is made during partial or final closure. Within sixty (60) days of determining that the tank system must be closed as a landfill, the permittee shall submit a permit modification for closure and post-closure as a landfill.

D. Landfill Closure and Certification Requirements

The permittee shall close the landfill identified as TCEQ Permit Unit No. 3 in accordance with the approved Closure Plan and Engineering Reports, 40 CFR Part 264, Subpart G, 40 CFR 264.310, TRRP Remedy Standard of 30 TAC Chapter 350 Subchapter B, 30 TAC Section 335.174, and the following requirements:

1. The permittee shall close the landfill cell using a final cover as follows:
 - a. A leveling layer of compacted non-select clay soil placed over the waste for as a subgrade for the performance cover.
 - b. A one (1) foot layer of reinforced concrete, as required by the LLRW license.

- c. A minimum three (3) foot thick layer of compacted clay meeting the construction, material and compaction specifications of Provision V.G.3.b. This layer shall be sloped upwards from the perimeter of the landfill at greater than 2.0% and less than 5.0% to a crown in the center of each cell.
- d. A continuous layer of 60 mil HDPE geomembrane for shall be installed on the compacted clay-rich soil cover and shall be secured in an anchor trench at the perimeter dikes. The installation of the geomembrane shall be in accordance with the applicable requirements of Provision V.G.3.c.
- e. A drainage layer consisting of a minimum 10 oz. geotextile overlying a 200-mil geonet shall be installed over the geomembrane. The geo-textile filter fabric shall be overlain by two feet of clean granular sand exhibiting a hydraulic conductivity of greater than 1×10^{-2} cm/sec.
- f. A two (2) foot layer of clean native granular soil to provide protective cover for the geomembrane.
- g. A variable thickness layer of non-select red bed clay to bring the landfill surface to a uniform seven (7) feet below the final design contours of the site.
- h. A three (3) foot layer of caliche cobble and gravel/crushed rock with a diameter ranging from 4 to 12 inches to act as a barrier to burrowing animals. Sufficient caliche fines and gravel added to form a solid mass.
- i. A four (4) foot evapotranspiration soil later containing a three (3) layer soil system.
- j. For the topsoil layer, thickness determinations at a rate of at least one (1) determination shall be made by appropriate surveying techniques per every 10,000 square feet of topsoil placed.
- k. The permittee shall install a permanent benchmark at each corner of all closed landfill cells at the site within six months after closure.
- l. Within 60 days of certification of closure of the landfill unit, the permittee shall submit to the Executive Director documentation demonstrating compliance with 40 CFR Part 264.119, pertaining to deed recordation.
- m. Within sixty (60) days of completion of closure of the landfill unit, the permittee shall submit to the Executive Director a closure certification report, as specified in Provision VII.A.6. and Section VII.E., for the cells not previously certified as closed. The final certification report for closure of the landfill unit shall provide any additional information as required in 40 CFR 264 Subpart G and by Section VII.E., and shall state that the landfill has been closed in accordance with the specifications in the approved Closure Plan as required by 40 CFR Section 264.115. The closure certification report shall address the technical requirements specified in 30 TAC Section 350.95 for RACR, as applicable.

2. After completion of the interim cover and final cover for a landfill cell, the permittee shall submit certification of proper construction of the cap in accordance with Provision II.A.6. Each final cover certification shall be accompanied by a certification report which contains the results of all tests performed to verify proper construction. The permittee shall conduct whatever tests, inspections, or measurements are necessary in the judgement of the professional engineer for the engineer to certify that the landfill cap has been constructed in conformance with the design and construction specifications of this permit. The certification report shall, at a minimum, contain the following engineering plans and test results:
 - a. Scaled plan-view and east-west and north-south cross-sections which accurately depict the area boundaries and dimensions of the cover; surrounding natural ground surface elevations; minimum, maximum, and representative elevations of the base on which the interim cover was placed; minimum, maximum, and representative elevations of the upper surface of the interim and final covers; thickness, extent, and materials of component parts of the cover system.
 - b. All observations tests and analyses required to ensure that the installation has been completed with the terms of this permit and the incorporated design plans.

E. Containment Buildings Closure Requirements - Reserved

F. Facility Post-Closure Care Requirements

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

1. Maintain all storm water conveyance structures in good functional condition.
2. Maintain the cover on the landfill, as applicable, such that the cover promotes drainage, prevents ponding, minimizes surface water infiltration, and minimizes erosion of the cover. Any desiccation cracks, erosion, gully, or other damage shall be repaired upon observance.
3. Maintain the cover to promote natural growth of native vegetation.
4. Maintain all benchmarks at the facility.
5. Maintain the facility perimeter fence, manned or locked gates, and warning signs in good functional condition.
6. Ensure that all entrances to the facility have manned or locked gates.

7. Ensure that the TCEQ has access to the facility.
8. Prepare and submit the Biennial Report required by Provision II.B.7.
9. Perform all groundwater monitoring and related activities specified in Provision VI.A.1. of the permit.
10. The permittee shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom of the liner.
11. All liquids removed from the leak detection systems shall be managed as hazardous waste.
12. The permittee shall maintain a record of the amount of liquids removed from each leak detection system sump at least monthly during the post-closure period.
13. The permittee may record the amount of liquids removed from the each leak detection system sump quarterly or semi-annually during the post-closure period, after the final cover is installed, provided that the liquid level in the sump stays below the pump operating level for two (2) consecutive months or quarters, respectively.
14. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the permittee shall return to monthly recording of amounts of liquids removed from each leak detection system sump until the liquid level again stays below the pump operating level for two (2) consecutive months.
15. The permittee shall determine if the action leakage rate specified in Table V.G.1 - Landfills has been exceeded by converting the monthly flow rate from the monitoring data obtained under Provision VII.G.12. to an average daily flow rate (gallons per acre per day) for each sump. The permittee shall calculate the average daily flow rate for each sump on a monthly basis during the post-closure care period.
16. If the action leakage rate is exceeded at any time during the post-closure period, the permittee shall perform the following minimum activities:
 - a. Notify the Executive Director in writing of the exceedance within seven (7) days of the determination;
 - b. Submit a preliminary written assessment to the Executive Director within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
 - c. Determine to the extent practicable the location, size, and cause of any leak;
 - d. Determine whether any waste should be removed from the unit for inspection, repairs, or controls;

- e. Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
 - f. Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the Executive Director the results of the evaluations specified in Provisions VII.G.16.c., d., and e., the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the permittee shall submit to the Executive Director a report summarizing the results of any remedial actions taken and actions planned.
17. To make the leak and/or remediation determinations in Provisions VII.G.16.c., d., e., and f., the permittee shall:
- a. Assess the source of liquids and amounts of liquids by source;
 - b. Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - c. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
 - d. Document why such assessments are not needed.

18. General Post-Closure Requirements

a. Request for Permit Modification or Amendment

The permittee shall submit a written request for a permit modification or amendment to authorize a change in the approved Post-Closure Plan(s) in accordance with 40 CFR 264.118 (d)(2). The written request shall include a copy of the amended Post-Closure Plan(s) for approval by the Executive Director.

b. Time Frames for Modification/Amendment Request

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

19. Post-Closure Notice and Certification Requirements

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

G. Financial Assurance for Post-Closure

1. The permittee shall provide financial assurance for post-closure care activities required by the permit but not duplicated in the requirements for other authorizations in an amount not less than \$789,300 (2018 dollars) as shown on Table VII.E.2. - Permitted Unit Post Closure Cost. The financial assurance amount must be revised if there is a change in post-closure activities that effects the post-close care costs. Financial assurance shall be secured and maintained in compliance with 30 TAC Chapter 37, Subchapter P and 30 TAC Section 335.152.

- a. Adjustment to Financial Assurance Amount

At least sixty (60) days prior to management of waste in proposed permitted units listed in Table VII.E.2. - Permitted Unit Post-Closure Cost Summary, the permittee shall increase the amount of financial assurance required for post-closure by the amounts listed in Table VII.E.2. - Permitted Unit Post-Closure Cost Summary and shall submit additional financial assurance documentation.

- b. Inflation Factor Correction

During the active life of the facility, financial assurance for post-closure care (including adjustments after permit issuance) shall be corrected for inflation according to the methods described by 30 TAC Sections 37.131 and 37.141.

2. The permittee shall submit to the Executive Director, upon request, such information as may be required to determine the adequacy of the financial assurance.
3. The financial assurance for any post-closure care activity required under this permit may be satisfied in whole or in part, by the maintenance of financial assurance for that activity pursuant to the requirements of other permits and/or licenses issued by the TCEQ, upon demonstration of equivalency to the Executive Director by the Permittee. Such demonstration shall be submitted as a written request for a permit modification or amendment to authorize a change in the approved financial assurance, in accordance with 30 TAC 305.69.

VIII. Liability Requirements

A. Sudden Accidental Occurrences

1. The permittee shall demonstrate continuous compliance with the requirements of 30 TAC Chapter 37 Subchapter P and 30 TAC Section 335.152(a)(6) to maintain liability coverage for sudden accidental occurrences of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs.
2. The permittee also shall demonstrate continuous compliance with the 30 TAC Chapter 37, Subchapter P and 30 TAC Section 335.152(a)(6) requirements to have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence, with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

3. The permittee may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences shall maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate.

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

The permittee shall comply with 30 TAC Section 37.71, regarding bankruptcy, whenever necessary.

IX. **Corrective Action for Solid Waste Management Units**

A. Notification of Release from Solid Waste Management Unit

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

B. Corrective Action Obligations

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

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

Upon Executive Director's review of the Corrective Action Program obligations, the permittee may be required to perform any or all of the following:

1. Conduct investigation(s);
2. Provide additional information;
3. Conduct additional investigation(s);
4. Investigate an additional unit(s);
5. Proceed to the next task in the Corrective Action Program; and/or
6. Submit an application for a new compliance plan to implement corrective measures.

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

C. Units Requiring Investigation

There are no known units requiring an RFI at this facility at the time of this permit renewal.

D. Variance from Investigation

The permittee may elect to certify that no hazardous waste or hazardous constituents listed in 40 CFR Part 261, Appendix VIII and/or 40 CFR Part 264, Appendix IX are or were present/managed in a unit listed in Section IX.C. in lieu of performing the investigation required in Sections IX.B. and E., provided that confirmation data is submitted for the current and past waste(s) managed in the respective unit. The permittee shall submit such information and certification(s) on a unit-by-unit basis in the time frame required in Section IX.E. for review and approval by the Executive Director of the TCEQ. If the permittee cannot demonstrate and certify that hazardous waste or hazardous constituents are not or were not present in a particular unit, the investigation required in Sections IX.B. and E. shall be performed for the unit and/or AOC.

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

Within sixty (60) days from the date of issuance of this permit the permittee shall submit a schedule for completion of the RFI(s)/APA for the SWMU(s) or AOC listed in Section IX.C. to the Executive Director for approval. Also, within sixty (60) days of approval of an RFA Report which recommends further investigation of a SWMU(s) or AOC in accordance with Section IX.A., the permittee shall submit a schedule for completion of the RFI(s)/APA to the Executive Director for approval. The permittee shall initiate the investigations in accordance with the approved schedule and guidance contained in the EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 and in accordance with state regulations referenced in Section IX.B. If the permittee elects to use an alternate investigation approach, Executive Director approval of the workplan will be required prior to initiation of investigation(s). The results of the RFI/APA must be appropriately documented in a report and submitted to the Executive Director for

approval within the time frame established in the approved schedule. The Report shall be considered complete when the full nature and extent of the contamination, the QA/QC procedures and the Data Quality Objectives are documented to the satisfaction of the Executive Director. The permittee shall propose or conduct Interim Corrective Measures (ICMs), as necessary, to protect human health and the environment.

F. Remedy Selection

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

1. Corrective Measures Implementation (CMI)/Remedial Action Plan (RAP). The permittee shall submit a RAP within the time frame required by the Executive Director, not to exceed 180 days from the date of approval of the APAR. The RAP shall address all of the items for Corrective Measures Implementation (CMI) Workplans contained in the U.S. EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994. If the RAP does not propose a permanent remedy, then a RAP shall be submitted as part of a new Compliance Plan application or as a modification/amendment application to an existing compliance plan. The RAP shall contain detailed final engineering design and 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 RAP, the permittee shall submit a RACR. Approval of the RACR places the SWMU in a status of conditional No Further Action, reflecting that the remedy is in place, controls must be maintained, and effectiveness must be monitored. To report the progress of the corrective measures, the permittee shall submit the Post-Response Action Care Report (PRACR) to the TCEQ in accordance with the schedule specified in the Compliance Plan to show the progress of actions taken.

If on the basis of the RFI and/or BLRA and/or CMS or APA, it is determined that there is a risk to human health and/or the environment, then the permittee shall submit for approval a CMI Work Plan(s) or propose a response action (TRRP) within 180 days of receipt of approval of the RFI and/or BLRA/CMS Report or APAR unless otherwise extended by the Executive Director. The CMI Workplan shall address all of the applicable items contained in the EPA publications referenced in Section IX.B. or other guidance acceptable to the Executive Director. Response actions, including TRRP Remedy Standard A or Risk Reduction Standard (RRS) No. 2, cannot be self-implemented as normally allowed

by TRRP or RRS because under HSWA corrective action requires the CMI workplan to be reviewed prior to approval and public participation (see also Provision IX.F.2). For TRRP response actions, the permittee shall submit a RAP in accordance with schedules and requirements of 30 TAC Chapter 350. The CMI Workplan or RAP shall contain detailed final proposed engineering design, monitoring plans and schedule to implement the selected remedy and assurances of financial responsibility for completing the corrective action. Upon completion of the response action, the permittee shall submit a CMI Report or RACR to the TCEQ for review and approval. The CMI Report shall address all the applicable items in the EPA publications EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 or other guidance acceptable to the Executive Director. The RACR shall address all the applicable items in Title 30 TAC Chapter 350 and applicable guidance.

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

To report the progress of the corrective measures, the permittee shall submit to the TCEQ CMI Progress Reports or RAERs (TRRP) on a semi-annual basis, or schedule approved by the Executive Director in the CMI Workplan or RAP. For waste and contaminated media approved to remain in place above background or health-based concentration levels after completion of the corrective action program, the permittee shall record an instrument in the county deed records for the facility to specifically identify the areas of contamination exceeding background or health-based values. The deed certification shall follow the requirements of 30 TAC Sections 335.560 and 335.569 or 30 TAC Section 350.111, where applicable. The permittee shall within ninety (90) days of approval for the final corrective action submit to the Executive Director for review and approval the required proof of deed notice.

2. Public Notice

a. The permittee shall conduct public notice when:

- (1) CMI Work Plan or RAP is submitted to the Executive Director, in accordance with Provision IX.F.1., which contains the proposed final corrective measure for SWMU(s) and/or AOC(s) from which a release has occurred, and with proposed institutional control (as applicable). This process occurs through the submittal of an application for a new Compliance Plan; or

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

b. No public notice is required when it is determined based on the results of the RFA required by Section IX.A., or the RFI or APAR required by Section IX.E., that no release occurred from a SWMU and/or AOC. The purpose of the public notice is to give the members of the public the opportunity to submit written comments on the proposed corrective measure(s) or proposed no further action determination.

G. Compliance Plan - Reserved

X. Air Emission Standards

A. General Conditions

1. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in Section 382.003 of the Texas Health and Safety Code Ann. or violate Section 382.085 of the Texas Health and Safety Code Ann. If the Executive Director of the TCEQ determines that such a condition or violation occurs, the permittee shall implement additional abatement measures as necessary to control or prevent the condition or violation.
2. The permittee shall include in the Biennial Report, required in Provision II.B.7., a statement that hazardous waste management units or associated ancillary equipment at this facility are not subject to any of the requirements in Provision X.B. and X.C., if these requirements are not applicable to any hazardous waste management units or associated ancillary equipment at this facility. If at any time any hazardous waste management units or associated ancillary equipment become subject to the requirements in Provision X.B. and X.C., the permittee must immediately comply with these requirements.

B. Process Vents

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

C. Equipment Leaks

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

D. Tanks, Surface Impoundments and Containers

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

XI. Compliance Plan - Reserved

TABLE III.D. INSPECTION SCHEDULE

<i>Facility Unit(s) and Basic Elements</i>	<i>Possible Error, Malfunction, or Deterioration</i>	<i>Frequency of Inspection</i>
GENERAL INSPECTION (ACTIVE FACILITY) – SECURITY DEVICES		
Perimeter Fence	<ul style="list-style-type: none"> Check for breaches and damage 	Monthly
Gates	<ul style="list-style-type: none"> Check for damage Check for proper operation Check for presence and function of locking mechanism 	Weekly
Perimeter Warning Signs	<ul style="list-style-type: none"> Check for presence and legibility of warning signs 	Monthly
Exterior Lighting	<ul style="list-style-type: none"> Check for proper function 	Weekly
GENERAL INSPECTION (POST-CLOSURE) – SECURITY DEVICES		
Perimeter Fence	<ul style="list-style-type: none"> Check for breaches and damage 	Semiannually
Gates	<ul style="list-style-type: none"> Check for damage Check for proper operation Check for presence and function of locking mechanism 	Semiannually
Perimeter Warning Signs	<ul style="list-style-type: none"> Check for presence and legibility of warning signs 	Semiannually
GENERAL INSPECTION (ACTIVE FACILITY) – ENVIRONMENTAL MONITORING SYSTEMS		
Groundwater Monitoring Wells	<ul style="list-style-type: none"> Check integrity of pad and subgrade Check protective casing <ul style="list-style-type: none"> Presence of label Presence/proper function of cap and lock Evidence of damage or instability Check well casing <ul style="list-style-type: none"> Presence of cap Evidence of damage or instability 	Semiannually
GENERAL INSPECTION (POST-CLOSURE) – ENVIRONMENTAL MONITORING SYSTEMS		
Groundwater Monitoring Wells	<ul style="list-style-type: none"> Check integrity of pad and subgrade Check protective casing <ul style="list-style-type: none"> Presence of label Presence/proper function of cap and lock Evidence of damage or instability Check well casing <ul style="list-style-type: none"> Presence of cap Evidence of damage or instability 	Semiannually

TABLE III.D. INSPECTION SCHEDULE

<i>Facility Unit(s) and Basic Elements</i>	<i>Possible Error, Malfunction, or Deterioration</i>	<i>Frequency of Inspection</i>
GENERAL INSPECTION (ACTIVE FACILITY) - SAFETY AND EMERGENCY EQUIPMENT		
Protective Clothing Designated for Emergency Use	<ul style="list-style-type: none"> • Check for adequate supply • Check accessibility • Check for deterioration/damage 	Monthly or after each use
Breathing Apparatus	<ul style="list-style-type: none"> • Check for adequate supply • Check accessibility • Check for deterioration/damage • Check for function 	Monthly or after each use
First Aid Kits	<ul style="list-style-type: none"> • Check for adequate supply • Check accessibility 	Monthly or after each use
Emergency Showers and Eye Wash Stations	<ul style="list-style-type: none"> • Check that units activate and shut off properly • Check water pressure • Check accessibility 	Monthly
Alarm Systems (Plant-wide and operational areas)	<ul style="list-style-type: none"> • Check accessibility • Activate alarm (power/battery failure/function) 	Monthly
Internal (2-way radio) and External (phone) Communications Systems	<ul style="list-style-type: none"> • Check accessibility • Check operation 	Monthly
Fire Extinguishers	<ul style="list-style-type: none"> • Check pressure gauge for full charge indication • Check inspection tag to ensure annual maintenance by qualified inspection service is up-to-date • Check seal to ensure that no one has used extinguisher • Check accessibility 	Monthly or after each use
Spill Control Supplies (shovels, brooms, booms, etc.) and Kits	<ul style="list-style-type: none"> • Check for adequate supply • Check accessibility • Check for deterioration/damage 	Monthly or after each use
Absorbent Supply	<ul style="list-style-type: none"> • Check for adequate supply 	Monthly or after each use
Other Safety and Emergency Equipment	<ul style="list-style-type: none"> • Check for adequate supply • Check accessibility • Check for deterioration/damage • Check proper operation 	Monthly

TABLE III.D. INSPECTION SCHEDULE

<i>Facility Unit(s) and Basic Elements</i>	<i>Possible Error, Malfunction, or Deterioration</i>	<i>Frequency of Inspection</i>
Receiving and Administrative Area		
Truck Scales	<ul style="list-style-type: none"> Check for evidence of spills, leaks, or other releases 	Daily when in use
Receiving and Demurrage Areas	<ul style="list-style-type: none"> Check for evidence of spills, leaks, or other releases Check for secure tarps, lids, or other closure devices Check for stormwater on tarps Check for transport truck leaks or other damage that could impede area operations (e.g. flat tires) 	Daily when in use
Staging and Decontamination Buildings (ACTIVE FACILITY)		
Bulk Staging Building and Container Storage Building	<ul style="list-style-type: none"> Check for evidence of spills leaks or other releases Check for condition of containers Check for secure container lids, tarps or other closure devices Check for integrity of floors and curbing Check adequacy of aisle space Check for proper container placement (pallets, stacking, etc.) Check for liquids or other material within containment 	Daily when in use
Decontamination Building	<ul style="list-style-type: none"> Check for evidence of spills, leaks, or other releases Check for liquids and other materials in sumps Check for secure container lids, tarps, or other closure devices Check for integrity of floors, curbing, sumps and grates 	Daily when in use
Leachate Accumulation Tanks and Wastewater Treatment Plant		
Tanks	<ul style="list-style-type: none"> Check for evidence of spills, leaks or other releases Check for corrosion or other visible deterioration of tank shells Check liquid level in each tank 	Daily
	<ul style="list-style-type: none"> Check condition of tank coating or paint 	Weekly

TABLE III.D. INSPECTION SCHEDULE

<i>Facility Unit(s) and Basic Elements</i>	<i>Possible Error, Malfunction, or Deterioration</i>	<i>Frequency of Inspection</i>
Pumps, Piping, Valves and Other Ancillary Components	<ul style="list-style-type: none"> • Check for evidence of spills, leaks or other releases • Check that loading/unloading lines are properly capped when not in use • Check that valves would allow direct gravity drainage of tanks are closed and secured • Check for corrosion or other visible deterioration of equipment and evidence of excessive wear 	Daily
	<ul style="list-style-type: none"> • Check condition of coatings or paints 	Weekly
Secondary Containment Structure	<ul style="list-style-type: none"> • Check for integrity of containment floor, walls, and sump • Check for liquids or other material within containment sump 	Daily
LANDFILL INSPECTION (ACTIVE FACILITY)		
Drainage System and Run-On and Run-Off Control Systems	<ul style="list-style-type: none"> • Check run-on diversion berm for erosion and deterioration • Check ditches for erosion siltation and debris • Check landfill cells for accumulation of storm water • Check intercell berms for integrity 	Weekly and after storm events
Cover Systems	<ul style="list-style-type: none"> • Check interim cover for erosion, deterioration, or dust dispersal • Check final cover for erosion, deterioration, and condition of vegetative cover 	Weekly and after storm events
Wind Dispersal Control	<ul style="list-style-type: none"> • Check for evidence of waste, reagent, or dust dispersal 	Weekly
Leachate Collection System	<ul style="list-style-type: none"> • Check for presence and level of liquid in risers • Check condition of risers and manholes • Check pump and level alarm function • Check integrity of temporary accumulation vessel(s) 	At least weekly and after storm events

TABLE III.D. INSPECTION SCHEDULE

<i>Facility Unit(s) and Basic Elements</i>	<i>Possible Error, Malfunction, or Deterioration</i>	<i>Frequency of Inspection</i>
Leak Detection System	<ul style="list-style-type: none"> • Check for presence and level of liquid in risers • Check condition of risers • Check pump function • Check integrity of temporary accumulation containers 	At least weekly
LANDFILL INSPECTION – (POST-CLOSURE)		
Cover Systems	<ul style="list-style-type: none"> • Check final cover for erosion, grade and continuity of cobblestones and natural vegetation; check for indications of ponding (pooled water, soft areas, etc.) 	Semiannually and after major storm events
Leachate Collection System	<ul style="list-style-type: none"> • Check for presence and level of liquid in risers • Check condition of risers and manholes • Check pump function 	At least monthly
Leak Detection System	<ul style="list-style-type: none"> • Check for presence and level of liquid in risers • Check conditions of risers 	In accordance with 40 CFR §264.303(c)(2) ¹
Benchmarks	<ul style="list-style-type: none"> • Check for damage 	Semiannually and during any general inspection
	<ul style="list-style-type: none"> • Check for validity 	Every 5 years

¹Initially, the leak detection system will be inspected at least monthly. If the liquid level in the riser stays below the portable, submersible pump operating level for two consecutive months, the inspection frequency will be reduced and inspections will be conducted at least quarterly. If the liquid level in the riser stays below the pump operating level for two consecutive quarters, the inspection frequency will be reduced to at least semiannually. If the pump operating level in a riser is exceeded during a quarterly or semiannual inspection, the inspection frequency of that riser will be increased to at least monthly until the liquid level again stays below the pump operating level for two consecutive months.

Table IV.B. - Wastes Managed in Permitted Units

No.	Waste	EPA Hazardous Waste Numbers ^{1,2,3}	TCEQ Waste Form Codes and Classification Codes ¹
1	Mixed Waste Generated off Site Suitable for Disposal (consists of mixed waste meeting disposal criteria) ²	D001 D002 D003 ⁴ D004 D005 D006 D007 D008 D009 D010 D011 D012 D013 D014 D015 D016 D017 D018 D019 D020 D021 D022 D023 D024 D025 D026 D027 D028 D029 D030 D031 D032 D033 D034 D035 D036 D037 D038 D039 D040 D041 D042 D043 F001 F002 F003 F004 F005 F006 F007 F008 F009 F010 F011 F012 F019 F024 F025 F028 F032 F034 F035 F037 F038 F039 K001 K002 K003 K004 K005 K006 K007 K008 K009 K010 K011 K013 K014 K015 K016 K017 K018 K019 K020 K021 K022 K023 K024 K025 K026 K027 K028 K029 K030 K031 K032 K033 K034 K035 K036 K037 K038 K039 K040 K041 K042 K043 K044 ⁴ K045 ⁴ K046 K047 ⁴ K048 K049 K050 K051 K052 K060 K061 K062 K069 K071 K073 K083 K084 K085 K086 K087 K088 K093 K094 K095 K096 K097 K098 K099 K100 K101 K102 K103 K104 K105 K106 K107 K108 K109 K110 K111 K112 K113 K114 K115 K116 K117 K118 K123 K124 K125 K126 K131 K132 K136 K141 K142 K143 K144 K145 K147 K148 K149 K150 K151 K156 K157 K158 K159 K161 K169 K170 K171 K172 K174 K178 P001 P002 P003 P004 P005 P006 P007 P008 P009 ⁴ P010 P011 P012 P013 P014 P015 P016 P017 P018 P020 P021 P022 P023 P024 P026 P027 P028 P029 P030 P031 P033 P034 P036 P037 P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049 P050 P051 P054 P056 P057 P058 P059 P060 P062 P063 P064 P065 P066 P067 P068 P069 P070 P071 P072 P073 P074 P075 P076 ⁵ P077 P078 ⁵ P081 ⁴ P082 P084 P085 P087 P088 P089 P092 P093 P094 P095 P096 P097 P098 P099 P101 P102 P103 P104 P105 P106 P108 P109 P110 P111 P112 ⁴ P113 P114 P115 P116 P118 P119 P120 P121 P122 P123 P127 P128 P185 P188 P189 P190 P191 P192 P194 P196 P197 P198 P199 P201 P202 P203 P204 P205 U001 U002 U003 U004 U005 U006 U007 U008 U009 U010 U011 U012 U014 U015 U016 U017 U018 U019 U020 U021 U022 U023 U024 U025 U026 U027 U028 U029 U030 U031 U032 U033 U034 U035 U036 U037 U038 U039 U041 U042 U043 U044 U045 U046 U047 U048 U049 U050 U051 U052 U053 U055 U056 U057 U058 U059 U060 U061 U062 U063 U064 U066 U067 U068 U069 U070 U071 U072 U073 U074 U075 U076 U077 U078 U079 U080 U081 U082 U083 U084 U085 U086 U087 U088 U089 U090 U091 U092 U093 U094 U095 U096 ⁴ U097 U098 U099 U101 U102 U103 U105 U106 U107 U108 U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125 U126 U127 U128 U129 U130 U131 U132 U133 ³ U134 U135 U136 U137 U138 U140 U141 U142 U143 U144 U145 U146 U147 U148 U149 U150 U151 U152 U153 U154 U155 U156 U157 U158 U159 U160 ⁴ U161U162 U163 U164 U165 U166 U167 U168 U169 U170 U171 U172 U173 U174 U175 U176 U177 U178 U179 U180 U181 U182 U183 U184 U185 U186 U187 U188 U189 U190 U191 U192 U193 U194 U196 U197 U200 U201 U202 U203 U204 U205 U206 U207 U208 U209 U210 U211 U213 U214 U215 U216 U217 U218 U219 U220 U221 U222 U223 U225 U226 U227 U228 U234 ⁴ U235 U236 U237 U238 U239 U240 U243 U244 U246 U247 U248 U249 U271 U277 U278 U279 U280 U328 U353 U359 U364 U367 U372 U373 U387 U389 U394 U395 U404 U409 U410 U411	Classification Codes: H, 1, 2, and 3 Form Codes: Lab Packs: (001, 002, 003, 004, 009); Inorganic Solids: (301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 319, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399); Organic Solids: (401, 402, 403, 404, 405, 406, 407, 409, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499);

Table IV.B. - Wastes Managed in Permitted Units

2	Site Generated Mixed Waste Suitable for Onsite Disposal (consists of mixed waste meeting disposal criteria) ⁶	<p>D001 D002 D0034D004 D005 D006 D007 D008 D009 D010 D011 D012 D013 D014 D015 D016 D017 D018 D019 D020 D021 D022 D023 D024 D025 D026 D027 D028 D029 D030 D031 D032 D033 D034 D035 D036 D037 D038 D039 D040 D041 D042 D043 F00 F002 F003 F004 F005 F006 F007 F008 F009 F010 F011 F012 F019 F024 F025 F028 F032 F034 F035 F037 F038 F039 K001 K002 K003 K004 K005 K006 K007 K008 K009 K010 K011 K013 K014 K015 K016 K017 K018 K019 K020 K021 K022 K023 K024 K025 K026 K027 K028 K029 K030 K031 K032 K033 K034 K035 K036 K037 K038 K039 K040 K041 K042 K043 K0444 K0454 K046 K0474 K048 K049 K050 K051 K052 K060 K061 K062 K069 K071 K073 K083 K084 K085 K086 K087 K088 K093 K094 K095 K096 K097 K098 K099 K100 K101 K102 K103 K104 K105 K106 K107 K108 K109 K110 K111 K112 K113 K114 K115 K116 K117 K118 K123 K124 K125 K126 K131 K132 K136 K141 K142 K143 K144 K145 K147 K148 K149 K150 K151 K156 K157 K158 K159 K161 K169 K170 K171 K172 K174 K178 P001 P002 P003 P004 P005 P006 P007 P008 P0094 P010P011 P012 P013 P014 P015 P016 P017 P018 P020 P021 P022 P023 P024 P026 P027 P028 P029 P030 P031 P033 P034 P036 P037 P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049 P050 P051 P054 P056 P057 P058 P059 P060 P062 P063 P064 P065 P066 P067 P068 P069 P070 P071 P072 P073 P074 P075 P0765 P077P0785 P0814 P082 P084 P085 P087 P088 P089 P092 P093 P094 P095 P096 P097 P098 P099 P101 P102 P103 P104 P105 P106 P108 P109 P110 P111 P1124 P113P114 P115 P116 P118 P119 P120 P121 P122 P123 P127 P128 P185 P188 P189 P190 P191 P192 P194 P196 P197 P198 P199 P201 P202 P203 P204 P205 U001 U002 U003 U004 U005 U006 U007 U008 U009 U010 U011 U012 U014 U015 U016 U017 U018 U019 U020 U021 U022 U023 U024 U025 U026 U027 U028 U029 U030 U031 U032 U033 U034 U035 U036 U037 U038 U039 U041 U042 U043 U044 U045 U046 U047 U048 U049 U050 U051 U052 U053 U055 U056 U057 U058 U059 U060 U061 U062 U063 U064 U066 U067 U068 U069 U070 U071 U072 U073 U074 U075 U076 U077 U078 U079 U080 U081 U082 U083 U084 U085 U086 U087 U088 U089 U090 U091 U092 U093 U094 U095 U0964 U097 U098 U099 U101 U102 U103 U105 U106 U107 U108 U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125 U126 U127 U128 U129 U130 U131 U132 U1333 U134 U135 U136 U137 U138 U140 U141 U142 U143 U144 U145 U146 U147 U148 U149 U150 U151 U152 U153 U154 U155 U156 U157 U158 U159 U1604 U161U162 U163 U164 U165 U166 U167 U168 U169 U170 U171 U172 U173 U174 U175 U176 U177 U178 U179 U180 U181 U182 U183 U184 U185 U186 U187 U188 U189 U190 U191 U192 U193 U194 U196 U197 U200 U201 U202 U203 U204 U205 U206 U207 U208 U209 U210 U211 U213 U214 U215 U216 U217 U218 U219 U220 U221 U222 U223 U225 U226 U227 U228 U2344 U235 U236 U237 U238 U239 U240 U243 U244 U246 U247 U248 U249 U271 U277 U278 U279 U280 U328 U353 U359 U364 U367 U372 U373 U387 U389 U394 U395 U404 U409U410 U411</p>	<p>Classification Codes: H, 1, 2, and 3 Form Codes: Lab Packs: (001, 002, 003, 004, 009);</p> <p>Inorganic Solids: (301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 319, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399);</p> <p>Organic Solids: (401, 402, 403, 404, 405, 406, 407, 409, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499);</p>
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Table IV.B. - Wastes Managed in Permitted Units

No.	Waste	EPA Hazardous Waste Numbers ^{1,2,3}	TCEQ Waste Form Codes and Classification Codes ¹
3	Site Generated Mixed Waste Not Suitable for Onsite Disposal ⁶	F001 F002 F003 F004 F005 F006 F007 F008 F009 F010 F011 F012 F019 F024 F025 F028 F032 F034 F035 F037 F038 F039 K001 K002 K003 K004 K005 K006 K007 K008 K009 K010 K011 K013 K014 K015 K016 K017 K018 K019 K020 K021 K022 K023 K024 K025 K026 K027 K028 K029 K030 K031 K032 K033 K034 K035 K036 K037 K038 K039 K040 K041 K042 K043 K044 ⁴ K045 ⁴ K046 K047 ⁴ K048 K049 K050 K051 K052 K060 K061 K062 K069 K071 K073 K083 K084 K085 K086 K087 K088 K093 K094 K095 K096 K097 K098 K099 K100 K101 K102 K103 K104 K105 K106 K107 K108 K109 K110 K111 K112 K113 K114 K115 K116 K117 K118 K123 K124 K125 K126 K131 K132 K136 K141 K142 K143 K144 K145 K147 K148 K149 K150 K151 K156 K157 K158 K159 K161 K169 K170 K171 K172 K174 K178 P001 P002 P003 P004 P005 P006 P007 P008 P009 ⁴ P010 P011 P012 P013 P014 P015 P016 P017 P018 P020 P021 P022 P023 P024 P026 P027 P028 P029 P030 P031 P033 P034 P036 P037 P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049 P050 P051 P054 P056 P057 P058 P059 P060 P062 P063 P064 P065 P066 P067 P068 P069 P070 P071 P072 P073 P074 P075 P076 ⁵ P077 P078 ⁵ P081 ⁴ P082 P084 P085 P087 P088 P089 P092 P093 P094 P095 P096 P097 P098 P099 P101 P102 P103 P104 P105 P106 P108 P109 P110 P111 P112 ⁴ P113 P114 P115 P116 P118 P119 P120 P121 P122 P123 P127 P128 P185 P188 P189 P190 P191 P192 P194 P196 P197 P198 P199 P201 P202 P203 P204 P205 U001 U002 U003 U004 U005 U006 U007 U008 U009 U010 U011 U012 U014 U015 U016 U017 U018 U019 U020 U021 U022 U023 U024 U025 U026 U027 U028 U029 U030 U031 U032 U033 U034 U035 U036 U037 U038 U039 U041 U042 U043 U044 U045 U046 U047 U048 U049 U050 U051 U052 U053 U055 U056 U057 U058 U059 U060 U061 U062 U063 U064 U066 U067 U068 U069 U070 U071 U072 U073 U074 U075 U076 U077 U078 U079 U080 U081 U082 U083 U084 U085 U086 U087 U088 U089 U090 U091 U092 U093 U094 U095 U096 ⁴ U097 U098 U099 U101 U102 U103 U105 U106 U107 U108 U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125 U126 U127 U128 U129 U130 U131 U132 U133 ³ U134 U135 U136 U137 U138 U140 U141 U142 U143 U144 U145 U146 U147 U148 U149 U150 U151 U152 U153 U154 U155 U156 U157 U158 U159 U160 ⁴ U161 U162 U163 U164 U165 U166 U167 U168 U169 U170 U171 U172 U173 U174 U175 U176 U177 U178 U179 U180 U181 U182 U183 U184 U185 U186 U187 U188 U189 U190 U191 U192 U193 U194 U196 U197 U200 U201 U202 U203 U204 U205 U206 U207 U208 U209 U210 U211 U213 U214 U215 U216 U217 U218 U219 U220 U221 U222 U223 U225 U226 U227 U228 U234 ⁴ U235 U236 U237 U238 U239 U240 U243 U244 U246 U247 U248 U249 U271 U277 U278 U279 U280 U328 U353 U359 U364 U367 U372 U373 U387 U389 U394 U395 U404 U409 U410 U411	Classification Codes: H, 1 and 2 Inorganic Liquids: (101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 113, 114, 116, 119) Organic Liquids: (201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 219, 296, 297) Inorganic Sludges: (519,598) Organic Sludges: (608, 609, 698)

Table IV.B. - Wastes Managed in Permitted Units

No.	Waste	EPA Hazardous Waste Numbers ^{1,2,3}	TCEQ Waste Form Codes and Classification Codes ¹
4	Mixed Waste Generated Off-site Suitable for Macro-encapsulation/ Disposal (consists of mixed waste that meets disposal criteria upon macro-encapsulation)	D001 D002 D0034 D004 D005 D006 D007 D008 D009 D010 Dou D012 D013 D014 Do15 D016 D017 D018 D019 D020 D021 D022 D023 D024 D025 D026 D027 D028 D029 D030 D031 D032 D033 D034 D035 D036 D037 D038 D039 D040 D041 D042 D043 F001 F002 F003 F004 F005 F006 F007 F008 F009 F010 F011 F012 F019 F024 F025 F028 F032 F034 F035 F037 F038 F039 K001 K002 K003 K004 K005 K006 K007 K008 K009 K010 K011 K013 K014 K015 K016 K017 K018 K019 K020 K021 K022 K023 K024 K025 K026 K027 K028 K029 K030 K031 K032 K033 K034 K035 K036 K037 K038 K039 K040 K041 K042 K043 K04 ⁴ K045 ⁴ K046 K047 ⁴ K048 K049 K050 K051 K052 K060 K061 K062 K069 K071 K073 K083 K084 K085 K086 K087 K088 K093 K094 K095 K096 K097 K098 K099 K100 K101 K102 K103 K104 K105 K106 K107 K108 K109 K110 K111 K112 K113 K114 K115 K116 K117 K118 K123 K124 K125 K126 K131 K132 K136 K141 K142 K143 K144 K145 K147 K148 K149 K150 K151 K156 K157 K158 K159 K161 K169 K170 K171 K172 K174 K178 P001 P002 P003 P004 P005 P006 P007 P008 P009 ⁴ P100 P111 P012 P013 P014 P015 P016 P017 P018 P020 P021 P022 P023 P024 P026 P027 P028 P029 P030 P031 P033 P034 P036 P037 P038 P039 P040 P041 P042 P043 P044 P045 P046 P047 P048 P049 P050 P051 P054 P056 P057 P058 P059 P060 P062 P063 P064 P065 P066 P067 P068 P069 P070 P071 P072 P073 P074 P075 P076 ⁵ P077 P0785 P081 ⁴ P082 P084 P085 P087 P088 P089 P092 P093 P094 P095 P096 P097 P098 P099 P101 P102 P103 P104 P105 P106 P108 P109 P010 P111 P112 ⁴ P113 P114 P115 P116 P118 P119 P120 P121 P122 P123 P127 P128 P185 P188 P189 P190 P191 P192 P194 P196 P197 P198 P199 P201 P202 P203 P204 P205 U001 U002 U003 U004 U005 U006 U007 U008 U009 U010 U011 U012 U014 U015 U016 U017 U018 U019 U020 U021 U022 U023 U024 U025 U026 U027 U028 U029 U030 U031 Uo32 Uo33 Uo34 Uo35 U036 U037 U038 U039 U041 U042 U043 U044 U045 U046 U047 U048 U049 U050 U051 U052 U053 U054 U056 U057 U058 U059 U06o U061 U062 U063 U064 U066 U067 U068 U069 U070 U071 U072 U073 U074 U075 U076 U077 U078 U079 U08o U081 U082 U083 U084 U085 U086 U087 U088 U089 U090 U091 U092 U093 U094 U095 U0964 U097U098 U099 U101 U102 U103 U105 U106 U107 U108 U109 U110 U111 U112 U113 U114 U115 U116 U117 U118 U119 U120 U121 U122 U123 U124 U125 U126 U127 U128 U129 U130 U131 U132 U1334 U134 U135 U136 U137 U138 U140 U141 U142 U143 U144 U145 U146 U147 U148 U149 U150 U151 U152 U153 U154 U155 U156 U157 U158 U159 U1604 U161 U162 U163 U164 U165 U166 U167 U168 U169 U170 U171 172 U173 U174 U175 U176 U177 U178 U179 U180 U181 U182 U183 U184 U185 U186 U187U188 U189 U190 U191 U192 U193 U194 U196 U197 U200 U201 U202 U203 U204 U205 U206 U207 U208 U209 U210 U211 U213 U214 U215 U216 U217 U218 U219 U220 U221 U222 U223 U225 U226 U227 U228 U2344 U235 U236 U237 U238 U239 U240 U243 U244 U246 U247 U248 U249 U271 U277 U278 U279 U280 U328 U353 U359 U364 U367 U372 U373 U387 U389 U394 U395 U404 U409 U410 U411	Classification Codes: H Form Codes: Lab Packs: (001, 002, 003, 004, 009) Inorganic Solids: (301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313,314,315,316, 319,388) Organic Solids: (401,402, 403, 404, 405, 406, 407, 409, 488, 489, 490, 491, 492, 493, 494, 495, 496,497,498,499)

Table IV.B. - Wastes Managed in Permitted Units

No.	Waste	EPA Hazardous Waste Numbers ^{1,2,3}	TCEQ Waste Form Codes and Classification Codes ¹
5	Mixed Waste Generated Off-site Suitable for Macro-encapsulation/ Disposal (consists of mixed waste that meets disposal criteria upon macro-encapsulation)	See EPA waste code list for Waste No. 4 above	See Classification Codes and Form Codes listed for Waste No. 4 above.

- 1 Hazardous waste codes, TCEQ Waste Form Codes and TCEQ Classification Codes identified in this table are derived from the codes in existence on January 20, 2005.
- 2 Mixed wastes from off-site sources may carry any of the codes listed. Excluding waste that will be treated by WCS via macroencapsulation, the waste will have been treated elsewhere to achieve the applicable treatment standard(s) (or It may meet the standard without treatment) prior to receipt at WCS.
- 3 Wastes that exhibit the characteristic of an ignitable, reactive, and/or corrosive waste are acceptable only if they have been treated to remove such characteristic(s). Excluding waste that will be treated by WCS via macroencapsulation, all applicable underlying hazardous constituents must be treated in accordance with 40 CFR Part 268.40 or meet alternate treatment standards as allowed under 40 CFR Part 268 prior to receipt.
- 4 No wastes that are explosive as defined in 40 CFR §261.23(a)(6), (7), or (8) are acceptable. Wastes bearing the noted waste codes are acceptable if they are not explosive as defined in the cited regulations.
- 5 Waste in a gaseous form will not be accepted unless it is packaged at an absolute pressure that does not exceed 1.5 atm at 20 degrees C°
- 6 On-site generated wastes may carry any of the codes listed, based on the codes associated with the off-site waste from which the on-site waste was generated.

TABLE IV.C. SAMPLING AND ANALYTICAL METHODS

Waste No. ^{1,4,5}	Sampling Location	Sampling Method ²	Frequency	Parameter	Test Method ²	Desired Accuracy Level ³
1,2 LLRW (not a solid waste)	Generator's Site (Pre-Shipment Sample)	Scoop, trier, shovel	Once prior to waste stream approval and each time a profile is recertified	40 CFR Part 261 (D001-D043)	per SW-846	Per SW-846
				Free Liquids - Paint Filter Test	SW-846 Method 9095A	Results match profile (must pass paint filter)
				pH screen	ASTM D 4980 or equivalent	Std +1.0 Standard unit (S.U.)
				Water Reactivity	ASTM D 5058C or equivalent	Results match profile
				Flammability Potential	ASTM D 4982 or equivalent	Duplicate samples must have same reaction
				Cyanide Screen	ASTM D 5059 or equivalent	Duplicate samples must have same reaction
				Sulfides Screen	ASTM D 4978 or equivalent	Duplicate samples must have same reaction
				Density	ASTM D 5057 or equivalent	Duplicate samples must have same reaction
				Soil Classification (soil and soil like wastes only)	ASM D2488/AASHTO M145 or equivalent	Soils cannot be classified as Types A-6 or A-7
1,2 LLMW (hazardous)	Generator's Site (pre-shipment sample)	Scoop, trier, shovel	Once prior to waste stream approval and each time a profile is recertified	Applicable 40 CFR Part 268 Requirements	per SW-846	Per SW-846
				Free Liquids - Paint Filter Test	SW-846 Method 9095A	Results match profile (must pass paint filter)
				pH screen	ASTM D 4980 or equivalent	Std +1.0 Standard unit (S.U.)
				Water Reactivity	ASTM D 5058C or equivalent	Results match profile
				Flammability Potential	ASTM D 4982 or equivalent	Duplicate samples must have same reaction
				Cyanide Screen	ASTM D 5059 or equivalent	Duplicate samples must have same reaction
				Sulfides Screen	ASTM D 4978 or equivalent	Duplicate samples must have same reaction

TABLE IV.C. SAMPLING AND ANALYTICAL METHODS

Waste No. ^{1,4,5}	Sampling Location	Sampling Method ²	Frequency	Parameter	Test Method ²	Desired Accuracy Level ³
				Density	ASTM D 5057 or equivalent	Duplicate samples must have same reaction
				Soil Classification (soil and soil like wastes only)	ASM D2488/AASHTO M145 or equivalent	Soils cannot be classified as Types A-6 or A-7
1,2 (LLRW and LLMW)	Waste Staging Building (Shipment Verification Sample)	Scoop, Trier, Shovel	Grab Sample of first 10 containers (minimum) and 10% of containers thereafter for all wastes that are subject to intrusive verification sampling and analysis (see WAP Table 2.1)	Free Liquids – Paint Filter Test	SW-846 Method 9095A	Results match profile (must pass paint filter)
				pH screen	ASTM D 4980 or equivalent	Std +1.0 Standard unit (S.U.)
				Water Reactivity	ASTM D 5058C or equivalent	Results match profile
				Flammability Potential	ASTM D 4982 or equivalent	Duplicate samples must have same reaction
				Cyanide Screen	ASTM D 5059 or equivalent	Duplicate samples must have same reaction
				Sulfides Screen	ASTM D 4978 or equivalent	Duplicate samples must have same reaction
				Density	ASTM D 5057 or equivalent	Duplicate samples must have same reaction
				Soil Classification (soil and soil like wastes only)	ASM D2488/AASHTO M145 or equivalent	Soils cannot be classified as Types A-6 or A-7
1,2 (LLRW and LLMW)	Waste Staging Building (Shipment Verification Sample)	Scoop, Trier, Shovel	For wastes that are subject to intrusive verification, 10% of the containers of each waste in each containerized	Free Liquids – Paint Filter Test	SW-846 Method 9095A	Results match profile (must pass paint filter)
				pH screen	ASTM D 4980 or equivalent	Std +1.0 Standard unit (S.U.)
				Water Reactivity	ASTM D 5058C or equivalent	Results match profile
				Flammability Potential	ASTM D 4982 or equivalent	Duplicate samples must have same reaction

TABLE IV.C. SAMPLING AND ANALYTICAL METHODS

Waste No. ^{1,4,5}	Sampling Location	Sampling Method ²	Frequency	Parameter	Test Method ²	Desired Accuracy Level ³
			waste shipment (see WAP Table 2.1)	Cyanide Screen	ASTM D 5059 or equivalent	Duplicate samples must have same reaction
				Sulfides Screen	ASTM D 4978 or equivalent	Duplicate samples must have same reaction
				Density	ASTM D 5057 or equivalent	Duplicate samples must have same reaction
				Soil Classification (soil and soil like wastes only)	ASM D2488/AASHTO M145 or equivalent	Soils cannot be classified as Types A-6 or A-7

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.

⁴ Waste No. 3: Is site generated mixed waste not suitable for onsite disposal is managed per the requirements of HW-50358 and/or shipped offsite for proper treatment and disposal

⁵ Waste Nos. 4 and 5: by definition are wastes suitable for microencapsulation and meet the definition of debris and are not amenable to sampling.

TABLE V.B CONTAINER STORAGE AREAS

Permit Unit No.	Container Storage Area	N.O.R. Unit #	Rated Capacity ³	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable, ¹ Reactive, ¹ or Incompatible ² Waste (state all that apply)
001	Waste Staging Building	03	22,140 cubic feet	60 feet x 154 feet (plus sampling room of 23 x 25 feet)	No liquid based on WAC & enclosed building ³	Incompatible: Yes (Incompatible wastes are segregated)

¹Containers managing ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.

²Incompatible 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.

³Container Storage Areas need to include in capacity calculations any nonhazardous and universal wastes managed in the unit in addition to hazardous wastes

TABLE V.C TANKS AND TANK SYSTEMS

Permit Unit No.	Tank	N.O.R. Unit #	Storage and/or Processing	Waste Nos ¹	Rated Capacity	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit Will Manage Ignitable, Reactive, or Incompatible Waste (State all that apply)
004	FWF Contact Water Tank 1	004	Storage and Processing	3	500,000 gallons	60'D X 24'H	785,450 gallons	No
005	FWF Contact Water Tank 2	004	Processing and Storage	3	500,000 gallons	60'D X 24'H	785,450 gallons	No
006	FWF Contact Water Tank 3	004	Processing and Storage	3	500,000 gallons	60'D X 24'H	785,450 gallons	No
007	FWF Contact Water Tank 4 (Proposed)	006	Processing and Storage	3	500,000 gallons	60'D X 24'H	692,580 gallons	No

TABLE V.C TANKS AND TANK SYSTEMS

008	FWF Contact Water Tank 5 (Proposed)	006	Processing and Storage	3	500,000 gallons	60'D X 24'H	692,580 gallons	No
009	FWF WWTP Reaction Tank 1	005	Storage and Processing	3	1,000 gallons	5'D X 7.5'H	7,135 gallons	No
010	FWF WWTP Reaction Tank 2	005	Storage and Processing	3	1,000 gallons	5'D X 7.5'H	7,135 gallons	No
011	FWF WWTP Concentration Tank	005	Storage and Processing	3	1,700 gallons	6'D X 8'H	7,135	No
012	FWF WWTP Cleaning Tank 1	005	Storage and Processing	3	500 gallons	4'W X 6'L X 3'H	7,135	No
013	FWF WWTP Cleaning Tank 2	005	Storage and Processing	3	500 gallons	4'W X 6'L X 3'H	7,135	No

TABLE V.C TANKS AND TANK SYSTEMS

014	FWF WWTP Neutralization Tank	005	Storage and Processing	3	1,500 gallons	6'D X 7.17'H	7,135	No
015	FWF WWTP Discharge Collection Tank	005	Storage and Processing	3	500 gallons	4'D X 5.52'H	7,135	NO

¹ from Table IV.B, first column

TABLE V.G.1. LANDFILLS

<i>Per mit Unit No.</i>	<i>Landfill</i>	<i>N.O.R. Unit #</i>	<i>Waste Nos¹</i>	<i>Rated Capacity</i>	<i>Dimensions²</i>	<i>Distance from lowest liner to ground water</i>	<i>Action Leakage Rate (if required)</i>	<i>Unit will manage Ignitable, Reactive, Incompatible, or F020, F021, F022, F023, F026, and F027 Waste (state all that apply)</i>
003	Federal Waste Facility (FWF) Landfill	001	1 thru 4	4,600,000 cy	Canister Disposal Area (lined area): 48 acres Average Dimensions: 970 ft (north/south), 1,950 ft (east/west Depth from Finished Grade to Bottom of Waste 105-115 ft Max. Thickness of Waste: 77 ft	59 feet	3,310 gallons per acre per day 9gpad) (landfill floor) And 3,260 gallons per acre per day (gpad) (landfill sidewalls) ³	Incompatible wastes are properly segregated

¹from Table IV.B, first column.

²Dimensions should be provided as average length, width and depth, also include the surface acreage for the unit.

³ALR is calculated as documented in Appendix F.2 of Attachment V.G.

TABLE V.G.3. LANDFILL LINER SYSTEM

[illegible]

TABLE V.G.4 LANDFILL LEACHATE COLLECTION SYSTEM

Landfill	Primary Leachate Collection System					Secondary Leachate Collection System				
	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material
Federal Waste Facility (FWF) Landfill	Floor: geocomposite geonet (min 8 oz) Geotextile filter Sidewalls: Geocomposite Drainage media Geonet and 6oz geotextile on both sides	Lateral Pipes: 6" HDPE (DR 9) Collector Pipes: 8" HDPE (DR 9) Sump Collection Pipe: 24" HDPE (DR 9) Side Wall Riser: 20" HDPE (DR 9)	Geotextile Floor: Min 8oz Sidewall: Min 6oz	Geocomposite	2 Layers 60 mil HDPE Gravel 16oz geotextile	Floor: Geonet Sidewall Geocomposite 6 oz geotextile	Collector Pipes: Min 6" to 8" HDPE (DR 9) Sidewall Riser Pipes: 8" HDPE (DR 9)	---	Geocomposite/geonet	60 mil HDPE with gravel and 16oz geotextile and geonet

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-1B	FWF-1C	FWF-2B	FWF-2C	FWF-2D	FWF-3B
Hydrogeologic Unit Monitored	125	225	125	225	225	125
Type (e.g., point of compliance, background, observation, etc.)	Observ	POC	Observ	POC	POC	Observ
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3474.80	3474.68	Proposed	Proposed	Proposed	Proposed
Grade or Surface Elevation (Ft, MLGL or MSL)	3471.6	3471.5	Proposed	Proposed	Proposed	Proposed
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	104.7	255.82	Proposed	Proposed	Proposed	Proposed
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	107.9	259.0	Proposed	Proposed	Proposed	Proposed
Screen Interval From (Ft, BGS) To (Ft, BGS)	93.9 to 103.9	245.2 to 255.2	Proposed	Proposed	Proposed	Proposed
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	97.1 to 107.1	248.38 to 258.38	Proposed	Proposed	Proposed	Proposed
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	Proposed	Proposed	Proposed	Proposed
Northing (ft)	6874426.4962	6874421.0693	Proposed	Proposed	Proposed	Proposed
Easting (ft)	562063.4720	562075.3983	Proposed	Proposed	Proposed	Proposed

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-3C	FWF-3D	FWF-4B	FWF-4C	FWF-4D	FWF-5B
Hydrogeologic Unit Monitored	225	225	125	225	225	125
Type (e.g., point of compliance, background, observation, etc.)	POC	POC	Observ	POC	POC	Observ
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Grade or Surface Elevation (Ft, MLGL or MSL)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Screen Interval From (Ft, BGS) To (Ft, BGS)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Facility Coordinates (e.g., lat./long. or company coordinates)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Northing (ft)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Easting (ft)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-5C	FWF-5D	FWF-6B	FWF-6C	FWF-7B	FWF-7C
Hydrogeologic Unit Monitored	225	225	125	225	125	225
Type (e.g., point of compliance, background, observation, etc.)	POC	POC	Observ	POC	Observ	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	Proposed	Proposed	3473.15	3473.12	Proposed	Proposed
Grade or Surface Elevation (Ft, MLGL or MSL)	Proposed	Proposed	3470.3	3470.2	Proposed	Proposed
Well Depth (Ft, Below Grade Surface [BGS])	Proposed	Proposed	120.25	251.08	Proposed	Proposed
Well Depth (Ft, Below Top of Casing [BTOC])	Proposed	Proposed	123.1	254.0	Proposed	Proposed
Screen Interval From (Ft, BGS) To (Ft, BGS)	Proposed	Proposed	104.5 to 119.5	235.4 to 250.4	Proposed	Proposed
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	Proposed	Proposed	107.35 to 122.35	238.32 to 253.32	Proposed	Proposed
Facility Coordinates (e.g., lat./long. or company coordinates)	Proposed	Proposed	State Plane	State Plane	Proposed	Proposed
Northing (ft)	Proposed	Proposed	3874108.1808	6874100.5948	Proposed	Proposed
Easting (ft)	Proposed	Proposed	562754.5267	562773.1359	Proposed	Proposed

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-7D	FWF-8B	FWF-8C	FWF-8D	FWF-9B	FWF-9C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type (e.g., point of compliance, background, observation, etc.)	POC	Observ	POC	POC	Observ	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	Proposed	Proposed	Proposed	Proposed	3472.48	3472.19
Grade or Surface Elevation (Ft, MLGL or MSL)	Proposed	Proposed	Proposed	Proposed	3469.3	3468.9
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	Proposed	Proposed	Proposed	Proposed	115.52	239.81
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	Proposed	Proposed	Proposed	Proposed	118.7	243.1
Screen Interval: From (Ft, BGS) To (Ft, BGS)	Proposed	Proposed	Proposed	Proposed	100 to 115	224.2 to 239.2
Screen Interval: From (Ft, BTOC) To (Ft, BTOC)	Proposed	Proposed	Proposed	Proposed	103.18 to 118.18	227.49 to 242.49
Facility Coordinates (e.g., lat./long. or company coordinates)	Proposed	Proposed	Proposed	Proposed	State Plane	State Plane
Northing (ft)	Proposed	Proposed	Proposed	Proposed	6873916.564	6873908.6212
Easting (ft)	Proposed	Proposed	Proposed	Proposed	563176.3943	563191.8078

Permit No. 50397

Permittee: Waste Control Specialists LLC

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-9D	FWF-10B	FWF-10C	FWF-10D	FWF-11B	FWF-11C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type (e.g., point of compliance, background, observation, etc.)	POC	Observ	POC	POC	Observ	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3471.96	3472.83	3472.56	3473.31	3472.06	3471.98
Grade or Surface Elevation (Ft, MLGL or MSL)	3468.8	3468.7	3468.9	3468.9	3468.9	3468.9
Well Depth (Ft, Below Grade Surface [BGS])	253.74	114.47	232.04	243.59	122.14	242.22
Well Depth (Ft, Below Top of Casing [BTOC])	256.9	118.6	235.7	248.0	125.3	245.3
Screen Interval From (Ft, BGS) To (Ft, BGS)	238.2 to 253.2	98.8 to 113.8	216.34 to 231.34	227.57 to 242.57	106.6 to 121.6	226.6 to 241.6
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	241.36 to 256.36	102.93 to 117.93	220.0 to 235.0	232.0 to 247.0	109.76 to 124.76	229.68 to 244.68
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873899.8854	6873845.1471	6873838.6796	6873835.1300	6873789.3491	6873781.0514
Easting (ft)	563210.6151	563337.2007	563347.0986	563357.3367	563451.9747	563471.2334

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-11D	FWF-12B	FWF-12C	FWF-12D	FWF-13B	FWF-13C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type (e.g., point of compliance, background, observation, etc.)	POC	Observ	POC	POC	Observ	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3472.37	3472.39	3472.34	3472.49	3472.17	3472.53
Grade or Surface Elevation (Ft, MLGL or MSL)	3468.7	3469.0	3468.9	3469.0	3469.0	3469.1
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	253.33	130.41	257.86	273.31	129.13	254.17
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	257.0	133.8	261.3	276.8	132.3	257.6
Screen Interval From (Ft, BGS) To (Ft, BGS)	237.8 to 252.8	114.7 to 129.7	242.3 to 257.3	257.7 to 272.7	113.6 to 128.6	238.6 to 253.6
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	241.47 to 256.47	118.09 to 133.09	245.74 to 260.74	261.19 to 276.19	116.77 to 131.77	242.03 to 257.03
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	3873773.1459	6873725.9743	6873719.3197	6873709.9968	6873662.4105	6873654.1728
Easting (ft)	563489.9446	563589.1720	563606.6668	563624.9147	563728.5828	563747.1123

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-13D	FWF-14B	FWF-14C	FWF-15B	FWF-15C	FWF-15D
Hydrogeologic Unit Monitored	225	125	225	125	225	225
Type (e.g., point of compliance, background, observation, etc.)	POC	Observ	POC	Observ	POC	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3472.77	3473.52	3472.95	3472.68	3472.88	3473.14
Grade or Surface Elevation (Ft, MLGL or MSL)	3469.0	3469.2	3469.2	3469.5	3469.6	3469.8
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	269.43	128.58	253.05	122.12	249.62	261.26
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	273.2	132.9	256.8	125.3	252.9	264.6
Screen Interval From (Ft, BGS) To (Ft, BGS)	254.1 to 269.1	113 to 128	237.25 to 252.25	106.5 to 121.5	234.0 to 249.0	245.6 to 260.6
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	257.6 to 272.6	117.3 to 132.2	241.0 to 256.0	109.68 to 124.68	237.28 to 252.28	248.94 to 263.94
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873645.5630	6873592.1622	6873583.4828	6873641.6440	6873659.7358	6873675.4130
Easting (ft)	563765.7717	563882.8324	563901.5211	563972.0967	563980.5736	563988.0318

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-16B	FWF-16C	FWF-16D	FWF-17B	FWF-17C	FWF-17D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type (e.g., point of compliance, background, observation, etc.)	Observ	POC	POC	Observ	POC	POC
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3478.31	3478.43	3478.53	3477.54	3477.93	3478.23
Grade or Surface Elevation (Ft, MLGL or MSL)	3473.1	3473.3	3473.3	3477.8	3478.1	3478.5
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	130.49	252.47	265.27	143.74	260.33	278.73
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	135.7	257.6	270.5	144.0	260.5	279.0
Screen Interval From (Ft, BGS) To (Ft, BGS)	115.2 to 130.2	236.6 to 251.6	250.2 to 265.2	128.6 to 143.6	245.5 to 260.5	263.6 to 278.6
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	120.4 to 135.4	241.7 to 256.7	255.4 to 270.4	128.3 to 143.3	245.3 to 260.3	263.3 to 278.3
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873968.0899	6873982.1988	6873993.1844	6874375.8800	6874389.5101	6874403.3939
Easting (ft)	564124.4657	564130.7703	564135.781	564311.8932	564318.3038	564324.0419

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-18B	FWF-18C	FWF-18D	FWF-21B	FWF-21C	FWF-21D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type (e.g., point of compliance, background, observation, etc.)	Observ	POC	POC	Observ	POC	POC
Up or Down Gradient	UG	UG	UG	UG	UG	UG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3483.60	3483.71	3483.87	3485.72	3485.98	3485.61
Grade or Surface Elevation (Ft, MLGL or MSL)	3480.5	3480.5	3480.7	3484.9	3485.1	3485.2
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	143.8	267.29	279.83	144.98	267.42	290.99
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	146.9	270.5	283.0	145.8	268.3	291.4
Screen Interval From (Ft, BGS) To (Ft, BGS)	128.1 to 143.1	251.7 to 266.7	264.2 to 279.2	130.3 to 145.3	252.4 to 267.4	275.8 to 290.8
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	131.2 to 146.2	254.91 to 269.91	267.37 to 282.37	130.5 to 145.5	252.8 to 267.8	275.9 to 290.9
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6874687.3158	6874690.9928	6874698.5186	6875308.416	6875613.2443	6875318.3481
Easting (ft)	564496.8229	564486.1791	564468.4068	563818.8526	563806.7260	563796.0980

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹					
Well Number(s):	FWF-22C	FWF-22D	FWF-23B	FWF-23C	FWF-23D
Hydrogeologic Unit Monitored	225	225	125	225	225
Type (e.g., point of compliance, background, observation, etc.)	POC	POC	Observ	POC	POC
Up or Down Gradient	UG	UG	UG	UG	UG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3486.96	3487.07	3486.61	3486.49	3486.39
Grade or Surface Elevation (Ft, MLGL or MSL)	3486.9	3486.8	3486.4	3486.3	3486.3
Well Depth (Ft, Below Grade Surface [BGS])	269.14	285.43	144.09	266.71	275.61
Well Depth (Ft, Below Top of Casing [BTOC])	269.2	285.7	144.3	266.9	275.7
Screen Interval From (Ft, BGS) To (Ft, BGS)	253.5 to 268.5	269.8 to 284.8	128.5 to 143.5	251.6 to 266.6	259.91 to 274.91
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	254.1 to 269.1	270.07 to 285.07	128.7 to 143.7	251.8 to 266.8	260.00 to 275.00
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6875547.6513	6875558.8005	6875592.3248	6875598.8774	6875605.2059
Easting (ft)	563420.8339	563396.9949	563159.2874	563146.0768	563132.7551

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-25B	FWF-25C	FWF-25D	FWF26B	FWF-26C	FWF-26D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type (e.g., point of compliance, background, observation, etc.)	Observ	POC	POC	Observ	POC	POC
Up or Down Gradient	UG	UG	UG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3486.29	3486.10	3485.58	3482.41	3482.31	3482.26
Grade or Surface Elevation (Ft, MLGL or MSL)	3482.9	3482.7	3482.5	3479.3	3479.3	3479.2
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	142.51	257.6	272.42	143.59	263.29	272.04
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	145.9	261.0	275.5	146.7	266.3	275.1
Screen Interval From (Ft, BGS) To (Ft, BGS)	126.9 to 141.9	242.0 to 257.0	256.6 to 271.6	128.0 to 143.0	252.7 to 262.7	261.5 to 271.5
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	130.2 to 145.2	245.3 to 260.3	259.8 to 274.8	131.1 to 146.1	255.7 to 265.7	264.6 to 274.6
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6875649.4520	6875632.5970	6875614.4840	6875269.6558	6875257.3582	6875245.6837
Easting (ft)	562539.4730	562531.1820	562523.1650	562368.1321	562362.8945	562358.2246
Well Number(s):	FWF-27B	FWF-27C	FWF-28B	FWF-28C	FWF-28D	FWF-119B

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Hydrogeologic Unit Monitored	125	225	125	225	225	125
Type (e.g., point of compliance, background, observation, etc.)	Observ	POC	Observ	POC	POC	Observ
Up or Down Gradient	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (Ft, MLGL or MSL)	3479.09	3478.99	Proposed	Proposed	Proposed	3481.03
Grade or Surface Elevation (Ft, MLGL or MSL)	3474.6	3474.2	Proposed	Proposed	Proposed	3481.1
Well Depth (Ft, Below Grade Surface [BGS])	121.11	266.11	Proposed	Proposed	Proposed	142.33
Well Depth (Ft, Below Top of Casing [BTOC])	125.6	270.9	Proposed	Proposed	Proposed	142.4
Screen Interval From (Ft, BGS) To (Ft, BGS)	104.4 to 119.4	249.5 to 264.5	Proposed	Proposed	Proposed	127 to 142
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	108.9 to 123.9	254.3 to 269.3	Proposed	Proposed	Proposed	126.9 to 141.9
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	Proposed	Proposed	Proposed	State Plane
Northing (ft)	6874873.4286	6874852.8919	Proposed	Proposed	Proposed	6874825.7239
Easting (ft)	562184.3360	562177.3215	Proposed	Proposed	Proposed	564041.4846

Table VI.B.3.b. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Federal Waste Facility (FWF) Landfill - Permit Unit No. 3					
Well Number(s):	FWF-119C	FWF-119D	FWF-19A (TP-33)			
Hydrogeologic Unit Monitored	225	225	OAG			
Type (e.g., point of compliance, background, observation, etc.)	POC	POC	Observ			
Up or Down Gradient	UG	UG	UG			
Casing Diameter and Material	2" PVC	2" PVC	2" PVC			
Screen Diameter and Material	2" PVC	2" PVC	2" PVC			
Screen Slot Size (in.)	0.010"	0.010"	0.010"			
Top of Casing Elevation (Ft, MLGL or MSL)	3480.96	3481.11	3486.28			
Grade or Surface Elevation (Ft, MLGL or MSL)	3481.2	3481.3	3483.5			
Well Depth (Ft, Below Grade Surface <i>[BGS]</i>)	272.86	284.31	52.42			
Well Depth (Ft, Below Top of Casing <i>[BTOC]</i>)	273.1	284.5	55.2			
Screen Interval From (Ft, BGS) To (Ft, BGS)	257.6 to 272.6	269.8 to 284.8	41.5 to 51.5			
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	257.4 to 272.4	269.6 to 284.6	44.78 to 54.78			
Facility Coordinates (e.g., lat./long. or company coordinates)	State Plane	State Plane	State Plane			
Northing (ft)	6874841.7440	6874858.6563	6874937.3974			
Easting (ft)	564030.5397	564018.2856	564545.6547			

¹From Tables in Section V.

MSL: Mean Sea Level; *MLGL*: Mean Low-tide Gulf Level; *BGS*: Below Grade Surface; *BTOC*: Below Top of Casing

TABLE VI.B.3.c - GROUNDWATER DETECTION MONITORING PARAMETERS

Unit/Waste Management Area- **Federal Waste Facility (FWF) Landfill**

Well No(s). FWF-1(B & C), FWF-2(B, C, & D), FWF-3(B,C, & D), FWF-4(B,C, & D), FWF-5(B,C, & D), FWF-6(B & C), FWF-7(B,C, & D), FWF-8(B,C, & D), FWF-9(B,C, & D), FWF-10(B,C, & D), FWF-11(B,C, & D), FWF-12(B,C, & D), FWF-13(B,C, & D), FWF-14(B,C, & D), FWF-15(B,C, & D), FWF-16(B,C, & D), FWF-17(B,C, & D), FWF-18(B,C, & D), FWF-21(B,C, & D), FWF-22(B,C, & D), FWF-23(B,C, & D), FWF-25(B,C, & D), FWF-26(B,C, & D), FWF-27(B & D), FWF-28(B,C, & D), FWF-119(B,C, & D), FWF-19A

Parameter	Sampling Frequency	Analytical Method	Method Detection Limit (MDL) or Method Quantification Limit (MQL) Value (units), MDL or MQL ²	Concentration Limit ¹
Volatile Organic Priority Pollutant Monitoring Parameters				
Acetone	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 ug/l	5 ug/l
Benzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Bromoform	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Carbon Disulfide	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 ug/l	5 ug/l
Carbon Tetrachloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Chlorobenzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Chlorodibromomethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Chloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Chloroform	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Dichlorobromomethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,1 -Dichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,2 - Dichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,1-Dichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l

1 The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

2 a. Enter the laboratory expected *Method Detection Limit* if determination of *Statistically Significant Increase* (SSI) occurrence is based on detection of the presence of the constituent of concern in the sample.

2 b. Enter the laboratory expected Method Quantification Limit if determination of SSI is based on statistical analysis of detection monitoring data or direct comparison to a limit value.

This should be based on the laboratory's minimum expected level of performance. Please designate which type of limit has been entered for each constituent, with its values and units.

TABLE VLB.3.c - GROUNDWATER DETECTION MONITORING PARAMETERS

Parameter	Sampling Frequency	Analytical Method	Method Detection Limit (MDL) or Method Quantification Limit (MQL) Value (units), MDL or MQL ²	Concentration Limit ¹
Volatile Organic Priority Pollutant Monitoring Parameters (concluded)				
1,2-Dichloropropane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
cis-1,3-Dichloropropylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	2 ug/l	2 ug/l
trans-1,3-Dichloropropylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	2 ug/l	2 ug/l
Ethylbenzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Methyl Bromide	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Methyl Chloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,1,2,2-Tetrachloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Tetrachloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Toluene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,2-trans-Dichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	2 ug/l	2 ug/l
1,1,1,-Trichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
1,1,2-Trichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Trichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l
Vinyl Chloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	1 ug/l	1 ug/l

1 The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

2 a. Enter the laboratory expected *Method Detection Limit* if determination of *Statistically Significant Increase (SSI)* occurrence is based on detection of the presence of the constituent of concern in the sample.

2 b. Enter the laboratory expected Method Quantification Limit if determination of SSI is based on statistical analysis of detection monitoring data or direct comparison to a limit value.

This should be based on the laboratory's minimum expected level of performance. Please designate which type of limit has been entered for each constituent, with its values and units.

TABLE VI.B.3.c - GROUNDWATER DETECTION MONITORING PARAMETERS

Parameter	Sampling Frequency	Analytical Method	Method Detection Limit (MDL) or Method Quantification Limit (MQL) Value (units), MDL or MQL ²	Concentration Limit ¹
Semi-Volatile Monitoring Parameters				
Phenol	Staggered Semi-Annual	SW-846 8270/EPA Method 625	10 ug/l	10 ug/l
1,4 Dioxane	Staggered Semi-Annual	SW-846 8270/EPA Method 625	10 ug/l	10 ug/l
Metal Monitoring Parameters²				
Arsenic	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.005 mg/l	NA
Nickel	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.002 mg/l	NA
Cadmium	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.001 mg/l	NA
Selenium	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.005 mg/l	NA

1 The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

2 a. Enter the laboratory expected *Method Detection Limit* if determination of *Statistically Significant Increase (SSI)* occurrence is based on detection of the presence of the constituent of concern in the sample.

2 b. Enter the laboratory expected Method Quantification Limit if determination of SSI is based on statistical analysis of detection monitoring data or direct comparison to a limit value.

This should be based on the laboratory's minimum expected level of performance. Please designate which type of limit has been entered for each constituent, with its values and units.

Table VII.E.1 – PERMITTED UNIT CLOSURE COST SUMMARY

Existing Unit Closure Cost Estimate	
Unit	Cost (2018) ¹
Federal Waste Facility (FWF) Landfill	\$15,680,059
Waste Staging Building	\$513,336
Wastewater Treatment Plant	\$226,553
Contact Water Tanks	\$547,848
Ancillary Components (included in costs for other units)	---
Subtotal	\$16,967,795
Engineering Oversight, Certification, General Conditions	\$2,214,331
Subtotal	\$19,214,433
Contingency (10%)	\$1,921,433
Total Existing Unit Closure Cost Estimate	\$21,135,764 (2018) ^{1,2}
Proposed Unit Closure Cost Estimate	
Total Proposed Unit Closure Cost Estimate	NA
Total Existing and Proposed Unit Closure Cost Estimate	\$21,135,764 (2018) ^{1,2}

¹As 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-calculation the revised total cost in current dollars.

²Financial assurance for all closure of units associated with the management of low level mixed waste (LLMW) is required under TCEQ Radioactive Materials License R04100. Compliance with such financial assurance requirements of RML R04100 satisfies the financial assurance requirements of this permit for LLMW.

TABLE VII.E.2. - PERMITTED UNIT POST-CLOSURE COST SUMMARY

RCRA Groundwater Monitoring Post-Closure Cost Estimate ^{1,2,3}		
Unit		Cost
Federal Waste Facility (FWF) Landfill	Annual Cost Estimate	\$26,310 (2018 dollars)
	30-year Cost Estimate	\$789,300 (2018 dollars)
Total RCRA Groundwater Monitoring Post-Closure Cost Estimate		\$789,300 (2018 dollars)

¹As units are added, modified, 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.

²The cost estimate does not include duplicative costs covered under radioactive materials license R04100.

³ Post-closure care costs, except those listed above are covered by Financial Assurance for radioactive materials license R04100. The post-closure costs may be updated when the groundwater monitoring system design is modified.

Table VII.G. - Post-Closure Period

Unit Name	Date Certified Closed	Permitted Post Closure Period (Yrs)	Earliest Date Post Closure Ends (See Note 1)
Federal Waste Facility (FWF) Landfill	To be Determined	30 years	To be Determined

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

[illegible]

Attachment A - Legal Description of Facility

B.2 LEGAL DESCRIPTION OF EXISTING RCRA PERMITTED TSD FACILITY

FIELD NOTES

Being 1338.121 acres of land out of Sections 16, 17, 24 and 25, Block A-29 and Sections 4 and 5, Block A-39, P.S.L., Andrews County, Texas, and being more particularly described by metes and bounds as follows:

Beginning at a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for the NW corner of this survey, from whence a Stone Mound being a reference to the NW corner of said Section 25 bears S 24°-54'-27"W, 1208.80 feet;

Thence, S 0°-00'-00" E, 250.0 feet east of and parallel to the Texas-New Mexico State Line, a distance of 6250.39 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for a corner of this survey;

Thence, N 90°-00'-00" E a distance of 525.00 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for a corner of this survey;

Thence, S 0°-00'-00" E a distance of 285.00 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for a corner of this survey;

Thence, S 90°-00'-00" W a distance of 525.00 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for a corner of this survey;

Thence, S 0°-00'-00" E, 250.00 feet east of and parallel to the Texas-New Mexico State Line, a distance of 1677.35 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for the SW corner of this survey;

Thence, N 90°-00'-00" E a distance of 7050.00 feet to a 1/2" I.R. set with Alum. Cap marked RPLS 1985 for the SE corner of this survey, from whence a Galv. Bolt and Stone Mound being the SE corner of said Section 25 bears N 42°-53'-08" W, 3355.49 feet;

Thence, N 00°-00'-00" E, 7300.00 feet east of and parallel to the Texas-New Mexico State Line, a distance of 7765.47 feet to a 1/2" I.R. set with Alum Cap marked RPLS 1985 for the NE corner of this survey;

Thence, N 81°-33'-02" W a distance of 7127.36 feet to the point of beginning.

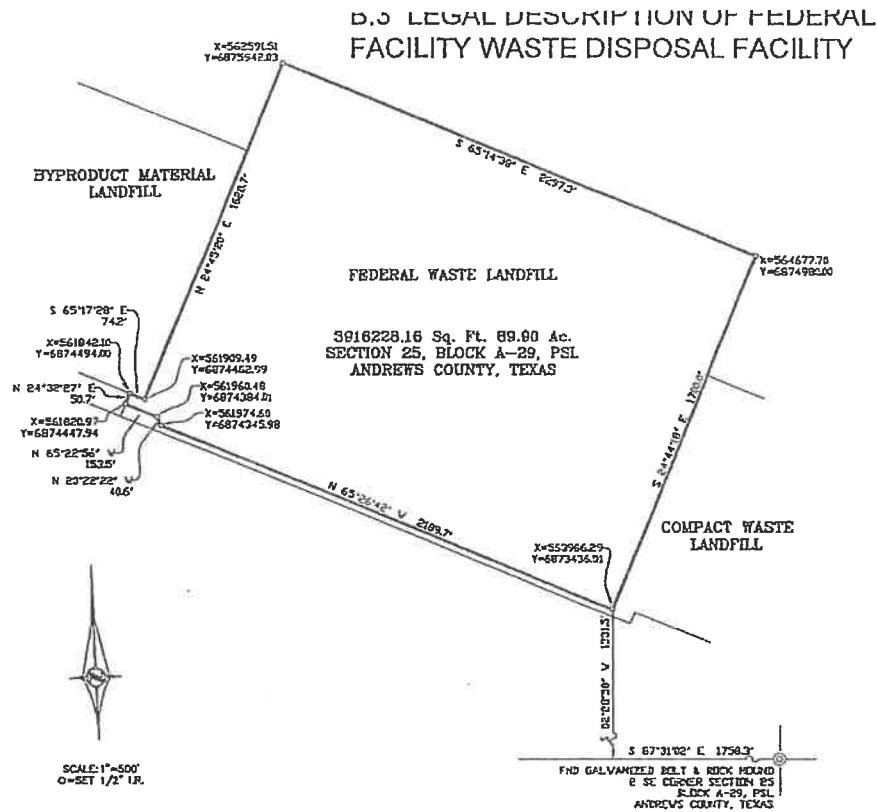
Containing 1338.121 acres and 58288557.98 square feet.

James E. Tompkins
James E. Tompkins, RPLS No. 19



March 9, 1993

Attachment A - Legal Description of Facility



**FIELD NOTE DESCRIPTION OF AN 89.90 ACRE TRACT OF LAND OUT OF SECTION 25, BLOCK A-29,
PUBLIC SCHOOL LAND, ANDREWS COUNTY, TEXAS:**

BEGINNING at a 1/2-inch iron rod set for the southeast corner of this tract, from which point a galvanized bolt and rock mound found for the Patented Southeast corner of Section 25, Block A-29, Public School Land, Andrews County, Texas, as filed of record in Volume 3, Page 272, Patent Records, Andrews County, Texas, bears S 02° 28' 58" W. 1331.5 feet and S 87° 31' 02" E, 1758.3 feet;

THENCE N 65° 26' 42" W, 2189.7 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE N 20° 22' 22" W, 40.6 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE N 65° 22' 56" W, 153.5 feet to a 1/2-inch iron rod set for the southwest corner of this tract;
THENCE N 24° 38' 27" E, 50.7 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE S 65° 17' 28" E, 74.2 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE N 24° 45' 20" E, 1628.7 feet to a 1/2-inch iron rod set for the northwest corner of this tract;
THENCE S 65° 14' 38" E, 2297.3 feet to a 1/2-inch iron rod set for the northeast corner of this tract;
THENCE S 24° 44' 18" W, 1700.0 feet to the place of beginning and containing 391,622.16 square feet or 89.90 acres of land.

Note: Coordinates are Texas State Plane NAD 83 Texas North Central Zone in US Survey Feet, with a Scale Factor of 0.999996852. Bearings are Grid and have a Theta Angle of -02° 29' 13".

Dated: March 13, 2007

SS Job No. 80898
Cook-Joyce, Inc.

By:

STARK SURVEYING, LLC

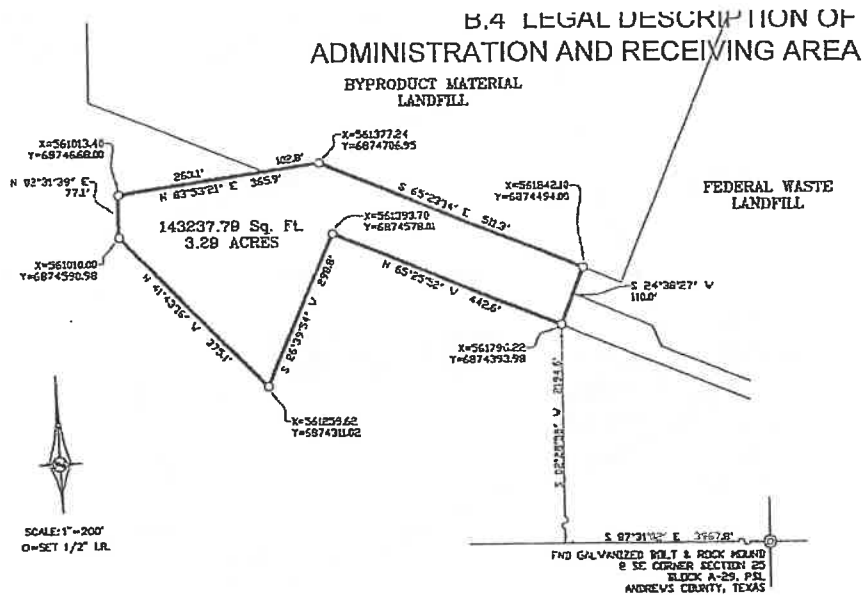
[Signature]

Jimmie Robert Stark
Registered Professional Land Surveyor



STARK SURVEYING, LLC
3300 N. M. STREET, SUITE 1-200
MCKINNEY, TEXAS

Attachment A - Legal Description of Facility



FIELD NOTE DESCRIPTION OF A 3.29 ACRE TRACT OF LAND OUT OF SECTION 25, BLOCK A-29, PUBLIC SCHOOL LAND, ANDREWS COUNTY, TEXAS:

BEGINNING at a 1/2-inch iron rod set for the southeast corner of this tract, from which point a galvanized bolt and rock mound found for the Patented Southeast corner of Section 25, Block A-29, Public School Land, Andrews County, Texas, as filed of record in Volume 3, Page 272, Patent Records, Andrews County, Texas, bears S 02° 28' 58" W, 2194.6 feet and S 87° 31' 02" E, 3967.8 feet:

THENCE N 65° 25' 52" W, 442.6 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE S 26° 39' 54" W, 298.8 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE N 41° 43' 16" W, 375.1 feet to a 1/2-inch iron rod set for the southwest corner of this tract;
THENCE N 02° 31' 39" E, 77.1 feet to a 1/2-inch iron rod set for the northwest corner of this tract;
THENCE N 83° 53' 21" E, 365.9 feet to a 1/2-inch iron rod set for a corner of this tract;
THENCE S 65° 23' 14" E, 511.3 feet to a 1/2-inch iron rod set for the northeast corner of this tract;
THENCE S 24° 38' 27" W, 110.0 feet to the place of beginning and containing 143237.79 square feet or 3.29 acres of land.

Note: Coordinates are Texas State Plane NAD 83 Texas North Central Zone in US Survey Feet, with a Scale Factor of 0.99996852, Bearings are Grid and have a Theta Angle of -03° 29' 13"

Dated: March 13, 2007

STARK SURVEYING, LLC

SS Job No. 80808
Cook-Joyce, Inc.

By:

Jimmie Robert Stark
Registered Professional Land Surveyor



STARK SURVEYING, LLC
3300 N. "A" STREET, BLDG. 1-250
MELAND, TEXAS

[illegible]

Attachment C - Permit Application Revision Chronology

Classification	Revision No.¹	Application Date²	Purpose
Permit Renewal	0	May 25, 2018	10-yr Permit Renewal
	1	January 29, 2021	Revisions to the permit renewal application

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

² Use the application signature page date as the Application Date.

Attachment D - List of Incorporated Application Materials

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

TCEQ Part A Application Form

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

TCEQ Part B Application Form

- I. General Information
 - A. Applicant Name
 - B. Facility Owner
 - C. Facility Contact
 - D. Application Type and Facility Status
 - E. Facility Siting Summary
 - F. Wastewater and Stormwater Disposition
 - G. Information Required to Provide Notice
 - H. TCEQ Core Data Form Requirements
 - I. Signature on Application
- II. Facility Siting Criteria
 - A. Requirements for Storage or Processing Facilities, Land Treatment Facilities, Waste Piles, Storage Surface Impoundments, and Landfills
 - B. Additional Requirements for Land Treatment Facilities - 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)
 - F. Flooding
 - G. Additional Information Requirements
- III. Facility Management
 - A. Compliance History and Applicant Experience
 - B. Personnel Training Plan
 - C. Security
 - D. Inspection Schedule
 - E. Contingency Plan
 - F. Emergency Response Plan
 - Table III.D. - Inspection Schedule
 - Table III.E.1. - Arrangements with Local Authorities
 - Table III.E.2. - Emergency Coordinators
 - Table III.E.3. - Emergency Equipment
- IV. Wastes And Waste Analysis
 - A. Waste Management Information

Attachment D - List of Incorporated Application Materials

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

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

V. Engineering Reports

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

Table V.A. - Facility Waste Management Handling Units
Table V.B. - Container Storage Areas
Table V.C. - Tanks and Tank Systems
Table V.G.1. - Landfills
Table V.G.3. - Landfill Liner System
Table V.G.4. - Landfill Leachate Collection System
Table V.G.5. - Landfill Material and Construction Specifications

VI. Geology Report

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

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

VII. Closure And Post-Closure Plans

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

Table VII.A. - Unit Closure
Table VII.B. - Unit Closure Cost Estimate
Table VII.C.5. - Land-based Units Closed under Interim Status
Table VII.D. - Unit Post-Closure Cost Estimate

Attachment D - List of Incorporated Application Materials

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

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

VIII. Financial Assurance

A. Financial Assurance Information Requirements for all Applicants

B. Applicant Financial Disclosure Statements for a new permit, permit amendment, or permit modification, or permit renewal

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

IX. Releases From Solid Waste Units And Corrective Action

A. Preliminary Review Checklists

For Applications for a New Hazardous Waste Permit

For Applications for a Renewal/Amendment/Modification of an Existing Hazardous Waste Permit

Instructions for Preliminary Review Facility Checklist

Instructions for Preliminary Review Unit Checklist (Continued)

Preliminary Review Facility Checklist

Preliminary Review Unit Checklist

Appendices to Preliminary Review (PR)

X. Air Emission Standards

A. Process Vents

B. Equipment Leaks

C. Tanks, Surface Impoundments, and Containers

D. "One - Stop" Permits - Reserved

Table X.A. - Process Vents

Table X.B. - Equipment Leaks

XI. Compliance Plan - Reserved

XII. Hazardous Waste Permit Application Fee

Table XII.A. - Hazardous Waste Units (For Application Fee Calculations)

Table XII.B. - Hazardous Waste Permit Application Fee Worksheet

XIII. Confidential Material

Attachment E - List of Permitted Facility Units

Authorized Permitted Units

TCEQ Permit Unit Number ¹	Unit Name	NOR No. ¹	Unit Description	Capacity	Unit Status ²
003	Federal Waste Facility Landfill	01	Landfill comprised of two separate landfill units: non-canister disposal unit and canister disposal unit	4,600,000 cubic yards	Active
001	Waste Staging Building	03	60' X 120' building for storage of containerized waste	22,140 cubic feet	Active
004	FWF Contact Water Tank 1	04	Storage tank for the wastewater treatment unit	500,000 gallons	Active
005	FWF Contact Water Tank 2	04	Storage tank for the wastewater treatment unit	500,000 gallons	Active
006	FWF Contact Water Tank 3	04	Storage tank for the wastewater treatment unit	500,000 gallons	Active
007	FWF Contact Water Tank 4	06	Storage tank for the wastewater treatment unit	500,000 gallons	Proposed
008	FWF Contact Water Tank 5	06	Storage tank for the wastewater treatment unit	500,000 gallons	Proposed
009	FWF WWTP Reaction Tank 1	005	Storage tank for the wastewater treatment unit	1,000 gallons	Active
010	FWF Reaction Tank 2	005	Storage tank for the wastewater treatment unit	1,000 gallons	Active
011	FWF WWTP Concentration Tank	005	Storage tank for the wastewater treatment unit	1,700 gallons	Active
012	FWF Cleaning Tank 1	005	Storage tank for the wastewater treatment unit	500 gallons	Active
013	FWF Cleaning Tank 2	005	Storage tank for the wastewater treatment unit	500 gallons	Active
014	FWF WWTP Neutralization Tank	005	Storage tank for the wastewater treatment unit	1,500 gallons	Active

Attachment E - List of Permitted Facility Units

TCEQ Permit Unit Number ¹	Unit Name	NOR No. ¹	Unit Description	Capacity	Unit Status ²
015	FWF WWTP Discharge Collection Tank	005	Storage tank for the wastewater treatment unit	500 gallons	Active

Historical Permitted Units No Longer Subject to this Permit⁴

TCEQ Permit Unit No. ¹	Unit Name	NOR No. ¹	Unit Description ³	Capacity	Unit Status ²
002	Federal Waste Facility Bulk Waste Staging Building	002	60 X 450' Building for storage of bulk and containerized waste	35,110	Never Built

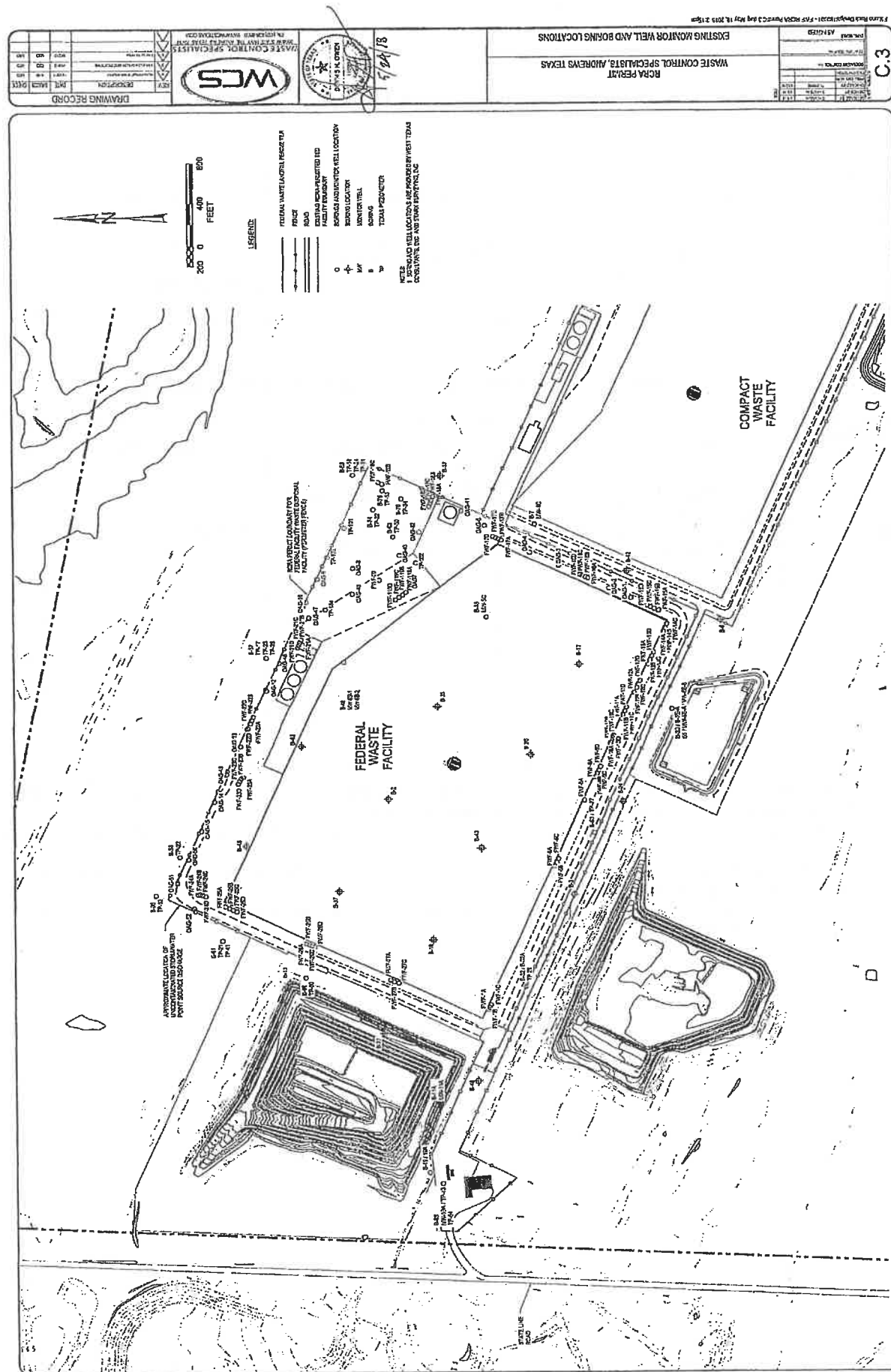
¹Permitted Unit No. and NOR No. cannot be reassigned to new units or used more than once and all units that were in the Attachment D of a previously issued permit must be listed.

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

³If 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.

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

Attachment F - Map Indicating Point of Compliance and Groundwater Monitoring Wells



Attachment G - Well Design and Construction Specifications

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

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

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

Attachment G - Well Design and Construction Specifications

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

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

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

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

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

Attachment G - Well Design and Construction Specifications

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

11. Each well shall be secured and/or designed to maintain the integrity of the well borehole and groundwater.
12. The Permittee shall protect the above-ground portion of the well by bumper guards and/or metal outer casing protection.
13. Copies of drilling and construction details demonstrating compliance with the items of this provision shall be kept on site. This record shall include the following information:
 - name/number of well (well designation);
 - intended use of the well(sampling, recovery, etc.);
 - date/time of construction;
 - drilling method and drilling fluid used;
 - well location (\pm 0.5 ft.);
 - bore hole diameter and well casing diameter;
 - well depth (\pm 0.1 ft.);
 - drilling and lithologic logs;
 - depth to first saturated zone;
 - casing materials;
 - screen materials and design;
 - casing and screen joint type;
 - screen slot size/length;
 - filter pack material/size;
 - filter pack volume (how many bags, buckets, etc.);
 - filter pack placement method;
 - sealant materials;
 - sealant volume (how many bags, buckets, etc.);
 - sealant placement method;
 - surface seal design/construction;
 - well development procedure;
 - type of protective well cap;
 - ground surface elevation (\pm 0.01 ft. MSL);
 - top of casing elevation (\pm 0.01 ft. MSL); and,
 - detailed drawing of well (include dimensions).
14. The Permittee shall complete construction or abandonment and plugging of each well in accordance with the requirements of this Permit and 16 TAC 76.100 through 76.109 and shall certify such proper construction or abandonment within sixty (60) days of installation or abandonment. If the Permittee installs any additional or replacement wells, well completion logs for each well shall be submitted within sixty (60) days of well completion and development in accordance with 16 TAC Chapter 76. Certification of each well shall be submitted within sixty (60) days of installation for an individual well

Attachment G - Well Design and Construction Specifications

project or within sixty (60) days from the date of completion of a multiple well installation project. The certification shall be prepared by a qualified geologist or geotechnical engineer. For each well drilled, deepened, or altered submit a copy of the State of Texas Well Report in accordance with 16 TAC 76.70. Each well certification shall be accompanied by a certification report, including an accurate log of the soil boring, which thoroughly describes and depicts the location, elevations, material specifications, construction details, and soil conditions encountered in the boring for the well. A copy of the certification and certification report shall be kept on-site, and a second copy shall be submitted to the Executive Director. Required certification shall be in the following form:

This is to certify that installation (or abandonment and plugging) of the following facility components authorized or required by TCEQ Permit No. HW- ***** has been completed, and that construction (or plugging) of said components has been performed in accordance with and in compliance with the design and construction specifications of Permit No. HW-*****." (Description of facility components with reference to applicable permit provisions).

15. The Permittee shall clearly mark and maintain the well number on each well at the site.
16. The Permittee shall measure and keep a record of the elevation of the top of each well casing in feet above mean sea level to the nearest 0.01 foot and permanently mark the measuring point on the well. The Permittee shall compare old and new elevations from previously surveyed wells and determine a frequency of surveying not to exceed five (5) year intervals.
17. Wells may be replaced at any time the Permittee or Executive Director determines that the well integrity or materials of construction or well placement no longer enable the well to yield samples representative of groundwater quality.
18. The Permittee shall plug soil test borings and wells removed from service after issuance of the Compliance Plan with a cement/bentonite grout mixture so as to prevent the preferential migration of fluids in the area of the borehole. Certification of each plugging shall be reported in accordance with Provision 14 of this attachment to this permit. The plugging of wells shall be in accordance with 16 TAC § 76.100 through § 76.109 dealing with Well Drilling, Completion, Capping and Plugging.
19. A well's screened interval shall be appropriately designed and installed to meet the well's specific objective (i.e., either DNAPL, LNAPL, both, or other objective of the well). All wells designed to detect, monitor, or recover DNAPL must be drilled to intercept the bottom confining layer of the aquifer. The screened interval to detect DNAPL should extend from the top of the lower confining layer to above the portion of the aquifer saturated with DNAPL. The screened interval for all wells designed to detect, monitor, or recover LNAPL must extend high enough into the vadose zone to provide for fluctuations in the seasonal water table. In addition, the sandpacks for the recovery or monitoring well's screened interval shall be coarser than surrounding media to ensure the movement of NAPL to the well.