EPA United States Environmental Protection Agency

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	April 1-4, 2024		
Media:	RCRA Compliance Evaluation Inspection		
Regulatory Program(s)	RCRA Treatment, storage and Disposable Facility		
Company Name:	Clean Earth, Inc.		
Facility Name:	Chemical Reclamation Services Avalon Facility		
Facility Physical Location:	405 Powell St		
(city, state, zip code)	Avalon, TX - 76623		
Mailing address:	405 Powell St		
(city, state, zip code)	Avalon, TX - 76623		
County/Parish:	Ellis		
Facility Contact:	Mark Alaniz	Operations Manager	
	malaniz@harsco.com		
FRS Number:	110000619475		
Identification/Permit Number:	RCRA: 50084		
Media Number:	TXD046844700		
NAICS:	562211 - HAZARDOUS WASTE TREATMENT AND DISPOSAL		
SIC:	4953 – Refuse System, 7839 – Business Services		
Personnel participating in inspection:			
John Penland	EPA Region 6 (ECDSR)	Senior Inspector	
Sandesh Thapa	EPA Region 6 (ECDSR)	Lead Inspector	
Johnny Busby	Chemical Reclamation Services (CRS)	General Manager	
Jody Mathers	CRS	Environmental Health and Safety Manager	
Mark Alaniz	CRS	Operations Manager	
EPA Lead Inspector Signature/Date	SANDESH THAPA Digitally signed by SANDESH THAPA Date: 2024.08.26 16:24:30 -05'00'		
	Sandesh Thapa – Lead Inspector		Date
Supervisor Signature/Date	DEBRA PANDAK Digitally signed by DEBRA PANDAK Date: 2024.08.27 11:08:49 -05'00'		
	Debra Pandak – RCRA Enforcement Section Supervisor		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

During the week of April 1, 2024, I, Sandesh Thapa, conducted an unannounced inspection of the Chemical Reclamation Services facility (CRS) located at 405 Powell St in Avalon, Texas for compliance with the Resource Conservation and Recovery Act (RCRA). I was assisted on this inspection by Environmental Protection Agency (EPA) inspector John Penland and Texas Commission on Environmental Quality (TCEQ) inspectors Yelitza Barragan, Dawson Gonzales, and Todd Jahns. This inspection included a walkthrough of the facility's waste generation and management units, and a review of the facility's records related to hazardous waste management.

The CRS facility was targeted for inspection as part of the National Compliance Initiative to evaluate facilities subject to RCRA Subpart AA, BB, CC regulations for air emissions from hazardous waste management units.

We concluded the inspection of the CRS facility on April 4, 2024, with a closing conference where we presented our preliminary findings. A summary of the areas of concern identified during the inspection is provided in Section III.

This report serves as documentation of all onsite activities and observations during the inspection of the CRS facility. Photographs taken during the inspection to document onsite observations are included as Appendix 1.

FACILITY DESCRIPTION

Chemical Reclamation Services, (CRS) operates a hazardous waste storage and processing facility on approximately 8 acres at 405 Powell Street in Avalon, Texas. The facility operates under Hazardous Waste Permit #50084 issued by the Texas Commission on Environmental Quality (TCEQ) on September 17, 2013. The facility operates 24 hours a day, seven days a week and employs sixty full-time personnel. CRS is a permitted Treatment, Storage and Disposal Facility (TSDF) and a Large Quantity Generator (LQG) of hazardous waste since March of 1990. CRS manages industrial, hazardous, non-hazardous and chemical waste. Its services include transportation of hazardous waste, disposal of electronic waste, lab packs, pharmaceutical waste, treatment and processing of hazardous soils, dredged materials, bulk liquids, and drums. Primary processing activities includes supplemental fuel blending and waste consolidation for off-site disposal. The facility's permit authorizes the operation of ten hazardous waste tanks, six Container Storage Areas (CSA), and two active Miscellaneous Units (MUs). The CRS facility was issued the EPA ID# TXD046844700.

A general map of the facility is included in Appendix 2. A process diagram is included in Appendix 3. A copy of CRS' Current Hazardous Waste Operating Permit is included as Appendix 6.

Section II – INSPECTION SUMMARY

We conducted the onsite inspection during normal business hours from April 1-4, 2024. During this inspection, the facility was conducting normal operations, and all areas of the facility were in use.

Throughout the week, we visited each of the facility's waste generation, accumulation, and management areas. We also reviewed the facility's operating records related to the facility's compliance with the regulatory requirements applicable to large quantity generators of hazardous waste and the requirements of Hazardous Waste Permit # 50084.

This section provides an abbreviated description of our daily activities. See Appendix 4 for a more detailed summary of our observations.

April 1, 2024

John Penland, Todd Jahns, Yelitza Barragan and I entered the facility at approximately 9:05 am Central Time (CT). We presented our credentials to Mr. Mark Alaniz and informed him that we were there to conduct an inspection of the facility under Section 3007 of the Resource Conservation and Recovery Act (RCRA). I explained the right of CRS to assert a Confidential Business Information claim for records requested by the EPA. This discussion was followed by a presentation of EPA Region 6's Confidentiality Notice (40 CFR Section 2.203). Following this introduction, we conducted an inspection opening briefing with Mark Alaniz. This included daily inspection schedules and a request for compliance records.

Following the opening briefing, we conducted a walkthrough of CRS's waste storage and management areas. Mark Alaniz, the operations Manager for the CRS, accompanied us on the walkthrough. Our physical inspection included: each of the 6 permitted CSAs (S1, S2, S3, R1, S5, and S6); the 10 permitted hazardous waste storage tanks (7R, 10R, 23R, 24R, 26R, 101, 110, 111, 112, and 113); the 2 container shredders permitted as miscellaneous units (M101 and M104); the facility laboratory; and one groundwater monitoring well (MW-0).

We departed the CRS facility at 2:30 pm.

April 2, 2024

John Penland, Dawson Gonzales and I entered the facility at approximately 9:00 am CT. We started our inspection with a tabletop review of CRS' operations, including CRS' Leak Detection and Repair program; Emergency Planning and Contingency Plan; the personnel training program; manifest rejection procedures; and the container washing process for CRS' hazardous waste tanker trailers. Following this review, we continued our facility walkthrough with the remainder of the groundwater monitoring wells and the designated 10-day transfer area for CRS' hazardous waste transporter operation.

We departed the CRS facility at 3:00 pm.

April 3, 2024

John Penland and I entered the facility at approximately 9:15 am CT. Our inspection day was focused on assessing the permitted hazardous waste tanks for compliance with the requirements of 40 CFR 264 Subpart J and Subparts BB and CC for hazardous waste tank systems. We were accompanied during this evaluation by facility representatives Jody Mathers, Mark Alaniz and Johnny Busby. This assessment included an inspection of the tanks and ancillary equipment for all 10 hazardous waste tanks: Tank numbers 7R, 10R, 23R, 24R, 26R, 101, 110, 111, 112, and 113. We used a TVA2020 Toxic Vapor Analyzer to measure emissions of volatile organic compounds (VOC) from tank piping and closure devices. We concluded our inspection day at 2:30 pm CT.

April 4, 2024

John Penland and I entered the facility at 12:20 pm CT. We started the day with a review of the tank daily inspection logs for April 2023 through April 2024. After this review, we held a closing conference where we presented our preliminary findings and established a timeline for submitting the outstanding documents requested during this inspection. We concluded the inspection and departed the CRS facility at 2:15 pm CT.

Section III – Preliminary Findings

The following is a list of areas of concern discussed with the facility representatives. See Appendix 4 for details of EPA observations.

1. **Permit No. 50084 Section V.C.8 - 40 CFR Part 264.1084(g)(1)(ii)** "*Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device...*"

   On April 1 and April 3, 2024, we conducted an inspection of the hazardous waste tanks for compliance with the RCRA Subpart CC requirements. During this assessment we used a TVA2020 to measure VOC emissions from the piping and closure devices in accordance with EPA Method 21. During our inspection of these tanks, we found the following concerns:

   a. Tank 110 –On April 3, 2024, we recorded a VOC reading of 11,000 ppm above background from the hatch of Tank 110.

   b. Tank 111- On April 1, 2024, we conducted a visual inspection of Tank 111. During this inspection, we observed that the hatch affixed to the roof of the tank was open, Appendix 1, Photo 9. Facility personnel closed this hatch after being notified. On April 3, 2024, we recorded a VOC reading of 14,000 ppm above background from the same (now closed) hatch of Tank 111.

   c. Tank 10- On April 1, 2024, we conducted a visual inspection of Tank 10. During this inspection, we observed that the hatch affixed to the roof of the tank was open, See Appendix 1, Photo 10. Facility personnel closed this hatch after being notified. On April 3, 2024, we recorded a VOC reading of 14,400 ppm above background from the closed hatch of Tank 10.

   d. Tank 112- On April 1, 2024, we conducted a visual inspection of Tank 112. During this inspection, we observed that the hatch affixed to the roof of the tank was open, Appendix 1, Photo 11. Facility personnel closed this hatch after being notified. The same tank was inspected on April 3, 2024, for VOC emissions. We recorded a VOC reading of 11,100 ppm above background from the closed hatch of Tank 112.

   e. Tank 113- On April 1, 2024, we conducted a visual inspection of Tank 113. During this inspection, we observed that the hatch affixed to the roof of the tank was open, See Appendix 1, Photo 14. Facility personnel closed this hatch after being notified. The same tank was inspected on April 3, 2024, for VOC emissions. We recorded a VOC reading of 9,500 ppm above background from the closed hatch of Tank 113.

f. Tank 7(R)- On April 1, 2024, we conducted a visual inspection of Tank 7(R). During this inspection, we observed that the hatch affixed to the roof of the tank was open. Facility personnel closed this hatch after being notified. The same tank was inspected on April 3, 2024, for VOC emissions. The TVA recorded a measurement of 14,000 ppm from the hatch before flaming out. We found that the source for this high reading was a large visible opening in the roof of the tank where the flange had corroded away. See Appendix 1, Photo 12, 44.

   On, April 26, 2024, CRS provided a response to this finding with a photograph of the replaced hatch, See Appendix 5, Photo 5.

g. Tank 101- On April 3, 2024, we conducted an inspection of Tank 101 for VOC emissions. We noticed holes on the roof of the tank where the flange had corroded beneath the hatch, see Appendix 1, Photo 13. We recorded a VOC reading of 10,200 ppm above background from the hatch of Tank 101.

h. Tank 26(R)- On April 3, 2024, we conducted an inspection of Tank 26(R) for VOC emission. We recorded a VOC reading of 10,400 ppm above background from the hatch of Tank 26(R). On April 3, 2024, CRS provided a response to this finding with a photograph. It showed Tank 26(R) was put out of service with a service tag dated April 3, 2024. See Appendix 5, Photo 7.

i. Tank 23(R)- On April 3, 2024, we conducted an inspection of Tank 23(R) for VOC emissions. We recorded a VOC reading of 9,600 ppm above background from the hatch of Tank 23(R).

j. Tank 24(R)- On April 3, 2024, we conducted an inspection of Tank 24(R) for VOC emissions. We recorded a VOC reading of 10,400 ppm above background from the hatch of Tank 24(R).

2. **Permit No. 50084 Section II.C.2, 40 CFR 264.1056(a)(1)** *"Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.* **(2)** *The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line."*

During our inspection on April 1, 2024, we found an open-ended line on a waste transfer pump located near CSA S2 used to transfer waste between containers and the permitted hazardous waste tank system, See Appendix 1, Photo 36. There were no active operational activities such as transferring of waste material from the line. The facility personnel placed a cap on the open-ended line after notification.

3. **Permit No. 50084 Section II.A.1** *"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."

Permit No. 50084 Section V.A.1 *"The permittee is authorized to operate the permitted facility units listed in "Attachment E" in accordance with terms and conditions of this permit and Permit No. 50084 Continuation Sheet 22 of 49 Chemical Reclamation Services, LLC [V. - Authorized Units and Operations, C. - Tanks and Tank Systems] 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."*

Permit No. 50084 lists the facility's mechanical shredder M101 as a proposed but not constructed miscellaneous unit. During our inspection on April 1, 2024, we found that the facility had constructed and was now operating M101. In addition, the facility was operating a tank for the purpose of storing liquids collected from the operation of the mechanical shredder M101. This tank is a separate, free-standing unit connected to the shredder's internal accumulation tank by an ancillary pump and piping system. This tank is not listed as an authorized unit in Permit No. 50084. The tank does not have dedicated secondary containment system. This tank does not appear on the facility inspection logs. See Appendix 1, Photo 39.

4. **Permit No. 50084 Section II.C.2, 40 CFR 264.193(e)(1)** *"External liner systems must be: ...***(iii)** *free of cracks or gaps..."*

On April 3, 2024, we inspected the secondary containment liner system for tanks TK-10R, TK-110, TK-111, TK-112, TK-113, and TK-7R for compliance with the RCRA Subpart J requirements. At two locations within the secondary containment near Tank 10R, we found areas of corrosion that penetrated the steel liner, see Appendix 1, Photos 42 and 43.

5. Permit No. 50084 Section II.C.2, 40 CFR 264.177(c) "*A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device."*

On April 1, 2024, we observed incompatible waste, notably flammable waste and oxidizing waste, stored in close proximity and sharing a secondary containment system in CSA S1 and CSA 5. The RCRA regulations require a physical means of separating containers of waste from incompatible materials. At a minimum, incompatible materials should be stored with enough physical separation to prevent a leak from one container from intersecting a leak from an incompatible container. In this case, containers in both units shared containment areas where a leak from one container would directly impact another, incompatible container. See Appendix 1, Photo 1-3, 37.

6. Permit No. 50084 Section II.C.2, 40 CFR 264.171 "*If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this part.*"

On April 1, 2024, we inspected CSA S6 for compliance with RCRA hazardous waste container management requirements. During this inspection we found 3 containers with significant physical defects being used for the storage of hazardous waste. In the first case, we found a 55-gallon steel drum that contained a flammable liquid hazardous waste but had a crushed lid, See Appendix 1, Photo 29. For the second container, we found that the facility was storing waste in a 275-gallon capacity, IBC tote where the top had been cut off. However, this container was labeled as household hazardous waste under the exemption codified at 40 CFR 261.4(b)(1). See Appendix 1, Photo 28. For the third container, we noticed a leak from one hazardous waste drum that was on the third tier of a stack of hazardous waste drums. The material had spilled from the top and down the side of the drum. We were unable to determine whether this leak was caused by a defect in the container or from the container not being properly closed. See Appendix 1, photos 25 and 26.

7. **Permit No. 50084 Section II.C.2, 40 CFR 264.173(a) "***A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste*."

   On April 1, 2024, we inspected 5 CSAs (S1, S2, S6, S5 and R1) for compliance with requirements of the facility's hazardous waste permit.

   a. CSA S1- We found one open hazardous waste drum with flammable waste. This was an open-headed, 55-gallon plastic drum. The lid was equipped with a lock ring, but the clamp was open. Appendix 1, Photo 3.

   b. CSA S2- We found one open container of hazardous waste. This was an open-headed, 55-gallon steel drum. The lid was equipped with a lock ring, but the bolt was not secured. Appendix 1, Photo 35.

   c. CSA S6- We found six open hazardous waste drums with flammable waste. There were four 55-gallon open-headed plastic drums and two open-headed 55-gallon steel drums. The clamps of the lock rings were open in two of the plastic drums. See Appendix 1, Photo 22 and 23. We noticed a drum plug was not properly tightened in one of the plastic drums. See Appendix 1, Photo 34. Also, a lid was not placed correctly on one of the plastic drum. See Appendix 1, Photo 24. The bolts of the lock rings were not secured on both of the steel drums. See Appendix 1, Photo 31 and 33.

   d. CSA 5- We found three open hazardous waste drums with flammable waste. All three drums were 55-gallon, open-headed steel drums. We found that the bongs were not tightened on two of the drums. A bolt from a lock ring was missing on the third drum. Appendix 1, Photo 16-19.

   e. CSA R1- We found five open containers of hazardous waste. Two of the open-headed, 55-gallon plastic drums lids were equipped with a lock rings. The clamps were open on both of the lock rings. See Appendix 1, Photo 4 and 5. One 5-gallon plastic bucket with a hazardous waste label was located at CSA R1, it was missing a lid. See Appendix 1, Photo 5. Also, one open headed, 55-galllon steel drum with lighters waste was missing a bung. See Appendix 1, Photo 7. A 55-gallon plastic drum with hazardous waste, Methyl Ethyl Ketone, was seen with an open lid. See Appendix 1, Photo 7.

8. **40 CFR 263.12(a)** *"A transporter who stores manifested shipments of hazardous waste in containers meeting the independent requirements of § 262.30 of this chapter at a transfer facility for a period of ten (10) days or less is not subject to regulation under parts 264, 265, 267, 268, and 270 of this chapter with respect to the storage of those wastes."*
40 CFR 262.30 *"Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179."*
49 CFR 173.24 "*Each package used for the shipment of hazardous materials under this subchapter shall be designed, constructed, maintained, filled, its contents so limited, and closed, so that under conditions normally incident to transportation— (1) Except as otherwise provided in this subchapter, there will be no identifiable (without the use of instruments) release of hazardous materials to the environment;"*

On April 1, 2024, we inspected the facility's 10 Day Transfer Area. This area is operated under the facility's transporter registration and CRS considers to be a separate facility from the permitted storage facility. During our inspection we found a roll-off box containing hazardous waste which had a hole in the covering tarp. See Appendix 1, Photos 40 and 41.

On, April 2, 2024, CRS provided a response to this finding with a photograph of replaced tarp, See Appendix 5, Photo 4.

9. **Permit No. 50084 Section II.C.2, 40 CFR 264.173(b) "***A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak*."

On April 1, 2024, during our inspection of CSA S6, we found a stack of three cardboard containers being used for the storage of hazardous waste. These three containers were stacked on top of one another in a manner which was causing the bottom container to collapse and the entire stack to lean precariously toward other adjacent stacks of hazardous waste containers See Appendix 1, photos 20 and 21.

10. **Permit No. 50084 Section (V)(A)(1***) "…All authorized units must be clearly identified as numbered in 'Attachment E.' These units must have signs indicating 'TCEQ Permit Unit No.'"*

During our inspection of the miscellaneous units on April 1, 2024, we found that the Miscellaneous Units M101 and M104 were not equipped with the required identifying signage.

On, April 29, 2024, CRS provided a response to this finding with a photograph of new sign with "TCEQ Permit Unit No", See Appendix 5, Photo 2.

11. **Permit No. 50084,** CP Attachment C (11): *Each well shall be secured and/or designed to maintain the integrity of the well borehole and groundwater"*

As part of our general facility walkthrough, we inspected each of the facility's groundwater monitoring wells. On April 1, 2024, we found that the protective collar for monitoring well MWO was unlocked. See Appendix 1, Photo 38.

12. **40 CFR 279.22(c). "***Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil*."

    On April 1, 2024, we conducted an inspection of the CRS maintenance building for compliance with RCRA standards. During our inspection of this area we found two unlabeled drums which contained used oil. See Appendix 1, Photo 46.

13. **Permit 50084 Section (II)(A)**, **40 CFR 264.53(b)** *"A copy of the contingency plan and all revisions to the plan must be: (b) submitted to all local police departments, fire departments... and local emergency response teams that may be called upon to provide emergency services.*"

    On April 1, 2024, we requested a copy of CRS' hazardous waste contingency plan and were provided a copy of the plan with a revision date of March 15, 2023. We reviewed this document for compliance with the RCRA standards on April 2, 2024. During this review we found the facility was unable to demonstrate that the contingency plan had been provided to the local emergency response organizations.

    On, April 2, 2024, CRS provided a response to this finding with a photograph of mailing receipts for the contingency plan, dated April, 2, 2024, See Appendix 5, Photo 1.However, CRS has not provided documentation that demonstrates that the contingency plan was distributed prior to our inspection.

Section IV – FOLLOW UP

The following information was received by EPA, after exiting the facility on April 4, 2024.

- Avalon Contingency Plan 2024
- Contingency plan mailing receipts
- Process flow diagram of QA/QC Process, Pumping Process, Lab-pack process, Rework Process, Roll-off process, Inbound manifest process, and Outbound bulk shipment process
- Assessment report of secondary containment design including welded steel
- Photograph of replaced hatch
- Training records of CRS employees.
- Tank Engineering Reports

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 45 photos taken 4/1-3/2024
Appendix 2 – Facility Diagram
Appendix 3 – Process Flow Diagram
Appendix 4 – EPA Daily Summary E-mails
Appendix 5 – Response from Facility (E-mails and Photographs)
Appendix 6 – Permit No. 50084

Appendix 1

Photograph Log

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1256.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of waste drum with flammable liquid at CSA S1	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1257.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Flammable waste drum next to drum with oxidizer at CSA S1	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1258.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste drum with unsecured lid containing flammable waste. These containers are also stored with the oxidizing waste shown in Photo 2 located at CSA S1	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1259.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste drum with open lid at CSA R1	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1260.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste bucket without a lid at CSA R1.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1262.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste drum with unsecured lid at CSA R1.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1263.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste drum with missing bung at CSA R1.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1264.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste drum without properly closed lid at CSA R1.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1265.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of flange with an unsecured cap of Tank 111	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1266.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open/unsecured hatch in Tank 10R	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1267.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open/unsecured hatch in tank 112	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1268.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hatch in tank 7(R) with holes in flange.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1269.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hatch in tank 101	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1270.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open/unsecured hatch in tank 113.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1271.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Overview of Tank Farm	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1272.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSW 5, NOR # 36	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1273.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Top view of open hazardous waste drum, same drum from photo 17, at CSW 5	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1274.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSW 5	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1275.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSW 5	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1279.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hazardous waste containers stacked in unsafe condition at S6- the weight of the top containers have caused the bottom containers to start collapsing.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1280.JPG	
Date:	4/1/2024	
Camera:	Nikon COOLPIX AW120	
Photographer:	Sandesh Thapa	
Witness:	Sandesh Thapa, John Penland	
Description: Close view of stacked containers, same containers from photo no. 20, located at CSA S6		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1281.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1282.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1283.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1285.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open Hazardous waste drum with active leak found at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1286.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open Hazardous waste drum with active leak, same drum from photo no. 25, located at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1289.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of IBC tote with hazardous waste label at CSA S6. The top portion of the tote is cut off and covered with plastic as shown in photo no. 28.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1290.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste IBC tote at CSA S6. The top section of the IBC toe has been cut off- failed to meet the standards of hazardous waste container.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1291.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6- crushed drum lid	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 30

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1292.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of crushed drum, same drum from photo 29, located at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 31

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1293.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open/unsecured hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1294.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of hazardous waste label of an open drum, same drum from Photo 31, located at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 33

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1295.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 34

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1296.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S6	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 35

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1297.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open hazardous waste drum at CSA S2	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 36

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1298.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Open ended line at waste transfer pump in S2	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 37

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1300.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Flammable waste drums and oxidizer drums stored without separation at S1.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 38

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1305.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Unsecured monitoring well MW-0	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 39

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1306.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Tank used for the accumulation of hazardous waste from Miscellaneous Unit M100. This tank is not represented in the facility hazardous waste permit.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 40

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1307.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Punctured tarp on hazardous waste roll-off container located in the transporter transfer lot.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 41

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1307.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Side view of roll off box from outbound roll off area, same roll off box from photo 40.	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 42

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1310.JPG
Date:	4/3/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Close view of corrosion observed in secondary containment liner near tank 10R	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 43

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1311.JPG
Date:	4/3/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Corrosion observed in secondary containment liner next to Tank 10(R).	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 44

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1312.JPG
Date:	4/3/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hole on top of Tank 7R	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 45

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1313.JPG
Date:	4/3/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Hole on top of Tank 101	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

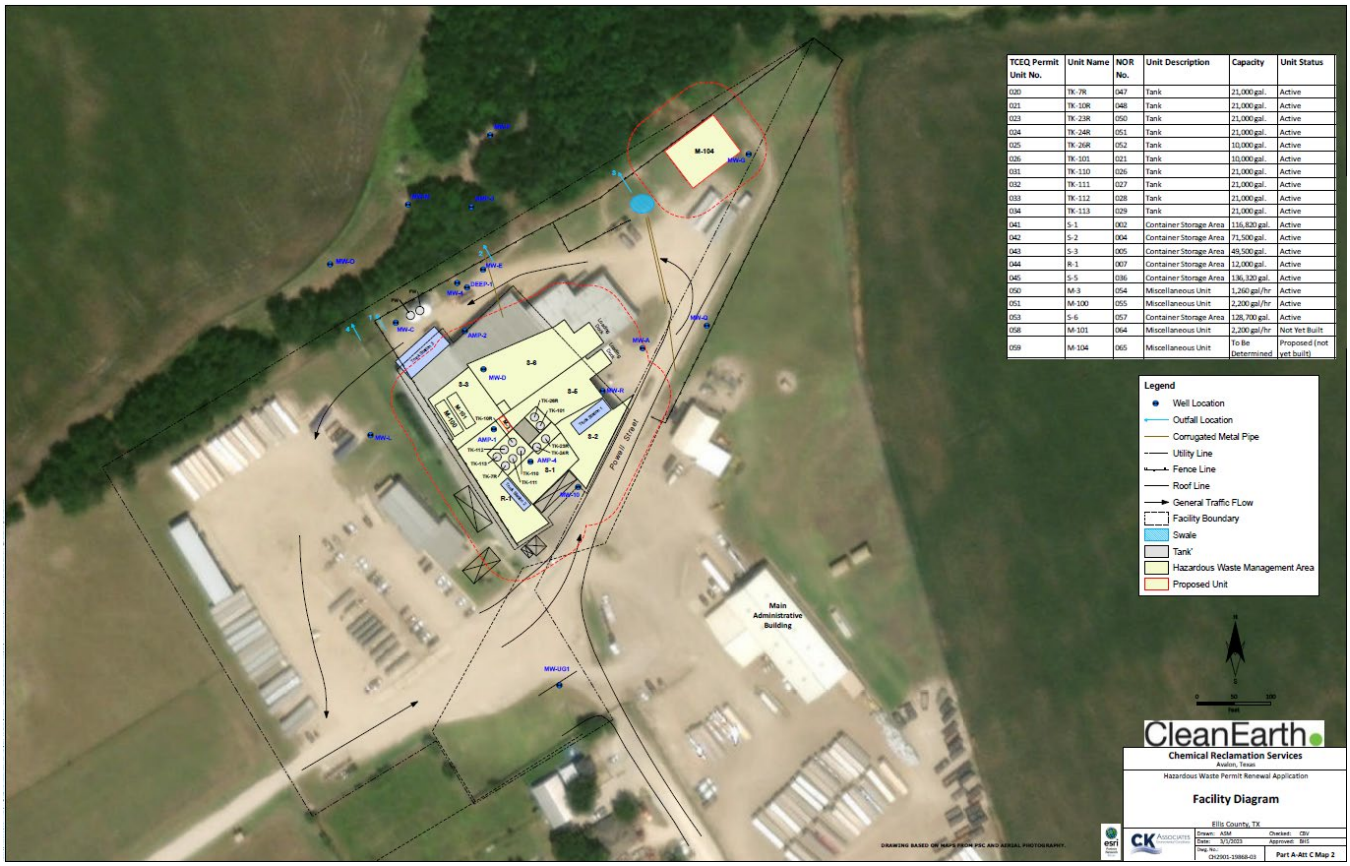
Photo No. 46

Location: Chemical Reclamation Services Avalon, 405 Powell St		
City: Avalon	County/Parish: Ellis	State: Texas

Photo #:	DSCN1304.JPG
Date:	4/1/2024
Camera:	Nikon COOLPIX AW120
Photographer:	Sandesh Thapa
Witness:	Sandesh Thapa, John Penland
Description: Unlabeled drums with used oil located at maintenance building.	

Appendix 2

Facility Diagram



TCEQ Permit Unit No.	Unit Name	NOR No.	Unit Description	Capacity	Unit Status
020	TK-7R	047	Tank	21,000 gal.	Active
021	TK-10R	048	Tank	21,000 gal.	Active
023	TK-23R	050	Tank	21,000 gal.	Active
024	TK-24R	051	Tank	21,000 gal.	Active
025	TK-26R	052	Tank	10,000 gal.	Active
026	TK-101	021	Tank	10,000 gal.	Active
031	TK-110	026	Tank	21,000 gal.	Active
032	TK-111	027	Tank	21,000 gal.	Active
033	TK-112	028	Tank	21,000 gal.	Active
034	TK-113	029	Tank	21,000 gal.	Active
041	S-1	002	Container Storage Area	116,820 gal.	Active
042	S-2	004	Container Storage Area	71,500 gal.	Active
043	S-3	005	Container Storage Area	49,500 gal.	Active
044	R-1	007	Container Storage Area	12,000 gal.	Active
045	S-5	036	Container Storage Area	136,320 gal.	Active
050	M-3	054	Miscellaneous Unit	1,260 gal/hr	Active
051	M-100	055	Miscellaneous Unit	2,200 gal/hr	Active
053	S-6	057	Container Storage Area	128,700 gal.	Active
058	M-101	064	Miscellaneous Unit	2,200 gal/hr	Not Yet Built
059	M-104	065	Miscellaneous Unit	To Be Determined	Proposed (not yet built)

Legend
- Well Location
- Outfall Location
- Corrugated Metal Pipe
- Utility Line
- Fence Line
- Roof Line
- General Traffic FLow
- Facility Boundary
- Swale
- Tank'
- Hazardous Waste Management Area
- Proposed Unit

N
S
0 50 100
Feet

CleanEarth

Chemical Reclamation Services
Avalon, Texas

Hazardous Waste Permit Renewal Application

Facility Diagram

Ellis County, TX

CK Associates

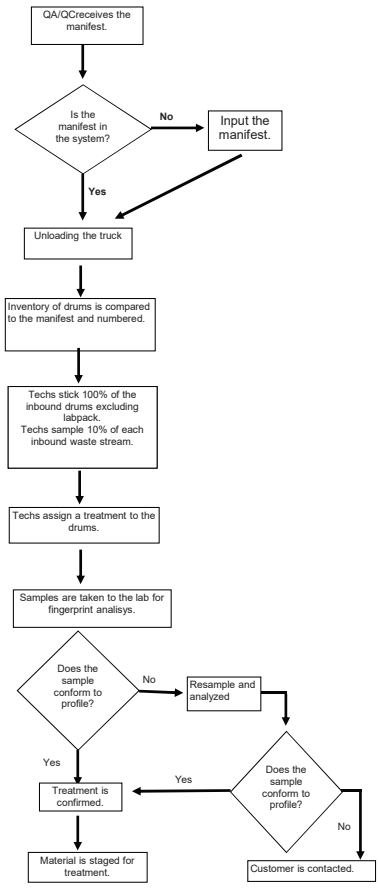
Drawn: ASM Checked: CBV
Date: 3/1/2023 Approved: BHS
Dwg. No.: CH2901-19868-03

Part A-Att C Map 2

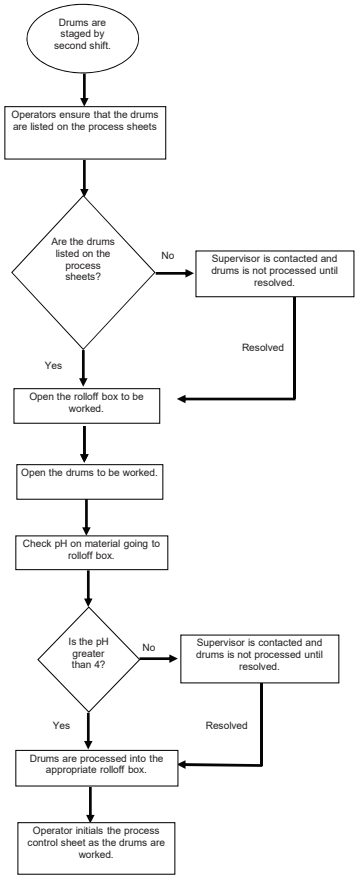
Appendix 3

Process Flow Diagram

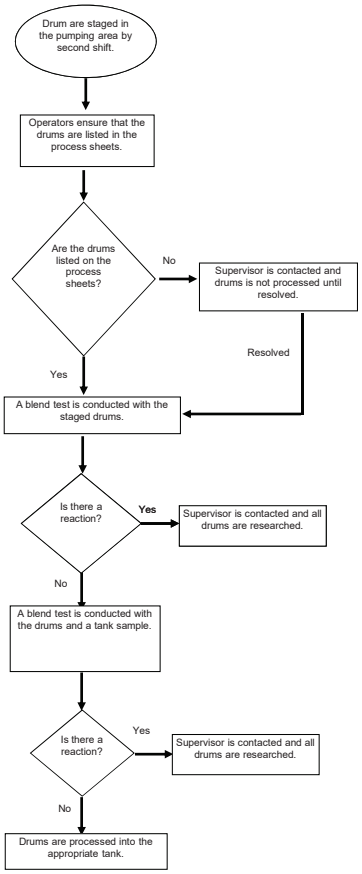
QA/QC PROCESS



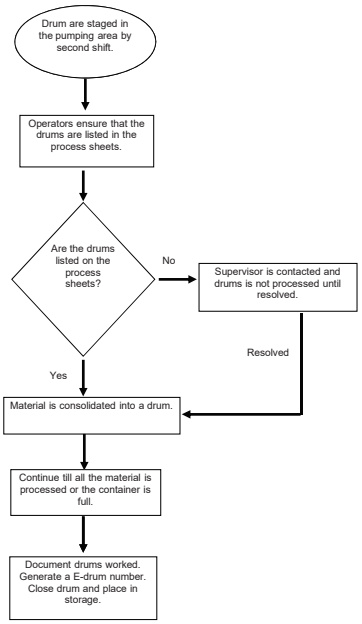
ROLLOFF PROCESS



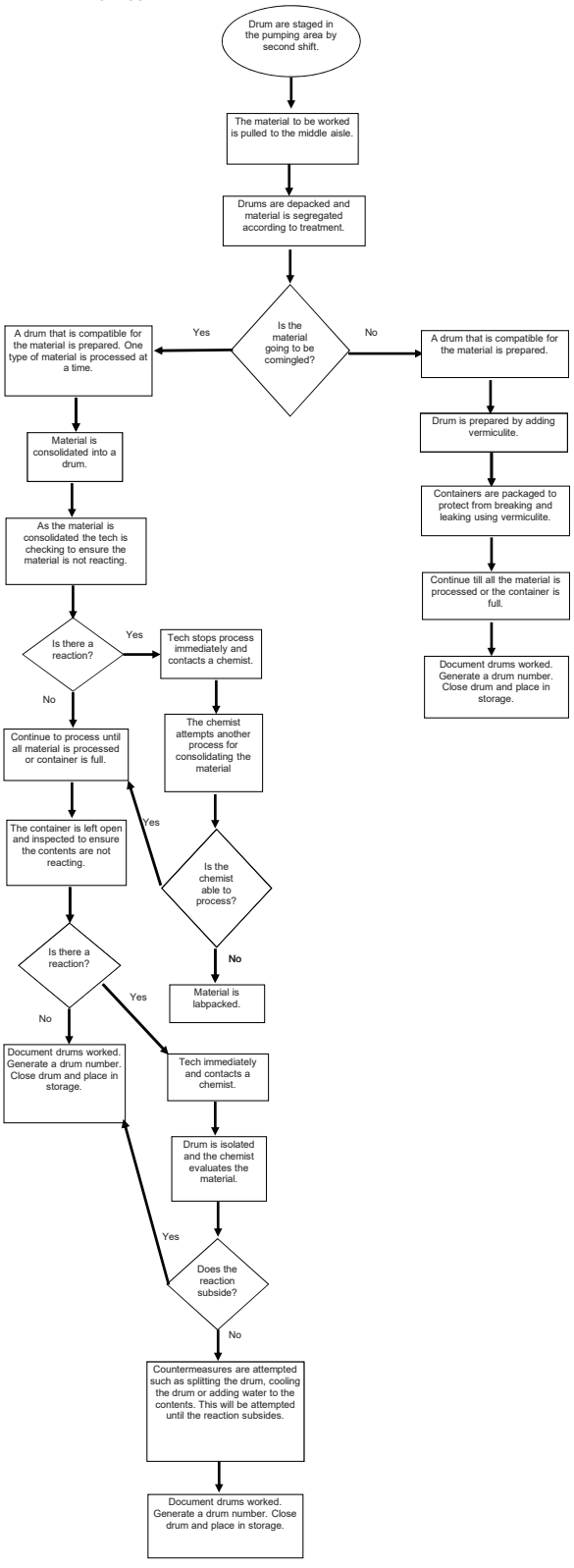
PUMPING PROCESS



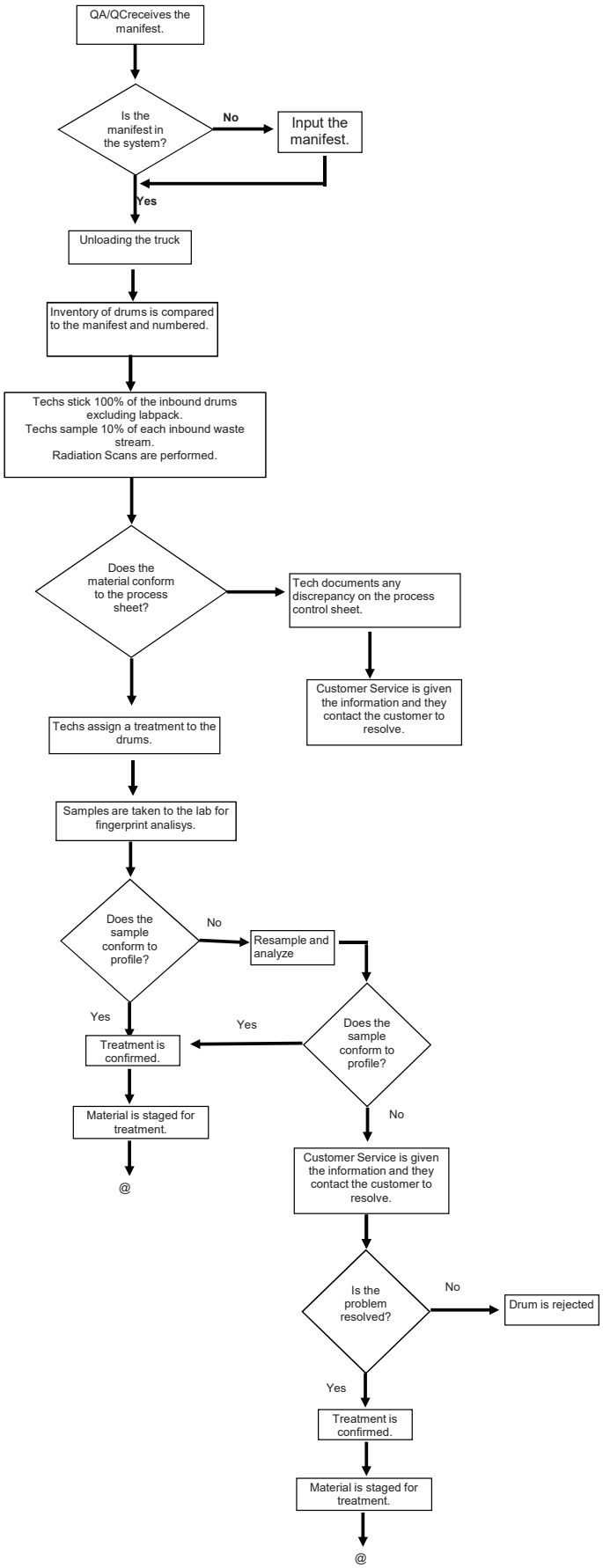
REWORK PROCESS



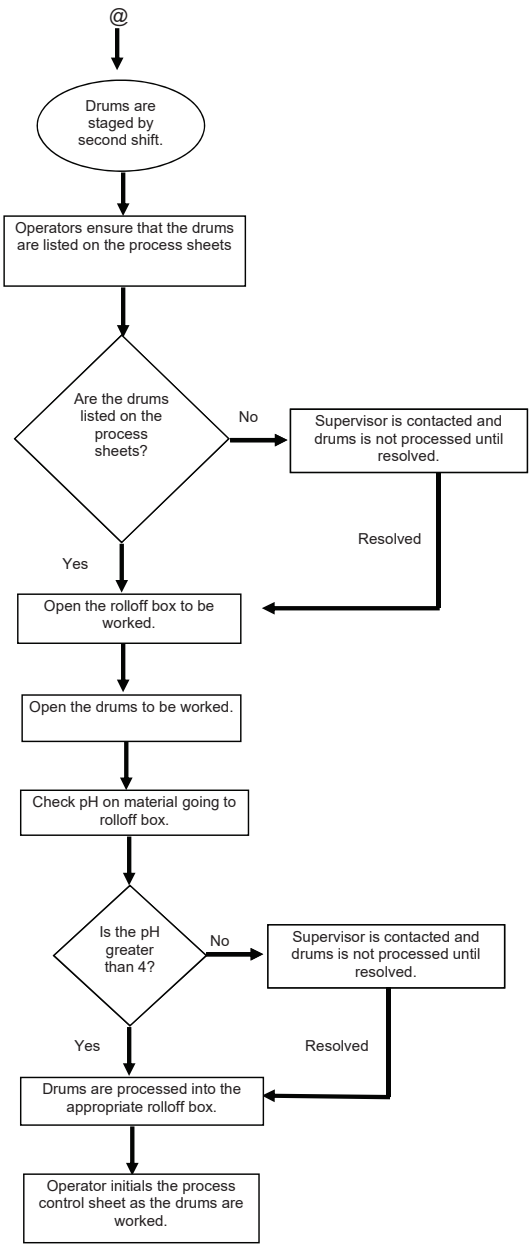
LABPACK PROCESS



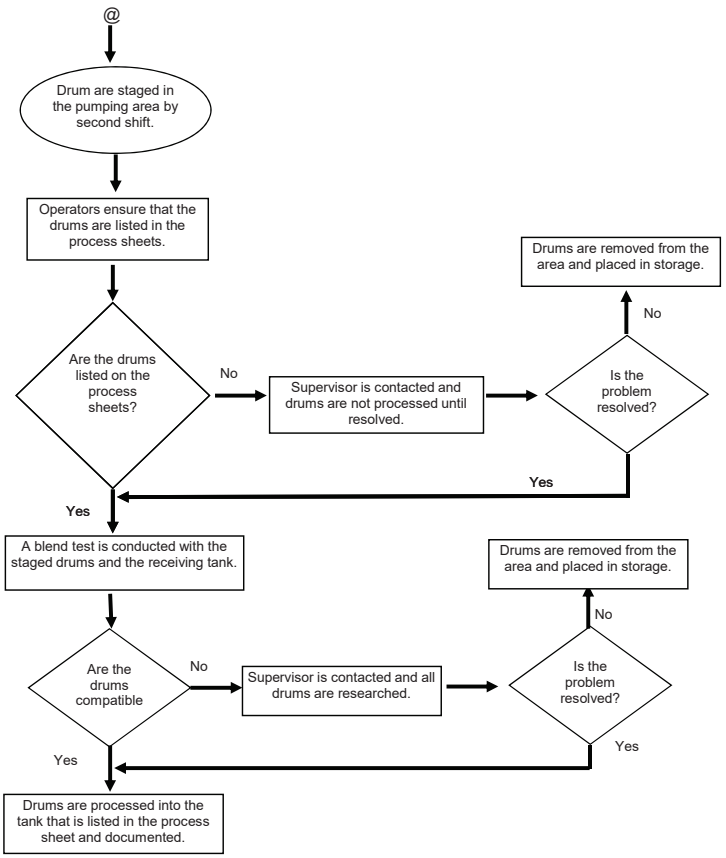
QA/QC PROCESS



ROLLOFF PROCESS



PUMPING PROCESS



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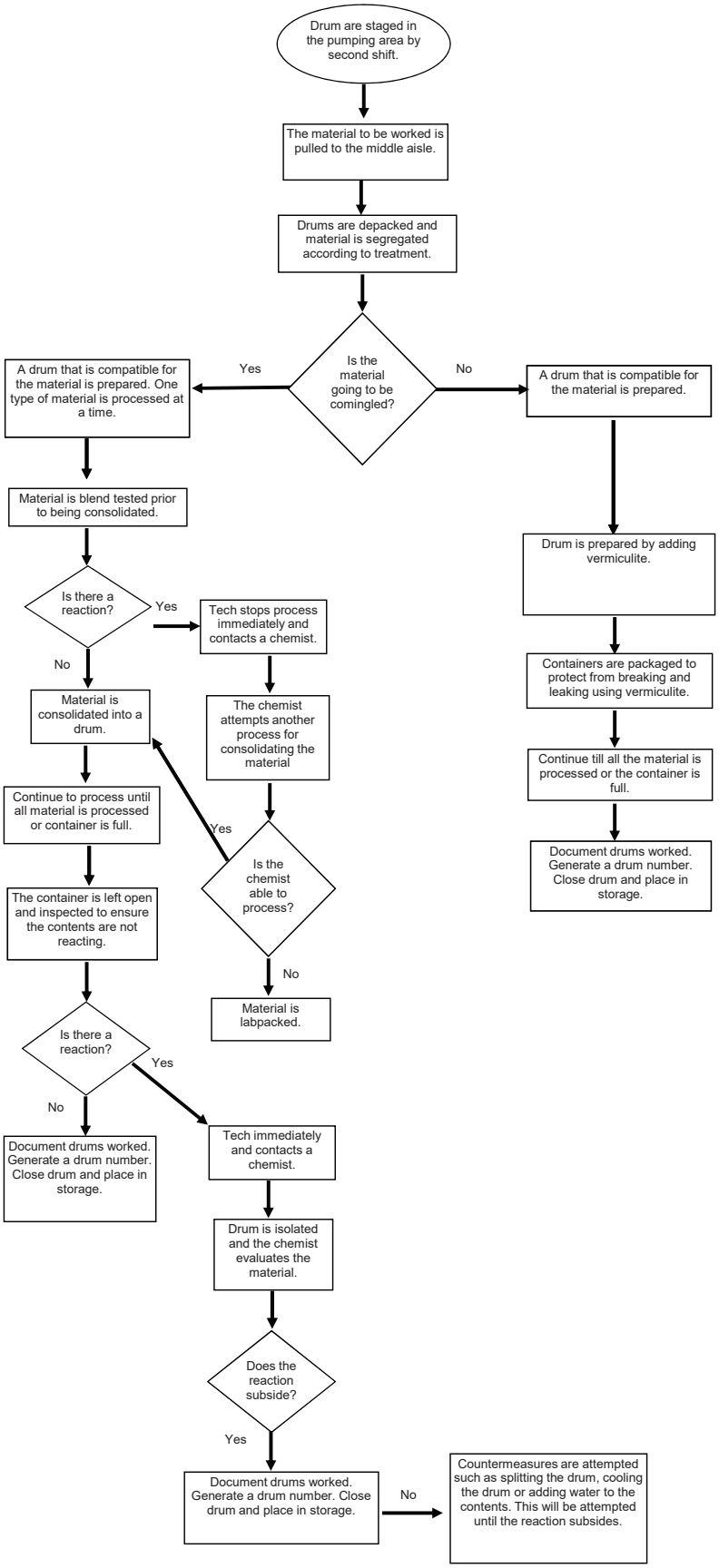
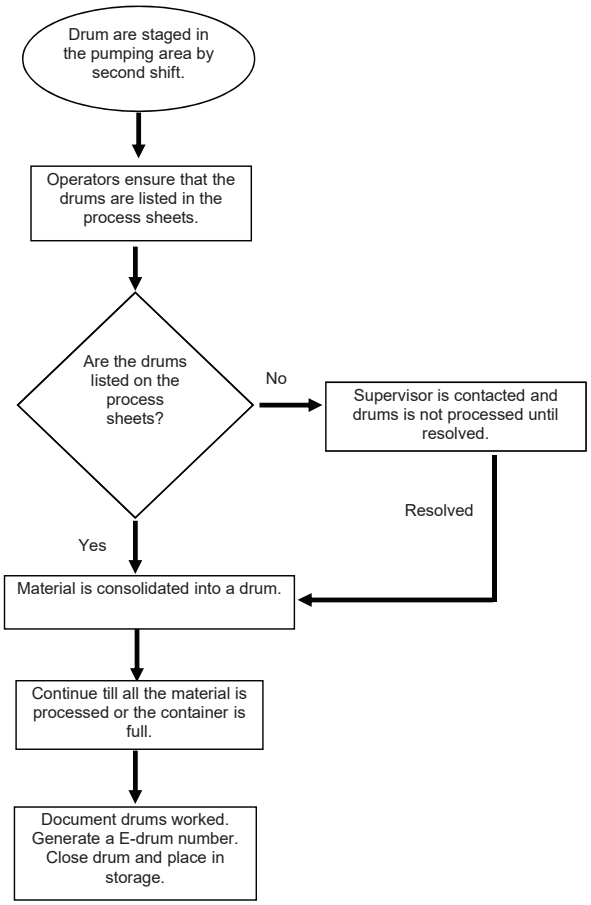
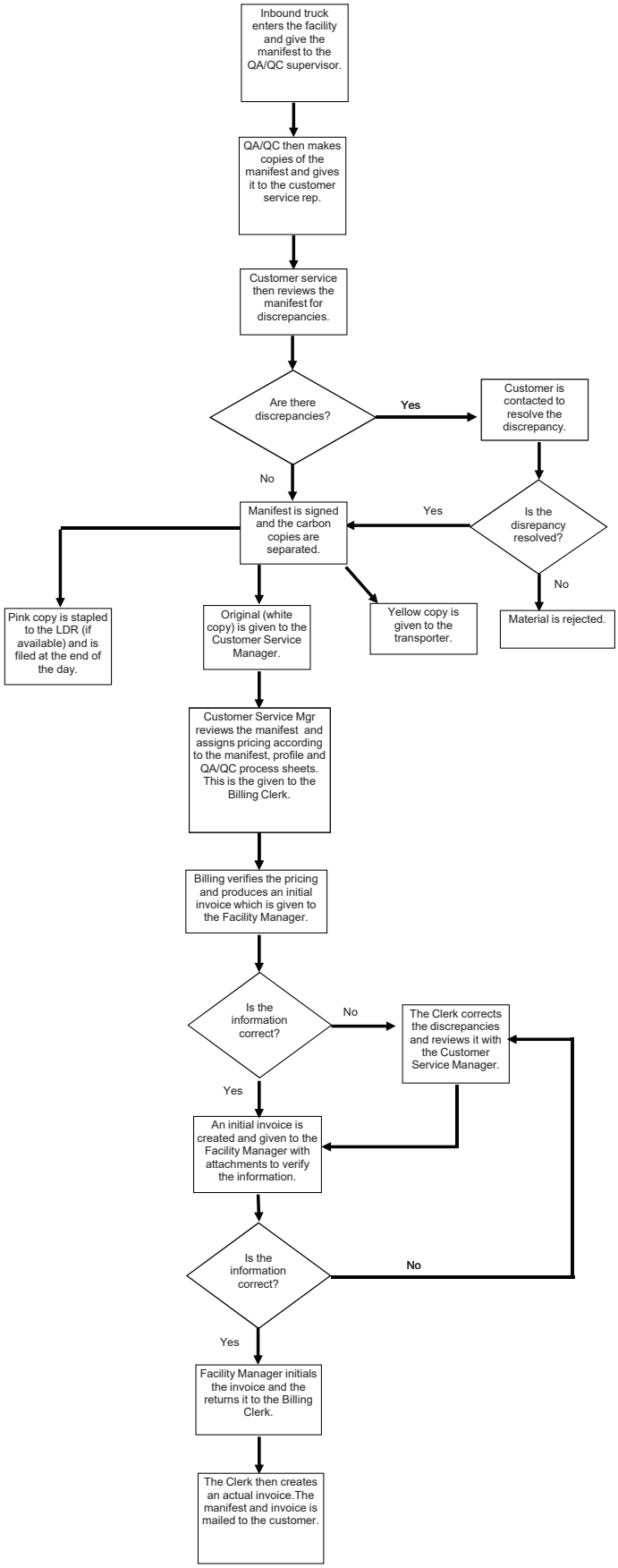


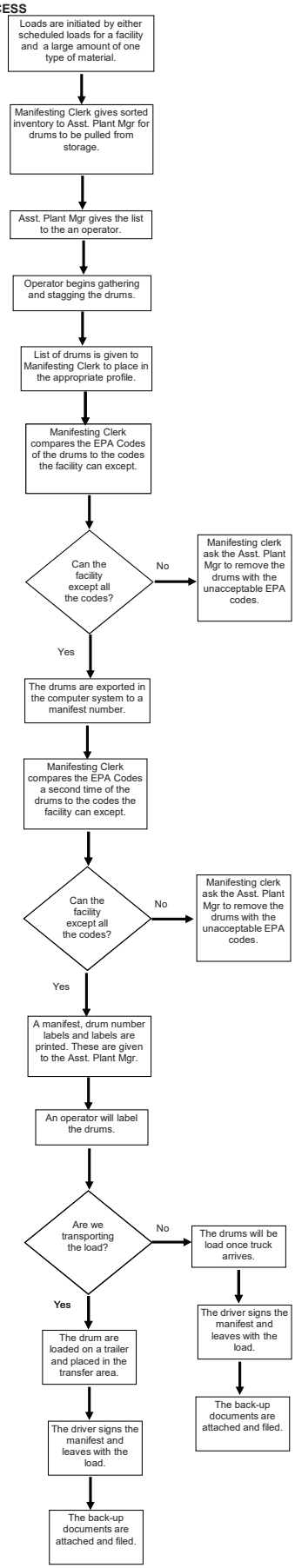
REWORK PROCESS



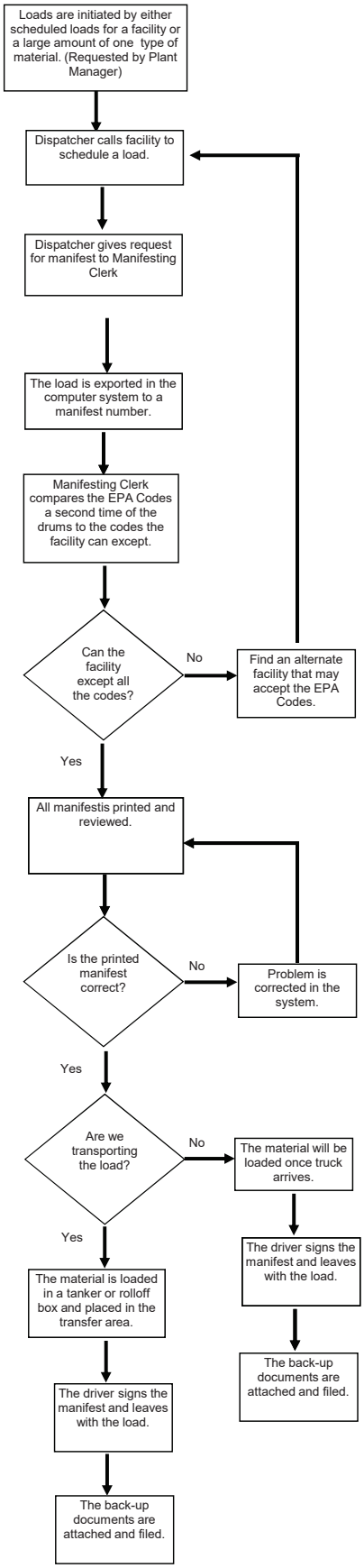
INBOUND MANIFEST PROCESS



OUTBOUND DRUM SHIPMENT PROCESS



OUTBOUND BULK SHIPMENT PROCESS



Appendix 4

EPA Daily Summary E-mails

From: Thapa, Sandesh

To: jmathers@harsco.com; malaniz@harsco.com

Cc: Penland, John; Pandak, Debra (she/her/hers); Yelitza Barragan; Todd.Jahns@tceq.texas.gov

Subject: Daily Summary for 2024 RCRA inspection of Chemical Reclamation Services - Avalon, TX - April 1, 2024

Date: Tuesday, April 2, 2024 12:15:00 AM

Attachments: Small Business Resources Information Sheet.pdf

General CBI Notice 2.0 12-1-22.pdf

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Introduction

During the week of April 1, 2024, I, Sandesh Thapa, conducted an unannounced inspection of the Chemical Reclamation Services (CRS) facility located at 405 Powell St, Avalon, Texas for compliance with the Resource Conservation and Recovery Act (RCRA). I was assisted on this inspection by Environmental Protection Agency (EPA) inspector John Penland, Texas Commission on Environmental Quality (TCEQ) inspectors Yelitza Barragan and Todd Jahns . The inspection included walkthroughs of the facility's hazardous waste generation and management units; a review of the facility records related to hazardous waste management.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
Sandesh Thapa	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
John Penland	Senior Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Yelitza Barragan	Hazardous Waste Inspector	TCEQ	817-588-5935	Yelitza.Barragan@tceq.texas.gov
Todd Jahns	Hazardous Waste Inspector	TCEQ	817-588-5918	Todd.Jahns@tceq.texas.gov
Jody Mathers	Environmental Health and Safety Manager	CRS	972-627-3224 ext.124	jmathers@harsco.com

Mark Alaniz	Operations Manager	CRS	972-816-2426	malaniz@harsco.com

Daily Summary

- Initial Entry to the facility - approximately 09:05am
- Opening meeting start – 09:35am
    - I presented my credentials to Mark Alaniz and informed him that we were there to conduct an inspection of the facility under the authority of section 3007 of the Resource Conservation and Recovery Act.
    - We discussed the authority for the inspection – RCRA Section 3007 - For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes and permit such person at all reasonable times to have access to, and to copy all records relating to such wastes. For the purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, such officers, employees or representatives are authorized—
        - (1)to enter at reasonable times any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from;
        - (2)to inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.
    - We discussed the purpose of EPA's inspection – Assessment of Chemical Reclamation Services' compliance with its requirements under RCRA, including, but not limited to, the requirements for: waste determination and counting; waste marking; waste container management; use of the hazardous waste manifest; emergency planning; personnel training; air pollution control requirements for hazardous waste units; and the requirements for the management of excluded or exempt materials.
    - Discussed the right of Chemical Reclamation Services to assert a Confidential Business Information claim for records requested by EPA (see attachment)
    - Discussed the process for transferring electronic records – EPA has set up a Microsoft OneDrive folder with access limited to the inspection participants.
        - One Drive Link: RCRA Chemical Reclamation Services
    - Discussed the inspection process – the inspection will be conducted April 1, 2024 through April 5, 2024. The participants will meet at the facility at 9:00am each day to conduct the onsite portion of the inspection and discuss the findings of the ongoing records review. The records review will be conducted by the inspectors independently offsite throughout the week. Daily summaries will be provided by the inspectors at the end of each day to ensure a clear communication of questions and findings. The

meeting Friday, April 5, 2024 will be reserved for a closing conference, where EPA will summarize the overall findings of the inspection to that point and provide a plan for concluding any unfinished evaluation.

- General Facility Process – The Chemical Reclamation Services is a permitted Treatment, Storage and Disposal Facility (TSDF) and a Large Quantity Generator (LQG) of hazardous waste. CRS manages industrial, hazardous, non- hazardous and chemical waste. Its services include transportation of hazardous waste, disposal of electronic waste, lab packs, pharmaceutical waste, treatment and processing of hazardous soils, dredged materials, bulk liquids, and drums. Primary processing activities includes supplemental fuel blending and waste consolidation for off-site disposal.
- Initial request for compliance records, including:
    - Hazardous waste notification form: 8700-12 or equivalent
    - A current Hazardous Waste Contingency Plan including records of distribution.
    - Facility Maps identifying solid waste management units.
    - Facility waste profiles for any solid waste generated since 2023. Include documentation relevant to the waste determination made for each waste (i.e. analytical reports or documentation to support generator knowledge; see 40 CFR 262.11(f))
    - Facility SOPs related to the generation or management of hazardous waste.
    - RCRA Unit inspection records since 2023 for tanks and container storage areas.
    - Drawings and detailed of Miscellaneous Unit M 101 (processing shredder).
    - RCRA Training Records

- Facility Walkthrough
    - Beginning at approximately 10:00 AM

    - Container Storage Area (CSA)
        - CSA S1 – NOR 004, Permit Unit No. 42
            - Containers holding incompatible waste such as flammable and oxidizing materials are stored nearby without proper separation. 40 CFR 261.17 (a) 1 (VII) c regulation states such containers must be separated or protected by means of a dike, berm, wall, or other device.
        - CSA R1 NOR 007, Permit Unit No. 044
            - One open bucket and four open buckets with hazardous waste were found in this area. 40 CFR 261.17 (a) 1 (IV) A, 40 CFR 264. 173.
            - Tank Farm
                - Pressure release hatch in open condition- Tank 7 (R), Tank 10(R), Tank 111, Tank 112, and Tank 113.
                - Manway hatch in open condition – Tank 111
        -

CSA 5 NOR 036, Permit Unit No. 045

- Three open drums were found in this area. 40 CFR 261.17 (a) 1 (IV) A, 40 CFR 264. 173.
- Containers holding incompatible waste such as flammable and oxidizing materials are stored nearby without proper separation. 40 CFR 261.17 (a) 1 (VII) c regulation states such containers must be separated or protected by means of a dike, berm, wall, or other device.

- CSA S6 NOR 057, Permit Unit No. 053
  - Six open drums were found in this area. 40 CFR 261.17 (a) 1 (IV) A, 40 CFR 264. 173. Additionally, one drum was found with crushed lid. 40 CFR 264.171.

    One 275-gallon capacity, IBC tote containing hazardous waste was observed without the top section. It was secured using clear plastic. 40 CFR 264.171 regulation requires container holding hazardous waste to be in a good condition without any structural defects.
- CSA S2 NOR 004, Permit Unit No. 042
  - One open drum was found in this area. 40 CFR 261.17 (a) 1 (IV) A, 40 CFR 264. 173.
  - Line used to fill the trucks was in open state. The facility secured the line during inspection.
- CSA S3 NOR 005, Permit Unit No. 043
  - No issues.

- Miscellaneous Unit
  - M 101 NOR 064, Permit Unit No. 058 (Processing Shredder)
    - This unit is missing sign indication requirement of permit No. 50084 - These units must have sign indicating “TCEQ Permit Unit No.“
    - The shredder system is connected to an unregistered free-standing tank. According to the facility, the tank is exempt from registration by permit No. 50084. Diagram and details requested with the facility.
  - M 104 NOR 065, Permit Unit N0. 059
    - This unit is missing sign indication requirement of permit No. 50084- These units must have sign indicating “TCEQ Permit Unit No.“
    - Backup unit, inactive.
- Lab
  - Facility has an inhouse lab. No issues.

- Monitoring well (MW-0)

- The lock was not secured properly.

- Daily Wrap up meeting
- Departed Facility at approximately 2:30pm

Planned activities for April 2, 2024

- Process walkthrough
  - Waste streams
    - This discussion will include:
      - Management of hazardous waste generated from the processes.
      - Document review – LDAR, Training documents and Emergency procedure.

From: Thapa, Sandesh

To: jmathers@harsco.com; malaniz@harsco.com

Cc: Pandak, Debra (she/her/hers); Penland, John; dawson.gonzales@teceq.texas.gov

Subject: Daily Summary for 2024 RCRA inspection of Chemical Reclamation Services - Avalon, TX - April 2, 2024

Date: Wednesday, April 3, 2024 1:00:00 AM

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
Sandesh Thapa	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
John Penland	Senior Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Dawson Gonzales	Environmental Inspector	TCEQ	817-588-5920	dawson.gonzales@teceq.texas.gov
Jody Mathers	Environmental Health and Safety Manager	Chemical Reclamation Services (CRS)	972-627-3224 ext.124	jmathers@harsco.com
Mark Alaniz	Operations Manager	CRS	972-816-2426	malaniz@harsco.com

Daily Summary

- Inspection Starts – 9:00 am
- Recap of Daily Summary from April 1, 2024
    - Unlabeled drum found in the maintenance building contained used oil.
- Opening meeting start – 09:35am

LDAR Process:

- LDAR monitoring is done inhouse. Facility use portable detecting instrument MiniRAE 3000 for VOC leaks detection. LDAR SOP requested by EPA.
- Reviewed inspection records and calibrations records.

Contingency Plan :

- Request pending for proof of arrangements with local authority.
- Suggested to incorporate activation threshold for Contingency plan.

Training Documents:

- Received DOT Hazardous Material Training records for Mandi Hernandez, Margarita Munoz, Lorena Olsen, Jessica Simpson, Skyler West and William young.

Manifest Review:

- Received copy of Manifest no: 026346366JJK, as sample of rejected waste.

Tank Wash Process:

- The facility has inhouse tanker trailers that transport hazardous waste. These trailers are sent off-site for washing. During the washing process, residues from the trailers are placed in drums and transported back to the facility. Later, sent off-site for hazardous waste disposal.

Facility Walkthrough:

- 10 Days Roll-Off Box Storage Area.
  - A roll-off box with hazardous waste was found in this area. The tarp securing the roll-off box had multiple holes. 40 CFR 264.173
  - The area is registered under Clean Earth Houston's EPA Transporter ID, but CRS team members are responsible for daily operations.

Planned activities for April 3, 2024

- Review LDAR SOP
- Review permit no: 50084
- Review Manifest and Training documents.

Departed Facility at approximately 2:15pm

Regards,

Sandesh Thapa
Enforcement and Compliance Assurance Division
U.S. EPA Region 6
Office: 214-665-2265
Cell: 469-616-8576

From: Thapa, Sandesh

To: jgbusby@harsco.com; jmathers@harsco.com; malaniz@harsco.com

Cc: Penland, John; Pandak, Debra (she/her/hers)

Subject: Daily Summary for 2024 RCRA inspection of Chemical Reclamation Services - Avalon, TX - April 3, 2024

Date: Wednesday, April 3, 2024 11:49:00 PM

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
Sandesh Thapa	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
John Penland	Senior Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Johnny Busby	General Manager	Chemical Reclamation Services (CRS)	972-310-3742 ext. 123	jgbusby@harsco.com
Jody Mathers	Environmental Health and Safety Manager	CRS	972-627-3224 ext.124	jmathers@harsco.com
Mark Alaniz	Operations Manager	CRS	972-816-2426	malaniz@harsco.com

Daily Summary

- Inspection Starts – 9:15 am
- Recap of Daily Summary from April 2, 2024
    - Arrangements with local authorities of contingency plan requests are for previous version of the plan.
- Tanks Inspection for leaks:
    - EPA used TVA2020 Toxic Vapor Analyzer, Model# A2E3B1, Serial# 202016081525 to sample emissions from tanks. All the calibrations were within acceptable ranges. Refer to Calibration Table for details.
    - Emissions greater than permitted threshold, 500 ppm, were measured in ten tanks. At no time during the inspection, these tanks were being loaded or unloaded. The measurements were taken from the PRV hatches located at the top of the tanks. Refer to Emission Measurement Table for details. Permit No. 50084.
    - Two of the tanks, Tank 7 (R) and Tank 101, has holes in the top section of the tanks. The facility has plans to initiate the repair process by replacing the flanges.

40 CFR 264.1084(K) 1 regulation requires owner or operator to make first efforts at repair of the defect no later than 5 celander days after detection.

- During the inspection, few cracks were observed in the surface Impoundments at the Tank Farm.
- Post test FID SPAN 2 9500 Conc methane calibration reading result was 9500 ppm.

Calibration Table:

DET /Calibration Type	Known Conc (Methane)	Cal Date	Manufactured Date	Exp Date	Lot Number	Result
FID Zero	O PPM	4/3/2024	Aug 2022	Aug 2027	302-402485490-53	Accepted
FID SPAN1	500 PPM	4/3/2024	Apr 2022	4/20/2026	304-402425358-1	Accepted
FID SPAN2	9500 PPM	4/3/2024	Apr 2022	4/20/2026	304-402415359-1	Accepted

Emission Measurement Table:

Tank Number	Sampling location/parts	Measured Value
TK 110	PRV hatch	11,000 ppm
TK 110	Valve 41	47 ppm
TK 110	Valve 42	70 ppm
TK 110	Valve 45	3 ppm
TK 10 (R)	PRV hatch	14,400 ppm
TK 10 (R)	Valve 37	11 ppm
TK 10 (R)	Valve 36	19 ppm
TK 10 (R)	Valve 44	20 ppm
TK 112	PRV hatch	11,100 ppm
TK 112	Valve 57	14 ppm
TK 113	PRV hatch	9,500 ppm
TK 113	Valve 62	< 1 ppm
TK 113	Valve 63	< 1ppm
TK 7 (R)	holes on top portion around flanges	>14,000ppm
TK 7 (R)	Valve 60	5 ppm
TK 7 (R)	Valve 61	<1ppm
TK 111	PRV hatch	14,000 ppm
TK 111	Valve 52	50 ppm
TK 111	Valve 53	30 ppm
TK 111	Valve 54	51 ppm
TK 101	Hatch on top of the tank, holes on top	10,200 ppm
TK 101	Valve 22	15 ppm
TK 101	Valve 23	14 ppm
TK 26 (R)	Hatch on top of the tank	10,400 ppm
TK 26 (R)	Valve 26	20 ppm

TK 26 (R)	Valve 27	12 ppm
TK 23 (R)	Hatch on top of the tank	9,600 ppm
TK 23 (R)	Valve 14	17 ppm
TK 23 (R)	Valve 15	16 ppm
TK 24 (R)	Hatch on top of the tank	10,400 ppm
TK 24 (R)	Valve 16	14 ppm
TK 24 (R)	Valve 17	11 ppm

Planned activities for April 4, 2024

- Closing Conference
- Document review of any recent submittals.
- Discuss Area of Concerns
- Questions/ Feedback

Departed Facility at approximately 2:30pm

Regards,

Sandesh Thapa
Enforcement and Compliance Assurance Division
U.S. EPA Region 6
Office: 214-665-2265
Cell: 469-616-8576

From: Thapa, Sandesh

To: jgbusby@harsco.com; jmathers@harsco.com; malaniz@harsco.com

Cc: Pandak, Debra (she/her/hers); Penland, John

Subject: Daily Summary for 2024 RCRA inspection of Chemical Reclamation Services - Avalon, TX - April 4, 2024

Date: Friday, April 5, 2024 12:15:00 AM

Hi All,

Here is a summary from inspection closing conference. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
Sandesh Thapa	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
John Penland	Senior Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Johnny Busby	General Manager	Chemical Reclamation Services (CRS)	972-310-3742	jgbusby@harsco.com
Jody Mathers	Environmental Health and Safety Manager	CRS	972-627-3224 ext.124	jmathers@harsco.com
Mark Alaniz	Operations Manager	CRS	972-816-2426	malaniz@harsco.com

Daily Summary

- Meeting Starts – 12:20 pm

- Recap of Daily Summary from April 3, 2024
    - Pitting corrosions were seen in the steel liner at Tank farm. Previously noted as cracks in surface impoundments.
    - Correction, reading of emission were measured at the base of hatches at the top of the tanks. Previously noted as PRV hatches.

Document Review:

- There were no logs of any leaks or venting noted in daily inspection logs of tanks from April 1, 2023- April 3,2024.

Closing Conference:

Identified Concerns:

- Containers holding incompatible waste such as flammable and oxidizing materials are

stored nearby without proper separation. 40 CFR 261.17 (a) 1 (VII) c.

- 16 open drums and 1 open bucket were found in Container storage area (CSA). One of the drum lids was crushed and noted as open drum. There were 3 hazardous waste containers stacked on top of each other at an angle. 40 CFR 264. 173.
- IBC tote containing hazardous waste was observed without the top section. It was secured using clear plastic. 40 CFR 264.171
- Pressure release hatches were open in 5 tanks (resolved), 2 tanks had hole in them, and 10 tanks were above the permitted emission limit of 500 ppm.
- Line used to fill the trucks was in open state. - resolved
- A roll-off box with hazardous waste was found in this area. The tarp securing the roll-off box had multiple holes. 40 CFR 264.173 – resolved.
- Two Miscellaneous Units, M101 and M104, were missing signage requirements of permit No. 50084.
- Monitoring well MW0 was not secured properly. Lock was in open state. - resolved
- Pitting corrosions were seen in steel liner at Tank farm.
- Used oil drum found without label at the maintenance shop. – resolved

Areas for Additional Review:

- Review of Personnel Training records.
  - List of personnel for review.
    - Edie Washington
    - Natalie Miranda
    - Allen M

- Biennial Reports
  - Biennial reports will be reviewed for consistency of waste coding and counting.

- Manifest Review.

Ongoing request of compliance records, including

- Arrangement with local authorities of contingency plan prior to the inspection start date. 40 CFR 264.53 (b)
- Facility SOP related to hazardous waste management and waste analysis plan (see 40 CFR 264.13).
- Records pretending to Financial Requirements of Permit N0. 50084.
- Calibration records of miniRAE 3000 from Jan 2024.
- Engineering certification for tanks.

Departed Facility at approximately 2:15 pm

Regards,

Sandesh Thapa
Enforcement and Compliance Assurance Division
U.S. EPA Region 6
Office: 214-665-2265
Cell: 469-616-8576

Appendix 5

Response from Facility (Emails and Photo Logs)

Photo Number	Date Submitted	Title	Description
1	4/2/2024	Contingency Plan	Mailing receipts of contingency plans sent on 4/2/2024 to establish proof of agreements with local authorities.
2	4/29/2024	M-101	Proof of correction for signage requirement of permit 50084 for Unit M101, NOR 64
3	4/29/2024	Manway Hatch	Proof of secured flange on tank 111.
4	4/2/2024	R02	Proof of replacement of tarp of roll of box located at 10-day transfer area.
5	4/26/2024	Thief Hatch Replacement	New Hatch replaced in Tank 7(R)
6	4/3/2024	Tank 20 Out of Service	Out of use Service tag placed on tank 20 on 4/3/2024
7	4/3/2024	Tank 26 out of service	Out of use Service tag placed on tank 20 on 4/3/2024
8	4/3/2024	Used Oil Drum	Labelled Used Oil drum with “USED OIL”

2


3

5


NOTICE
TEMPORARILY
OUT OF
USE
SIGNED BY
DATE 04/03/24

7

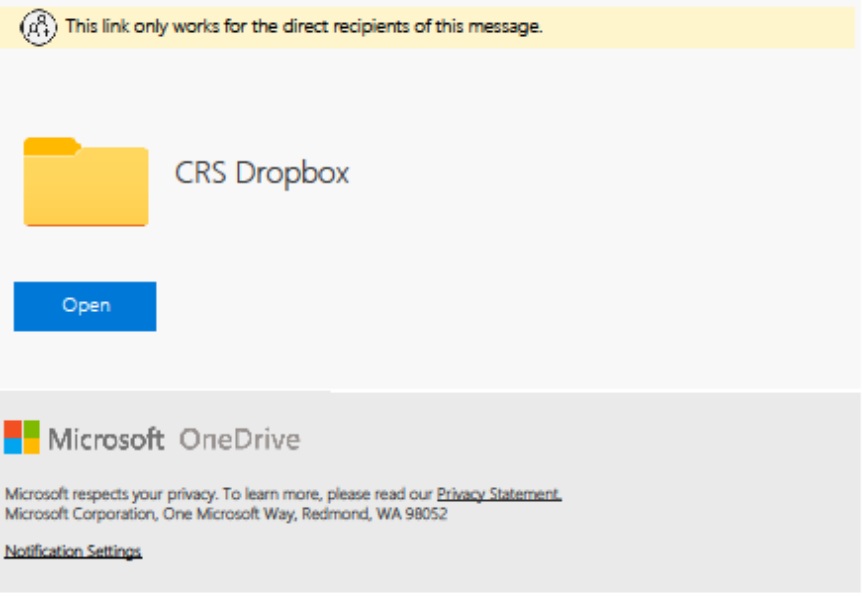

USED
OIL

From: SharePoint Online
To: Thapa, Sandesh
Subject: The link to "CRS Dropbox" was successfully used
Date: Wednesday, April 3, 2024 3:39:45 PM
Attachments: cfb6d6ca-5a39-461b-aa70-6913827704372
9d001d85-39a0-41b3-955b-4c712c0c0b88
eb4a71d2-c24b-42f0-8c5c-d63edcf7cb16

---

jgbusby@harsco.com has opened the link you sent to "CRS Dropbox"!

If this is unexpected, you can manage your folder's sharing permissions.



Microsoft OneDrive

From: Mathers, Jody

To: Thapa, Sandesh

Cc: Penland, John

Subject: RE: :EXTERNAL: RE: Thapa, Sandesh shared the folder "CRS Dropbox" with you

Date: Friday, July 12, 2024 3:22:24 PM

Attachments: image009.png
image010.png
image011.png
image012.png
image013.png
image014.png

Done sir. Uploaded to the Emergency Planning folfer.

Jody Mathers
EH&S Manager

CleanEarth™

O (214-399-8523)

jmathers@cleanearthinc.com

www.cleanearthinc.com

405 Powell St, Avalon, TX 76623

icare
think safety. act safely

From: Thapa, Sandesh <Thapa.Sandesh@epa.gov>
Sent: Friday, July 12, 2024 12:30 PM
To: Mathers, Jody <jmathers@cleanearthinc.com>
Cc: Penland, John <Penland.John@epa.gov>
Subject: RE: :EXTERNAL: RE: Thapa, Sandesh shared the folder "CRS Dropbox" with you

Hi Mr. Jody,

Thank you for uploading the process diagram. Can you please upload the contingency plan in the shared folder as well?

Regards,
Sandesh Thapa
Enforcement and Compliance Assurance Division

U.S. EPA Region 6
Office: 214-665-2265

Cell: 469-616-8576

From: Mathers, Jody <jmathers@cleanearthinc.com>
Sent: Tuesday, July 2, 2024 9:16 AM
To: Thapa, Sandesh <Thapa.Sandesh@epa.gov>
Cc: Alaniz, Mark <malaniz@cleanearthinc.com>
Subject: Re: :EXTERNAL: RE: Thapa, Sandesh shared the folder "CRS Dropbox" with you

Hello Sandesh,

I'm currently at our Kansas City facility but will upload ASAP.

Thank you,

Jody

From: Thapa, Sandesh <Thapa.Sandesh@epa.gov>
Sent: Monday, July 1, 2024 4:15:17 PM
To: Mathers, Jody <jmathers@cleanearthinc.com>
Cc: Alaniz, Mark <malaniz@cleanearthinc.com>
Subject: :EXTERNAL: RE: Thapa, Sandesh shared the folder "CRS Dropbox" with you

Hi Mr. Jody,

I am working on CRS Inspection report. Can you please upload a process diagram of hazardous waste management at CRS in the drop box, within process diagram folder?

Regards,

Sandesh Thapa

Enforcement and Compliance Assurance Division

U.S. EPA Region 6
Office: 214-665-2265

Cell: 469-616-8576

From: Thapa, Sandesh
Sent: Monday, April 1, 2024 8:21 PM
To: jmathers@harsco.com
Subject: Thapa, Sandesh shared the folder "CRS Dropbox" with you

Thapa, Sandesh shared a folder with you

Here's the folder that Thapa, Sandesh shared with you.

CRS Dropbox

This link only works for the direct recipients of this message.

Open

Appendix 6

Permit No. 50084

Hazardous Waste Permit No. 50084

EPA ID No. TXD0468444700

ISWR No. 50084

Original Date of Issuance: September 15, 1987

Renewal Dates: May 30, 2002 and September 17, 2013

Texas Commission on Environmental Quality
Austin, Texas

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

Name of Permittee:	Chemical Reclamation Services, LLC 405 Powell Street Avalon, Texas 76623
Site Owner:	Chemical Reclamation Services, LLC 405 Powell Street Avalon, Texas 76623
Registered Agent for Service:	Corporation Services Company d/b/a CSC-Lawyers Incorporating Services Company 211 E. 7th Street, Suite 620 Austin, Texas 78701-3218

Classification of Site:

Waste Classification:	Site Type:	Permit Type:
Hazardous	Off-Site	Storage
Nonhazardous:		Processing
Industrial Class 1 waste		Compliance Plan
Industrial Class 2 waste		

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

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

Issued Date: February 15, 2024

K Keel

For the Commission

Table of Contents

List of Tables:

List of Attachments:

List of Compliance Plan Attachments:

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
MDL.....Method Detection Limit
MQL.....Method Quantitation Limit
MSL.....Mean Sea Level
NAPL.....Non-Aqueous Phase Liquid
NOR.....Notice of Registration
PCB.....Polychlorinated Biphenyl
PCL.....Protective Concentration Level
PMZ.....Plume Management Zone
POC.....Point of Compliance
POE.....Point of Exposure
ppm.....Parts Per Million
ppmv.....Parts Per Million by Volume
PQL.....Practical Quantitation Limit
Psi.....Pounds Per Square Inch
QA/QC.....Quality Assurance/Quality Control
RACR.....Response Action Completion Report
RAER.....Response Action Effectiveness Report
RAP.....Response Action Plan (for Action Leakage Rate in landfills)
RAP.....Remedial Action Plan
RCRA.....Resource Conservation and Recovery Act
RFA.....RCRA Facility Assessment
RFI.....RCRA Facility Investigation
RRR.....TCEQ Risk Reduction Rules
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 Chemical Reclamation Services, LLC (hereafter called the permittee), to manage a hazardous waste facility located at 405 Powell Street, in Avalon, Ellis County, Texas, and within the drainage area of Segment 0814 in the Trinity River Basin (North Latitude 32°12'43", West Longitude 96°47'30"). The legal description of the facility submitted in Permit No. 50084 application dated March 15, 2023, is hereby made a part of this permit as "Attachment A." The hazardous waste management facility as delineated by the permittee's application map is hereby made a part of this permit as "Attachment B."

B. Incorporated Application Materials

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

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

II. General Facility Standards

A. Standard Permit Conditions

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

1. Modification of Permitted Facilities

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

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. 50084 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 constructionspecifications of Permit No. 50084."

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

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

11. Monitoring of Commercial Hazardous Waste Management Facility Operations

    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 TACSection 335.328(c)]

d. If required, the permittee shall document the basis for the assessment of any applicable waste management fees, including any adjustment to or exemption from assessment. [30 TAC Section 335.329(b)(4)]

e. If required, the permittee shall submit a monthly report of on-site waste management activities subject to the assessment of waste management fees on forms furnished or approved by the executive director. This report shall be due by the 25th day following the end of the month (or quarter) for which a report is made. Monthly (or quarterly) reports shall be submitted, regardless of whether any storage, processing, or disposal was made during a particular month (or quarter), by preparing and submitting a summary indicating that no waste was managed during that month (or quarter). [30 TAC Section 335.329(b)(5)]

f. As applicable, the permittee shall maintain the required records and reports in accordance with 30 TAC Sections 335.329(c) and (d).

15. Transfer of Ownership and/or Operational Control

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

B. Recordkeeping and Reporting Requirements

1. Monitoring and Records

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

b. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity. The method used to obtain a representative sample of the material to be analyzed shall be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved in writing prior to use by the executive director of the TCEQ. Laboratory methods shall be the latest version specified in current edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846 (EPA SW-846); Standard Methods for the Examination of Water and Wastewater; RCRA Groundwater Monitoring: Draft Technical Guidance, 1992, OSWER Directive 9950.1; or an equivalent method; as specified in the Waste Analysis Plan, Section IV of the Part B Application, and approved in writing prior to use by the

executive director. [30 TAC Section 305.125(11)(A)]

c. The permittee shall retain in an organized fashion and furnish to the executive director, upon request, records of all monitoring information, copies of all reports and records required by this permit, and the certification required by 40 CFR 264.73(b)(9), for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application. [30 TAC Section 305.125(11)(B)]

d. Records of monitoring shall include the following [30 TAC Section 305.125(11)(C)]:

(1) The date, time, and place of sample or measurement;

(2) The identity of individual who collected the sample or measurement;

(3) The dates analyses were performed;

(4) The identity of individual and laboratory who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses or measurements.

e. All engineering and geoscientific information submitted to the TCEQ shall be prepared by, or under the supervision of, a licensed professional engineer or licensed professional geoscientist, and shall be signed, sealed, and dated by qualified professionals as required by the Texas Engineering Practice Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts.

2. Operating Record

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

3. Retention of Application Data

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

4. Reporting of Noncompliance

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

a. Report of such information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the noncompliance.

b. A written submission of such information shall also be provided within five (5) days of the time the permittee becomes aware of the noncompliance. The written submission shall contain the following:

(1) A description of the noncompliance and its cause;

(2) The potential danger to human health or safety, or the environment;

(3) The period of noncompliance, including exact dates and times;

(4) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(5) Steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance, and to mitigate its adverse effects.

5. Twenty-Four Hour Reporting

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

a. Information concerning release of any solid waste that may cause an endangerment to public drinking water supplies; and

b. Any information of a release or discharge of solid waste, or of a fire or explosion which could threaten the environment or human health or safety,outside the facility. The description of the occurrence and its cause shall include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident;

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to the environment and human health or safety outside the facility, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

6. Notice Waiver

The executive director may waive the five (5) day written notice requirement specified in Provision II.B.4.b. in favor of a written report submitted to the

commission within fifteen (15) days of the time the permittee becomes aware of the noncompliance or condition. [30 TAC Section 305.145(b)]

7. Biennial Report

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

8. Pollution Prevention

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

9. Annual Detection Monitoring Report (Reserved)

10. Manifest Discrepancy Report

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

11. Unmanifested Waste Report

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

12. Monthly Summary

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

13. Annual Unsaturated Zone Monitoring Report (Reserved)

14. Annual Zone of Incorporation Monitoring Report (Reserved)

C. Incorporated Regulatory Requirements

1. State Regulations

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

   - 30 TAC Chapter 37, Subchapter P: Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities;
   - 30 TAC Chapter 305, Subchapter A: General Provisions;
   - 30 TAC Chapter 305, Subchapter C: Application for Permit;
   - 30 TAC Sections 305.61 - 305.69 (regarding amendments, renewals, transfers, corrections, revocation and suspension of permits);
   - 30 TAC Sections 305.121 - 305.125 (regarding permit characteristics and conditions);
   - 30 TAC Sections 305.127 - 305.129 (regarding permit conditions, signatories and variance procedures);
   - 30 TAC Chapter 305, Subchapter G: Additional Conditions for Hazardous and Industrial Solid Waste Storage, Processing and Disposal Permits;
   - 30 TAC Chapter 305, Subchapter I: Hazardous Waste Incinerator Permits;
   - 30 TAC Chapter 305, Subchapter J: Permits for Land Treatment Demonstrations Using Field Tests or Laboratory Analyses;
   - 30 TAC Chapter 305, Subchapter K: Research, Development and Demonstration Permits;
   - 30 TAC Chapter 305, Subchapter Q: Permits for Boilers and Industrial Furnaces Burning Hazardous Waste;
   - 30 TAC Chapter 335, Subchapter A: Industrial Solid Waste and Municipal Hazardous Waste in General;
   - 30 TAC Chapter 335, Subchapter B: Hazardous Waste Management General Provisions;
   - 30 TAC Section 335.152, Standards;
   - 30 TAC Sections 335.153 - 335.155 (regarding reporting of emergency situations and additional reports required);
   - 30 TAC Sections 335.156 - 335.167 (regarding applicability of groundwater monitoring programs and corrective action requirements);
   - 30 TAC Sections 335.168 - 335.169 (regarding the design and operating requirements and closure and post-closure care of surface impoundments);
   - 30 TAC Section 335.170 (regarding the design and operating requirements of waste piles);

- 30 TAC Sections 335.171 - 335.172 (regarding the design and operating requirements and closure and post-closure care of land treatment units);
- 30 TAC Sections 335.173 - 335.174 (regarding the design and operating requirements and closure and post-closure care of landfills);
- 30 TAC Sections 335.175 - 335.176 (regarding special requirements for containers and bulk and containerized waste);
- 30 TAC Sections 335.177 - 335.179 (regarding general performance standard, cost estimate for closure, and financial assurance);
- 30 TAC Section 335.221 (regarding hazardous waste burned for energy recovery);
- 30 TAC Sections 335.325, 335.328 and 335.329 (regarding waste management fee assessment, fee payment, and records and reports);
- 30 TAC Chapter 335, Subchapter Q: Pollution Prevention: Source Reduction and Waste Minimization; and
- 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

The following provisions of 40 CFR Parts 264, 266 Subpart H, 266 Subpart M, and Part 268, adopted by reference by 30 TAC Section 335.152, 30 TAC Section 335.221(a), and 335 Subchapter O, are hereby made provisions and conditions of this permit, as applicable, 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:

- Subpart B -- General Facility Standards;
- Subpart C -- Preparedness and Prevention;
- Subpart D -- Contingency Plan and Emergency Procedures;
- Subpart E -- Manifest System, Recordkeeping, and Reporting;
- Subpart G -- Closure and Post-Closure;
- Subpart H -- Financial Requirements;
- Subpart I -- Use and Management of Containers;
- Subpart J -- Tank Systems;
- Subpart K -- Surface Impoundments;

- Subpart L -- Waste Piles;
- Subpart M -- Land Treatment;
- Subpart N -- Landfills;
- Subpart O -- Incinerators;
- Subpart X -- Miscellaneous Units;
- Subpart AA -- Air Emission Standards for Process Vents;
- Subpart BB -- Air Emission Standards for Equipment Leaks;
- Subpart CC -- Air Emission Standards for Tanks, Surface Impoundments, and Containers;
- Subpart DD -- Containment Buildings;
- Subpart EE -- Hazardous Waste Munitions and Explosives Storage;
- 40 CFR Part 266 Subpart H -- Hazardous Waste Burned in Boilers and Industrial Furnaces; and
- 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 CFR264.16. The permittee shall maintain training documents and records, as requiredby 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; or

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

3. The permittee shall post warning signs at all points of access to the active waste management portion(s) of the facility and along the natural and/or artificial barriers in sufficient numbers to be seen from any approach to that (those) portion(s) of the facility. The signs shall be printed so that they may be clearly read from a distance of at least twenty-five (25) feet and shall state “Danger - Unauthorized Personnel Keep Out” in English and in an alternate language per 40 CFR 264.14(c), as applicable.

D. General Inspection Requirements

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

E. Contingency Plan

1. The permittee shall follow the Contingency Plan, developed in accordance with40 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 toall employees involved in waste management at the facility.

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

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

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

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

    c. Discharge in accordance with a wastewater discharge permit.

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

5. Preparedness and Prevention

a. At a minimum, the permittee shall equip the facility as set forth in Table III.E.3. - Emergency Equipment contained in the permit application identified in Section I.B. of this permit, as required by 40 CFR 264.32.

b. All sumps, pumps, fire- and spill-control equipment, decontamination equipment, and all other equipment and structures authorized or required through the Contingency Plan shall be tested and maintained, as necessary,to assure its proper operation in time of emergency, as required by 40 CFR 264.33.

c. The permittee shall maintain access to the communications or alarm system, as required by 40 CFR 264.34.

d. A trained emergency coordinator shall be available at all times in case of an emergency and will have the responsibility for coordinating all emergency response measures as required by 40 CFR 264.55 and 264.56. Emergency number(s) shall be posted in all waste management portions of the facility and all employees in those areas shall be trained in the location of those postings.

e. For new facilities, the names, addresses, and phone numbers of all persons qualified to act as emergency coordinator in Table III.E.2. - Emergency Coordinators of the Part B application shall be supplied to the executive director at the time of certification required by Provision II.A.6., rather thanat the time of application. [40 CFR 264.52(d)]

IV. Waste and Waste Analysis

A. Waste Analysis Plan

The permittee shall follow the Waste Analysis Plan, developed in accordance with40 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 wastes listed in Table IV.B. - Wastes Managed in Permitted Units, subject to the limitations provided herein.

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

When authorized wastes include hazardous or nonhazardous waste from an off-site source (except where the permittee is also the generator), as described in the Part B application, Section IV, 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 unless authorized:

a. PCB waste, as defined by the Environmental Protection Agency (EPA) in regulations issued pursuant to the Toxic Substances Control Act under 40CFR Part 761, unless the permittee is compliant with the federal requirements for PCB storage as specified in 40 CFR Part 761;

b. Radioactive materials/wastes unless the permittee is authorized to store and process these wastes in compliance with specific licensing and permitting requirements under Chapter 401 of the Texas Health and Safety Code. In accordance with 30 TAC Section 336.203, no person shall dispose of radioactive material unless that person has a license or an exemption from the Texas Commission on Environmental Quality (TCEQ) under Texas Healthand Safety Code, Section 401.106(a);

c. Explosive material, as defined by the Department of Transportation under49 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. Garbage as defined in 30 TAC Section 330.3

f. Municipal Solid Waste as defined in 30 TAC Section 330.3;

g. Putrescible Waste as defined in 30 TAC Section 330.3; or

h. Special Waste from Health-Care Related Facilities subject to 25 TAC Part 1 or 30 TAC Chapter 326.

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. 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.

4. If the sampling required in Provision IV.C.3. indicates that a waste contains free liquids, the waste shall be treated (i.e., stabilized) prior to landfilling using a treatment technology that is based on chemical stabilization and does not solely involve the use of a material that functions primarily as a sorbent. In order to verify that chemical stabilization has taken place, the permittee shall demonstrate, based on the procedures described in the Waste Analysis Plan (Section IV.A.), that the stabilized waste will not release liquid after having been subjected to expected overburden loads.

5. Waste treated to meet the LDR standards shall be sampled and analyzed in accordance with 40 CFR Part 268 and the procedures described in the Waste Analysis Plan (Section IV.A.) to ensure compliance with this permit. In addition, based on the procedures described in Provisions IV.C.3. and 4., the permittee shall demonstrate that the stabilization technology is based on chemical reaction acquired through the stabilization agent and it does not solely involve the use of a material that functions primarily as a sorbent.

   For chemical stabilization processes based solely on a pozzolanic reaction between the waste and an appropriate stabilization agent ratio, an unconfined compressive strength test shall be used to verify successful stabilization. Each sample taken in accordance with Provision IV.C.5. shall be prepared into a remolded specimen as described in Section 4.3 of ASTM Test Method D-2166-66. After curing for not more than seven (7) days, the unconfined compressive strength of the specimen shall be determined using ASTM Test MethodD-2166-66. Successful stabilization shall be considered to be achieved if the unconfined compressive strength is measured to be at least 50 pounds per square inch (psi).

   If the stabilization process used to achieve the LDR treatment standards is based on a chemical reaction other than pozzolanic reaction between the waste and stabilization agent, in lieu of the 50 psi unconfined compressive strength, other appropriate equivalent tests described in the Waste Analysis Plan (SectionIV.A.) may be used to demonstrate that successful stabilization has taken place.

   Prior to first receipt of LDR wastes, the permittee shall perform corroborative sampling and analysis on the wastes 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, 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” in accordance with terms and conditions of this permit and

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 and their management method are shown in Table V.B. - Container Storage Areas. The permittee is authorized to operate the facility container storage areas 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 bereported.)

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 (Reserved)

H. Incinerators (Reserved)

I. Boilers/Industrial Furnaces (Reserved)

J. Drip Pads (Reserved)

K. Miscellaneous Units

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

L. Containment Buildings (Reserved)

VI. Groundwater Detection Monitoring (Reserved)

VII. Closure and Post-Closure Requirements

A. Facility Closure

1. The permittee shall follow the closure plan, developed in accordance with 40 CFR Part 264 Subpart G for hazardous waste management units, and the approved Closure Plan for nonhazardous waste management units, and contained in the permit application submittals identified in Section I.B except as modified in Section VII of this permit.

   In addition, facility closure shall commence:

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

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

   c. Upon abandonment of the site; or

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

2. Request for Permit Modification or Amendment

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

3. Time Frames for Modification/Amendment Request Submittal

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

4. Closure Notice and Certification Requirements

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 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), as applicable. 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 262.16 and 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 at an authorized unit at this facility or at an authorized off-site facility.

10. All equipment/structures and liners (i.e., debris), contaminated with hazardous waste, and intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous debris contained in 40 CFR268.45 or removed and managed at an authorized industrial solid waste management facility. All contaminated dikes and soils intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous soils contained in 40 CFR 268.49 or removed and managed at an authorized industrial solid waste management facility.

11. All hard-surfaced areas within the hazardous waste management unit areas shall be decontaminated and the wash water generated treated and/or disposed at an authorized unit 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 (suchas tank interiors, secondary containment structures, ancillary equipment, sumps, loading/unloading docks, etc.) shall be deemed complete when the concentration of each chemical of concern in the final rinsate sample(s) collected from the wash water is below TCEQ Texas Risk Reduction Program (TRRP), Remedy Standard A, Tier 1 Residential Class 1 Groundwater PCL; and

    b. Unless it can be demonstrated that soil contamination has not occurred, underlying soils shall be decontaminated or removed to the TRRP Remedy Standard A, Residential PCL, for no further action. If the underlying soils are decontaminated or removed to the PCL for Remedy Standard A, Commercial/Industrial Land use, the permittee shall comply

with the institutional controls requirements of 30 TAC Section 350.111, as required.

B. Financial Assurance for Closure

1. The permittee shall provide financial assurance for closure of all existing permitted units covered by this permit in an amount not less than as shown on Table VII.E.1 - Permitted Unit Closure Cost Summary. 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.

C. Storage, Processing, Combustion Unit and Land Treatment Unit Closure Requirements

The permittee shall close the storage, processing, combustion units, and Land Treatment units identified in Attachment E within 90 days after receiving the final volume of waste, or a later date approved by the executive director, in accordance with the closure plan incorporated in Section I.B, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (container storage), 264.197 (tanks), 264.351 (incinerators), 266.102(e)(11), 266.102(a)(2)(vii), (boilers & industrial furnaces), and 264.280 (land treatment unit), as applicable and 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 Chapter350, Subchapter B, and an approved contingent closure and post-closure plan 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 ninety (90) 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. Surface Impoundment Closure Requirement (Reserved)

E. Landfill Closure and Certification Requirements (Reserved)

F. Containment Buildings Closure Requirements (Reserved)

G. Facility Post-Closure Care Requirements (Reserved)

H. Financial Assurance for Post-Closure (Reserved)

VIII. Liability Requirements

A. Sudden and Nonsudden Accidental Occurrences

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, exclusiveof legal defense cost.

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

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

X. Air Emission Standards

A. General Conditions

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

2. The permittee shall include in the Biennial Report, required in Provision II.B.7., a statement that hazardous waste management units or associated ancillary equipment at this facility are not subject to any of the requirements in Section 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 Section 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.

XI. Compliance Plan

A. General Information (and Applicability)

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

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

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

4. The Compliance Plan is specific to the SWMU and/or AOC and the Facility Operations Area (FOA) listed in CP Table I (Items C and E) and depicted in Attachment A, for which the Corrective Action Program applies pursuant to 30 TAC Section 335.167 and Chapter 350 for releases from the SWMUs.

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

6. The Compliance Plan applies to any SWMU and/or AOC discovered subsequent to issuance of this Compliance Plan. The permittee shall notify the executive director within fifteen (15) days of such a discovery. Within forty-five (45) days of discovering a SWMU or AOC, the permittee shall complete the following:

Submit a RCRA Facility Assessment (RFA) report for that SWMU and/or AOC

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

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

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

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

Corrective Action Systems:

1. Groundwater monitoring system may at a minimum consist of the following categories of wells listed in CP Table V, to monitor groundwater quality. An application to modify or amend the Compliance Plan is required to change the category or wells listed in CP Table V.

a. Background Well(s) unaffected by the operation of the facility.

b. POC Wells to demonstrate compliance with the GWPS.

c. FOA Boundary of Compliance (FBOC) Wells to demonstrate compliance with the GWPS.

d. Point of Exposure (POE) Wells, to demonstrate compliance with the GWPS and evaluate the effectiveness of the remediation program.

e. Alternate Point of Exposure (APOE) Wells to demonstrate compliance with the GWPS at a location other than the prescribed POE; and in maintaining a Plume Management Zone (PMZ) in accordance with 30 TAC Section 350.33.

2. The permittee is authorized to install and operate the following additional corrective action system wells to monitor groundwater quality and hydrogeological conditions of the aquifer as designated in CP Attachment A. The permittee may propose changes to the following corrective action system wells as part of the reporting requirements in CP Table VII (Item 12) and shall become part of the Compliance Plan upon approval by the executive director.The purpose is to provide the permittee with the flexibility to alter the groundwater monitoring system and Corrective Action System designs, as necessary, to proactively address changing environmental conditions without modification or amendment to the Compliance Plan.

a. Corrective Action Observation (CAO) Wells to evaluate the lateral and vertical extent of groundwater contamination in the Uppermost Aquifer and evaluate the effectiveness of the remediation program.

b. Corrective Action System (CAS) Wells to remediate and/or contain contaminated groundwater.

c. Attenuation Monitoring Point (AMP) Wells, located within the migration pathway of a chemical of concern, which demonstrates that Attenuation Action Levels (AALs) representing critical Protective Concentration Levels (PCLs) established as the GWPS will not be exceeded at the applicable point of exposure.

d. FOA Piezometer and/or Supplemental Wells to gauge hydrogeologic conditions of the aquifer.

3. Groundwater Corrective Action System to effect withdrawal, treatment, and/or containment of contaminated groundwater and non-aqueous phase liquids (NAPLs) by means of recovery wells, interceptor trenches, bioremediation, air sparging and/or another alternate Corrective Action System design. Any alternate Corrective Action System designs proposed by the permittee subsequent to issuance of this Compliance Plan that are equivalent to or exceed the performance of the Corrective Action Systems approved herein shall become part of the Compliance Plan upon approval by the executive director. The type of Corrective Action System in operation at the facility and an evaluation of system performance shall be reported in accordance with CP Table VII.

4. Collection and conveyance system to store recovered groundwater and NAPLs, if found, prior to disposal at authorized facilities. If the recovered groundwater is characteristically hazardous and/or is contaminated with listed hazardous waste and the collection system does not meet the wastewater treatment unit exemption under 30 TAC Sections 335.2(f) and 335.41(d), the collection system shall comply with the following regulations: 1) If the contaminated groundwater is stored for less than ninety (90) days without a permit or interim status, then the container and tank collection systems shall comply with provisions of 30 TAC Section 335.69(a)(1) / 40 CFR Part 265 Subparts I and J; 2) If the contaminated groundwater is stored for more than ninety (90) days, then the container and tank collection system shall comply with the provisions of 30 TAC Section 335.152(a)(7) and (8) / 40 CFR Part 264 Subparts I and J. The collection and conveyance system shall consist of the following components.

    a. A groundwater CAS.

    b. A groundwater storage system.

    c. Appurtenances for the collection and conveyance of recovered contaminated groundwater and NAPLs, if applicable.

5. Treatment system to reduce the concentration of hazardous constituents in contaminated groundwater to the GWPS specified in CP Table III by means of biological, physical, and chemical treatment processes.

6. Groundwater containment system to inhibit contaminated groundwater above CP Table III GWPS from migrating beyond the influence of the CAS.

7. Reinjection of fresh or recovered groundwater, after treatment, into the contaminated aquifer in accordance with 30 TAC Sections 331.9 and 331.10.

8. The following handling methods are authorized for recovered groundwater having concentrations of hazardous constituents exceeding the GWPS:

    a. Treatment through an on-site wastewater treatment system and discharge via a permitted outfall in compliance with a current industrial wastewater discharge permit.

    b. Treatment of recovered groundwater by means of air stripping and carbon adsorption. The air stripper shall be maintained in compliance with applicable air quality regulations.

    c. Disposal at permitted deep injection well facility.

    d. Disposal at other authorized on-site facility or permitted off-site facility.

    e. Any other treatment methods approved by the executive director.

    f. The method(s) utilized for handling, disposing and recording volumes of all recovered/purged contaminated groundwater shall be reported in accordance with CP Table VII.

9. Recovered NAPLs, if found, shall be managed (treated, stored, and disposed), or recycled in an authorized on-site unit(s) or an off-site facility.

10. The Corrective Action Program shall consist of the system components listed in Provisions XI.B.1. through XI.B.9., to be operated according to the plans and specifications as approved in Provision XI.C.1. and the specifications of this Compliance Plan.

    a. If groundwater recovery wells are utilized in the Corrective Action System, the flow rate at each recovery well shall be set and recorded once a week. This weekly flow rate data shall be used to calculate a semiannual total flow which shall be reported in accordance with CP Table VII of this Compliance Plan.

    b. All Corrective Action System components shall be maintained in a functional and leak-free condition. All above ground collection system pipes shall be inspected weekly. In addition, the area surrounding the wells shall be inspected weekly for visible signs indicating leaks in buried sections of the collection system. If a release of reportable quantity is detected in any part of the collection system, it must be reported within twenty-four (24) hours to the local TCEQ Region Office,and immediate action must be taken to stop the release and resolve the problem.

    c. The permittee shall notify the executive director of any scheduled or non-scheduled periods of Corrective Action System shutdown, Corrective Action System malfunction, or treatment system shutdown for maintenance lasting more than thirty (30) days. The permittee shall notify the executive director in writing no later than seven (7) days following the date the permittee determines that the shutdown will last more than thirty (30) days. All shutdowns and malfunctions, irrespective of duration, shall be recorded in the facility's inspection log, and shall be reported in accordance with CP Table VII.

11. Compliance Monitoring Systems: Groundwater monitoring system may at a minimum consist of the following categories of wells listed in CP Table V, to monitor groundwater quality. An application to modify or amend the Compliance Plan is required to change the category or the wells listed in CP Table V.

    a. Background well(s) that is unaffected by the operation of the facility.

    b. POC wells to demonstrate compliance with the GWPS.

    c. POE wells to demonstrate compliance with the GWPS.

    d. APOE wells to demonstrate compliance with the GWPS at a location other than the prescribed POE.

C. General Design and Construction Requirements

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

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

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

   For all wells to be constructed after issuance of this Compliance Plan that do not meet the well construction specifications identified in CP Attachment C of this permit, the permittee shall submit to the executive director the proposed well location and construction diagram for approval at least ninety (90) days in advance of the anticipated date of installation or in accordance with an approved schedule for installation. These requirements may be met through submittal of a work plan by the permittee and subsequent approval by the executive director. Well installation shall commence upon written approval of the executive director. Wells constructed prior to issuance of this Compliance Plan may be utilized as groundwater monitoring wells if they meet the standards of CP Attachment C or are otherwise authorized by issuance of the Compliance Plan.

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

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

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

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

1. The GWPS defines the concentration limits of hazardous constituents, with respect to groundwater quality restoration in the Uppermost Aquifer and any lower interconnected aquifers, which are to be achieved at the POC, (and FBOC, POE, and APOE, if applicable) and beyond in accordance with Provision XI.E.1. by operation of the Corrective Action Program and/or Compliance Monitoring Program at this facility.

2. POC wells are designated in CP Attachment A and further defined for purposes of this Compliance Plan by CP Table V, which also identifies FBOC (POE and APOE, if any) wells for which groundwater monitoring procedures will apply (Permit Section XI.F.).

3. For Corrective Action, the hazardous constituents detected in groundwater are specified in Column A of CP Table III and IIIA. For Compliance Monitoring, hazardous constituents that are reasonably expected to be in or derived from waste placed in the units and that are to be monitored annually at the POC are listed in Column A of CP Table IV. The hazardous constituents detected in the

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

4. The GWPS are specified in Column B (and if applicable, in Column C) of CP Tables III, IIIA (Corrective Action) or IVA (Compliance Monitoring). The GWPS shall be the values for statistical comparisons unless CP Tables III, IIIA or IVA are amended in accordance with current guidance and regulations, or if any other accepted levels are promulgated by the TCEQ or the EPA. The values in CP Tables III, IIIA or IVA will change as updates to 30 TAC Section 335.160 and Chapter 350 are promulgated. The executive director or the permittee may request to replace concentration limits through a modification or amendment to this Compliance Plan in accordance with 30 TAC Chapter 305 Subchapter D.

5. Compliance Period for each unit is specified in CP Table VI.

6. The GWPS Achieved for Corrective Action Program.

    a. Achievement of the GWPS, in accordance with Provision XI.E.1., is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents have been reduced by the Corrective Action Program (Permit Section XI.E.) to concentrations of hazardous constituents that do not exhibit a statistically significant increase or exceed the concentration limits when directly compared to the GWPS of CP Table III.

    b. If the GWPS is achieved at the RCRA-regulated units or waste management areas, in accordance with Provision XI.E.1., during the Compliance Period, the permittee may apply to modify or amend this Compliance Plan to revise the Corrective Action Program to the extent necessary to demonstrate by means of the Groundwater Monitoring Program that the GWPS will not be exceeded during the remainder of the Compliance Period.

    c. If the GWPS is not achieved at the RCRA-regulated units or waste management areas, in accordance with Provision XI.E.1., during the Compliance Period, the Corrective Action Program must continue until the GWPS has not been exceeded in all wells for that corrective action area for three (3) consecutive years.

    d. If the GWPS established in this Compliance Plan for the RCRA-regulated unit or waste management area have not been exceeded for three (3) consecutive years at the end of the Compliance Period, then the permittee must, within ninety (90) days, submit an application for a Compliance Plan/Permit modification or amendment to establish a Compliance Monitoring Program or a Detection Monitoring Program for the aquifer(s) during the remaining portion of the thirty (30) year post- closure care

period in accordance with 40 CFR Part 264.117. If the thirty (30) year post-closure care period has expired, the permittee may request groundwater monitoring for that RCRA-regulated unit or waste management area be discontinued. Until approval of the request, the permittee shall continue groundwater monitoring under current Compliance Plan provisions for each RCRA-regulated unit or waste management area.

e. If the GWPS established in this Compliance Plan for SWMUs and/or AOCs listed in CP Table I, Item C have not been exceeded for three (3) consecutive years in all wells for that unit, then the permittee may apply for a modification or amendment to the Compliance Plan to terminate the Corrective Action Program for that unit.

f. If the GWPS established by this Compliance Plan for those units/areas listed in CP Table I, Item D (regarding alternative corrective action requirements for commingled plumes) have not been exceeded for three (3) consecutive years for all wells for those units/areas, and the performance standards of 30 TAC Sections 335.8 and 335.167 are met, then the permittee may apply for a modification or amendment to the Compliance Plan to terminate the Corrective Action Program for those units/areas.

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

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

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

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

permittee shall continue groundwater monitoring under current Compliance Plan provisions.

E. Corrective Action Program

The Corrective Action Program applies to units specified in CP Table I, Items A, C and D and E. The Corrective Action Program shall remediate, recover, and/or contain contaminated groundwater from the Uppermost Aquifer and any interconnected lower aquifers, if applicable. The Corrective Action Program shall consist of the system components of Permit Section XI.B., to be operated according to the specifications of this Compliance Plan. The permittee shall conduct the Corrective Action Program until the performance standards of Provision XI.E.1. are met. The permittee shall initiate the Corrective Action Program immediately upon issuance of this Compliance Plan, except where other specific TCEQ response deadlines may apply.

1. Performance Standard

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

a. At the POC (FBOC, POE, and APOE, if any) and between the POC (FBOC, POE,and APOE, if any) and the downgradient facility property line;

b. Beyond the facility boundary where necessary to protect human health and the environment, unless the permittee demonstrates to the satisfaction of the executive director that, despite the permittee's best efforts, the necessary permission from the property owner(s) was not received to undertake such action. The permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied;

c. Operate the Corrective Action System so as to intercept, contain and/or treat the contamination in the Uppermost Aquifer unless the system is under repair or maintenance;

d. Recommend changes to the configuration of the Corrective Action System at any time that it is determined that the contamination present in the Uppermost Aquifer, deeper zone, or any interconnected lower aquifers is not being effectively contained and/or remediated; and

e. The permittee is required to actively remove NAPLs from the Uppermost Aquifer and any interconnected aquifers wherever found, to the extent technically practicable.

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

F. Groundwater Monitoring Program Requirements

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

1. Waste Management Area Specific Background Groundwater Quality

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

2. Sampling and Analysis Plan

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

b. An up-to-date and approved Sampling and Analysis Plan shall be maintained at the facility and made available for inspection upon request.

3. Sampling and Analysis Frequencies and Parameters

a. Frequencies of sampling are defined below:

(1) “Week” and “month” shall be based upon a calendar week and month;

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

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

consecutive quarters;

(4) "Annual" or "Year" shall be four consecutive quarters, beginning with the first quarter. Years shall be designated consecutively, beginning with the "first year", "second year", etc; and

(5) "Calendar year" shall be based on divisions of the calendar (i.e. January through December).

b. Sampling of wells shall commence during the first complete quarter after issuance of this Compliance Plan. Thereafter, samples shall be collected on a frequency as specified in CP Table VIII. Data evaluations shall be completed within sixty (60) days of collection of the last sample unless QA/QC procedures show that data is unacceptable and re-analyses or re-sampling must be performed. In such cases, the executive director will be notified as soon as it becomes apparent that the sixty (60) day time limit will not be met.

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

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

(a) Each Background, POC, FOA, FBOC, POE, APOE well listed in CP TableV; and AMP well (if applicable), CAO well, and CAS well depicted in Attachment A shall be sampled and analyzed on a frequency as specified in CP Table VIII for the constituents of CP Table IIIA until the achievement of the GWPS in accordance with Provision XI.D.6.

(b) Each CAO well, AMP well (if applicable) and CAS well shall continue to be sampled, according to Section XI.D., until any changes to these groups of wells are approved by the executive director pursuant to Provision XI.B.3.

(c) Each well of CP Table V shall be sampled for the constituents of CP Table IIIA, according to Provision XI.D.3., until analytical results satisfy the GWPS of CP Table IIIA for all wells of CP Table V of that unit or area for two consecutive sampling events. All wells listed in CP Table V shall then be sampled and analyzed on a frequency specified in CP Table VIII for the constituents of CP Table III until all constituents of CP Table III are below the GWPS for all CP Table V wells of that unit or area in accordance with Provision XI.D.6.

(d) If the GWPS is achieved in all wells (Background, POC, FBOC, POE, APOE, AMP, CAO and CAS), in accordance with Provision XI.D.6.a., then the permittee may apply to modify or amend the Compliance Plan according to Provisions XI.D.6.b., XI.D.6.d., XI.D.6.e., or XI.D.6.f.

(e) Any well with NAPLs detected in the wellbore shall be considered as non-compliant with the GWPS and is not required to be analyzed for the constituents of CP Table III or IIIA.

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

(a) If data evaluation is performed in accordance with Provision XI.F.4.a., one sample from each well of CP Table V shall be taken and analyzed semiannually for the constituents of CP Table IVA. If data evaluation is performed in accordance with Provision XI.F.4.b., a sequence of at least four independent samples from each well of CP Table V shall betaken and analyzed on a frequency as specified in CP Table VIII for the constituents of CP Table IVA; and

(b) One sample from each well of CP Table V shall be taken and analyzed annually for constituents in CP Table IV during the first quarter of each year. Analysis for the hazardous constituents of CP Table IV and CP Table IVA may be accomplished with the same sample when sampling events coincide.

d. Field Determination Requirements - All Wells Specified in CP Table VII (Item12).

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

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

(3) Field observations including descriptions of appearance (clarity, color, etc.) shall be recorded on a frequency as specified in CP Table VIII for all wells of CP Table V and wells depicted in CP Attachment A, excluding wells containing NAPL.

(4) The total depth of each well which is not equipped with a dedicated pump shall be measured during each sampling event. Total depth of each well which is equipped with a dedicated pump shall be measured when: 1) pumps are removed for maintenance; or 2) the groundwater production rate of the dedicated pump decreases by 25% from the initial production rate when the pump was installed. The measured total depth shall be compared to the total depth recorded on the well construction log. Should a comparison of the measured and the recorded total depth reveal that greater than 20% of the well screen has been silted in, the permittee shall perform such actions necessary (redevelopment, replacement, etc.) to enable the well to function properly.

(5) All wells specified in CP Table VII (Item 12) shall be inspected during each sampling event in accordance with specifications in the Sampling and Analysis Plan. Repairs or a proposal for replacement for any affected well shall be performed within ninety (90) days of the routine sampling event inspection which identified the problem well.

4. Data Evaluation Procedures

Data evaluation in accordance with this provision shall be performed for all wells within sixty (60) days of collection of the last sample for the duration of the Corrective Action Monitoring and Compliance Monitoring programs. When evaluating the monitoring results of each well, pursuant to Section XI.F., for the constituents of CP Tables III or IIIA for corrective action monitoring, or CP Tables IV or IVA for compliance monitoring, the permittee shall either:

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

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

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

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

(2) An alternative statistical method proposed by the permittee and approved by the TCEQ. Any proposed alternative method must be appropriate with respect to distributional assumptions and must provide

reasonable control of both false positive and false negative error rates.

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

G. Response and Reporting

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

a. If the permittee or the Executive Director determines that the Corrective Action Program required by this Compliance Plan no longer satisfies the requirements of 30 TAC Section 335.166 or Section 335.167, the permittee must, within ninety (90) days of either the permittee's determination or executive director's notification, submit an application for a Compliance Plan modification or amendment to make any appropriate changes to the Corrective Action Program which will satisfy the regulations.

b. If the executive director determines that the lateral or vertical extent of groundwater contamination is not delineated and/or is not delineated outside the FOA boundary, the permittee must, within ninety (90) days of the date of the executive director's notification unless otherwise directed, initiate an investigation to determine the extent of the contamination based on the Practical Quantitation Limit (PQL), Method Quantitation Limit (MQL), or other applicable standard as required or approved by the executive director.

c. This section applies only if POEs are defined in CP Table V and a GWPS is assigned at the POE; and attenuation action level (if applicable) is assigned to its respective attenuation monitoring point. If during two (2) consecutive sampling events the GWPS is exceeded at the POE, or the attenuation action level (if applicable) is exceeded at its respective attenuation monitoring point, then within ninety (90) days of completing the data evaluation of thesecond sampling event, the permittee must:

(1) Install groundwater recovery wells or alternate Corrective Action System design to mitigate the downgradient migration of the contaminant plume; and/or

(2) Reevaluate the criteria originally used to establish the GWPS, in accordance with Provision XI.D.4., and submit an application to modify or amend the Compliance Plan to address the GWPS exceedance; and/or reevaluate the criteria originally used to establish the attenuation action level and submit an analysis to the executive director for approval to request changes to the attenuation action level.

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

a. Compliance with the GWPS for each POC (POE and APOE, if applicable) well of CP Table V is defined by the results of the data evaluation of Provision XI.F.4., wherein the concentrations of hazardous constituents do not exhibit a statistically significant increase or exceed the concentration limits when directly compared to the concentration limits of CP Table IVA. If the permittee determines that any concentration limit of CP Table IVA is being exceeded pursuant to the procedures used in Provision XI.F.4 at any POC (POE, and APOE, if applicable) well of CP Table V, then the permittee must notify the executive director of this finding in writing within seven (7) days. The notification must identify what concentration limits have been exceeded and indicate that the permittee will either:

(1) Submit a Compliance Plan modification or amendment to the executive director to establish a Corrective Action Program meeting the requirements of 30 TAC Section 335.166 within 180 days of such determination in accordance with 30 TAC Section 335.165(11)(b);

(2) Demonstrate that a source other than the regulated unit caused the exceedance of the concentration limits of CP Table IVA or that the concentration is an artifact caused by errors in sampling, analysis, or statistical evaluation or natural variation in the groundwater within ninety (90) days in accordance with 30 TAC Section 335.165(12); or

(3) Re-evaluate the criteria originally used to establish the concentration limits of the GWPS to determine if a Corrective Action Program is necessary. If it is determined that revised concentration limits will result in a GWPS that is protective of human health and the environment, then the permittee may request to replace the concentration limits of the GWPS through a modification or amendment to this Compliance Plan in accordance with Provision XI.D.6. Such a request must be submitted within ninety (90) days and may require a proposal for additional groundwater monitoring wells to verify attenuation of the contaminant plume to levels that are protective of human health and the environment.

b. If the permittee detects CP Table IV constituents at concentration levels equal to or greater than the listed Quantitation Limit and which exceed background groundwater quality in groundwater samples from POC (POE, APOE, if any) wells of CP Table V that are not already identified in CP Table IVA as monitoring constituents, then the permittee must either:

(1) Report the concentration of the newly detected constituents to the executive director within seven (7) days after the completion of the analysis. Within ninety (90) days after the completion of the analysis, the permittee shall submit a modification or amendment application, in accordance with Provision XI.J.4., requesting that the constituent be added to the CP Table IVA. The request shall propose a concentration limit for the GWPS based on 30 TAC Section 335.160 for each constituent; or

(2) Resample within thirty (30) days of the initial findings and repeat the CP Table IV analysis. If the second analysis does not confirm the presence of the newly detected constituents, then the permittee shall continue monitoring under the current Compliance Plan provisions. If the second

analysis confirms the presence of the newly detected constituents, then the permittee shall report the concentration of these additional constituents to the executive director within seven (7) days after the completion of the second analysis. Within ninety (90) days after completion of the second analysis, the permittee shall submit a modification or amendment application, in accordance with Provision XI.J.4, requesting that the confirmed constituents be added to the CP Table IVA. The request shall propose a concentration limit for the GWPS based on 30 TAC Section 335.160 for each constituent.

c. If the permittee or the executive director determines that the Compliance Monitoring Program required by this Compliance Plan no longer satisfies the requirements of 30 TAC Section 335.165, the permittee must, within ninety (90) days of either the permittee's determination or executive director's notification, submit a Compliance Plan application, in accordance with Provision XI.J.4, to make changes to the Compliance Monitoring Program which will satisfy the regulations.

3. For Corrective Action and Compliance Monitoring Programs, the permittee shall submit a groundwater monitoring report(s) in accordance with the frequency specified in Column B, CP Table VII, and contain the information listed in CP Table VII required for the specific program(s) that are applicable.

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

1. Corrective Action Obligations

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

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

a. Conduct investigation(s);

b. Provide additional information;

c. Investigate additional SWMU(s) and/or AOC(s); and/or

d. Submit an application for a modification/amendment to a Compliance Plan to implement corrective action.

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

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

3. Variance From Investigation

The permittee may elect to certify that no COCs are currently or never have been present or managed in a SWMU and/or AOC referenced in Provision XI.H.2 in lieu of performing the investigation required in Provisions XI.H.1 and XI.H.4, provided that confirming data is submitted for the current and past waste(s) managed in the respective unit or area. The permittee shall submit such information and certification(s) on a unit-by-unit basis in the time frame required in Provision XI.H.4 for review and approval by the executive director of the TCEQ. Should the permittee fail to demonstrate and certify that COCs are not or were not present in a particular unit, the investigation required in Provisions XI.H.1 and XI.H.4 shall be performed for the SWMU and/or AOC.

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

Within sixty (60) days from the date of issuance of this Compliance Plan and/or approval of the RFA Report of Provision XI.A.5., the permittee shall submit a schedule for completion of the RFI(s)/APA to the executive director for review and approval. The permittee shall initiate the investigations in accordance with the approved schedule and guidance contained in the EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 and in accordance with state regulations referenced in Provision XI.H.1.

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

5. Remedy Selection

Upon approval of RFI Report/APA Report (APAR), if it is determined that there has been a release of COCs into the environment, which poses a potential risk to human health and the environment, then the permittee shall propose a remedy in accordance with the 30 TAC Chapter 335, Subchapters A and S, Risk Reduction Standards (if applicable), the TRRP rules, or as otherwise authorized by the executive director. This may require a BLRA and/or CMS Report to be

submitted for review and approval within the time frame(s) specified by the executive director. For facilities that are grandfathered under 30 TAC Chapter 335, Subchapter S, this report shall address RRS requirements, and the applicable items contained in the EPA publications referenced in Provision XI.H.4 or other guidance acceptable to the executive director. For projects conducted under TRRP, the risk assessment process shall be addressed in theAPAR and the evaluation of corrective measures shall be conducted as part ofthe remedy standard selection process.

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

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

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

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

To report the progress of the corrective measures, the permittee shall submit to the TCEQ CMI Progress Reports or RAERs (TRRP) as a section of the Compliance

Plan groundwater report required by CP Table VII of this Compliance Plan, or as otherwise directed.

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

7. Public Notice

a. The permittee shall conduct public notice when:

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

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

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

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

8. Interim Corrective Measures (ICM)

a. The ICM apply to waste management units or AOC under investigation for which a final Corrective Action Program has not been authorized by the Compliance Plan. ICM also apply to units/AOC that are discovered after issuance of this Compliance Plan.

b. The objectives of the ICM are to remove, decontaminate, and/or stabilize thesource (i.e., waste and waste residues) and contaminated media to protect human health and the environment. The permittee shall modify the ICM, as necessary, to achieve these objectives.

c. The permittee is authorized to design, construct, operate and maintain ICM for waste management units/AOC as necessary to protect human health and the environment. The ICM shall be operated until final corrective measures established, in accordance with Provision XI.H.6, are authorized in the Compliance Plan. At a minimum, the ICM shall consist

of the following:

(1) Specific performance goals to protect human health and the environment;

(2) A monitoring system to evaluate the ICM and determine if the objectives outlined in Provision XI.H.8.b are being met. All ICM wells must comply with the requirements of Provision XI.C.2 and CP Attachment C, Well Design and Construction Specifications, of this permit;

(3) An implementation schedule to initiate ICMs;

(4) Submittal of a report specifying the design of the ICM upon installation. During implementation of the ICM, periodic ICM Status Reports shall be submitted in accordance with CP Table VII (Item 25) to document the objectives of Provision XI.H.8.b are being achieved; and

(5) A procedure to modify the design, as necessary, to achieve the objectives outlined in Provision XI.H.8.b.

I. Financial Assurance

The permittee shall provide financial assurance for operation of the Groundwater Monitoring and Corrective Action Programs, as applicable, in accordance with this Compliance Plan in a form acceptable to the executive director in an initial amount not less than the total cost specified in Table XI.E.3 within sixty (60) days of issuance of this Compliance Plan. The financial assurance shall be secured, maintained, and adjusted in compliance with TCEQ regulations on hazardous waste financial requirements (30 TAC Chapter 37, Subchapter P).

J. General Provisions

1. Deed Recordation Requirements

For waste and contaminated media approved to remain in place above background or health-based concentration levels after completion of the corrective action and/or groundwater monitoring programs, the permittee shall record an instrument in the county deed records for the facility to specifically identify the areas of contamination exceeding background or health-based values. The deed certification shall follow the requirements of 30 TAC Sections 335.560 and 335.569 or 30 TAC Section 350.111, where applicable.

2. Notification Requirements

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

3. Distribution of Copies

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

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

b. One electronic copy to the Waste Program, Texas Commission on Environmental Quality local Region Office.

4. Compliance Plan Modification or Amendment

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

5. Any changes to the Corrective Action or Groundwater Monitoring Systems are subject to executive director's approval.

6. The permittee shall maintain all reports, monitoring, testing, analytical, and inspection data obtained or prepared pursuant to the requirements of this Compliance Plan, including graphs and drawings, in the operating record at the facility. The operating record at the facility shall be made available for review by the staff of the TCEQ upon request.

7. The permittee shall submit a compliance schedule in accordance with CP Table VIII.

K. Force Majeure

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

The occurrence of a "Force Majeure" event that justifies the missing of one deadline shall not automatically justify the missing of later deadlines unless there is a cumulative effect due to such an event. The permittee shall keep a record of any delaying events.

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

Table III.D. - Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
GENERAL SITE		
Security Fencing and Gates	Condition, signs of unauthorized entry, warning signs posted, warning signs legible	Daily
Loading/Unloading	Evidence of spills, precipitation run-on, cracks/deterioration in secondary containment	Daily
First Aid and Protective Equipment	Missing, damaged, inadequate supply	Quarterly
Portable and Stationary Eye Wash Station and Safety Showers	Insufficient water, signs posted	Quarterly
Emergency Communication System	Inoperable	Quarterly
Fire Detection and Emergency Alarm Systems	Inoperable	Quarterly
Emergency Exits	Obstructions	Quarterly
Area Lighting and Emergency Lighting	Inadequate, inoperable	Quarterly
Warning Signs	Signs posted and legible	Quarterly
SAFETY AND EMERGENCY EQUIPMENT		
Firefighting Equipment	Inoperable, damaged/deteriorating, inadequate supply	Quarterly
Fire Extinguishers	Missing, inoperable, inadequate pressure, deterioration of hoses or cone, missing tags, corrosion	Quarterly
Spill Control Equipment	Inadequate supply, damaged/deteriorating	Quarterly
TANK SYSTEMS		
Level in Tanks	Overflowing	Daily
Tank System	Corrosion, spills or leaks	Daily
Secondary Containment	Cracks or erosion, spills or leaks	Daily

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Pumps, Hoses, and Ancillary Equipment	Deteriorating, spills or leaks, inoperable	Daily
Tank Shell Thickness	Loss of thickness	Annually
CONTAINER STORAGE AREAS		
Containers	Missing/illegible labels, labels improperly filled out, damaged containers, inadequate aisle spacing, improper segregation of materials	Weekly
Containment Area	Cracks or deterioration, spills or leaks, precipitation run-on	Weekly
MISCELLANEOUS		
Miscellaneous Units M3, M100, M101, M102, M104	Deterioration, leaks or spills, structural deterioration and mechanical wear, ancillary equipment damaged/missing, cracks/spills in secondary containment	Daily

Table IV.B – Wastes Managed In Permitted Units

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
1	Waste Generated by TSDF Operations, Organic Fuel Blender (Other Organic Sludges)	D001 through D020 F001, F002, F003, F005, K001 through K011, K013 through K052, K060, K061, K062, K069, K071, K073, K083 through K088, K093 through K118, K123 through K126, K131, K132, K136, K141 through K145, K147 through K151, K156 through K159, K161, K169 through K172, K174 through K178, K181, P001 through P018, P020 through P024, P026 through P031, P033, P034 P036 through P051, P054, P056 through P060, P062 through P078, P081, P082 P084, P085, P087, P088, P089, P092 through P099, P101through P106, P108 through P116, P118 through P123, P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U001 through U064, U066 through U099, U101 through U102 U228, U234	609H
2	Solid Waste Generated by TSDF Operations, Organic Fuel Blenders (Non-Halogenated Sludges)	D001 through D043, F001, F002, F003, F005	409H

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
3	Spent Carbon (Filters , solid adsorbents, ion exchange resins)	D001 through D043, F001 through F012, F019, F024, F025, F032, F034, F035, F037, F038, F039, K001 through K033, K035 through K052, K060, K061, K062, K071, K073, K083 through K088, K093 through K126, K131, K132, K136, K141 through K145, K147 through K151, K159, U001 through U099, U101, U102, U103, U105 through U194, U196, U197, U200, U201, U203 through U211, U213 through U223, U225 through U228, U234 through U240, U243, U244, U246 through U249, U328, U353, U359, U364, U367, U372, U387, U389, U404, U409, U410, U411	404H
4	Plant Production Refuse	Non-Hazardous, Non-Class 1 Waste	022
5	Consolidation of Off-Site Generated Wastes for Hazardous Incineration (Other non-halogenated organic solids)	D014 through D043, F001 though F005, U001 through U039, U041 through U053, U055 through U064, U066 through U099, U101, U102, U103, U105 through U138, U140 through U146	409H
6	Consolidation of Hazardous Debris for Landfill (Macro-encapsulation) (Other Waste inorganic solids)	D004 through D011, D014 through D025	319H
7	Consolidation of Non-Hazardous Debris for Incineration	Non-Hazardous Waste	4091

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
	(other non-halogenated organic solids)		
8	Rainwater in Containment Dock in S-5 and Non-Hazardous Waters from Tank #25 (Aqueous waste with low solvents)	Non-Hazardous Waste	1011
9	Labpacks (with no acute wastes)	D001 through D043, K001through K011, K013 through K062, K069, K071, K073, K083 through K088, K093 through K118, K123 through K126, K131, K132, K136, K141 through K145, K147 through K159, K161, K169 through K172, K174 through K178, K181, U001 through U012, U014 through U039, U041 through U053, U055 through U064, U066 through U099, U101, U102, U103, U105 through U174, U176 through U197, U200, U201, U203 through U228, U234 through U240, U243, U244, U246 through U249, U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, U411	003H
10	Labpack – Non-Hazardous	Non-Hazardous	0031
11	Hazardous Pharmaceutical Waste (non-halogenated organic solids)	D001, D004 through D007, D009, D010, D011, D013, D020, D024, P001, P012, P042, P046, P075, P081, P118, P204, U010, U034, U035, U058,	409H

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
		U059, U075, U089, U121, U129, U132, U150, U151, U182, U188, U200, U201, U205, U206, U237, U248	
12	Waste Aerosols From Maintenance and Painting Operations (organic gases)	D001, D005, D006, D007, D008, D035	801H
13	Consolidation of Acids from Retail Facilities (spent acid with metals)	D001, D002, D035	103H
14	Consolidation of caustic, inorganic aqueous waste (Caustic aqueous waste)	D001, D002, D004 through D011, D035	110H
15	Organic Pesticides (halogenated pesticide solids)	D016, U192, U279	401H
16	Non-haz Liquid for Landfill Disposal (other organic liquids)	Non-Hazardous	2191
17	Non-haz Organic Solids (non-halogenated solids)	Non-Hazardous	4091
18	Lab Packs Acute	D001 through D043, K001through K052, K060, K061, K062, K069, K071, K073, K083 through K088, K093 through K118, K123 through K126, K131, K132, K136, K141 through K145, K147 through K151, K156 through K159, K161, K169 through K172, K174 through K175, K178, K181, P001through P018, P020 through P024, P026 through P031, P033 P034, P036 through	004H

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
		P051, P054, P056 through P060, P062 through P082, P084, P085, P087, P088, P089, P092 through P099, P101 through P106, P108 through P116, P118 through P123, P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U001 through U012, U014 through U064, U066 through U099, U101, U102, U103, U105 through U211, U213 through U223, U225 through U228, U234 through U240, U243, U244, U246 through U249, U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, U411	
19	Miscellaneous Empty Plastic Containers	Non-Hazardous	4061
20	Pesticide Liquids and Pour Ups of Flammable Acids (organic liquids)	D001, D002, D004 through D043, F001 through F005, F012, F024, F037, F038, K001, K009, K010, K011, K013, K014 through K019, P004, P012, P020, P037, P039, P044, P050, P051, P059, P071, P089, P108, P123, P199, U001 through U012, U018, U019, U021, U022, U023, U028, U029 through U032, U037, U039, U041, U043 through U053, U055 through U058, U061through U064, U067 through U073, U075 through	219H

No.	Waste	EPA Hazardous Waste Numbers	TCEQ Waste Form Codes and Classification Codes
		U081, U083, U084, U086, U087, U088, U091, U092, U094, U096, U101, U102, U103, U105. U107. U108. U109. U112 through U115, U117, U118, U120, U122 through U123 U124 U125, U127 through U194, U196, U197, U200, U201, U203, U204 through U211, U213 through U223, U225 through U228, U234 through U240, U243, U244, U246 through U249 U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, U411	
21	Hydrogen Peroxide <3% (aqueous waste with high dissolved solids)	Non-Hazardous	1131
22	Hydrogen Peroxide >3% (aqueous waste with high dissolved solids)	D001	113H
23	Compressed Gas Cylinders	D001, D002	701H, 801H

Table IV.C. – Sampling and Analytical Methods

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
1 Waste Generated by TSDF Operations, Organic Fuel Blender	Container, Truck, or Tank	Coliwasa for liquids and/or Grab using trowels, shovels, or augers for solids[a]	10% of inbound containers	Physical Description Ignitability Screen pH Specific Gravity Heat of Combustion/ Halogen Content Volatile Organic Constituents Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Appendix IV-7.A of WAP See Appendix IV-7.B of WAP See Appendix IV-7.C of WAP See Appendix IV-7.D of WAP See Appendix IV.F of WAP SW-846 Methods: 8240, 8010, 8015, 8020 ASTM D-3271-76, E260	+/- 10%
2 Solid Waste Generated by TSDF Operations, Organic Fuel Blenders	Container, Truck, or Tank	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above

[a] Sampling methods depend on the container and matrix of the waste. See Appendix IV-4 of the Waste Analysis Plan for detailed descriptions of sampling methods.

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
3 Spent Carbon	Container, Truck, or Tank	Grab using trowels, shovels, or augers[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	Not Applicable
4 Plant Production Refuse	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable
5 Consolidation of Off-Site Generated Wastes for Hazardous Incineration	Container, Truck, or Tank	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
6 Consolidation of Hazardous Debris for Landfill	Container or Truck	Grab using trowels, shovels or augers[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
7 Consolidation of Non-	Container or Truck	Grab using trowels, shovels or	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See	See Waste No. 1 above	See Waste No. 1 above

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
Hazardous Debris for Incineration		augers[a]		Section IV.5.2 of the Waste Analysis Plan (WAP) for more details		
8 Rainwater in Containment Dock in S-5 and Non-Hazardous Waters from Tank #25	Container or Tank	Coliwasa	Prior to removing	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
9 Labpacks (with no acute wastes)	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable
10 Labpack – Non-Hazardous	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable
11 Hazardous Pharmaceutical Waste	Container	Coliwasa for liquids and/or Grab using trowels,	10% of non-consumer packaged containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan	See Waste No. 1 above	See Waste No. 1 above

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
		shovels or augers for solids[a]		(WAP) for more details		
12 Waste Aerosols From Maintenance and Painting Operations	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable
13 Consolidation of Acids from Retail Facilities	Container	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
14 Consolidation of caustic, inorganic aqueous waste	Container	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
15 Organic Pesticides	Container	Coliwasa for liquids and/or Grab	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See	See Waste No. 1 above	See Waste No. 1 above

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
		using trowels, shovels or augers for solids[a]		Section IV.5.2 of the Waste Analysis Plan (WAP) for more details		
16 Non-haz Liquid for Landfill Disposal	Container, Truck, or Tank	Coliwasa	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
17 Non-haz Organic Solids	Container	Grab using trowels, shovels or augers[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
18 Lab Packs Acute	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
19 Miscellaneous Empty Plastic Containers	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable
20 Pesticide Liquids and Pour Ups of Flammable Acids	Container, Truck, or Tank	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above
21 Hydrogen Peroxide <3%	Container, Truck, or Tank	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above

Waste No.[1]	Sampling Location	Sampling Method[2]	Frequency	Parameter	Test Method[2]	Desired Accuracy Level[3]
22 Hydrogen Peroxide >3%	Container	Coliwasa for liquids and/or Grab using trowels, shovels or augers for solids[a]	10% of inbound containers	See Waste 1 above. Not all parameters apply to each sample. See Section IV.5.2 of the Waste Analysis Plan (WAP) for more details	See Waste No. 1 above	See Waste No. 1 above.
23 Compressed Gas Cylinders	Container	Not Sampled	Not Applicable	Generator Knowledge	Review of Safety Data Sheets, Technical Specification, and/or Waste Characterization Form	Not Applicable

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.

Table V.B. - Container Storage Areas

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos.[4]	Rated Capacity[3]	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable[1], Reactive[1], or Incompatible[2] waste (state all that apply)	Unit Status
041	S-1	002	2, 4, 5, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 23	116,820 gal.	8,130 ft^2	52,800 gal.	Ignitable, Reactive, Incompatible	Active
042	S-2	004	2, 3, 4, 5, 9, 10, 11, 12, 15, 18, 19, 20	71,500 gal.	5,264 ft^2	33,540 gal.	Ignitable, Reactive, Incompatible	Active
043	S-3	005	2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	49,500 gal.	5,270 ft^2	33,540 gal.	Ignitable, Reactive, Incompatible	Active
044	R-1	007	2, 4, 5, 9, 10, 11, 18, 19, 20, 21, 22	32,000 gal.	5,096 ft^2	32,620 gal.	Ignitable, Reactive, Incompatible	Active
045	S-5	036	2, 4, 5, 8, 9, 10, 11, 16, 17, 18, 19, 20	136,620 gal.	7,618 ft^2	48,640 gal.	Ignitable, Reactive, Incompatible	Active
053	S-6	057	2, 4, 5, 10, 11, 19, 20	128,700 gal.	8,200 ft^2	52,370 gal.	Ignitable, Reactive, Incompatible	Active

1. Containers managing ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
2. Incompatible waste must be separated from other waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments by means of a dike, berm, wall, or other device.
3. Container Storage Areas need to include in capacity calculations any nonhazardous wastes and universal wastes managed in the unit in addition to hazardous wastes.
4. from Table IV.B, first column

Table V.C. - Tanks and Tank Systems

Permit Unit No.	Tank	N.O.R. No.	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)	Unit Status
020	TK-7R	047	Processing (fuel blending)	1, 8, 9	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active
021	TK-10R	048	Processing (fuel blending)	1, 8, 9	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active
023	TK-23R	050	Processing (fuel blending)	1, 8, 9	21,000 gal	12' diam 25' height	27,695 gal	Ignitable, Reactive, Incompatible	Active
024	TK-24R	051	Processing (fuel blending)	1, 8, 9	21,000 gal	12' diam 25' height	27,695 gal	Ignitable, Reactive, Incompatible	Active
025	TK-26R	052	Storage	1, 8, 9	10,000 gal	10' diam 15' height	33,319 gal	Ignitable, Reactive, Incompatible	Active
026	TK-101	021	Storage	1	10,000 gal	10' diam 15' height	33,319 gal	Ignitable, Reactive, Incompatible	Active
031	TK-110	026	Processing (fuel blending)	1	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active
032	TK-111	027	Processing (fuel blending)	1	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active
033	TK-112	028	Processing (fuel blending)	1	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active
034	TK-113	029	Processing (fuel blending)	1	21,000 gal	12' diam 25' height	30,092 gal	Ignitable, Reactive, Incompatible	Active

1. from Table IV.B, first column

Table V.K. - Miscellaneous Units

Permit Unit No.*	Miscellaneous Unit	N.O.R. No.	Storage, Processing, and/ or Disposal	Waste Nos.[1]	Rated Capacity	Dimensions	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
050	M-3	054	Processing (Solids Separation and Dispersal)	9	1,260 gal/hr	15 ft (w) x 30 ft (l) x 20 ft (ht)	Ignitable
051	M-100	055	Processing (Shredder)	8, 9	2,200 gal/hr	15 ft (w) x 30 ft (l) x 20 ft (ht)	Ignitable, Incompatible
058	M-101	064	Processing (Shredder) (not yet built)	8, 9	2,200 gal/hr	15 ft (w) x 30 ft (l) x 20 ft (ht)	Ignitable, Incompatible
059	M-104	065	Processing (Stabilization Unit) (Proposed)	8, 10, 11, 13, 14, 16, 22	678 yd^3/day	68 ft (w) x 81 ft (l)	Ignitable

1. from Table IV.B, first column

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

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

Unit	Cost
Existing Units	
NOR 001; Permit No. 014 - Storage Tank TK-M3A	$39,161
NOR 003; Permit No. 015 - Storage Tank TK-M3B	$39,460
NOR 047; Permit No. 020 - Storage Tank TK-7R	$114,928
NOR 048; Permit No. 021 - Storage Tank TK-10R	$100,347
NOR 050; Permit No. 023 - Storage Tank TK-23R	$113,822
NOR 051; Permit No. 024 - Storage Tank TK-24R	$100,347
NOR 052; Permit No. 025 - Storage Tank TK-26R	$82,448
NOR 021; Permit No. 026 - Storage Tank TK-101	$67,516
NOR 026; Permit No. 031 - Storage Tank TK-110	$100,347
NOR 027; Permit No. 032 - Storage Tank TK-111	$100,347
NOR 028; Permit No. 033 - Storage Tank TK-112	$100,347
NOR 029; Permit No. 034 - Storage Tank TK-113	$100,347
NOR 002: Permit No. 041 - Container Storage Area S-1	$314,055
NOR 004: Permit No. 042 - Container Storage Area S-2	$197,448
NOR 005; Permit No. 043 - Container Storage Area S-3	$146,934
NOR 007; Permit No. 044 - Container Storage Area R-1	$106,061
NOR 036; Permit No. 045 - Container Storage Area CSW-5	$356,872
NOR 057; Permit No. 053 - Container Storage Area S-6	$341,616
NOR 054; Permit No. 050 -Miscellaneous Unit M-3	$51,847
NOR 055; Permit No. 051 -Miscellaneous Unit M-100	$61,796
Subtotal	**$2,636,046**
Proposed Units	
NOR 064; Permit No. 058 -Miscellaneous Unit M-101 (Proposed)	$61,796
NOR 065; Permit No. 059 -Miscellaneous Unit M-104 (Proposed)	$167,671
Subtotal	**$229,467**
Total Closure Cost (2022 Dollars)	**$2,865,513**

As units are added or deleted from these tables through future permit amendments or modifications, the remaining itemized unit costs should be updated for inflation when re-calculating the revised total cost in current dollars.

[1] Costs include transportation and disposal of wastes in each unit only. Additional costs are summarized in Table VII.B

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

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

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

B. Compliance Monitoring[1] (30 TAC Section 335.165)

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

C. Corrective Action[2] (30 TAC Section 335.167)

Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed[4]
AOC No. 1	N/A	N/A

D. Alternative Corrective Action[3] (30 TAC Section 335.151)

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

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

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

Foot Note:

1. Program applies to RCRA-regulated units only.

2. Program applies to releases from solid waste management units (SWMUs) and/or areas of concern (AOCs).
3. Program applies to commingled releases from RCRA-regulated unit and from one or more SWMUs and/or AOCs.
4. List SWMUs, additional units/areas of Investigation, AOCs, RCRA-regulated units within the FOA that are subject to corrective action. For RCRA units, SWMUs and/ or AOC outside the FOA boundary for which compliance monitoring and/ or corrective action applies should be listed separately in Items A, B or C as appropriate.
5. For the purpose of maintaining a historical record to verify the units/areas have met the program requirements in accordance with Permit Provisions XI.A.2, XI.A.3., XI.A.4. and/or

XI.A.5., the permittee shall update CP Table I to reflect the new status of the unit/area to include the remedy standard achieved for all media of concern and the date of the Commission's No Further Action (NFA) approval letter. The units/area shall not be deleted from CP Table I until the program objectives have been completed and no further action has been approved through modification or amendment to the Permit.

N/A - not applicable

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

Unit Name	NOR Number, if applicable	SWMU or AOC	Affected Media[1]	Date Program Requirement and Remedy Standard Completed[2]
AOC No. 1	N/A	AOC	Soil/GW	

SWMU= Solid Waste Management Units

AOC= Area of Concern

Foot Note:

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

N/A = not applicable

Note:

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

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

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

There may be cases in which the permittee fulfills the Corrective Action Objectives for soils at a SWMU/AOC, but long-term groundwater monitoring and corrective action may be necessary to meet the groundwater Corrective Action Objectives. In such instances, the SWMU/AOC would be listed in CP Table I, Item C, and would be subject to all applicable provisions of this Compliance Plan. If a release from a SWMU/AOC is commingled with a RCRA-regulated unit, then the unit and the SWMU/AOC would be listed in CP Table I, Item D. In accordance with

Permit Section XI.H., once the Corrective Action Objectives for groundwater are completed, the permittee shall modify or amend the Compliance Plan to reassign the SWMU/AOC in CP Table I, Item C or Item D, to CP Table II. CP Table II should reflect the new status of the SWMU/AOC. It should include the Remedy Standard achieved for all media of concern and the date of the Commission's NFA approval letter for each SWMU/AOC.

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

Unit Name	**Column A** Hazardous Constituents	**Column B** Groundwater Protection Standards (mg/l) at the POC [2]		**Column C** Groundwater Protection Standards (mg/l) at the POE or APOE, or FBOC[1,2]	
AOC No. 1	Tetrachloroethylene	N/A	N/A	0.005	GW GW ING
	Trichloroethylene	N/A	N/A	0.005	GW GW ING
	1,1-Dichloroethylene	N/A	N/A	0.007	GW GW ING
	cis-1,2-Dichloroethylene	N/A	N/A	0.070	GW GW ING
	Vinyl chloride	N/A	N/A	0.002	GW GW ING
	Arsenic	N/A	N/A	0.010	GW GW ING
	1,1-Dichloroethane	N/A	N/A	15	GW GW ING
	Chloroethane (Ethyl chloride)	N/A	N/A	29	GW GW ING
	Lead (inorganic)	N/A	N/A	0.015	GW GW ING
	trans-1,2-Dichloroethylene	N/A	N/A	0.10	GW GW ING
	Barium	N/A	N/A	2.0	GW GW ING
	Chromium (total)	N/A	N/A	0.100	GW GW ING
	Benzene	N/A	N/A	0.005	GW GW ING
	Ethylbenzene	N/A	N/A	0.700	GW GW ING
	Toluene	N/A	N/A	1.0	GW GW ING
	Xylenes (total)	N/A	N/A	10	GW GW ING
	Naphthalene	N/A	N/A	1.5	GW GW ING
	Isopropylbenzene (Cumene)	N/A	N/A	7.3	GW GW ING
	n-Propylbenzene	N/A	N/A	2.9	GW GW ING
	bis(2-ethylhexyl) Phthalate	N/A	N/A	0.006	GW GW ING
	2-Methylnaphthalene	N/A	N/A	0.29	GW GW ING
	sec-Butylbenzene	N/A	N/A	2.9	GW GW ING
	1,2,4-Trimethylbenzene	N/A	N/A	2.5	GW GW ING
	Hexachlorobutadiene	N/A	N/A	0.026	GW GW ING

Notes:

a) If the Corrective Action Program (Provision XI.E.) does not apply to the RCRA-regulated units, SWMUs, or AOCs at the facility, mark “Reserved” next to the CP Table III heading.

b) CP Table III represents the long list of hazardous constituents that are reasonably expected to be in, or derived from, the waste placed in each RCRA-regulated unit, SWMU, and/or AOC listed in the table. CP Table III also lists the hazardous constituents that have been historically detected in the

groundwater for each RCRA-regulated unit, SWMU, and/or AOC. These hazardous constituents are monitored in accordance with Provision XI.F.3.c.(1).

c) In accordance with Provision XI.D.6., the Groundwater Protection Standards (GWPS) must be met before the RCRA-regulated unit, SWMU, and/or AOC can exit the Corrective Action Program.

d) If applicable, "Appendix IX" can be used in Column A for a unit instead of listing each chemical of concern (COC). The permittee may petition the Executive Director for the deletion of a specific COC from the Appendix IX analysis if the permittee can demonstrate that the COC was never used in the facility's operations nor was disposed of in the waste management area.

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

Footnotes:

1. Use Column C to specify the GWPS assigned at a POE or APOE (i.e. for sites with MNA or PMZ proposals as applicable under TRRP), or FBOC for those sites with FOA authorization. Put "N/A" if a specific program or column item is not applicable.
2. For each COC, select the appropriate GWPS designation and definition to demonstrate that the corrective action program objectives are being achieved either under the Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or the Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350. The RRR and TRRP GWPS designations and definitions may not be combined pursuant to 30 TAC Section 350.2(m).

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

$^{GW}GW_{Class3}$ ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial /Industrial), Tier I for Class 3 groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

$^{Air}GW_{Inh\text{-}V}$ ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial /Industrial) for Class 1 or Class 2 groundwater inhalation PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

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

B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

^{SED}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater-to-sediment PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

^{ECO}GW ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater based on ecological receptor(s) PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

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

ND Non-detectable at the method quantitation limit (MQL) as determined by the analytical methods of the most recent edition of EPA SW-846 and as listed in the July 8, 1987 edition of the Federal Register and later editions. MQL is indicated in parentheses. MQL is defined in 30 TAC Section 350.4 (54) as the lowest non-zero concentration standard in the laboratory's initial calibration curve and is based on the final volume of extract (or sample) used by the laboratory.

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

Unit Name	**Column A** Hazardous Constituents	**Column B** Groundwater Protection Standards (mg/l) at POC [2]		**Column C** Groundwater Protection Standards (mg/l) at the POE or APOE, or FBOC[1,2]	
AOC No. 1	Tetrachloroethylene	N/A	N/A	0.005	GW GW ING
	Trichloroethylene	N/A	N/A	0.005	GW GW ING
	1,1-Dichloroethylene	N/A	N/A	0.007	GW GW ING
	cis-1,2-Dichloroethylene	N/A	N/A	0.070	GW GW ING
	Vinyl chloride	N/A	N/A	0.002	GW GW ING
	Arsenic	N/A	N/A	0.01	GW GW ING
	Barium	N/A	N/A	2.0	GW GW ING
	Isopropylbenzene (Cumene)	N/A	N/A	7.3	GW GW ING
	n-Propylbenzene	N/A	N/A	2.9	GW GW ING

Notes:

a) If the Corrective Action Program (Provision XI.E.) does not apply to the RCRA-regulated units, SWMUs, or AOCs at the facility, mark "Reserved" next to the CP Table III heading.

b) CP Table III represents the long list of hazardous constituents that are reasonably expected to be in, or derived from, the waste placed in each RCRA-regulated unit, SWMU, and/or AOC listed in the table. CP Table III also lists the hazardous constituents that have been historically detected in the groundwater for each RCRA-regulated unit, SWMU, and/or AOC. These hazardous constituents are monitored in accordance with Provision XI.F.3.c.(1).

c) In accordance with Provision XI.D.6., the Groundwater Protection Standards (GWPS) must be met before the RCRA-regulated unit, SWMU, and/or AOC can exit the Corrective Action Program.

d) If applicable, "Appendix IX" can be used in Column A for a unit instead of listing each chemical of concern (COC). The permittee may petition the Executive Director for the deletion of a specific COC from the Appendix IX analysis if the permittee can demonstrate that the COC was never used in the facility's operations nor was disposed of in the waste management area.

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

Footnotes:

1. Use Column C to specify the GWPS assigned at a POE or APOE (i.e. for sites with MNA or PMZ

proposals as applicable under TRRP), or FBOC for those sites with FOA authorization.

Put "N/A" if a specific program or column item is not applicable.

2. For each COC, select the appropriate GWPS designation and definition to demonstrate that the corrective action program objectives are being achieved either under the Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or the Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350. The RRR and TRRP GWPS designations and definitions may not be combined pursuant to 30 TAC Section 350.2(m).

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

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

Unit Name	**Column A** Hazardous Constituents[2]	**Column B** Concentration Limits (mg/l)[1]	
Reserved			

Notes:

a) If there are no RCRA-regulated units subject to the Compliance Monitoring Program , mark "Reserved" next to the CP Table IV heading.

b) CP Table IV represents the long list of hazardous constituents that are reasonably expected to be in, or derived from, waste placed in a RCRA-regulated unit, but may not be detected in groundwater above the constituents' respective quantitation limits.

c) CP Table IV constituents are to be monitored annually in accordance with Provision XI.F.3.(2). Any CP Table IV constituents detected in the groundwater should be carried over to CP Table IVA.

Footnotes:

1) For each constituent of concern, select the appropriate quantitation limit designation and definition according to either the Risk Reduction Rules (RRR) pursuant to 30 TAC Chapter 335 or the Texas Risk Reduction Program (TRRP) pursuant to 30 TAC Chapter 350.

2) If applicable, "Appendix IX" can be used in Column A for a unit instead of listing each chemical of concern (COC). The permittee may petition the Executive Director for the deletion of a specific COC from the Appendix IX analysis if the permittee can demonstrate that the COC was never used in the facility's operations nor was disposed of in the waste management area.

TRRP Quantitation Limit Designations and Definitions

ND Non-detectable at the method quantitation limit (MQL) as determined by the analytical methods of the most recent edition of EPA SW-846 and as listed in the July 8, 1987 edition of the Federal Register and later editions. MQL is indicated in parentheses. MQL is defined in 30 TAC Section 350.4(a)(54) as the lowest non-zero concentration standard in the laboratory's initial calibration curve and is based on the final volume of extract (or sample) used by the laboratory.

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

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

Unit Name	**Column A** Hazardous Constituents	**Column B** Concentration Limits (mg/l)	
Reserved			

Notes:

a) If there are no RCRA-regulated units subject to the Compliance Monitoring Program (Provision ?), mark "Reserved" next to the CP Table IVA heading.

b) CP Table IVA represents the short list of hazardous constituents detected in groundwater above the quantitation limits specified in CP Table IV.

c) CP Table IVA constituents are monitored semiannually in accordance with Provision XI.F.3.c.(2) to verify that the groundwater protection standards (GWPS) are being met.

Footnotes:

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

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

TRRP GWPS Designations and Definitions

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

$^{GW}GW_{Class3}$ ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined

	under RSA or RSB (Residential or Commercial /Industrial) Tier I for Class 3 groundwater ingestion PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.
$^{Air}GW_{Inh-V}$	ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB (Residential or Commercial /Industrial) for Class 1 or Class 2 groundwater inhalation PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.
^{SW}GW	ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater-to-surface water PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.
^{SED}GW	ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater-to-sediment PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.
^{ECO}GW	ACL pursuant to 30 TAC Section 335.160(b) based upon the PCL determined under RSA or RSB for groundwater based on ecological receptor(s) PCL of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.
BKG	Background as determined in accordance with Provision XI.F.1.
ND	Non-detectable at method quantitation limit (MQL) as determined by the analytical methods of the most recent edition of EPA SW-846 and as listed in the July 8, 1987 edition of the Federal Register and later editions. MQL is indicated in parentheses. MQL is defined in 30 TAC Section 350.4 (54) as the lowest non-zero concentration standard in the laboratory's initial calibration curve and is based on the final volume of extract (or sample) used by the laboratory.

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CP Table V: Designation of Wells

Point of Compliance Wells
Unit Name: AOC No. 1
Well Numbers: None
Point of Exposure Wells
Unit Name: AOC No. 1
Well Numbers: None
Alternate Point of Exposure Wells
Unit Name: AOC No. 1
Well Numbers: MW-G, MW-L, MW-MR, MW-O, MW-PR2, MW-Q, Deep-1
Background Wells
Unit Name: AOC No. 1
Well Numbers: MW-UG1
FOA Boundary of Compliance Wells
Exposure Pathway: (e.g. SWGW - Groundwater to surface water PCL for Brazos River or Barge Canal, etc)
Unit Name: AOC No. 1
Well Numbers: None

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

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

	Year or Number of Years
Year Waste Management Activities Initiated	Reserved
Year Closed	
Compliance Period (years)	
Compliance Period Began	
Remove Last Unit	Add Unit

CP Table VII: Reporting Requirements

Item	Program	Reporting Frequency	Requirements
1.	All programs	Semiannual by January 21 Semiannual by July 21	Each report shall be certified by a qualified engineer and/or geoscientist.
2.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	A table of all modifications and amendments made to this Compliance Plan with their corresponding approval dates by the Executive Director or the Commission and a brief description of each action;
3.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	A summary of any activity within an area subject to institutional control.
4.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Tabulation of well casing elevations in accordance with CP Attachment C;
5.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Certification and well installation diagram for any new well installation or replacement and certification for any well plugging and abandonment;
6.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Recommendation for any changes to the program;
7.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Any other items requested by the Executive Director;
8.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Water table maps shall be prepared from the groundwater data collected pursuant to Permit Provision XI.G. and shall be evaluated by the permittee with regard to the following parameters: a. Development and maintenance of a cone of depression during operation of the system; b. Direction and gradient of groundwater flow; c. Effectiveness of hydrodynamic control of the contaminated zone during operation; and d. Estimation of the rate and direction of groundwater contamination migration.

Item	Program	Reporting Frequency	Requirements
9.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	The permittee shall submit a report to each recipient listed in Provision XI.J.3., which includes the all applicable information listed in this table (CP Table VII: Reporting Requirements), determined since the previously submitted report, if those items are applicable. If both Corrective Action and Compliance Monitoring Programs are authorized, then the Groundwater Monitoring Report required by CP Table VII shall contain information required for both programs.
10.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	The Corrective Action System(s) authorized under Provision XI.B.3. in operation during the reporting period and a narrative summary of the evaluations made in accordance with Permit Sections XI.E., XI.F., and XI.G. for the preceding reporting period. The reporting periods shall be January 1 through June 30 and July 1 through December 31 for Corrective Action Monitoring, unless an alternative semiannual schedule is approved by the Commission. The period for Compliance Monitoring shall be based on the calendar year.
11.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	The method(s) utilized for management of recovered/purged groundwater shall be identified in accordance with Provision XI.B.8. The permittee shall maintain this list as part of the facility operating record and make it available for inspection upon request.

Item	Program	Reporting Frequency	Requirements
12.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	An updated table and map of all monitoring and corrective action system wells. The wells to be sampled shall be those wells proposed in the Compliance Plan Application referenced in Provision I.B. and any changes subsequently approved by the Executive Director pursuant to Provision XI.B.3. Provide in chronological order, a list of those wells which have been added to, or deleted from, the groundwater monitoring and remediation systems since original issuance of the Compliance Plan. Include the date of the Commission's approval for each entry;
13.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	The results of the chemical analyses, submitted in a tabulated format acceptable to the Executive Director which clearly indicates each parameter that exceeds the Groundwater Protection Standard (GWPS). Copies of the original laboratory report for chemical analyses showing detection limits and quality control and quality assurance data shall be provided if requested by the Executive Director;
14.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Tabulation of all water level elevations required in Provision XI.F.3.d.(1), depth to water measurements, and total depth of well measurements collected since the data that was submitted in the previous monitoring report;
15.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Potentiometric surface maps showing the elevation of the water table at the time of sampling, delineation of the radius of influence of the Corrective Action System, and the direction of groundwater flow gradients outside any radius of influence;
16.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	Tabulation of all data evaluation results pursuant to Provision XI.F.4. and status of each well with regard to compliance with the Corrective Action objectives and compliance with the GWPS;
17.	Corrective Action and/or Compliance Monitoring	Semiannual by January 21 Semiannual by July 21	An updated summary as required by CP Table VIII;

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

Item	Program	Reporting Frequency	Requirements
24.	Corrective Action only	Semiannual by January 21 Semiannual by July 21	Corrective Measures Implementation (CMI) Progress Report or Response Action Effectiveness Report or Response Action Completion Report to be submitted as a section of the Compliance Plan report in accordance with Provision XI.H.6., if necessary. The permittee will include a narrative summary of the status of the approved final corrective measures conducted in accordance with the approved CMI Workplan or RAP, and that the requirements of Provision XI.H.7. are being met.
25.	Corrective Action only	Semiannual by January 21 Semiannual by July 21	The permittee will include a narrative summary of the status of each Solid Waste Management Unit (SWMU) and/or Area of Concern (AOC) subject to the requirements of Permit Provision XI.H. and ICM Program for a SWMU and/or AOC which documents that the objectives of Provision XI.H.8.b. are being achieved. This summary shall be included as a section of the Compliance Plan groundwater monitoring report.
26.	PMZ	Semiannual by January 21 Semiannual by July 21	A summary evaluating the effectiveness of the corrective action system in controlling migration beyond the downgradient boundary and vertical limit of the PMZ to achieve the GWPS. The summary shall include an evaluation of whether the attenuation action levels are not exceeded at their respective attenuation monitoring points pursuant to 30 TAC Sections 350.33(f)(4)(A) and 350.33(f)(4)(D)(ii), if applicable;
27.	PMZ	Semiannual by January 21 Semiannual by July 21	An estimate of the percentage of the response action which has been completed within the PMZ, if applicable;
28.	PMZ	Semiannual by January 21 Semiannual by July 21	An estimate in years of the additional time necessary to complete the response actions for the PMZ, if applicable;
29.	PMZ	Semiannual by January 21 Semiannual by July 21	A determination whether sufficient progress is being made to achieve the selected remedy standard within a reasonable time frame given the circumstance of the affected property in the PMZ, if applicable.

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

Item	Program	Reporting Frequency	Requirements
30. (contd.)	Facility Operations Area (FOA)	Not Applicable	b. Document that the worker health and safety program meets the requirements of the Occupational Safety and Health Administration (OSHA) by providing records of the OSHA compliance history or the results of the most recent audit of the health and safety programs by the OSHA or a third party certified professional industrial hygienist and safety specialist. An audit is required anytime there is a significant change to the health and safety program, or at a minimum every three (3) years, the results of which indicate the program is satisfactory c. Document a compliance history ranking of average or better for the TCEQ. d. Document the pollution prevention program that has a goal of prevention of releases of COCs to environmental media within the FOA. e. Provide a statement that the program required in 30 TAC Section 350.134(a)(7) to protect workers within the FOA from environmental media having concentrations of COCs greater than PCLs or action levels based on the health and safety program is still in effect. In addition, the permittee shall provide, for the preceding year, an updated map delineating areas where the Soil Response Action Plan has been implemented pursuant to 30 TAC Section 350.135(a)(5). f. Document there have not been any significant outstanding non_compliance issues resulting from inspections for compliance with the RCRA permit or order, if any.

Item	Program	Reporting Frequency	Requirements
30. (contd.)	Facility Operations Area (FOA)	Not Applicable	g. Document areas of ecological impact identified within the FOA and procedures for responding to these identified ecologically impacted areas on a continual basis. Review any ecologically impacted areas annually and report any new ecological impacts within thirty (30) days of verification of impact. h. Document activity associated with tracking and responding to releases to soil and groundwater above reportable quantities, which occur within the FOA after the issuance of the Compliance Plan, in accordance with 30 TAC Section 350.135(a)(7). i. Document any NAPL occurrences and any procedure(s) used to address known NAPLs and any NAPLs identified during the operational life of the FOA. This should include any previously discovered NAPL occurrences. j. Provide documentation that access is restricted to the FOA.

CP Table VIII: Compliance Schedule

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
A.	60	Compliance Plan	Submit to the Executive Director a schedule summarizing all activities required by the Compliance Plan. The schedule shall list the starting dates of all routine activities. The permittee shall include an updated schedule in the groundwater monitoring report required by Provision XI.G.3. The schedule shall list the activity or report, the Compliance Plan Section which requires the activity or report and the calendar date the activity or report is to be completed or submitted (if this date can be determined.)
B.	60	30 TAC §335.163(4) and Provision XI.F.2.	Submit to the Executive Director for review and approval a Sampling & Analysis Plan (SAP) unless the SAP has been submitted with the application and referenced in Provision I.B.
C.	During the first thirty (30) days of each second and fourth quarter	30 TAC §335.166	Corrective action monitoring shall be conducted on a semiannual basis for any RCRA-regulated units subject to corrective action program, listed in CP Table I.A program.
D.	During the first thirty (30) days of each second and fourth quarter	30 TAC §335.165)	Compliance monitoring shall be conducted on a semiannual basis for any RCRA-regulated units subject to corrective action program listed in CP Table I.B.
E.	During the first thirty (30) days of each second and fourth quarter	30 TAC §335.167	For SWMUs and/or AOCs subject to alternative corrective monitoring, corrective action monitoring shall be conducted on a semiannual basis for the solid waste management units (SWMUs) and/or areas of concern (AOC) listed in CP Table I.C.

Item	**Compliance Schedule** (from the date of issuance of the Compliance Plan unless otherwise specified)	**Regulatory Citation**	**Requirement**
F	During the first thirty (30) days of each second and fourth quarter	30 TAC §335.151	For units subject to alternative corrective action, alternative corrective action shall be conducted on a semiannual basis for those units listed in CP Table I.D.
G.	During the first thirty (30) days of each second and fourth quarter	30 TAC Section 335.156 and Chapter 350	Corrective action monitoring shall be conducted on a semiannual basis for the RCRA Units, solid waste management units (SWMUs) and/or areas of concern (AOC) listed in CP Table I.E. located within the FOA Boundary
H.	120	30 TAC §350.33(f)(4)(C)(i)	If a PMZ has been authorized, submit to the Executive Director proof of compliance with institutional control requirements which provides notice of the existence and location of the Plume Management Zone (PMZ) which prevents exposure to groundwater from this zone until such a time as constituents of concern may be reduced to below the GWPS of CP Table III.
I.	Notify within 30 days	30 TAC §350.33(k)	If a PMZ has been authorized, after an unexpected event occurs, or a condition is detected, during post-response action care period which indicates that additional response actions will be required at an affected property.

[1]Note: Please note that Corrective action monitoring is conducted on semiannual basis unless a less frequent monitoring schedule is approved based on plume stability and achievement of

CP Table IX: Description of Uppermost Aquifer

The term "Uppermost Aquifer" as referenced in this Compliance Plan refers to the: Undifferentiated Cretaceous Sediments that range in elevation from approximately 530 feet above mean sea level (MSL) to 560 feet above MSL and any hydraulically interconnected aquifers. The top of the Uppermost Aquifer is approximately 5-15 feet below ground surface (BGS). The potentiometric surface of the groundwater is typically encountered from zero (artesian) to 5 feet BGS. The uppermost groundwater bearing unit (GWBU) in the Taylor Marl has been historically monitored by wells with screen/pack intervals occurring from about 3-30 feet in depth. The uppermost GWBU has been historically reported to occur in the thin, discontinuous lens of sandy clay that was occasionally encountered about 5 feet BGS and more commonly at depths of about 10-15 feet BGS. The potentiometric groundwater from this interval rises above the estimated top of the zone, so semi-confining to confining conditions are apparent (and some cases, artesian conditions exist). Shale underlies the Taylor Marl at about 40-50 feet BGS across the site and that, combined with the less permeable soils underlying the uppermost GWBU, are believed to be an aquitard limiting downward migration of impact into the next deeper GWBU. Groundwater flow in the uppermost GWBU appears to generally follow the local surface topography (flowing to the north-northwest across the site) towards the watershed tributaries.

Table XI.E.3. - Financial Assurance Summary

Task	Cost
Annual Off-Site Liquid Treatment / Disposal Cost	$0.00
Annual On-Site Treatment / Disposal Cost	$0.00
Annual Inspection / Maintenance / Operation Cost For The Corrective Action Program	$0.00
Annual Groundwater Monitoring Cost	$18,872.00
Annual Administrative Cost	$22,000.00
Annual Inspection And Maintenance Cost For The Groundwater Monitoring Program	$1,320.00
Annual Sub Total	**$42,192.00**
Total Years Used For Calculating Financial Assurance for Corrective Action and/or Compliance Monitoring Program	**30** Years
Remediation Cost (Annual Sub Total x Total Years Used)	$1,265,760.00
On-Site Waste Water Treatment System Capital Cost Total Well Cost	$0.00 $5,500.00
10% Contingency	$127,126.00
Total Cost	$1,398,386.00
Grand Total Cost (round to nearest $1000) (2022 Dollars)	**$1,399,000**

Attachment A - Legal Description of Facility

ELLIS ASSOCIATES
SURVEYORS

212 NORTH COLLEGE STREET WAXAHACHIE, TEXAS 75165
Telephone 972-937-7474 Fax 972-937-0331

January 27, 2011

Federal Title Inc
6750 Hillcrest Plaza Drive
Suite 313
Dallas, Texas 75230

phone no. 214-413-4008
Job & Invoice No B-11008

Survey, plat and field notes for 8.0363 acres in the Ellis County School Land Survey, Abstract 329, Ellis County, Texas,

	$ 1750.00
Use tax	144.38
	$ 1894.38

FOR PROPER CREDIT, PLEASE RETURN ONE COPY OF INVOICE

Thank you for your business
Due and Payable Upon Receipt
Please make checks payable to "Ellis Associates Surveyors"

Attachment A - Legal Description of Facility

FIELD NOTES for PSC LLC Job Number B – 11008

BEING a part of the Ellis County School Land Survey, Abstract 329, Ellis County, Texas, and being the 8.0287 acre tract described in deed from Michael O. Cloonen, et al to Michael O. Cloonen Declaration of Trust, et al, recorded in Volume 1841, Page 777, Official Public Records, Ellis County, Texas, and being more particularly described by its metes and bounds as follows;

Beginning at a ½" steel rod found at the northeast corner of said 8.0287 acre tract and the northwest corner of the 49.705 acre tract described in deed from H. L. Southard, et ux, to Republic Waste Services of Texas, LTD., recorded in Volume 2051, Page 1454, Official Public Records, Ellis County, Texas and on the south line of the 1.9709 acre tract described in deed from H. L. Southard, et ux, to Philip Services Corporation, recorded in Volume 2501, Page 2441, Official Public Records, Ellis County, Texas;

THENCE S 5°26'16" E, with the common line of said 8.0287 acre tract and said 49.705 acre tract, 382.21 feet (call S 4°14'56" E, 382.39 feet) to a ½ inch steel rod found at an angle in said common line;

THENCE S 16°21'05" E, continuing with the common line of said 8.0287 acre tract and said 49.705 acre tract, 739.40 feet (call S 15°07'09" E, 739.29 feet) to a 5/8 inch steel rod, with cap stamped “BMI”, found at the southeast corner of said 8.0287 acre tract and an interior corner of said 49.705 acre tract;

THENCE S 58°13'07" W, with easterly south line of said 8.0287 acre tract, 351.52 feet (call S 59°20'38" W, 350.79 feet) to ½ inch steel rod found at the easterly southwest corner of said 8.0287 acre tract and on the east line of the tract described in deed from C.G. Jenkins, et ux, to Paul A. Glenn, recorded in Volume 465, Page 102, Deed records, Ellis County, Texas, from which a 1 inch steel rod with aluminum cap stamped “Boundary Mark, Inc. found at the northwest corner of said 49.705 acre tract bears N 53°22'37"W, 10.52 feet;

THENCE N 31°06'57" W, with southerly west line of said 8.0287 acre tract and the east line of said Glenn tract 32.74 feet (call N 29°56'22" W, 32.74 feet) to a ½ inch steel rod set at an interior corner of said 8.0287 acre tract and the northeast corner of said Glenn tract;

THENCE S 57°33'35" W, with the westerly south line of said 8.0287 acre tract and the north line of said Glenn tract, 21.79 feet (call S 59°15'00" W, 21.62 feet) to a ½ inch steel rod found at the most west southwest corner of said 8.0287 acre tract and the southeast corner of said 1.9709 acre tract;

THENCE N 1°11'17" W, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 44.55 feet (call N 0°04'00" W, 44.30 feet) to a ½ inch steel rod set at the beginning of a curve with a radius of 315.60 feet (call 315.60 feet);

THENCE Northwesterly with the common line of said 8.0287 acre tract and said 1.9709 acre tract and with the arc of said curve, to the left, having a central angle of 29°14'00" and a chord bearing and distance of N 15°51'34" W, 159.28 feet, for an arc length of 161.02 feet (call 161.02 feet) to a ½ inch steel rod set at the end of said curve;

THENCE N 30°28'34" W, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 329.00 feet (call N 29°18'00" W, 329.00 feet) to a ½ inch steel rod set at the beginning of a curve with a radius of 156.15 feet (call 156.30 feet);

THENCE Northwesterly with the common line of said 8.0287 acre tract and said 1.9709 acre tract and with the arc of said curve, to the right, having a central angle of 56°27'00" and a chord bearing and distance of N 2°15'04" W, 147.70 feet, for an arc length of 153.86 feet (call 153.99 feet) to a ½ inch steel rod set at the end of said curve;

Attachment A - Legal Description of Facility

THENCE N 25°58'26" E, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 700.66 feet (call N 27°09'00" E, 700.69 feet) to the point of beginning and containing approximately 8.0363 acres of land.

I declare that the plat and field notes hereon are the representation of an actual and accurate survey made on the ground on 25 January 2011 and that corner monuments were found or set under my personal supervision. The bearings recited hereon are based on the GPS Satellite observations. According to the Federal Emergency Management Agency, Flood Insurance Rate Map Number 48139C0330 D, dated January 20, 1999, for Ellis County, Texas, and Incorporated Areas, this tract is not within a special flood hazard area inundated by 100-year flood. This survey is for the benefit of Chemical Reclamation Services, LLC., and Title Resources Guaranty Company.

Stuart G. Hamilton
Registered Professional Land Surveyor, Number 4480

Attachment A - Legal Description of Facility

FIELD NOTES for Michael O. Cloonen Job Number A – 11008B

BEING a part of the Ellis County School Land Survey, Abstract 329, Ellis County, Texas, and being the 8.0287 acre tract described in deed from Michael O. Cloonen, et al to Michael O. Cloonen Declaration of Trust, et al, recorded in Volume 1841, Page 777, Official Public Records, Ellis County, Texas, and being more particularly described by its metes and bounds as follows;

Beginning at a 5/8 inch steel rod, with cap stamped “BMI”, found at the southeast corner of said 8.0287 acre tract and an interior corner of the 49.705 acre tract described in deed from H. L. Southard, et ux, to Republic Waste Services of Texas, LTD., recorded in Volume 2051, Page 1454, Official Public Records, Ellis County, Texas;

THENCE S 58°13'07" W, with easterly south line of said with the common line of said 8.0287acre tract, 351.52 feet (call S 59°20'38" W, 350.79 feet) to ½ inch steel rod found at the easterly southwest corner of said 8.0287 acre tract and on the east line of the tract described in deed from C.G. Jenkins, et ux, to Paul A. Glenn, recorded in Volume 465, Page 102, Deed records, Ellis County, Texas, from which N 53°22'37"W, 10.52 feet;

THENCE N 31°06'57" W, (call N 29°56'22" W) with southerly west line of said 8.0287acre tract and the east line of said Glenn tract, 9.67 feet to a point on the westerly north line of said 49.705 acre tract, from which a 1 inch steel rod with aluminum cap stamped “Boundary Mark, Inc. found at the northwest corner of said 49.705 acre tract bears S 59°47'44"W 3.99 feet;

THENCE N 59°47’'44" W, (call N 60°09’'45" W) with the westerly north line of said 49.705 acre tract, 351.54 feet to the point of beginning and containing approximately 1700 square feet or 0.0390 acre of land.

I declare that the plat and field notes hereon are the representation of an actual and accurate survey made on the ground on 25 January 2011 and that corner monuments were found or set under my personal supervision. The bearings recited hereon are based on the GPS Satellite observations. This survey is for the benefit of Michael O. Cloonen.

Stuart G. Hamilton
Registered Professional Land Surveyor, Number 4480

Easement Note

TO: Chemical Reclamation Services, LLC., and Title Resources Guaranty Company:

The following items are referred to on Schedule B (easements and other exceptions) of the Title Resources Guaranty Company, Commitment for Title Insurance, GF Number CC10-361204, having an effective date of December 16, 2010.

Item 10a Easement dated December 27, 1922, from S.A. Fleeman and Josie Fleeman to John Hancock Mutual Life Insurance Company, recorded in Volume 265, Page 204, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10b Easement dated May 13, 1946, from Clarence to Texas Power and Light Company, recorded in Volume 383, Page 204, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10c Easement dated September 16, 1936, from S.A. Fleeman and Josie Fleeman to Texas Power and Light Company, recorded in Volume 331, Page 486, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10d Easement dated May 6, 1970, from Charles B. Roberson and Jimmie Lee Roberson to Avalon Water Supply and Sewer Service Corporation, recorded in Volume 545, Page 705, Deed Records, Ellis County, Texas, is a blanket easement and cannot be located as described.

Item 10e Easement dated May 13, 1946, from G. W. Fleeman to Texas Power and Light Company recorded in Volume 383, Page 205, Deed Records, Ellis County, Texas, does not apply and is not shown

Item 10f Easement dated March 15, 1975, from H. L. Southard and Joy Southard to Avalon Water Supply and Sewer Service Corporation, recorded in Volume 591, Page 513, Deed Records, Ellis County, Texas, is a blanket easement and cannot be located as described.

Item 10g Easement dated March 15, 1975, from H. L. Southard and Joy Southard to Avalon Water Supply and Sewer Service Corporation, recorded in Volume 591, Page 570, Deed Records, Ellis County, Texas, is a blanket easement and cannot be located as described.

Item 10h Easement dated March 15, 1975, from H. L. Southard and Joy Southard to Avalon Water Supply and Sewer Service Corporation, recorded in Volume 592, Page 646, Deed Records, Ellis County, Texas, is a blanket easement and cannot be located as described.

Item 10i Easement dated February 10, 1976, from H. L. Southard to Texas Power and Light Company, recorded in Volume 598, Page 779, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10j Easement dated August 13, 1975, from J. L. Southard to Texas Power and Light Company, recorded in Volume 598, Page 787, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10k Easement dated July 16, 1975, from H. L. Southard to Texas Power and Light Company, recorded in Volume 598, Page 789, Deed Records, Ellis County, Texas, does not apply and is not shown.

Attachment A - Legal Description of Facility

Item 10l Easement dated December 7, 1989, from H. L. Southard to Texas Power and Light Company, recorded in Volume 827, Page 633, Deed Records, Ellis County, Texas, does not apply and is not shown.

Item 10m Terms conditions, stipulations and provisions contained in Boundary Line Agreement dated April 3, 1978, by and between J. L. Southard and R. W. Riddle, recorded in Volume 619, Page 522, Deed Records, Ellis County, Texas, do not apply and are not shown.

Item 10m Terms conditions, stipulations and provisions contained in Easement Agreement dated April 3, 1978, by and between H. L. Southard and C.S.C Disposal and Landfill, Inc, recorded in Volume 838, Page 926, Deed Records, Ellis County, Texas, do not apply and are not shown.

Easement Note

TO: Chemical Reclamation Services, LLC., and Title Resources Guaranty Company:

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Item 10g Easement dated March 15, 1975, from H. L. Southard and Joy Southard to Avalon Water Supply and Sewer Service Corporation, recorded in Volume 591, Page 570, Deed Records, Ellis County, Texas, is a blanket easement and cannot be located as described.

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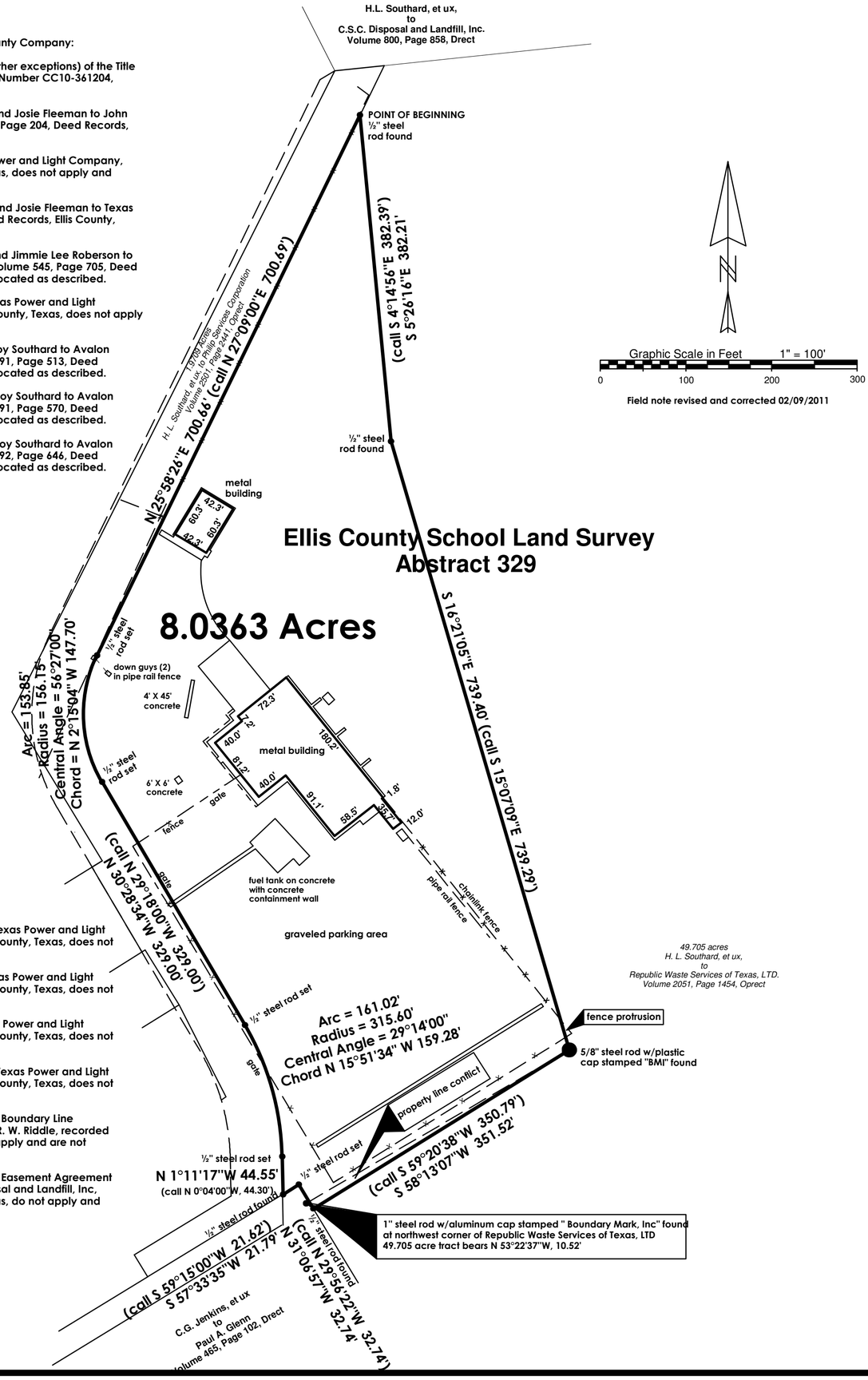

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Item 10m Terms conditions, stipulations and provisions contained in Easement Agreement dated April 3, 1978, by and between H. L. Southard and C.S.C Disposal and Landfill, Inc, recorded in Volume 838, Page 926, Deed Records, Ellis County, Texas, do not apply and are not shown.

FIELD NOTES for Chemical Reclamation Services, LLC. **Job Number B - 11008**

BEING a part of the Ellis County School Land Survey, Abstract 329, Ellis County, Texas, and being the 8.0287 acre tract described in deed from Michael O. Cloonen, et al to Michael O. Cloonen Declaration of Trust, et al, recorded in Volume 1841, Page 777, Official Public Records, Ellis County, Texas, and being more particularly described by its metes and bounds as follows;

Beginning at a ½" steel rod found at the northeast corner of said 8.0287 acre tract and the northwest corner of the 49.705 acre tract described in deed from H. L. Southard, et ux, to Republic Waste Services of Texas, LTD., recorded in Volume 2051, Page 1454, Official Public Records, Ellis County, Texas and on the south line of the 1.9709 acre tract described in deed from H. L. Southard, et ux, to Philip Services Corporation, recorded in Volume 2501, Page 2441, Official Public Records, Ellis County, Texas;

THENCE S 5°26'16" E, with the common line of said 8.0287 acre tract and said 49.705 acre tract, 382.21 feet (call S 4°14'56" E, 382.39 feet) to a ½ inch steel rod found at an angle in said common line;

THENCE S 16°21'05" E, continuing with the common line of said 8.0287 acre tract and said 49.705 acre tract, 739.40 feet (call S 15°07'09" E, 739.29 feet) to a 5/8 inch steel rod, with cap stamped "BMI", found at the southeast corner of said 8.0287 acre tract and an interior corner of said 49.705 acre tract;

THENCE S 58°13'07" W, with easterly south line of said 8.0287 acre tract, 351.52 feet (call S 59°20'38" W, 350.79 feet) to ½ inch steel rod found at the easterly southwest corner of said 8.0287 acre tract and on the east line of the tract described in deed from C.G. Jenkins, et ux, to Paul A. Glenn, recorded in Volume 465, Page 102, Deed Records, Ellis County, Texas, from which a 1 inch steel rod with aluminum cap stamped "Boundary Mark, Inc. found at the northwest corner of said 49.705 acre tract bears N 53°22'37"W, 10.52 feet;

THENCE N 31°06'57" W, with southerly west line of said 8.0287 acre tract and the east line of said Glenn tract 32.74 feet (call N 29°56'22" W, 32.74 feet) to a ½ inch steel rod set at an interior corner of said 8.0287 acre tract and the northeast corner of said Glenn tract;

THENCE S 57°33'35" W, with the westerly south line of said 8.0287 acre tract and the north line of said Glenn tract, 21.79 feet (call S 59°15'00" W, 21.62 feet) to a ½ inch steel rod found at the most west southwest corner of said 8.0287 acre tract and the southeast corner of said 1.9709 acre tract;

THENCE N 1°11'17" W, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 44.55 feet (call N 0°04'00" W, 44.30 feet) to a ½ inch steel rod set at the beginning of a curve with a radius of 315.60 feet (call 315.60 feet);

THENCE Northwesterly with the common line of said 8.0287 acre tract and said 1.9709 acre tract and with the arc of said curve, to the left, having a central angle of 29°14'00" and a chord bearing and distance of N 15°51'34" W, 159.28 feet, for an arc length of 161.02 feet (call 161.02 feet) to a ½ inch steel rod set at the end of said curve;

THENCE N 30°28'34" W, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 329.00 feet (call N 29°18'00" W, 329.00 feet) to a ½ inch steel rod set at the beginning of a curve with a radius of 156.15 feet (call 156.30 feet);

THENCE Northwesterly with the common line of said 8.0287 acre tract and said 1.9709 acre tract and with the arc of said curve, to the right, having a central angle of 56°27'00" and a chord bearing and distance of N 2°15'04" W, 147.70 feet, for an arc length of 153.86 feet (call 153.99 feet) to a ½ inch steel rod set at the end of said curve;

THENCE N 25°58'26" E, with the common line of said 8.0287 acre tract and said 1.9709 acre tract, 700.66 feet (call N 27°09'00" E, 700.69 feet to the point of beginning and containing approximately 8.0363 acres of land.

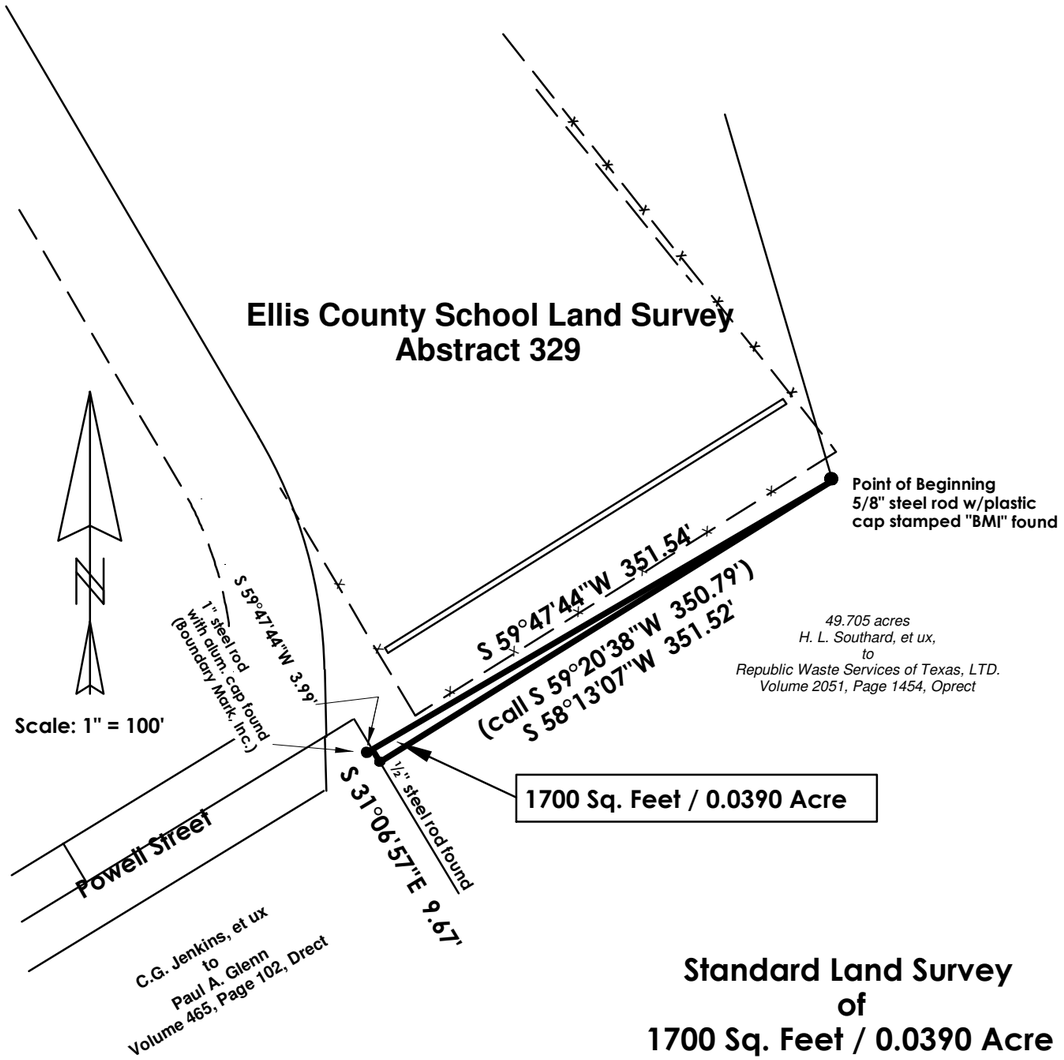
Land Title Survey of 8.0363 Acres in the Ellis County School Land Survey, Abstract 329, Ellis County, Texas

I declare that the plat and field notes hereon are the representation of an actual and accurate survey made on the ground on 25 January 2011 and that corner monuments were found or set under my personal supervision. The bearings recited hereon are based on the GPS Satellite observations. According to the Federal Emergency Management Agency, Flood Insurance Rate Map Number 48139C0330 D, dated January 20, 1999, for Ellis County, Texas, and Incorporated Areas, this tract is not within a special flood hazard area inundated by 100-year flood. This survey is for the benefit of Chemical Reclamation Services, LLC., and Title Resources Guaranty Company.

Stuart G. Hamilton
Registered Professional Land Surveyor, Number 4480

Job Number: B - 11008 drawn by sgh

Ellis Associates Surveyors
212 North College Waxahachie, Texas 75165
Ph. # (972) 937 - 7474 Fax # (972) 937 - 0331
Email - eas212@yahoo.com



FIELD NOTES for Michael O. Cloonen ***Job Number E - 11008A***

BEING a part of the Ellis County School Land Survey, Abstract 329, Ellis County, Texas, and being the 8.0287 acre tract described in deed from Michael O. Cloonen, et al to Michael O. Cloonen Declaration of Trust, et al, recorded in Volume 1841, Page 777, Official Public Records, Ellis County, Texas, and being more particularly described by its metes and bounds as follows;

Beginning at a 5/8 inch steel rod, with cap stamped "BMI", found at the southeast corner of said 8.0287 acre tract and an interior corner of the 49.705 acre tract described in deed from H. L. Southard, et ux, to Republic Waste Services of Texas, LTD., recorded in Volume 2051, Page 1454, Official Public Records, Ellis County, Texas;

THENCE S 58°13'07" W, with easterly south line of said with the common line of said 8.0287 acre tract, 351.52 feet (call S 59°20'38" W, 350.79 feet) to ½inch steel rod found at the easterly southwest corner of said 8.0287 acre tract and on the east line of the tract described in deed from C.G. Jenkins, et ux, to Paul A. Glenn, recorded in Volume 465, Page 102, Deed records, Ellis County, Texas, from which N 53°22'37"W, 10.52 feet;

THENCE N 31°06'57" W, (call N 29°56'22" W) with southerly west line of said 8.0287 acre tract and the east line of said Glenn tract, 9.67 feet to a point on the westerly north line of said 49.705 acre tract, from which a 1 inch steel rod with aluminum cap stamped "Boundary Mark, Inc. found at the northwest corner of said 49.705 acre tract bears S 59°47'44"W 3.99 feet;

THENCE N 59°47"44" W, (call N 60°09"45" W) with the westerly north line of said 49.705 acre tract, 351.54 feet to the point of beginning and containing approximately 1700 square feet or 0.0390 acre of land

I declare that the plat and field notes hereon are the representation of an actual and accurate survey made on the ground on 25 January 2011 and that corner monuments were found or set under my personal supervision. The bearings recited hereon are based on the record deed of the 8.0287 acre tract described in deed recorded in Volume 1841, Page 777, Official Public Records, Ellis County, Texas. This survey is for the benefit of Michael O. Cloonen.

Stuart G. Hamilton
Registered Professional Land Surveyor,
Number 4480

Standard Land Survey
of
1700 Sq. Feet / 0.0390 Acre
in the
Ellis County School Land Survey, Abstract 329
Ellis County, Texas

Job Number: A - 11008B **drawn by sgh**

Ellis Associates Surveyors
212 North College **Waxahachie, Texas 75165**
Ph. # (972) 937 - 7474 **Fax # (972) 937 - 0331**
Email - eas212@yahoo.com

TCEQ Permit Unit No.	Unit Name	NOR No.	Unit Description	Capacity	Unit Status
020	TK-7R	047	Tank	21,000 gal.	Active
021	TK-10R	048	Tank	21,000 gal.	Active
023	TK-23R	050	Tank	21,000 gal.	Active
024	TK-24R	051	Tank	21,000 gal.	Active
025	TK-26R	052	Tank	10,000 gal.	Active
026	TK-101	021	Tank	10,000 gal.	Active
031	TK-110	026	Tank	21,000 gal.	Active
032	TK-111	027	Tank	21,000 gal.	Active
033	TK-112	028	Tank	21,000 gal.	Active
034	TK-113	029	Tank	21,000 gal.	Active
041	S-1	002	Container Storage Area	116,820 gal.	Active
042	S-2	004	Container Storage Area	71,500 gal.	Active
043	S-3	005	Container Storage Area	49,500 gal.	Active
044	R-1	007	Container Storage Area	12,000 gal.	Active
045	S-5	036	Container Storage Area	136,320 gal.	Active
050	M-3	054	Miscellaneous Unit	1,260 gal/hr	Active
051	M-100	055	Miscellaneous Unit	2,200 gal/hr	Active
053	S-6	057	Container Storage Area	128,700 gal.	Active
058	M-101	064	Miscellaneous Unit	2,200 gal/hr	Not Yet Built
059	M-104	065	Miscellaneous Unit	To Be Determined	Proposed (not yet built)

Legend

- Well Location
- Outfall Location
- Corrugated Metal Pipe
- Utility Line
- Fence Line
- Roof Line
- General Traffic FLow
- Facility Boundary
- Swale
- Tank'
- Hazardous Waste Management Area
- Proposed Unit

N

S

0 50 100

Feet

CleanEarth

Chemical Reclamation Services
Avalon, Texas

Hazardous Waste Permit Renewal Application

Facility Diagram

Ellis County, TX

CK Associates Environmental Consultants

Drawn: ASM Checked: CBV
Date: 3/1/2023 Approved: BHS
Dwg. No.: CH2901-19868-03

Part A-Att C Map 2

Path: \\PROJECTS\Client Files\Waco\CCHEMICAL RECLAMATION SERVICES, LLC\CH2901\19868 - Chemical reclamation Services, LLC_Permit Renewal\MAGIS AND MAPS\CH2901-19868-04_Evacuation_Round2.mxd
Date: 2/28/2023

Attachment C – Permit Application Revision Chronology

Classification	Revision No.[1]	Application Date[2]	Purpose
Renewal	1	April 4, 2023, revised September 11, 2023, and October 24, 2023	Renewal and compliance plan with major amendment

[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. General Information
B. TCEQ Core Data Form (Form 10400)
C. Signature Page
Table I - General Information
Table I.1 - Description of Proposed Application Changes

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 (Not Applicable)
C. Additional Requirements for Waste Piles (Not Applicable)
D. Additional Requirements for Storage Surface Impoundments (Not Applicable)
E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with Wastes in Place) (Not Applicable)
F. Flooding
G. Additional Information Requirements
Table II – Facility Siting Criteria Information

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 (Not Applicable)
E. Waste Piles (Not Applicable)
F. Land Treatment Units (Not Applicable)
G. Landfills (Not Applicable)
H. Incinerators (Not Applicable)
I. Boilers and Industrial Furnaces (Not Applicable)
J. Drip Pads (Not Applicable)
K. Miscellaneous Units
L. Containment Buildings (Not Applicable)

Table V.A. Facility Waste Management Handling Units
Table V.B. - Container Storage Areas
Table V.C. - Tanks and Tank Systems
Table V.K. - Miscellaneous Units

VI. Geology Report (Provided in Section XI)

A. Geology and Topography
B. Facility Groundwater
C. Exemption from Groundwater Monitoring for an Entire Facility (Not Applicable)
D. Unsaturated Zone Monitoring (Not Applicable)

Table VI.A.1. - Major Geologic Formations

VII. Closure And Post-Closure Plans

A. Closure
B. Closure Cost Estimate
C. Post-closure (Not Applicable)
D. Post-closure Cost Estimate (Not Applicable)
E. Closure and Post-Closure Cost Summary

Table VII.A. - Unit Closure
Table VII.B. - Unit Closure Cost Estimate
Table VII.E.1. - Permitted Unit Closure Cost Summary

VIII. Financial Assurance

A. Financial Assurance Information Requirements for all Applicants

Attachment D - List of Incorporated Application Materials

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

Information for Applicants Subject to Financial Capability Requirements
Table VIII. B. - Estimated Capital Costs

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
Preliminary Review Facility Checklist
Preliminary Review Unit Checklist
Appendices to Preliminary Review (PR)

X. Air Emission Standards

A. Process Vents (Not Applicable)
B. Equipment Leaks
C. Tanks, Surface Impoundments, and Containers
D. “One - Stop” Permits (Not Applicable)

Table X.B. - Equipment Leaks
Table X.C. - Tanks, Surface Impoundments, and Containers Subject to Air Emission Controls

XI. Compliance Plan

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

Table XI.A.1. - Facility History for Waste Management Units
Table XI.E. - General Information
Table XI.E.1. - Corrective Action Program Cost Estimate
Table XI.E.2.e. - Groundwater Monitoring Cost Estimate
Table XI.E.3. - Financial Assurance Summary
CP Table I - Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring
CP Table II - Solid Waste Management Units and/or Areas of Concern Addressed in Provision XI.H for which Corrective Action Applies Pursuant to 30 TAC Section 335.167
CP Table III - Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard
CP Table IIIA - Corrective Action Program Table of Indicator Parameters and the Groundwater Protection Standard
CP Table IV - Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Practical Quantitation Limits (Reserved)

Attachment D - List of Incorporated Application Materials

CP Table IVA - Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard (Reserved)
CP Table V - Designation of Wells by Function
CP Table VI - Compliance Period for RCRA-Regulated Units (Reserved)
CP Table VIII - Compliance Schedule
CP Table IX - Description of Uppermost Aquifer

Attachment A

Alternate Concentration Limits
Alternate Concentration Limit Demonstration
Required Information for Alternate Concentration Limits

Attachment B

Well Design and Construction Specifications
Table of Well Construction Details

Attachment C

Sampling and Analysis Plan

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 (Not Applicable)

Attachment E - List of Permitted Facility Units

Authorized Permitted Units

TCEQ Permit Unit No.[1]	Unit Name	NOR No.[1]	Unit Description	Capacity	Unit Status[2]
014	TK-M3A	001	Tank	500 gal.	Inactive
015	TK-M3B	003	Tank	600 gal.	Inactive
016	TK-1R	043	Tank	21,000 gal.	Never Built
017	TK-2R	044	Tank	21,000 gal.	Never Built
019	TK-6R	046	Tank	21,000 gal.	Never Built
020	TK-7R	047	Tank	21,000 gal.	Active
021	TK-10R	048	Tank	21,000 gal.	Active
023	TK-23R	050	Tank	21,000 gal.	Active
024	TK-24R	051	Tank	21,000 gal.	Active
025	TK-26R	052	Tank	10,000 gal.	Active
026	TK-101	021	Tank	10,000 gal.	Active
031	TK-110	026	Tank	21,000 gal.	Active
032	TK-111	027	Tank	21,000 gal.	Active
033	TK-112	028	Tank	21,000 gal.	Active
034	TK-113	029	Tank	21,000 gal.	Active
035	TK-114	030	Tank	21,000 gal.	Never Built
036	TK-115	031	Tank	21,000 gal.	Never Built
037	TK-116	032	Tank	21,000 gal.	Never Built
041	S-1	002	Container Storage Area	116,820 gal.	Active
042	S-2	004	Container Storage Area	71,500 gal.	Active
043	S-3	005	Container Storage Area	49,500 gal.	Active
044	R-1	007	Container Storage Area	32,000 gal.	Active
045	CSW-5	036	Container Storage Area	136,320 gal.	Active
050	M-3	054	Miscellaneous Unit	1,260 gal/hr	Active
051	M-100	055	Miscellaneous Unit	2,200 gal/hr	Active
053	S-6	057	Container Storage Area	128,700 gal.	Active

Attachment E - List of Permitted Facility Units

TCEQ Permit Unit No.[1]	Unit Name	NOR No.[1]	Unit Description	Capacity	Unit Status[2]
054	S-7(a)	058	Container Storage Area	1,430 gal.	Never Built
054	S-7(b)	059	Container Storage Area	5,280 gal.	Never Built
055	M-102	060	Miscellaneous Unit	2,500 cans/hr	Never Built
058	M-101	064	Miscellaneous Unit	2,200 gal/hr	Proposed (not yet built)
059	M-104	065	Miscellaneous Unit	678 yd3/day	Proposed (not yet built)

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

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

[1]Permitted Unit No. and NOR No. cannot be reassigned to new units or used more than once and all units that were in the Attachment D of a previously issued permit must be listed.
[2]Unit Status options: Active, Closed, Inactive (built but not managing waste), Proposed (not yet built), Never Built, Transferred, Post-Closure.
[3]If a unit has been transferred; the applicant should indicate which facility/permit it has been transferred to in the Unit Description column of Table V.A.
[4]The historical units are closed and/or no longer subject to RCRA permit requirements and [is/are] included in this table for informational purposes.

LEGEND:

- Plume Management Zone (PMZ) Boundaries
- Facility Boundary
- Property Boundary

Apex Companies, LLC
2121 Midway Rd, Ste 100
Carrollton, TX 75006
Phone: (469) 365-1100
www.apexcos.com

Stericycle Environmental Solutions
Chemical Reclamation Services, LLC
405 Powell Street
Avalon, Ellis County, Texas

Project No. CLE002-0314725-22010327

CP ATTACHMENT A
Sheet 1 of 3

Facility Topographic and Plan View Map

Modified 7/8/2023 by BMiller NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS Coordinate System

LEGEND:

- Plume Management Zone (PMZ) Boundaries
- Approximate Areal Extent of AOC No. 1
- Facility Boundary
- Property Boundary

Apex Companies, LLC
2121 Midway Rd, Ste 100
Carrollton, TX 75006
Phone: (469) 365-1100
www.apexcos.com

Stericycle Environmental Solutions
Chemical Reclamation Services, LLC
405 Powell Street
Avalon, Ellis County, Texas

Project No. CLE002-0314725-22010327

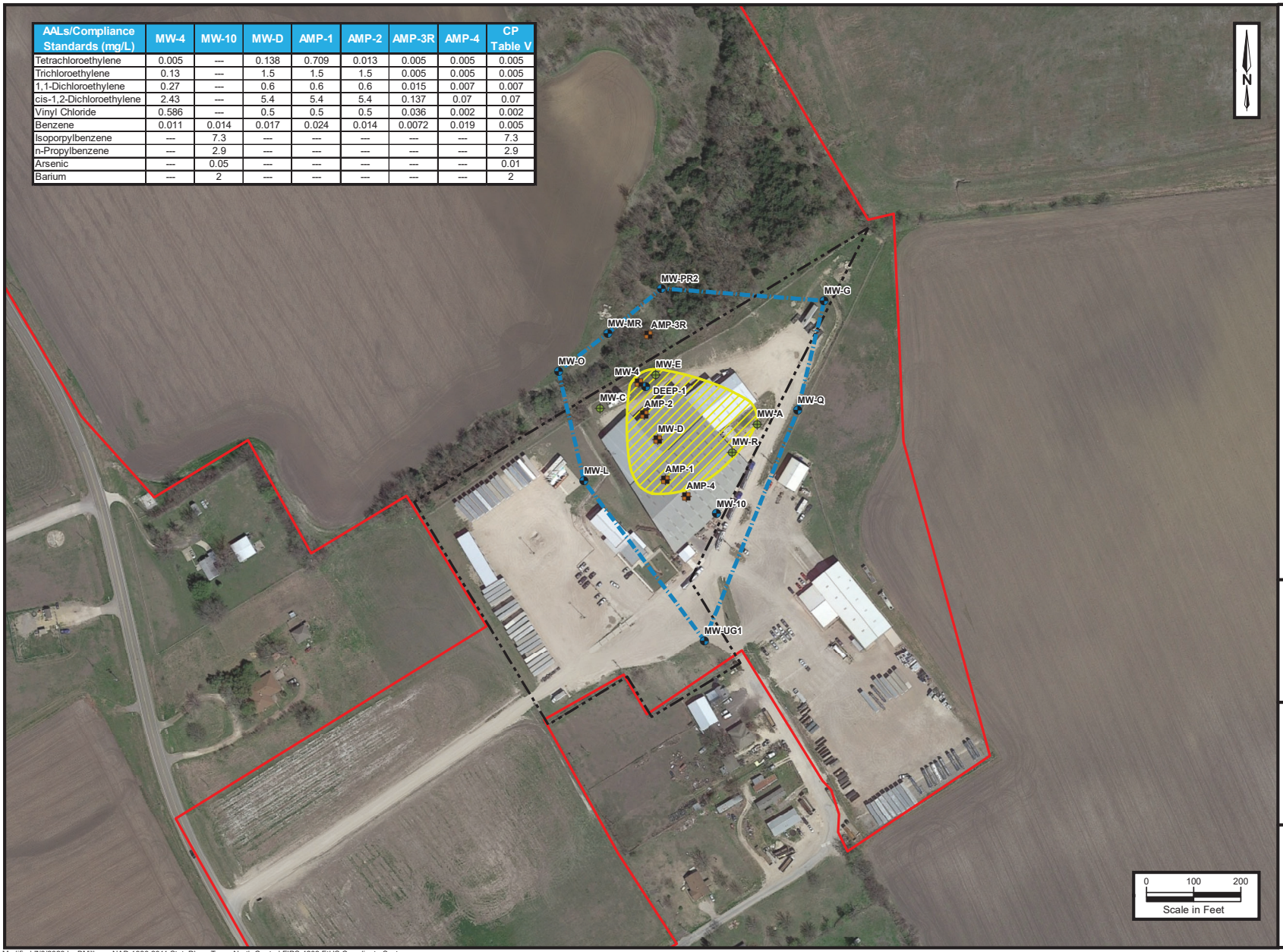
CP ATTACHMENT A
Sheet 2 of 3

SWMU and AOC
Location Map

Service Layer Credits:
Aerial Photograph March 2018

Modified 7/8/2023 by BMiller NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS Coordinate System

AALs/Compliance Standards (mg/L)	MW-4	MW-10	MW-D	AMP-1	AMP-2	AMP-3R	AMP-4	CP Table V
Tetrachloroethylene	0.005	---	0.138	0.709	0.013	0.005	0.005	0.005
Trichloroethylene	0.13	---	1.5	1.5	1.5	0.005	0.005	0.005
1,1-Dichloroethylene	0.27	---	0.6	0.6	0.6	0.015	0.007	0.007
cis-1,2-Dichloroethylene	2.43	---	5.4	5.4	5.4	0.137	0.07	0.07
Vinyl Chloride	0.586	---	0.5	0.5	0.5	0.036	0.002	0.002
Benzene	0.011	0.014	0.017	0.024	0.014	0.0072	0.019	0.005
Isoporpylbenzene	---	7.3	---	---	---	---	---	7.3
n-Propylbenzene	---	2.9	---	---	---	---	---	2.9
Arsenic	---	0.05	---	---	---	---	---	0.01
Barium	---	2	---	---	---	---	---	2



LEGEND:

- Monitoring Well Location
- PMZ Control Monitoring Well Location
- GW Elevation Monitoring Well Location
- Plume Management Zone (PMZ) Boundaries
- Approximate Areal Extent of AOC No. 1
- Facility Boundary
- Property Boundary

Apex Companies, LLC
2121 Midway Rd, Ste 100
Carrollton, TX 75006
Phone: (469) 365-1100
www.apexcos.com

Stericycle Environmental Solutions
Chemical Reclamation Services, LLC
405 Powell Street
Avalon, Ellis County, Texas

Project No. CLE002-0314725-22010327

CP ATTACHMENT A
Sheet 3 of 3

PMZ and Monitoring Well System Map

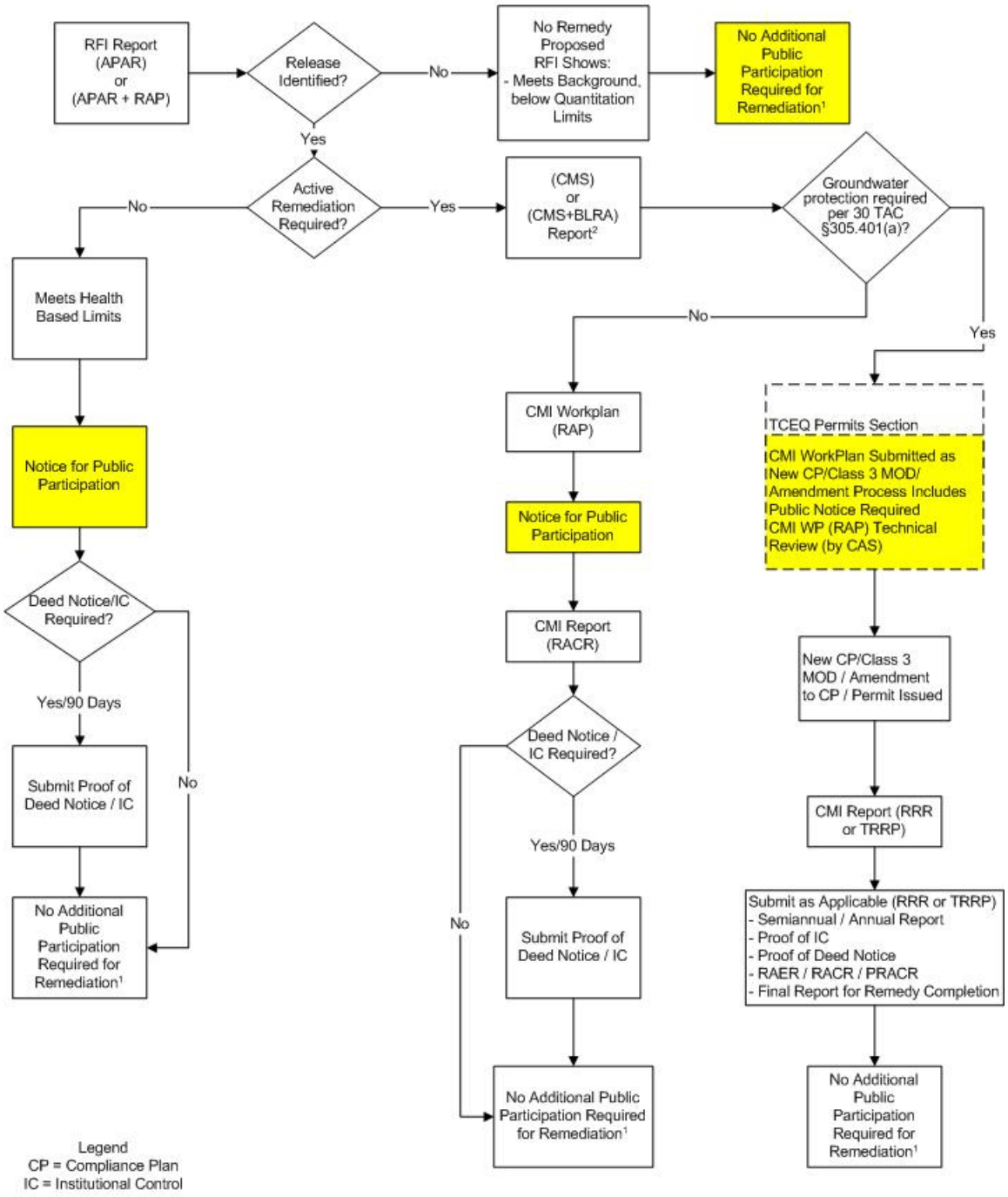
Service Layer Credits:
Aerial Photograph March 2018

Modified 7/8/2023 by BMiller NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS Coordinate System

CP Attachment B

Public Participation in HSWA Corrective Action

6/22/2005



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

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

1. The Permittee shall use well drilling methods that minimize potential adverse effects on the quality of water samples withdrawn from the well, and that minimize or eliminate the introduction of foreign fluids into the borehole.

2. All wells constructed to meet the terms of this Compliance Plan shall be constructed such that the wells can be routinely sampled with a pump, bailer, or alternate sampling device. Piping associated with recovery wells should be fitted with sample ports or an acceptable alternative sampling method to facilitate sampling of the recovered groundwater on a well by well basis.

3. Above the saturated zone, the well casing may be two (2)-inch diameter or larger Schedule 40 or 80 polyvinyl chloride (PVC) rigid pipe or stainless steel or polytetrafluoroethylene (PTFE or "Teflon®") or an approved alternate material. The PVC casing must bear the National Sanitation Foundation logo for potable water applications (NSF-pw). Solvent cementing compounds shall not be used to bond joints and all connections shall be flush-threaded. In and below the saturated zone, the well casing shall be stainless steel or PTFE.

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

4. The Permittee shall replace any well that has deteriorated due to incompatibility of the casing material with the groundwater contaminants or due to any other factors. Replacement of the damaged well shall be completed within ninety (90) days of the date of the inspection that identified the deterioration.

5. Well casings and screens shall be steam cleaned prior to installation to remove all oils, greases, and waxes. Well casings and screens made of fluorocarbon resins shall be cleaned by detergent washing.

6. For wells constructed after the date of issuance of this Compliance Plan, the screen length shall not exceed ten (10) feet within a given transmissive zone unless otherwise approved by the Executive Director. Screen lengths exceeding ten (10) feet may be installed in groundwater recovery or injection wells to optimize the groundwater remediation process in accordance with standard engineering practice.

7. The Permittee shall design and construct the intake portion of a well so as to allow sufficient water flow into the well for sampling purposes and minimize the passage of formation materials into the well during pumping. The intake portion of a well shall consist of commercially manufactured stainless steel or PTFE screen or approved alternate material. The annular space between the screen and the borehole shall be filled with clean siliceous granular material (i.e., filter pack) that has a proper size gradation to provide mechanical retention of the formation sand and silt. The well screen slot size shall be compatible with the filter pack size as determined by sieve analysis data. The filter pack should extend no more than three (3) feet above the well screen. A silt trap, no greater than one (1) foot in length, may be added to the bottom of the well screen to collect any silt that may enter the well. The bottom of the well casing shall be capped with PTFE or stainless steel or approved alternate material.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Certification, Plugging and Abandonment Procedures

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

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

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

    "This is to certify that installation (or plugging and abandonment) of the following facility components authorized or required by TCEQ Permit No. (Insert Permit number) has been completed, and that construction (or plugging) of said components has been performed in accordance with and in compliance with the design and construction specifications of this Permit No. (Insert Permit number):" (Add description of facility components with reference to applicable Compliance Plan provisions).

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

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

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

Table of Well Construction Details

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

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