

**SET ENVIRONMENTAL, INC.**

*HOUSTON FACILITY  
SITE PROFILE*

**SET ENVIRONMENTAL, INC. SITE PROFILE**

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Revised – April 2021

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**EXHIBITS**

- A. Facility Map
- B. Certificate of Insurance
- C. Part B Permit
- D. Safety Equipment and OSHA 300A Logs
- E. Recent Agency Inspection Correspondence
- F. Organizational Structure
- G. Training Program
- H. Waste Profile Forms
- I. Notification for Waste Restricted from Land Disposal (LDR)
- J. Waste Scheduling Notification Form

# SET ENVIRONMENTAL, INC.

## SITE PROFILE

### I. GENERAL INFORMATION

*NAME:* SET Environmental, Inc.

*MAILING ADDRESS:* 5738 Cheswood  
Houston, Texas 77087

*FACILITY ADDRESS:* 5743 Cheswood  
Houston, Texas 77087

*TELEPHONE:* (800) 598-7328 or (713) 645-8710

*FAX:* (713) 649-1027

*CONTACTS:* Dave DeVries  
CEO

Joel Taming  
President

Walter C. Kilgus  
Facility General Manager

Scott Skoog  
Facility Engineer

Daniel A. Didier  
Compliance Director

James Vasquez  
Safety Manager

Pamela Page Nowlin  
General Manager-Houston Field Services/Sales Manager

*OFFICE HOURS:* 8:00 a.m. to 5:00 p.m. (Weekdays)

*RECEIVING HOURS:* 8:00 a.m. to 4:00 p.m. (Weekdays)

## **II. SITE DESCRIPTION**

### ***LAYOUT***

The facility is situated on a one (1) acre site and has three (3) permitted storage buildings (a map of the facility is included as Exhibit A):

1. Warehouse - used for various types of hazardous waste storage, drum cleaning, waste compaction and metal drum compaction. This storage building has a concrete base that is coated with an epoxy sealant. To prevent run-on, run-off and accumulation of rainwater this building is roofed, has walls and is surrounded by a six-inch high concrete curb. Six-inch high concrete curbs within the containment area are used to separate incompatible material. Each separate storage area has the capacity to contain a minimum of 10% of the volume of waste stored in that area and 100% of the largest container in that area.
2. Process Building - used for chemical treatment, compressed gas and lab pack processing. This storage building also has a concrete base, is roofed and has walls. A six-inch high concrete secondary containment curb also surrounds this building. This building houses two permitted container storage units (CS-1 and CS-3) and three chemical treatment tanks that will be described later (PT-2, PT-11, PT-12).
3. Ignitable Storage Building - used for the storage of flammable wastes in containers. This container storage area has a concrete base, is roofed and enclosed on three sides. The container storage area is sloped to a low point in the center of the building and has the capacity to contain a minimum of 10% of all waste and 100% of the largest container stored in this area. This building is divided into three separate permitted storage units (CS-4, CS-5 and CS-6). Prior to 2009 this building housed 4 fuel blending tanks that have been clean closed and removed. A permit modification authorized November 13, 2017 expanded CS-6 to include the old fuel blend tank farm.

### ***LOCATION***

The facility is located outside the 100-year flood plain and on top of a divide between two watersheds. This explains why, with all the flooding Houston has experienced, there has never been any flooding near the facility. The surrounding area within one mile of the facility is classified as mixed commercial, residential and industrial. The nearest home is 1,100 feet north, the nearest school is 3,500 feet southeast and the nearest surface water (Sims Bayou) is 7,250 feet southeast of the facility. There are no down gradient drinking water wells within one (1) mile. Storm water flows to Brays Bayou located 2 miles north of the facility.

### ***SECURITY***

A six (6) foot high chain link fence topped with three (3) strands of barbed wire encloses the entire facility. All gates are closed and locked using magnetic locks and/or case-hardened chains and pad locks. On-site security personnel patrol the facility during non-operational hours. The facility is equipped with an intrusion detection and CCTV System. As required by 40 CFR 264.24, signs that state "Danger - Authorized Personnel Only" are posted on the perimeter of the site. These signs are posted in English and are visible from at least 25 feet.

## ***FACILITY HISTORY***

SET Environmental, Inc. was incorporated in the State of Illinois on April 4, 1979 and purchased the facility from Nuclear Sources and Services Inc. (NSSI) on April 8, 1988. At the time of purchase, the facility was under interim status and had been operated by NSSI since 1985.

The site was used for agricultural purposes up to 1930. Between 1930 and 1981 the property was privately owned. During this time no entities were identified that would suggest any on site industrial or commercial activities. Aerial photographs taken in 1969 and 1975 show the property to be vacant. Nuclear Sources and Services, Inc. (NSSI) purchased the property in 1981. NSSI began construction of the existing facility in 1985 for the purpose of hazardous waste treatment and storage.

Prior to purchasing the facility, SET Environmental hired an independent engineering and consulting firm to conduct a pre-acquisition environmental risk assessment of the property. The assessment included sampling of soil and groundwater. There were no signs of contamination observed in the groundwater; however, low concentrations (highest level = 3.1 ppm) of PCBs were detected in the upper foot of soil at the southern most end of the facility. Soil core analysis at two- and three-foot depth did not show any contamination. The soil showing low concentrations of PCB's in the upper foot was excavated and disposed of in April of 1988.

SET Environmental, Inc. was issued a Part B Permit on October 4, 1990 from the Texas Natural Resource Conservation Commission and December 14, 1990 from the United States Environmental Protection Agency. SET Environmental's RCRA permit was renewed on May 10, 2013 and will expire on May 10, 2023. The facility name was changed from Treatment One, Division of SET Environmental to SET Environmental, Inc. in March of 2002 to better convey the comprehensive services offered by the company.

## **III. FINANCIAL INFORMATION**

<i>CORPORATE OFFICE:</i>	SET Environmental, Inc. 450 Sumac Road Wheeling, Illinois 60090 (800) 634-6856 or (847) 537-9221
<i>FORM OF OWNERSHIP:</i>	Private Corporation
<i>COMPANY OFFICERS:</i>	Dave Devries, CEO Bernard Taming, Secretary/Treasurer
<i>DUN &amp; BRADSTREET NO:</i>	09-897-9297
<i>CLOSURE PLAN MECHANISM:</i>	Trust Fund (fully funded)
<i>CLOSURE COST ESTIMATE:</i>	\$1,157,710 (Last Update: December 2023)
<i>INSURANCE CERTIFICATE:</i>	See Exhibit B
<i>NUMBER OF EMPLOYEES:</i>	Approximately 650 (Total), 40 (Houston Facility)

#### **IV. REGULATORY INFORMATION**

*USEPA ID NO:* TXD055135388

*STATE REGISTRATION NO:* 50267

*PART B PERMIT NO:* HW-50267-001 (See Exhibit C)

*SIC CODE:* 4953 Refuse Systems  
4953-01 Hazardous Waste Collection and Distribution

*NAICS CODE:* 562211 Hazardous Waste Treatment and Disposal

*REGULATORY STATUS:* SET - Houston is currently under no enforcement action by any regulatory body.

*PERMIT WRITER:* Texas Commission on Environmental Quality  
Fabienne Rambaud, P.E, MC130  
Waste Permits Division  
Industrial and Hazardous Wastes Permits Section  
P.O. Box 13087  
Austin, TX 78711-3087  
[fabienne.rambaud@tceq.texas.gov](mailto:fabienne.rambaud@tceq.texas.gov)

*INSPECTION OFFICIAL:* Texas Commission on Environmental Quality, Region 12  
5425 Polk Avenue, Suite H  
Houston, Texas 77023  
Ms. Oindrila Das, (713) 767-3749

#### **V. ADMINISTRATIVE INFORMATION**

##### *BACKGROUND OF KEY PERSONNEL:*

Dave DeVries, CEO, B.S. Business Administration

1997 - Present – SET Environmental, Inc.

1994 - 1997 - General Manager; Treatment One, Division of SET Environmental

1991 - 1994 - General Manager; SET Environmental, Inc.- Remediation Division

1986 - 1991 - Various Positions; SET Environmental, Inc.

Walter (Chuck) Kilgus, Facility General Manager, B.S. Biology, Minor Chemistry

1998 – Present – SET Environmental, Inc.

1995 - 1998 – Environmental Field Services Manager, SET Environmental

1991 - 1995 - Lab Pack Approvals Coordinator; SET Environmental

Bob Mann, Facility Chemist, M.S. Chemistry

1989 - Present – SET Environmental, Inc.

1987 - 1989 - ENSCO; Chief Chemist

Scott Skoog, Facility Engineer, B.S. Chemical Engineering, PE

1995 – Present – SET Environmental, Inc.

1993 - 1995 – Operations Manager, Treatment One, Division of SET Environmental  
1985 - 1993 - SET Environmental, Inc; Permitting

Daniel A. Didier, Health Safety & Compliance Director, B.S. Forestry  
Certified Hazardous Materials Manager, 1993  
1988 - Present – SET Environmental, Inc.  
1986 - 1988 - SET Environmental, Inc; Project Manager

James Vasquez, CSP, CSP, CSST/CSSS/ST/FS-NCCER, Safety Manager  
2023 – Present SET Environmental, Inc.  
2019 - 2022 Area Safety, Hi-Tech Industrial Services, LLC, Decatur, IL,  
2015 - 2019 Safety, Stronghold Companies (Stronghold Inspection, EPC, ETS, Turnkey I&E, and Citadel),  
La Porte, TX  
2014 - 2015 Laboratory, Inspectorate Bureau Veritas,  
2005 - 2014 Chemical, Operations, and Laboratory, SGS North America Inc., Multiple Locations, TX

Pamela Page Nowlin, Sales Manager  
1996 - Present – SET Environmental, Inc.  
1992 - 1996 - Shipping, Receiving & Inventory/Administration Manager  
1991 - 1992 - Canonie Environmental; Business Development Manager  
1990 - 1991 - MSP Technical Service; District Account Manager  
1986 - 1990 - Chemical Waste Management; Customer Service

*BREAKDOWN OF EMPLOYEES BY DEPARTMENT:*

Sales (off site) .....	4
Customer Service (off-site) .....	4
Waste Approvals .....	3
Finance & Billing (off-site) .....	2
Laboratory .....	2
Drum Processing .....	3
Lab Pack Processing .....	3
Shipping and Receiving .....	3
Cylinder Management .....	7
Maintenance .....	4
Compliance and Safety .....	2
Administration & Human Resources .....	5

## VI. WASTE PROCESSING SYSTEMS

*CHEMICAL TREATMENT:* There are three tanks that make up the chemical treatment system. The tanks: identification numbers are PT-2, PT-11, and PT-12; permit numbers are 8, 9, and 16, and capacities are 1,870, 1,500, and 1,500 gallons, respectively.

All four tanks and associated ancillary equipment are:

- (1) Above ground;
- (2) Equipped with sealed secondary containment capable of containing the contents of the largest tank;
- (3) Equipped with agitators except PT-12;
- (4) Inspected every three (3) years for integrity by an independent registered professional engineer, and are;
- (5) Inspected each workday by qualified facility personnel. The purpose of this inspection is to identify any leaks, corrosion or other system failure in the tanks, ancillary equipment and secondary containment.

PT-2, PT-11 ancillary equipment:

- (1) Equipped with corrosion protection (Kynar liners PT-2 and PT-11 or electroless nickel plating PT-12);
- (2) Connected to an air emissions control system that is composed of a recirculating caustic counter current packed scrubber in line with an 8000-pound activated carbon bed PT-2 and PT-11.

PT-12 ancillary equipment:

- (1) Equipped with corrosion protection (electroless Nickel clad carbon steel tank);
- (2) Connected to an air emissions control system that is composed of a recirculating counter current packed scrubber in line with a cyclonic separator and venturi for particulate removal. The scrubber medium will either be caustic for acid gas treatment or potassium permanganate for treatment of reducing compounds.

The treatment processes designated for each tank are as follows: PT-2 is used for neutralization, chemical oxidation, chemical reduction and hydrolysis, and PT-11 and PT-12 are used primarily for hydrolysis of water reactive acids, oxidation/reduction and neutralization of liquids, solids, and gases.

*GAS CYLINDER PROCESSING:* SET Environmental, Inc. has a variety of scrubbing techniques used for the treatment and disposal and recycling of compressed gases. All processing activities take place under emission-controlled atmosphere. The use of PT-11 and PT-12 (Chemical Treatment Units) allows for remote handling of gas cylinders. The flow of gases through the scrubbing systems is controlled from outside the treatment building, thereby eliminating potential exposure to the gases.

Several portable processing units are used for the treatment of compressed gases. Each primary treatment unit is equipped with a back-up unit of equal capacity. These portable processing units are connected to an air emissions control system

consisting of a caustic scrubber to remove acidic fugitive emissions and venturi scrubber to remove particulates.

Three large enclosures, maintained under negative pressure are utilized while connecting compressed gas cylinders to manifold systems. Air exhaust from each hood is controlled by an air emission control system (i.e., carbon beds, caustic scrubber, or hydride scrubber). Each system is designed to prevent employee exposure and capture any potential fugitive emissions.

In addition to processing compressed gases, SET Environmental, Inc. has the capability to overpack or repack cylinders in poor condition and to process cylinders with inoperable valves.

## **VII. EMISSIONS CONTROL SYSTEMS**

*ACTIVATED CARBON BEDS:* Two separate activated carbon beds are utilized throughout the facility. The following chemical processing areas have emissions controlled with activated carbon.

1. Lab Pack Processing Unit
2. Two chemical treatment tanks (PT2 and PT11)
3. Portable Gas Cylinder Processing Units
4. Enclosure at PT-2

*CAUSTIC SCRUBBERS:* The facility has four caustic scrubbing units. Three are vertical, counter current, recirculating, packed towers. The fourth unit is a horizontal, caustic bath scrubber.

The following areas have emissions controlled with caustic scrubbers.

1. Chemical Treatment Tanks (PT2, PT11 and PT-12)
2. Gas Cylinder Processing Units and Enclosures
3. Lab Pack Consolidation Enclosure

*PARTICULATE SCRUBBERS:* The facility utilizes a reverse pulse, high efficiency particulate filtration system (HEPA) to collect silica generated during the treatment of hydride gases. Connected to one of the caustic scrubbers is a venturi particulate scrubber to capture fine particulates generated from the treatment of acidic gases. The air emissions system for PT-12 is equipped with a cyclonic separator and venturi.

## **VIII. WASTE TREATMENT INFORMATION**

*WASTE MANAGEMENT METHODS:* Neutralization, Oxidation/Reduction, Hydrolysis, Repackaging, and Storage.

*PACKAGING REQUIREMENTS:* SET Environmental, Inc. will only accept DOT authorized packagings for shipments of hazardous materials; non-hazardous materials may be shipped in non-DOT specification packagings. Lab Pack and Gas Cylinder Protocols are available upon request.

*UNACCEPTABLE MATERIAL:* TSCA regulated PCBs, Radioactive Material, Explosives, Infectious Wastes and Dioxins.

*EMPTY DRUM HANDLING:* All drums are power washed and are either reused by SET Environmental, Inc. or are rendered unusable. Metal drums are crushed and cylinders are cut in half and sent off-site for scrap metal recycling. Poly drums are cut up and shipped off-site for land disposal.

## **IX. SAFETY AND TRAINING**

*TRAINING:* SET Environmental, Inc. has developed a comprehensive training program structured into five areas: Administrative, Safety, Regulatory, Technical and Operational. Initial training includes 40 hours of classroom instruction. Each facility employee is certified by the American Red Cross in CPR/Standard First Aid. Continuing education includes a minimum of eight hours annual review complimented with monthly safety meetings.

*MEDICAL MONITORING:* SET Environmental, Inc.'s medical surveillance program includes a pre-employment and an annual physical examination as well as an examination upon any suspected exposure and upon termination of employment. A physician experienced in industrial medicine monitors medical surveillance results.

*SAFETY EQUIPMENT:* Phones readily accessible near the point of operations that can be used to summon emergency assistance. Emergency response and first aid stations are located near each processing area. See Exhibit D for description emergency response equipment. Each building is equipped with an automatic fire suppression system. The system activates when thermal detectors are exposed to a temperature of 190°F or a temperature rise of 15° F in one minute or less. Each hood enclosure is also equipped with a separate automatic dry chemical fire extinguishing system. Once automatic systems are activated, an alarm sounds to evacuate employees and a monitoring service contacts the Fire Department. The facility is also equipped with a general alarm to aid in evacuation of the facility personnel for other emergencies. Activators are located in all facility exit routes.

## **X. LABORATORY INFORMATION**

*PERSONNEL:* Experienced, degreed chemists staff SET ENVIRONMENTAL, INC.'s laboratory.

*EQUIPMENT:* The Houston lab is equipped with a flashpoint tester, a bomb calorimeter, halogen analyzers, pH meter, Karl Fischer titration unit, hydrometer, fourier-transform infrared spectrometer (FT-IR), and mass spectrometer.

*WASTE ANALYSIS:* A minimum of ten percent of the containers are sampled for each wastestream in each shipment, although SET Environmental, Inc. typically takes a composite sample of 100 percent of the containers. The sample is then analyzed to verify that wastes received are those described on the wastestream profile. Depending on the type of waste, analysis may include: % water, flashpoint, pH, BTU, %halides, specific gravity, reactive sulfide, reactive cyanide, qualitative tests for peroxides and oxidizing potential. Lab packs are unpacked and checked for conformance with

approved lab pack inventories. If the waste stream or lab pack does not conform to previously approved paperwork, SET Environmental, Inc. will contact the generator or the generator's agent in an effort to resolve the discrepancy. If the discrepancy requires further investigation, SET Environmental, Inc. will conditionally accept the waste if authorized by the generator until further analysis can be conducted. If the discrepancy cannot be resolved (this rarely occurs) the waste will be returned to the generator or an alternate facility.

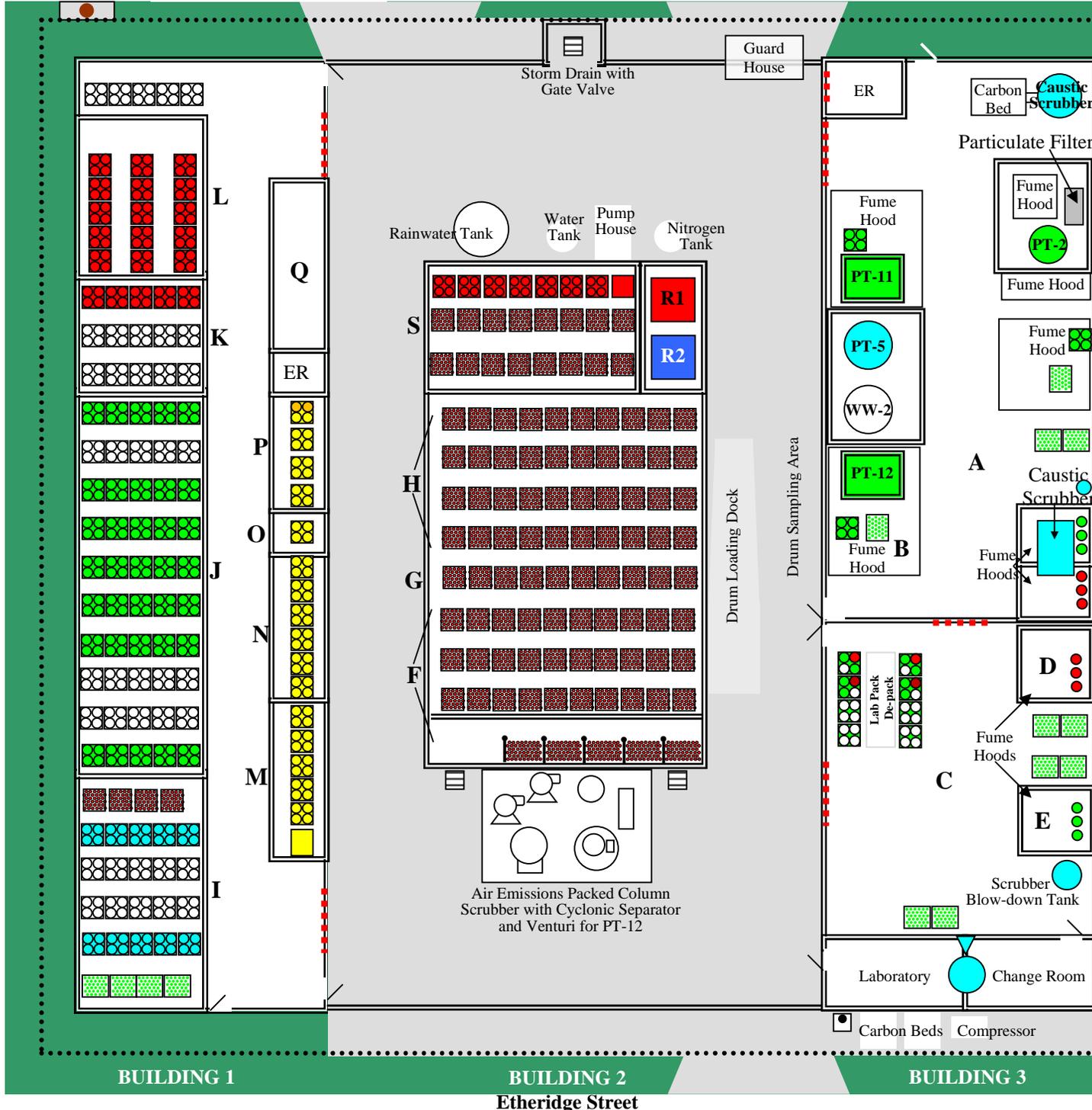
## **XI. RECORD KEEPING AND REQUIRED FORMS**

- INTERNAL RECORDS:* The following records and documents are maintained by SET Environmental, Inc.: Container Inventory and Tracking System, Contingency Plan, Spill Prevention Control and Counter Measure Plan, Waste Minimization Program, Waste Analysis Plan, Inspection Schedule, Training Documentation.
- WASTE PROFILE:* Waste Profile sheets are required for each individual wastestream.
- LAB PACK INVENTORIES* Lab Pack inventories must be submitted with a Lab Pack summary form signed by the packaging agent and generator for each Lab Pack project.
- CYLINDER PROFILE:* Cylinder Profiles must be submitted with each batch of cylinders for approval. In addition to the completed Gas Cylinder Profile, a Gas Cylinder Inspection and Evaluation Report must be completed and attached to the Profile. The Gas Cylinder Profile must be signed by the packaging agent and generator. If at all possible, include pictures of each cylinder.

Outfall 001/Connection to Municipal Separate Storm Sewer

5743 Cheswood Street

Joyner Street



Key

	Grass Covered Surface
	Cement Surface
	Covered Sheet Metal Building
	Flammable Liquids
	Toxic or "Other Hazards"
	Pyrophoric
	Water Reactive
	Oxidizer
	Organic Peroxide
	Highly Toxic
	Acids (Corrosive)
	Bases (Corrosive)
	Drum Storage
	Compressed Gas Storage
	Tank Storage
	Outdoor Gas Storage Toxic

LEGEND

- PT = Chemical Treatment Tank
- ER = Electrical Room
- = Fire Door
- = Fence
- == = Secondary Containment



1 Inch ≈ 26.2 feet

**SET ENVIRONMENTAL, INC.**  
**FACILITY MAP**

BUILDING 1

BUILDING 2

BUILDING 3

Etheridge Street



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/22/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Acisure LLC 1621 Colonial Parkway  Inverness IL 60067		<b>CONTACT NAME:</b> PHONE (A/C, No, Ext): (847)330-5000 FAX (A/C, No): (847) 705-1075 E-MAIL ADDRESS: tgcerts@hni.com	
<b>INSURED</b> SET Environmental, Inc. 450 Sumac Road  Wheeling IL 60090-6350		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Indian Harbor Insurance Company NAIC # 36940 <b>INSURER B:</b> XL Insurance America, Inc 24554 <b>INSURER C:</b> <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	

**COVERAGES**

CERTIFICATE NUMBER: 01) 24-25 CERT (MAIN)

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>			GEC0031513-14	05/07/2024	05/07/2025	EACH OCCURRENCE	\$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
	<input checked="" type="checkbox"/> X,C,U Included						MED EXP (Any one person)	\$ 10,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						PERSONAL & ADV INJURY	\$ 1,000,000
B	<input checked="" type="checkbox"/> <b>AUTOMOBILE LIABILITY</b>			AEC0031511-14	05/07/2024	05/07/2025	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per person)	\$
	<input checked="" type="checkbox"/> HIRED AUTOS ONLY	<input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY					BODILY INJURY (Per accident)	\$
	<input checked="" type="checkbox"/> MCS-90	<input checked="" type="checkbox"/> CA9948					PROPERTY DAMAGE (Per accident)	\$
A	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b>			UEC0031512-14	05/07/2024	05/07/2025	EACH OCCURRENCE	\$ 11,000,000
	<input checked="" type="checkbox"/> <b>EXCESS LIAB</b>	<input type="checkbox"/> CLAIMS-MADE					AGGREGATE	\$ 11,000,000
	DED	RETENTION \$						\$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>						PER STATUTE	OT-H-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y / N	N / A				E.L. EACH ACCIDENT	\$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$
A	<b>PROFESSIONAL &amp; POLLUTION LEGAL LIABILITY</b>			PEC0031514-14	05/07/2024	05/07/2025	EACH OCCURRENCE	\$10,000,000
							AGGREGATE	\$10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

This certificate supercedes any previously issued certificates.

**CERTIFICATE HOLDER****CANCELLATION**

\*\*\*\*\*Proof of Coverage\*\*\*\*\*

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/12/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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<b>PRODUCER</b> Cottingham & Butler 800 Main St. Dubuque IA 52001	<b>CONTACT NAME:</b> To Request a Certificate	
	<b>PHONE (A/C. No. Ext):</b> 888-785-4677	<b>FAX (A/C. No):</b> 563-587-5990
<b>E-MAIL ADDRESS:</b> certificates@cottinghambutler.com		
<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
<b>INSURER A:</b> The Travelers Indemnity Company of America		25666
<b>INSURED</b> SET Environmental, Inc. 450 Sumac Road Wheeling IL 60090	<b>INSURER B:</b>	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	
	<b>INSURER F:</b>	

**COVERAGES**

CERTIFICATE NUMBER: 779021828

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$	
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$	
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$	
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A	UB-3L88586A-24-NG-G	3/1/2024	3/1/2025	X PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**CERTIFICATE HOLDER****CANCELLATION**

\*\*\*For Information Only\*\*\*  
 Please Send Your Certificate Request To:  
 certificates@cottinghambutler.com  
 Or Fax To:  
 (563) 587-5990

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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

Hazardous Waste Permit No. 50267

EPA ID No. TXD055135388

ISWR No. 50267

Original Date of Issuance:  
October 3, 1990

Renewal Date: August 12, 2002

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: SET Environmental, Inc.  
5738 Cheswood Street  
Houston, Texas 77087

Site Owner: SET Environmental, Inc.  
5738 Cheswood Street  
Houston, Texas 77087

Registered Agent for Service: Keith Hopson  
Brown McCarrol & Oaks Hartline  
111 Congress Avenue  
Austin, TX 78701

**Classification of Site:**

<u>Waste Classification:</u>	<u>Site Type:</u>	<u>Permit Type:</u>
Hazardous	On-Site	Storage
Nonhazardous:	Off-Site	Processing
Industrial Class 1 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: June 6, 2024

A handwritten signature in black ink, appearing to read "K. Keel".

For the Commission

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**List of Attachments:**

A .....Legal Description of Facility  
B.....Facility Map  
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D .....List of Incorporated Application Materials  
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**Permit/Compliance Plan Acronyms**

ACL.....	Alternate Concentration Limit
AAL.....	Attenuation Action Level(s)
ALR.....	Action Leakage Rate
AMP .....	Attenuation Monitoring Point
AOC.....	Area(s) of Concern
APA .....	Affected Property Assessment
APAR.....	Affected Property Assessment Report
APOE.....	Alternate Point of Exposure
Appendix VIII.....	40 CFR 261, Appendix VIII (Identification and Listing of Hazardous Waste - Hazardous Constituents)
ASTM.....	American Society for Testing and Materials
BGS .....	Below Ground Surface
BLRA .....	Baseline Risk Assessment
CAO.....	Corrective Action Observation
CAS.....	Corrective Action System
CCC .....	Coastal Coordination Council
CEMS .....	Continuous Emissions Monitoring System
CFR.....	Code of Federal Regulations
CMI.....	Corrective Measures Implementation
CMP .....	Texas Coastal Management Program
CMS .....	Corrective Measures Study
COC.....	Constituent(s) of Concern
EPA.....	United States Environmental Protection Agency
EPA SW-846 .....	Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, Third Edition, November 1986
GWPS.....	Groundwater Protection Standard
HSWA.....	Hazardous and Solid Waste Amendments of 1984
ICM.....	Interim Corrective Measures
LDR.....	Land Disposal Restrictions
MDL.....	Method Detection Limit
SQL.....	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 SET Environmental, Inc. (hereafter called the permittee), to manage a hazardous waste facility located at 5738 Cheswood Street, Houston, in Harris County, Texas, and within the drainage area of Segment 1007 in the San Jacinto River Basin (North Latitude 29° 40' 32", West Longitude 95° 18' 24"). The legal description of the facility submitted in Permit No. 50267 application received November 8, 2022, 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. 50267 has been completed, and that construction of said facility component has been performed in accordance

with and in compliance with good engineering practices and the design and construction specifications of Permit No. 50267.”

- 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 TAC Section 335.328(c)]

- d. If required, the permittee shall document the basis for the assessment of any applicable waste management fees, including any adjustment to or exemption from assessment. [30 TAC Section 335.329(b)(4)]
- e. If required, the permittee shall submit a monthly report of on-site waste management activities subject to the assessment of waste management fees on forms furnished or approved by the executive director. This report shall be due by the 25th day following the end of the month (or quarter) for which a report is made. Monthly (or quarterly) reports shall be submitted, regardless of whether any storage, processing, or disposal was made during a particular month (or quarter), by preparing and submitting a summary indicating that no waste was managed during that month (or quarter). [30 TAC Section 335.329(b)(5)]
- f. As applicable, the permittee shall maintain the required records and reports in accordance with 30 TAC Sections 335.329(c) and (d).

#### 15. Transfer of Ownership and/or Operational Control

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

#### B. Recordkeeping and Reporting Requirements

##### 1. Monitoring and Records

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

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

- c. The permittee shall retain in an organized fashion and furnish to the executive director, upon request, records of all monitoring information, copies of all reports and records required by this permit, and the certification required by 40 CFR 264.73(b)(9), for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application. [30 TAC Section 305.125(11)(B)]
- d. Records of monitoring shall include the following [30 TAC Section 305.125(11)(C)]:
  - (1) The date, time, and place of sample or measurement;
  - (2) The identity of individual who collected the sample or measurement;
  - (3) The dates analyses were performed;
  - (4) The identity of individual and laboratory who performed the analyses;
  - (5) The analytical techniques or methods used; and
  - (6) The results of such analyses or measurements.
- e. All engineering and geoscientific information submitted to the TCEQ shall be prepared by, or under the supervision of, a licensed professional engineer or licensed professional geoscientist, and shall be signed, sealed, and dated by qualified professionals as required by the Texas Engineering Practice Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts.

## 2. Operating Record

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

## 3. Retention of Application Data

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

## 4. Reporting of Noncompliance

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

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

5. Twenty-Four Hour Reporting

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

- a. Information concerning release of any solid waste that may cause an endangerment to public drinking water supplies; and
- b. Any information of a release or discharge of solid waste, or of a fire or explosion which could threaten the environment or human health or safety, outside the facility. The description of the occurrence and its cause shall include:
  - (1) Name, address, and telephone number of the owner or operator;
  - (2) Name, address, and telephone number of the facility;
  - (3) Date, time, and type of incident;
  - (4) Name and quantity of material(s) involved;
  - (5) The extent of injuries, if any;
  - (6) An assessment of actual or potential hazards to the environment and human health or safety outside the facility, where this is applicable; and
  - (7) Estimated quantity and disposition of recovered material that resulted from the incident.

6. Notice Waiver

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

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

7. Biennial Report

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

8. Pollution Prevention

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

9. Annual Detection Monitoring Report (Reserved)

10. Manifest Discrepancy Report

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

11. Unmanifested Waste Report

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

12. Monthly Summary

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

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 CFR 264.16. The permittee shall maintain training documents and records, as required by 40 CFR 264.16(d) and (e).

#### C. Security

1. The permittee shall provide a twenty-four (24) hour surveillance system which continuously monitors and controls entry onto the active portion of the facility;  
or
2. The permittee shall provide and maintain an artificial or natural barrier which completely surrounds the active waste management portion(s) of the facility and shall have a means to control entry, at all times, through gates or other entrances to these same facility areas; 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). Records of inspection shall be kept, as required by 40 CFR 264.15(d). Any remedial actions taken in response to facility inspections and the date of the remediation shall be included in the inspection records.

E. Contingency Plan

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

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

#### IV. Waste and Waste Analysis

##### A. Waste Analysis Plan

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

##### B. Authorized Wastes

1. The permittee is authorized to manage hazardous and nonhazardous industrial and municipal solid wastes listed in Table IV.B. - Wastes Managed in Permitted Units, subject to the limitations provided herein. Wastes authorized for storage and processing include those generated from facility sources and from off-site sources.

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 40 CFR Part 761, unless the permittee is compliant with the federal requirements for PCB storage as specified in 40 CFR Part 761;
  - b. Radioactive materials/wastes unless the permittee is authorized to store and process these wastes in compliance with specific licensing and

permitting requirements under Chapter 401 of the Texas Health and Safety Code. In accordance with 30 TAC Section 336.203, no person shall dispose of radioactive material unless that person has a license or an exemption from the Texas Commission on Environmental Quality (TCEQ) under Texas Health and Safety Code, Section 401.106(a);

- c. Explosive material, as defined by the Department of Transportation under 49 CFR Part 173;
  - d. Dioxin-containing wastes, identified by EPA as F020, F021, F022, F023, F026, and F027 wastes in 40 CFR 261.31;
  - e. Garbage as defined in 30 TAC Section 330.3;
  - f. Municipal Solid Waste that is composed of garbage, rubbish, ashes, street cleanings, used tires, dead animals and abandoned automobiles;
  - 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.

#### 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

Permittee: SET Environmental, Inc.

1. The permitted tank units and their approved waste types are shown in Table V.C. - Tanks and Tank Systems. The permittee is authorized to operate the permitted tank units for storage and processing subject to the limitations contained herein.
  2. The permittee shall not place hazardous waste or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)]
  3. The permittee shall prevent spills and overflows from the tank or containment system as per the requirements of 40 CFR 264.194(b).
  4. Secondary containment systems must be provided with a leak-detection system that is operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours.
  5. The permittee shall report to the executive director within twenty-four (24) hours of detection when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste that is immediately contained and cleaned-up need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported.)
  6. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the permittee shall report the following information to the executive director: [40 CFR 264.196(d)(3)]
    - a. Likely route of migration of the release;
    - b. Characteristics of the surrounding soil (including soil composition, geology, hydrology, and climate);
    - c. Results of any monitoring or sampling conducted in connection with the release. If the permittee finds it will be impossible to meet this time period, the permittee shall provide the executive director with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires;
    - d. Proximity of downgradient drinking water, surface water, and populated areas; and
    - e. Description of response actions taken or planned.
  7. The permittee shall submit to the executive director all certifications of major repairs to correct leaks within seven (7) days of returning the tank system to use. [40 CFR 264.196(f)]
  8. The permittee must comply with the requirements of 40 CFR Part 264, Subpart CC, as applicable.
- D. Surface Impoundments (Reserved)
- E. Waste Piles (Reserved)

- F. Land Treatment Units (Reserved)
- G. Landfills (Reserved)
- H. Incinerators (Reserved)
- I. Boilers/Industrial Furnaces (Reserved)
- J. Drip Pads (Reserved)
- K. Miscellaneous Units (Reserved)
- L. Containment Buildings (Reserved)

**VI. Groundwater Detection Monitoring (Reserved)**

- A. Groundwater Monitoring Program (Reserved)
- B. Construction, Certification, and Plugging (Reserved)
- C. Detection Monitoring System Operation (Reserved)
- D. Sampling and Analysis (Reserved)
- E. Response Requirements for SSI (Reserved)
- F. Revised Detection Monitoring Program (Reserved)
- G. Annual Detection Monitoring Reporting Requirements (Reserved)
- H. Record Keeping Requirements (Reserved)
- I. Compliance Scheduling Requirements (Reserved)

**VII. Closure and Post-Closure Requirements**

**A. Facility Closure**

1. The permittee shall follow the closure plan, developed in accordance with 40 CFR Part 264 Subpart G 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 CFR 268.45 or removed and managed at an authorized industrial solid waste management facility. All contaminated dikes and soils intended for land disposal shall be treated in a manner which meets or exceeds the treatment standards for hazardous soils contained in 40 CFR 268.49 or removed and managed at an authorized industrial solid waste management facility.
11. All hard-surfaced areas within the hazardous waste management unit areas shall be decontaminated and the wash water generated treated and/or disposed at an authorized 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 (such as tank interiors, secondary containment structures, ancillary equipment, sumps, loading/unloading docks, etc.) shall be deemed complete when the concentration of each chemical of concern in the final rinsate sample(s) collected from the wash water is below TCEQ Texas Risk Reduction Program (TRRP), Remedy Standard A, Tier 1 Residential Class 1 Groundwater PCL; and
- b. Unless it can be demonstrated that soil contamination has not occurred, underlying soils shall be decontaminated or removed to the TRRP Remedy Standard A, Residential PCL, for no further action. If the underlying soils are decontaminated or removed to the PCL for Remedy Standard A, Commercial/Industrial Land use, the permittee shall comply with the institutional controls requirements of 30 TAC Section 350.111, as required.

B. Financial Assurance for Closure

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 Chapter 350, 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, exclusive of 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**

A. Notification of Release from Solid Waste Management Unit

If a solid waste management unit (SWMU) or area of contamination not previously addressed in the RCRA Facility Assessment (RFA) dated October 19, 1988, or any release of hazardous waste or hazardous constituents that may have occurred from any SWMU and/or Area of Concern (AOC), that is discovered subsequent to issuance of this permit, the permittee shall notify the executive director in writing within fifteen (15) days of the discovery. Within forty-five (45) days of such discovery, the permittee shall submit an RFA for that unit or release which shall be based on EPA's RCRA Facility Assessment Guidance, October 1986, NTIS PB 87-107769. If the RFA indicates a release or suspected release warrants further investigation, the permittee shall comply with the requirements of Section IX.B.

B. Corrective Action Obligations

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

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

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

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

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

C. Units Requiring Investigation (Reserved)

D. Variance from Investigation

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

E. RCRA Facility Investigation (RFI)/Affected assessment (APA)

Within sixty (60) days from the date of issuance of this permit the permittee shall submit a schedule for completion of the RFI(s)/APA for the SWMU(s) or AOC listed in Section IX.C. to the executive director for approval. Also, within sixty (60) days of approval of an RFA Report which recommends further investigation of a SWMU(s) or AOC in accordance with Section IX.A., the permittee shall submit a schedule for completion of the RFI(s)/APA to the executive director for approval. The permittee shall initiate the investigations in accordance with the approved schedule and guidance contained in the EPA publication EPA/520-R-94-004, OSWER Directive 9902.3-2A, RCRA Corrective Action Plan (Final), May 1994 and in accordance with state regulations referenced in Section IX.B. If the permittee elects to use an alternate investigation approach, executive director approval of the workplan will be required prior to initiation of investigation(s). The results of the RFI/APA must be appropriately documented in a report and submitted to the executive director for approval within the time frame established in the approved schedule. The Report shall be considered complete when the full nature and extent of the contamination, the QA/QC procedures and the Data Quality Objectives are documented to the satisfaction of the executive director. The permittee shall propose or conduct Interim Corrective Measures (ICMs), as necessary, to protect human health and the environment.

F. Remedy Selection

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

1. Corrective Measures Implementation (CMI)/Remedial Action Plan (RAP). The permittee shall submit a RAP within the time frame required by the executive

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

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

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

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

2. Public Notice

a. The permittee shall conduct public notice when:

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

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

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

G. Compliance Plan (Reserved)

**X. Air Emission Standards**

A. General Conditions

1. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in Section 382.003 of the Texas Health and Safety Code Ann. or violate Section 382.085 of the Texas Health and Safety Code Ann. If the executive director of the TCEQ determines that such a condition or violation occurs, the permittee shall implement additional abatement measures as necessary to control or prevent the condition or violation.
2. The permittee shall include in the Biennial Report, required in Provision II.B.7., a statement that hazardous waste management units or associated ancillary equipment

at this facility are not subject to any of the requirements in Section X.B.5 and X.B.6, 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.5 and X.B.6, the permittee must immediately comply with these requirements.

3. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on Attachment E - Emission Sources—Maximum Allowable Emission Rates. [30 TAC 116.115(b)(2)(F)].
4. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.
5. Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)].
6. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)].
7. The appropriate regional office of the TCEQ and Harris County Pollution Control Department (HCPCD) shall be notified prior to the start of any governmentally required air monitoring of the facility units authorized by this permit in such a manner that a representative of the TCEQ and HCPCD may be present during monitoring.
8. The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit;

and retain information in the file for at least five years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)].

9. Permittee shall maintain a duplicate record of a current inventory of materials regulated under this permit at an offsite location.

B. Federal Applicability

10. 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.
11. 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.
12. Tanks, Surface Impoundments, and Containers: The permittee must comply with the requirements of 40 CFR Part 264 Subpart CC, as applicable.

C. Process Vents, Containers, and Tanks

13. Containers of hazardous waste shall be opened only for the purposes authorized by the terms and conditions of this permit.
14. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must utilize submerged fill pipes.
15. Capacity and type of wastes stored in the containers and tanks is limited to the representation as listed in Attachment D, Table V.B Container Storage Area and Table V.C Tanks and Tank System of the Permit Renewal application dated March 04, 2023. Sample calculations that were used to determine the MAERT limits in the permit renewal application Industrial Hazardous Waste (IHW) One Stop Permit Renewal application dated March 04, 2023, shall be attached to a copy of this permit at the plant site.

D. Carbon Adsorption System (CAS)

16. Process tanks PT-2 and PT-11 shall vent through a carbon adsorption system designated as Carbon Adsorber 010211 (EPN: CAR010211). The lab pack fume hoods (FIN: CS-1) shall vent through a carbon adsorption system designated as Carbon Adsorber 30 (EPN: CAR30). The lab pack fume hoods (FIN: CS-3) shall vent through a carbon adsorption system designated as Carbon Adsorber 30 (EPN: CAR-30). The following FINs: Process tanks PT-2 and PT-11, and the lab pack fume hoods shall vent through a carbon adsorption system (CAS EPN: CAR010211, and CAR30 respectively).

A. The carbon adsorbers shall be sampled once each calendar week when they are in use. The sampling point shall be in the stack after passing through the carbon. Sampling shall be performed with the blower on and when:

- (a) Organic liquids are being transferred in the fume hoods connected to two carbon beds in parallel EPN: CAR 30.
- (b) Waste is present in Tank FIN: PT-2 and/or FIN: PT-11 connected to EPN: CAR010211.

- B. The VOC sampling and analysis shall be performed using an instrument with a flame ionization detector (FID), photo ionization detector (PID) or a TCEQ-approved alternative detector. The instrument/FID or PID must meet all requirements specified in Section 8.1 of EPA Method 21 (40 CFR 60, Appendix A). Sampling and analysis for VOC breakthrough shall be performed as follows:
- (a) Immediately prior to performing sampling, the instrument/FID shall be calibrated with zero and span calibration gas mixtures. Zero gas shall be certified to contain less than 0.1 ppmv total hydrocarbons. Span calibration gas shall be methane at a concentration within  $\pm 10$  percent of 100 ppmv and certified by the manufacturer to be  $\pm 2$  percent accurate. Calibration error for the zero and span calibration gas checks must be less than  $\pm 5$  percent of the span calibration gas value before sampling may be conducted.
  - (b) The sampling point shall be in the exhaust stack near the outlet of the carbon adsorber. Sample ports or connections must be designed such that air leakage into the sample port does not occur during sampling.
  - (c) During sampling, data recording shall not begin until after two times the instrument response time. The VOC concentration shall be monitored for at least 5 minutes, recording 1-minute averages, while the control device is in use as defined in X.D.16.A.
- C. Breakthrough shall be defined as the highest 1-minute average measured VOC concentration at or exceeding 100 ppmv. When the condition of breakthrough of VOC from the carbon adsorber occurs (1) Cease operations (i.e., no further transfer of waste between containers or no further additions to tanks PT-2 or PT-11), (2) Turn off the blower drawing air into the carbon canister, (3) Replace spent carbon with new carbon. Operations that vent organic air contaminants to the carbon adsorber may not be resumed until the carbon has been replaced. Sufficient new activated carbon shall be maintained at the site to replace spent carbon.
- D. Records of the CAS monitoring maintained at the plant site, shall include (but are not limited to) the following:
- A. Sample time and date.
  - B. Monitoring results (ppmv).
  - C. Corrective action taken including the time and date of that action.
  - D. Process operations occurring at the time of sampling.
  - E. Alternate monitoring or sampling requirements that are equivalent or better may be approved by the TCEQ Regional Manager. Alternate requirements must be approved in writing before they can be used for compliance purposes.
- E. Scrubbers: FIN: SCR010211, EPN: SCR 36 and EPN: SCR 30, EPN: SCR 36 / SPCAU36, EPN: SCR12 and FIN: WPS12
- 17. Scrubber (FIN: SCR010211, EPNs: SCR 36 and SCR 30, SCR12 and FIN: WPS12) shall operate with no less than the efficiencies and maximum outlet (ppmv) as listed for contaminants identified in Attachment A on an hourly average.
  - 18. The minimum liquid flow to the scrubber's shall be as listed in the Table I. below. For Scrubber EPNs EPN: SCR010211, SCR 30, SCR36 and EPN: SCR12, the minimum liquid

flow to the absorber shall be as listed in the Table I. below. The circulation rate shall be monitored and recorded as specified in Table I.

The flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.

Quality assured (or valid) data must be generated when the (facility generating emissions as specified in X.D.16.A) is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the (facility generating emissions as specified in X.D.16.A) operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

19. The scrubbing solution shall be maintained at or above a pH of 10 as listed in the Table I. below, when the scrubbers is charged with a basic material to control emissions. For Scrubber EPNs SCR010211, SCR30, SCR 36 and SCR12, the scrubbing solution shall be maintained at or above a pH of 10 when the scrubbers are charged with a basic material to control emissions. The pH shall be continuously analyzed and recorded at the frequency specified in Table 1. below. Each monitoring device shall be cleaned with an automatic cleaning system, or cleaned weekly using hydraulic, chemical, or mechanical cleaning. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least weekly, whichever is more frequent, and shall be accurate to within  $\pm 0.5$  pH unit.

Quality assured (or valid) data must be generated when the (facility generating emissions as specified in X.D.16.A) is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the (facility generating emissions as specified in X.D.16.A) operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded.

**XI. Compliance Plan (Reserved)**

**Table III.D. – Inspection Schedule**

<b>Facility Unit(s) and Basic Elements</b>	<b>Possible Error, Malfunction, or Deterioration</b>	<b>Frequency of Inspection</b>
<b>TANKS</b>		
Valves in Gas/Vapor or Light Liquid Service	Leaks [40 CFR §264.1063(b) & Method 21 Leak Detection]	Monthly
Valves	Leaks/Corrosion	Each Workday
Other Tank Connectors (e.g., Flanges, Plugs, Pressure Release Device, Agitator, Conservation Vent, Sample/Gauge Hatch, Man-way)	Leaks [Visual or Olfactory Evidence]	Each Work Day <sup>2</sup>
Open Ended Lines	Cap Missing	Each Workday
Tank Level	Overfilling	Each Workday
Tank Shell	Leaks/Corrosion	Each Workday
Temperature	Improper operation	Each Workday
Temperature Probe	Improper calibration	Annually
pH Probe	Improper calibration	Annually
Detailed Integrity Testing	Loss of tank integrity	Every 3 Years
Secondary Containment Vault and Lining	Loss of Containment Integrity (e.g., Cracks, Erosion, Damaged sealant, Leaks)	Each Workday
<b>PUMPS IN LIGHT LIQUID SERVICE</b>		
	Pump Seal Leaks [Visual Evidence]	Weekly
	Pump Seal Leaks [40 CFR §264.1063(b) & Method 21]	Monthly
<b>CONTAINER STORAGE, LOADING AND UNLOADING AREAS</b>		
Containers Covers and Closure Devices	Cracks, Holes, Gaps or Other Open Spaces	When Received <sup>3</sup>
Containers	Leaks	Weekly
	Corrosion	Weekly
	Sever dents that could predispose the drum to leak.	Weekly
	Unsecured closures	Weekly
	Cylinders unsecured	Weekly
	Unstable stacking	Weekly
	Inadequate aisle space between double rows of drums (30" Min)	Weekly
Concrete Slab of Storage Areas	Cracks	Weekly

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Containment Curbs of Storage Areas	Cracks	Weekly
Roof Drains	Holes causing rain to enter storage area	Weekly
<b>FIRE SUPPRESSION SYSTEMS</b>		
Pull Stations (9)	Physical Damage	Weekly
Strobes/Bells/Horns	Physical Damage	Weekly
Supply Water Level	Inadequate Supply (system not charging)	Weekly
Emergency Exits	Obstructions/Closed/Operability	Weekly
Dry Chemical Cylinder Charge	Not Fully Charged	Weekly
Automatic Overhead Doors	Inoperable	Annually
Dry Chemical System	Detailed Integrity Testing	Annually
High Expansion Foam System	Detailed Integrity Testing	Annually
<b>PORTABLE FIRE EXTINGUISHERS</b>		
Gauge	Charge (In Green Operating Range)	Weekly
Complete Unit	Detailed Integrity Testing	Annually
<b>EMERGENCY COMMUNICATION SYSTEM</b>		
	Operability	Weekly
<b>SPILL CONTROL EQUIPMENT</b>		
	Inadequate Inventory or Condition	Monthly
<b>SAFETY EQUIPMENT</b>		
	Inadequate Inventory and Condition	Weekly
<b>FIRST AID KIT</b>		
	Inadequate Inventory	Weekly
<b>SAFETY SHOWER/EYE WASH</b>		
	Inoperable	Monthly
<b>DECONTAMINATION CHEMICALS</b>		
	Inadequate Inventory	Monthly
<b>GATES AND FENCES</b>		
Fence	Holes	Monthly
Signs	Missing or Not Legible	Monthly
<b>AIR EMISSIONS SYSTEMS</b>		
Activated Carbon	Breakthrough (100 ppm Total Organics)	Weekly
Caustic Scrubbers		
(SCR 30 - Lab Pack)	Alkalinity*	Daily - Monthly
(SCR 36 - QC)	pH <sub>5</sub> Range: <4 or > 10	Hourly - Daily

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
(SCR 12 - Scrubber to PT-12)	Flow Rate <sup>6</sup>	Daily at start-up
(SCR 010211 - PT-2, PT-11)	Oxidation Potential <sup>7</sup>	Daily at start-up

**FOOTNOTES**

1. Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.
2. If evidence of a potential leak (found by visual, audible, olfactory or other means) is found, flanges and other connectors will be monitored with 5 days in accordance with Method 21.
3. Container covers and their closure devices will be visually inspected when received and if a container remains at the facility beyond one year (i.e., in the case of reusable containers) this inspection will be conducted annually.
4. Alkalinity will be tested daily at start-up for all caustic scrubber except SCR 30 which will be monitored monthly to estimate time the scrubbing solution will remain above pH 10.
5. At start up pH will be monitored for all caustic scrubbers. Hourly pH measurements will be taken for SCR 010211 (Chemical Treatment System Scrubber) while material is being added to a tank system connected to the scrubber. If the scrubber is charged with a basic material, the pH of the scrubbing material must be maintained above 10. If the scrubber is charged with an acid (e.g., appropriate when neutralizing Ammonia), the pH must be maintained below 4.0.
6. Flow rate is based on a pressure gauge reading on the discharge of the spray pump or a calibrated unit designed to read in gallons per minute (e.g., in-line turbine flow meters).
7. If the scrubber is charged with a reducing agent (e.g., Sodium bisulfite) or oxidizing agent (e.g., Sodium hypochlorite, Potassium permanganate), Oxidation Reduction Potential (ORP) in millivolts will be used to determine when the scrubbing solution reaches 1% concentration and requires recharging. ORP will be tested at start-up prior to treating oxidizing or reducing compounds in the system.

Table IV.B. – Wastes Managed In Permitted Units

No.	Waste	EPA Waste Codes	TCEQ Waste Codes (Form Code for Off-site Waste)	TCEQ Waste Classifications (H, 1, 2, 3)
<b>On-Site and Off-site Waste</b>				
1.	Oxidizers, solid, liquid and sludges	D001, D002, D004-D011, D018-D043, Applicable P & U Codes	101, 102, 103, 104, 105, 113, 114, 119, 319,	H
2.	Corrosive wastes	D002, D004-D011, D018-D043, K062 Applicable P & U Codes	103, 104, 105, 106, 109, 110, 113, 114, 115, 119, 219, 309, 501, 502, 505, 506, 507, 508, 511,	H
3.	Metallic salts, solids solutions and sludges	D004-D011, D018-D043, F006, F012, F019, K062, Applicable P & U Codes	101, 102, 103, 105, 106, 107, 113, 114, 115, 119, 198, 302, 303, 304, 305, 306, 307, 309, 310, 312, 316, 502, 505, 506, 507, 508, 510, 511, 514,	H, 1
4.	Ignitable liquids, solvents, and other organic liquids	D001, D002, D004-D011, D018-D043, F001-F005, K048-K052, K086 Applicable P & U Codes	201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 219, 296, 299,	H, 1
5.	Ignitable and other solids and sludges	D001, D002, D004-D011, D018-D043, K048-K052, K086, F001-F005, F037, F038, Applicable P & U Codes	301, 307, 403, 404, 406, 407, 409, 488, 489, 490, 493, 503, 601, 602, 603, 604, 605, 606, 609, 695, 696,	H, 1
6.	Reactive solids, liquids, and sludges	D001, D002, D003, D004-D011, D018-D043, F007-F011, Applicable P & U Codes	107, 108, 111, 112, 302, 307, 309, 310, 312, 313, 314, 315, 393, 405, 493, 506, 507, 508, 509, 597, 605, 609, 697,	H
7.	Non-reactive Cyanides and Sulfides	D002, D004-D011, Applicable P & U Codes	107, 108, 302, 312, 506, 507, 508,	H
8.	Metallic Mercury	D009, U151	117,	H
9.	Compressed Gases	D001, D002, D003, D004-D011, D012-D016, D018-D043, Applicable P & U Codes	701, 801,	H, 1
10.	Pesticides	D001, D002, D004-D011, D012-D016, D018-D043, Applicable P & U Codes	119, 201, 202, 203, 204, 205, 207, 319, 401, 402, 601, 602, 609,	H, 1

Permitted Unit: 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

No.	Waste	EPA Waste Codes	TCEQ Waste Codes (Form Code for Off-site Waste)	TCEQ Waste Classifications (H, 1, 2, 3)
11.	Polychlorinated Biphenyls	N/A	297, 298, 394, 395, 397, 398, 399, 1 494, 495, 496, 497, 498, 499, 598, 599, 698, 699,	
12.	Lab Packs	D001, D002, D003, D004-D016, D018-Do43, F001-F005, Applicable P & U Codes	001, 002, 003, 004, 009,	H, 1
13.	Wastewater	D001, D002, D004-D011, D012- D016, D018-Do43, Applicable P & U Codes	101, 102, 113, 114, 115, 119, 199, 299,	H, 1
14.	Inorganic solids and sludges	D004-D011, D012-D016, D018-Do43 Applicable P & U Codes	301, 302, 303, 304, 305, 306, 307, H, 1, 2 308, 309, 310, 311, 319, 388, 389, 390, 391, 392, 393, 501, 502, 503, 505, 504, 506, 507, 508, 510, 511, 514, 515, 516, 519, 597,	
<b>Waste Generated On-Site from the Management of Commercial Off-Site Waste (Off-site Waste)</b>				
15	Empty containers (For Disposal)	None	308	1
16	Aerosol Cans	D001, D004-D016, D018-Do43, Applicable P and U Codes	801	H
17	Emissions control waste (Spent Caustic)	D002, D004-D016, D018-Do43, P and U-Codes	115	H
18	Emissions Control Waste (Spent Carbon)	D004-D016, D018-Do43, P and U- Codes	404	H
19	Absorbents from spill clean-up	D004-D016, D018-Do43, F001-F007 Applicable P and U Codes	310	H
20	PPE (Contaminated)	D004-Do43, F001-F007, P and U- Codes	409	H
21	Filtered or Precipitated Solids	D004-D016, D018-Do43, F001-F005, P & U Codes	316	H
22	Empty Containers (Metal)	None	308	2

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No.	Waste	EPA Waste Codes	TCEQ Waste Codes (Form Code for Off-site Waste)	TCEQ Waste Classifications (H, 1, 2, 3)
23	Empty Containers (Plastic)	None	407	2
24	Rinse water (Cleaning Drums with Inorganics)	D002, D004-D011, P & U Codes	114	H
25	Rinse Water (Cleaning Drums with Organics)	D001, D004-D043, F001-F005, P & U-Codes	102	H
26	Rainwater	None	114	1
27	Laboratory Waste Liquids	D001, D002, D004-D016, D018- D043, F001-F005	110, 204	H
28	PPE (Uncontaminated)	None	409	1
29	Rinse Water (Cleaning Non- Hazardous Drums)	None	114	1
30	Laboratory Waste Solids	None	319	1
31	Chemical Treatment Process Water	D001, D002, D004-D016, D018- D043 Applicable P and U-codes	113	H
32	Broken Pallets	None	488	1
33	Rinse Water (Routine Housekeeping)	None	114	1
34	Rinse Water (Power washing contaminated floors)	D001-D043	102	H
35	Vermiculite	None	192	1
36	Silica	None	319	1
37	Used Oil Filters	None	489	1
38	Treatment Solids	D001, D003, D004 -D043, Applicable P and U-Codes	310	H
39	Sandblast waste from scouring concrete and other surfaces.	D004-D011, D018-D043, F001-F005 Applicable P and U-listed waste.	319	H

Table IV.C. – Sampling and Analytical Methods

Waste No <sup>1</sup>	Sampling Location	Sampling Method	Frequency	Parameter	Test Method (or equivalent)	Desired Accuracy Level
1.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description Cyanides <sup>5</sup> Sulfides pH  Specific Gravity or Bulk Density VO Content <sup>8</sup> Vapor Pressure <sup>9</sup>	ASTM D 4979-95 ASTM D4282-95 ASTM D 4978-89 SW-846 9041A SW-846 9040B ASTM D 1298-99 40 CFR 60 - 25D <sup>10</sup> ASTM D5191 <sup>10</sup>	N/A ± Result N/A ± Result N/A ± Result 1 0.1 0.1 1 ppm ± 76.6 kPa
2.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description Flash Point or Flammability Potential <sup>2</sup> Oxidizer Screen Cyanides <sup>5</sup> Sulfides pH  Specific Gravity or Bulk Density VO Content <sup>8</sup> Organic Vapor Pressure <sup>9</sup>	ASTM D 4979-95 SW-846 1020A ASTM D 4982-95 ASTM D 4981-95 ASTM D4282-95 ASTM D 4978-95 SW-846 9041A SW-846 9040B ASTM D1298-99 40 CFR 60 - 25D <sup>10</sup> ASTM D5191 <sup>10</sup>	N/A Observation 5°F N/A ± Result N/A ± Result N/A ± Result N/A ± Result 1 0.1 0.1 1 ppm ± 76.6 kPa
3.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description Flash Point or Flammability Potential <sup>2</sup> Oxidizer Screen Cyanide Sulfide pH  Specific Gravity or Bulk Density Presence of Liquids <sup>12</sup>	ASTM D4979-95 SW-846 1020A ASTM D4982-95 ASTM D 4981-95 ASTM D4282-95 ASTM D4978-95 SW-846 9041A SW-846 9040B ASTM D1298-99 SW-846 9095	N/A Observation 5°F N/A ± Result N/A ± Result N/A ± Result N/A ± Result 1 0.1 0.1 N/A ± Result

Waste No <sup>1</sup>	Sampling Location	Sampling Method	Frequency	Parameter	Test Method (or equivalent)	Desired Accuracy Level
				VO Content <sup>8</sup>	40 CFR 60-25D <sup>10</sup>	1 ppm
				Vapor Pressure <sup>9</sup>	ASTM D5191 <sup>10</sup>	± 76.6 kPa
4.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				Flash Point or	SW-846 1020A	5°F
				Flammability Potential	ASTM D 4982-95	N/A ± Result
				BTU Content <sup>7</sup>	ASTM D5468-95	500 BTU/lb
				Chloride and/or	SW-846 9253 <sup>10</sup> or 9212 <sup>10</sup>	0.1%
				Fluoride	SW-846 9214	0.1%
				Water Content	ASTM E 203-96	1%
				pH	SW-846 9041A	1
					SW-846 9040B	0.1
				Specific Gravity or Bulk Density	ASTM D 1298-99	0.1
				Vapor Pressure <sup>9</sup>	ASTM D5191 <sup>10</sup>	± 76.6 kPa
5.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				Flash Point or	SW-846 1020A	5°F
				Flammability Potential	ASTM D4982-95	N/A ± Result
				BTU Content <sup>7</sup>	ASTM D5468-95	1
				Chloride and/or	SW-846 9253 <sup>10</sup> or 9212 <sup>10</sup>	0.1%
				Fluoride	SW-846 9214	0.1%
				Specific Gravity	ASTM D1298-99	0.1
				Physical Description	ASTM D4979-95	N/A Observation
				Cyanide	ASTM D4282-95	N/A ± Result
				Sulfide	ASTM D4978-95	N/A ± Result
				pH	SW-846 9041A	1
					SW-846 9040B	0.1
				Specific Gravity or Bulk Density	ASTM D1298-99	0.1
				VO Content <sup>8</sup>	40 CFR 60-25D <sup>10</sup>	1 ppm
				Vapor Pressure <sup>9</sup>	ASTM D5191 <sup>10</sup>	± 76.6 kPa
7.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				Cyanide	ASTM D4282-95	N/A ± Result
				Sulfide	ASTM D4978-95	N/A ± Result
				pH	SW-846 9041A	1
					SW-846 9040B	0.1

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Waste No'	Sampling Location	Sampling Method	Frequency	Parameter	Test Method (or equivalent)	Desired Accuracy Level
				Specific Gravity or Bulk Density	ASTM D1298-85	0.1
				VO Content <sup>8</sup>	40 CFR 60-25D <sup>10</sup>	1 ppm
				Vapor Pressure <sup>9</sup>	ASTM D5191 <sup>10</sup>	± 76.6 kPa
8.	Container Receiving Area	SW-846 or equivalent	No sample will be taken. However, contents of containers will be visually inspected and documented visually inspected upon receipt.	Physical Description	ASTM D4979-95	N/A Observation
9.	Not applicable. Due to the physical state of this material and inherent hazards in sampling and analysis, this material will not be sampled.					
10.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				pH	SW-846 9041A	1
				Flashpoint	SW-846 9040B	0.1
				Specific gravity	SW-846 1020A	5°F
				Physical Description	ASTM D1298-99	0.1
11.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				Flash Point	SW-846 1020A	5°F
				PCB Content	SW-846 8082	1 ppm
12.	Not applicable. Due to the physical configuration of this waste, sampling and analysis is not practical.					
13.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Physical Description	ASTM D4979-95	N/A Observation
				Flash Point or	SW-846 1020A	5°F
				Flammability Potential	ASTM D4982-95	N/A ± Result
				Oxidizer Screen	ASTM D4981-95	N/A ± Result
				Cyanide	ASTM D4282-95	N/A ± Result

Waste No'	Sampling Location	Sampling Method	Frequency	Parameter	Test Method (or equivalent)	Desired Accuracy Level
				Sulfide	ASTM D4978-95	N/A ± Result
				pH	SW-846 9041A	1
				Specific Gravity or Bulk Density	SW-846 9040B	0.1
				VO Content <sup>8</sup>	ASTM D1298-99	0.1
				Vapor Pressure <sup>9</sup>	40 CFR 60-25D <sup>10</sup>	1 ppm
				Physical Description	ASTM D5191 <sup>10</sup>	± 76.6 kPa
14.	Container Receiving Area	SW-846 or equivalent	Individual samples will be taken for each waste stream in each shipment within 24 hours of unloading containers and prior to placement in tanks.	Oxidizer Screen	ASTM D4979-95	N/A Observation
				Cyanide	ASTM D4981-95	N/A ± Result
				Sulfide	ASTM D4282-95	N/A ± Result
				pH	ASTM D4978-95	N/A ± Result
				Specific Gravity or Bulk Density	SW-846 9041A	1
					SW-846 9040B	0.1
					ASTM D1298-85	0.1
15,22,23	Not applicable, empty containers will not be sampled and analyzed.					
16	Not applicable, aerosol cans will not be sampled and analyzed.					
17.	Scrubber or Containers	SW-846 or equivalent	Sampling and analysis will be conducted annually unless the waste is assumed to exhibit all hazardous characteristics applicable to waste being treated under the control of the air emissions system.	TC Metals	SW-846 1311, 6010/7470	1 - 0.001
				pH	SW-846 9040B	0.1
				Flash Point	SW-846 1020A	5°F
18.	Carbon beds or Containers	SW-846 or equivalent	Sampling and analysis will be conducted annually (or when generated) unless the waste is assumed to exhibit all hazardous	Toxicity Characteristics	SW-846 1311, 6010/7470	1 - 0.001

<b>Waste No'</b>	<b>Sampling Location</b>	<b>Sampling Method</b>	<b>Frequency</b>	<b>Parameter</b>	<b>Test Method (or equivalent)</b>	<b>Desired Accuracy Level</b>
			characteristics applicable to waste being treated under the control of the air emissions system.			
19. Waste classification will be based on the derived from rule, absorbents will retain the same EPA waste codes as the spilled material.						
20,28	Containers in storage areas CS-1, CS-2, CS-3, CS-4, CS-6.	SW-846 or equivalent	Sampling and analysis of contaminated PPE will be conducted annually unless the waste is assumed to exhibit all toxicity characteristics reasonably expected to be present in the waste.	Toxicity Characteristics	SW 846 1311, 6010, 7470, 8081, 8151, 8260, 8270	1 - 0.001
21.	Containers	SW-846 or equivalent	If the treated waste originally exhibited a hazardous characteristic or contained cyanides, sulfides or underlying hazardous constituents; sampling and analysis will be conducted with each batch to verify the waste meets the treatment standards or the waste will be assumed to exhibit the same hazards or constituents present in the waste prior to treatment.	Toxicity Characteristic	SW 846 1311, 6010,7470, 8081,8151,8260,8270	1 - 0.001 ppm
				Presence of liquids	SW-846 9050	N/A ± Result
				pH	SW-846 9040B	1
				Flash Point <sup>4</sup>	SW-846 1020A	5°F
				Total Cyanide	SW-846 9012 <sup>10</sup>	1 ppm
				Amenable Cyanide	EPA 335.1	1 ppm
				Total Sulfide	ASTM D4978-95	N/A ± Result

<b>Waste No'</b>	<b>Sampling Location</b>	<b>Sampling Method</b>	<b>Frequency</b>	<b>Parameter</b>	<b>Test Method (or equivalent)</b>	<b>Desired Accuracy Level</b>
24,25,29	Containers in storage areas CS-1	SW-846 or equivalent	Utilizing process knowledge, rinse water will be assumed to exhibit any toxicity characteristic that would have applied to the waste previously held in the container or will be analyzed with each batch for toxicity characteristics and pH (if the waste previously held in the container was corrosive).	Toxicity Characteristics	SW 846 1311, 6010, 7470, 8081, 8151, 8260, 8270	1 - 0.001
				pH	SW-846 9040B	1
26.	Container storage area floors or Containers	SW-846 or equivalent	Annually	pH	SW-846 9040B	0.1
				Flash Point	SW-846 1020A	5°F
				Toxicity Characteristics	SW 846 1311, 6010,7470, 8081,8151,8260,8270	1 - 0.001
				Underlying Hazardous Constituents <sup>11</sup>	SW-846 6010, 7470, 8260, 8270, 8081	1 - 0.001
27.	Container and Tanks	SW-846 or equivalent	Sampling and analysis will be conducted annually unless the waste is assumed to exhibit all toxicity characteristics reasonably expected to be present in the waste.	Toxicity Characteristic	SW 846 1311, 6010,7470, 8081,8151,8260,8270	1 - 0.001
				pH	SW-846 9040B	0.1
				Flash Point	SW-846 1020A	5°F
30.	Containers	SW-846 or equivalent	Sampling and analysis will be conducted annually unless the waste is assumed to exhibit all toxicity characteristics reasonably expected to be present in the waste.	Toxicity Characteristic	SW 846 1311, 6010,7470, 8081,8151,8260,8270	1 - 0.001
31.	Tanks PT2, PT-11, WW-2, PT-12	SW-846 or equivalent	If the treated waste originally exhibited a hazardous characteristic or contained cyanides, sulfides or underlying hazardous constituents; sampling and analysis will be conducted with each batch to verify the waste meets the treatment standards or the waste will be assumed to exhibit the same	Flash Point	SW-846 1020A	5°F
				pH	SW-846 9040B	0.1
				Toxicity Characteristics	SW 846 1311, 6010,7470, 8081,8151,8260,8270	1 - 0.001
				Total Cyanide	SW-846 9012 <sup>10</sup>	1 ppm

Waste No <sup>1</sup>	Sampling Location	Sampling Method	Frequency	Parameter	Test Method (or equivalent)	Desired Accuracy Level
			hazards or constituents present in the waste prior to treatment.	Amenable Cyanide	EPA 335-1	1 ppm
				Sulfide	ASTM D4978-95	N/A ± Result
				Underlying Hazardous Constituents	SW-846 6010, 7470, 8260, 8270, 8081	1 - 0.001 ppm
Pallets contaminated with waste from a leaking container will be classified in accordance with the derived from rule (i.e., EPA waste codes associated with the spilled material will be applied to the contaminated pallet).						
33.	Containers	SW-846 or equivalent	Annually	pH	SW-846 9040B	0.1
				Toxicity Characteristics	SW 846 1311, 6010, 7470, 8081, 8151, 8260, 8270	1 - 0.001
34. Rinse water generated during spill clean-up (Waste Number 34) will be classified in accordance with the derived from rule and will retain all hazardous characteristics, listed EPA waste codes and underlying hazardous constituents that applied to the waste prior to being spilled.						
35. Vermiculite is used to cushion containers in a lab pack and absorb liquids if lab pack bottles break. Vermiculite contaminated as a result of a broken container will be classified in accordance with the derived from rule and will retain all hazardous characteristics, listed EPA waste codes and underlying hazardous constituents that applied to the waste in the broken container. Uncontaminated vermiculite is classified as a class 1 non-hazardous waste based on process knowledge (no broken bottles in lab pack) and analysis. A Class 2 determination has also been demonstrated on two occasions through analysis that included all constituents specified in 30 TAC 335 Subchapter R Appendix 1 Table 1						
36. Silica is generated from the treatment of Silane. The waste determination for this material is based on process knowledge in that the byproduct of treating Silane with oxygen in air produces silica. One time analysis has also been conducted to demonstrate the Class 1 non-hazardous waste determination. Future analysis will be conducted if the process changes						
37. Used oil filters removed from company vehicles are classified in accordance with the hazardous waste exclusion in 40 CFR 261.4(b)(13).						
38. An absorbent material such as activated carbon is used to absorb certain compressed gases. The absorbent is classified in accordance with the derived from rule in that any listed EPA waste codes associated with the compressed gas will be assigned to the spent carbon. The spent carbon will also be assumed to exhibit the same characteristics of the compressed gas or will be analyzed for toxicity characteristics with each batch.						
39. Abrasives may be used to clean hard contaminated surfaces. Classification will be based on TCLP analysis for toxic hazardous constituents and from the derived from rule if the cleaning effort is the result of a spill (i.e., the sandblast media will be assigned the same listed codes as the material that spilled).						

**FOOTNOTES**

<sup>1</sup>Item numbers in this column correspond to the numbers in the first column of Table IV.B.

<sup>2</sup> 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.

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. Flash point or flammability potential analysis is conducted on waste containing liquids only.

Cyanide or sulfide analysis will not be conducted on aqueous waste with a  $\text{pH} \leq 2$ .

Analysis identified for Waste number "6" applies to reactive cyanide or reactive sulfide bearing wastes. Fingerprint analysis listed does not apply to other types of reactive waste (e.g., water reactives, air reactives) that cannot be sampled or analyzed due to inherent hazards.

BTU, % Water, TOX, and Chlorine analysis will be conducted on waste intended for fuel blending by SET Environmental.

The Volatile Organic (VO) Content determination (based on knowledge or analysis) will be conducted on hazardous waste intended to be placed in tanks exempt from 40 CFR Subpart CC controls due to their VO content.

Vapor pressure determinations (based on knowledge or analysis) will be conducted on hazardous waste intended to be placed in tanks meeting 40 CFR Subpart CC level 1 controls.

<sup>10</sup>The primary method is indicated; however, an alternate equivalent method may be used.

<sup>11</sup>This analysis is conducted when the waste exhibits a hazardous characteristic subject to 40 CFR §268.48 standards.

<sup>12</sup>If the waste will be placed in a permitted storage area that is not equipped with a secondary containment system.

Table V.B. – Container Storage Areas

Permit Unit No.	Container Storage Area	N.O.R. No.	Waste Nos. <sup>4</sup>	Rated Capacity <sup>3</sup>	Dimensions	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable <sup>1</sup> , Reactive <sup>1</sup> , or Incompatible <sup>2</sup> waste (state all that apply)
1	CS-1	1	2,3,4,8,9,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,33,36,38	6,600	48' x 100'	14,350	Ignitable, and Reactive Waste*
2	CS-2	3	1,2,3,4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,33,36,37,38	88,880	44' x 169'	14,540	Ignitable, Reactive and Incompatible Waste
3	CS-3	17	2,3,4,8,9,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,33,38	11,110	48' x 54'	8,843	
4	CS-4	2	2,3,4,8,9,11,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,33,37,38	48,400	51' x 68.5'	16,749	Ignitable, and Reactive Waste
5	CS-5	15	4,6,9,12,14	880	10.6' x 23.5'	380	Ignitable, Reactive
6	CS-6	16	2,3,4,6,9,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,33,27,38	15,840	36' x 23.5'	2,696	Ignitable, and Reactive Waste

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

\* Applies to ignitable and reactive waste treated in tanks.

Table V.C. – Tanks and Tank System

Permit Unit No.	Tank	N.O.R. No.	Storage and/or Processing	Waste Nos. <sup>1</sup>	Rated Capacity	Dimensions (feet)	Containment Volume (including rainfall for unenclosed areas)	Unit will manage Ignitable, Reactive, or Incompatible Waste (state all that apply)
8	PT-2	20	Storage and Processing	1, 2, 3, 6, 13, 14, 17, 21, 24, 26, 29, 31, 33, 34	1,870	D=6.5', H=8.6'	2,917	Ignitable, Reactive Incompatible
9	PT-11 <sup>(2)</sup>	21	Storage and Processing	1, 2, 3, 6, 13, 14, 17, 21, 24, 26, 29, 31, 33, 34	1,500	W=5.7', L=8', H=4.4'	1,615	Ignitable, Reactive Incompatible
14	PT-5	30	Storage and Processing	2, 3, 7, 13, 31	7,000	D=9', H=17'	7,135 <sup>(3)</sup>	None
15	WW-2	39	Storage	2, 3, 7, 13, 31	6,500	D=8.5', H=17.5'	7,135 <sup>(3)</sup>	None
16	PT-12 <sup>2</sup>	51	Storage and Processing	1, 2, 3, 6, 9, 13, 14, 17, 21, 24, 26, 29, 31, 33, 34, 36, 38	1,548	W=6', L=7.7', H=4.5'	2754 W=7.5' x L=9.5' x H=5.2'	Ignitable, Reactive Incompatible

<sup>1</sup> from Table IV.B, first column  
<sup>2</sup> PT-11 and PT-12 are rectangular tanks located in an in-ground vault.  
<sup>3</sup> Tanks PT-5 and WW-2 are located within a shared concrete containment structure.

Permit No. 50267  
 Permittee: SET Environmental, Inc.

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

Existing Unit Closure Cost Estimate	
Unit	Cost
TRRP Sampling Analysis and Closure Certifications	\$13,389
PT-2 (Permit Unit No. 8)	\$4,821
PT-5 (Permit Unit No. 14)	\$10,543
PT-11 (Permit Unit No. 9)	\$3,733
WW-2 (Permit Unit No. 15)	\$9,713
PT-12 (Permit Unit No. 16)	\$3,733
CS-1 (Permit Unit No. 1)	\$86,983
CS-2 (Permit Unit No. 2)	\$471,979
CS-3 (Permit Unit No. 3)	\$71,671
CS-4 (Permit Unit No. 4)	\$231,341
CS-5 (Permit Unit No. 5)	\$103,258
CS-6 (Permit Unit No. 6)	\$146,546
Total Existing Unit Closure Cost Estimate (in 2022 Dollars)	\$1,157,710

Proposed Unit Closure Cost Estimate	
Unit	Cost
Response: Not Applicable since there are no proposed units as part of this permit renewal application.	\$0.00

<sup>1</sup> 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.

**Table X.1. - Parameters to be Measured and Maintained for the Scrubbers**

Parameter	SCR010211	SCR 36 / SPCAU36	SCR 30	SCR 12	WPS12 - Wet water venturi type particulate scrubber ****
Alkalinity	Daily*	Daily*	Monthly	Daily*	-
pH or ORP*****	Hourly**	Daily*	Daily*	Daily*	-
pH value at or above*****	10	10	10	10	-
Flow Rate***	Daily*	Daily*	Daily*	Daily*	Daily*
Minimum liquid flow rate (gpm)	75	90	90	315	9000 scfm

\* During start-up.

\*\* When material is being added to either Tank PT-2 or PT-11.

\*\*\* Flow rate is based on a pressure gauge reading on the discharge side of the spray pump or a device (e.g., inline turbine flow meter) that measures flow rate in gallons per minute.

\*\*\*\* Particles are removed by the Stage 1 venturi scrubber using recirculating water. The emissions from the treatment unit (FIN PT-12) are emitted through EPN SCR12 which is the exhaust from two scrubbers which are operated in series. The first scrubber is a venturi type particulate scrubber (WPS12) and the second is a packed bed chemical (caustic sodium hydroxide or potassium hydroxide) solution (SCR 12).

\*\*\*\*\* If the scrubber is charged with a basic material, the pH of the scrubbing material must be as indicated in the table. If the scrubber is charged with an acid (e.g., appropriate when neutralizing Ammonia), the pH must be maintained below 2.0. If the scrubber is charged with a reducing agent (e.g., Sodium metabisulfite) or an oxidizer (e.g., Sodium hypochlorite or Potassium permanganate) the quality control measurement will be oxidation reduction potential (ORP).

**Section X - Attachment A - Tables 1- 8**

Removal Efficiencies / Maximum outlet concentration (ppmv) and outlet grain loading for the following scrubbers: Caustic Scrubber: EPN: SCR010211, FINs: SCR 36 and SCR 30, SPCAU36 and EPN: SCR12 and FIN: WPS12 - Wet particulate scrubber.

**Table 1 - Acid Gases**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Antimony	99%	10
Boron Tribromide	99%	17
Boron Trichloride	98%	10
Boron Trifluoride	97%	10
Bromine	99%	13
Carbonyl	95%	10
Chlorine	99%	25
Deuterium	99%	50
Deuterium	99%	50
Deuterium	99%	50
Deuterium Iodide	99%	50
Germanium	98%	10
Germanium Tetrafluoride	97%	10
Hydrogen Bromide	99%	50
Hydrogen Chloride	99%	50
Hydrogen Fluoride	99%	50
Hydrogen Iodide	99%	50
Molybdenum Hexafluoride	95%	10
Phosphorus Oxyfluoride	98%	10
Phosphorus Oxytrichloride	98%	10
Phosphorus Pentafluoride	95%	10
Phosphorus Trichloride	95%	10
Phosphorus Trifluoride	90%	10
Phosporus Tribromide	97%	10
Silicon Tetrafluoride	97%	10
Sulfur Bromide Pentafluoride 207.6100 29 > 0.25%	90%	10
Sulfur Choride Pentafluoride 163 100 22 > 0.25%	90%	10
Sulfur Dioxide	99%	25
Sulfuryl Chloride Fluoride	95%	10
Thionyl Bromide	97%	10
Thionyl Fluoride	95%	10
Trifluoromethyltriflate	90%	10
Trimethylborane	90%	10
Tungsten Hexafluoride	90%	10

**Section X - Attachment A - Tables 1- 8**

Removal Efficiencies / Maximum outlet concentration (ppmv) and outlet grain loading for the following scrubbers: Caustic Scrubber: EPN: SCR010211, FINs: SCR 36 and SCR 30, SPCAU36 and EPN: SCR12 and FIN: WPS12 - Wet particulate scrubber.

**Table 2 - Ammonia, Sulfides & Selenides**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Ammonia	99%	36
Carbonyl Sulfide	80%	10
Deuterium Sulfide	99%	21
Hydrogen Selenide	99%	21
Hydrogen Sulfide	99%	21

Notes: 1. Ammonia cannot be effectively scrubbed out of an air stream using recirculating plain water; rather an acid is required for neutralizing the Ammonia as it absorbs into the recirculating solution. Typical acid of choice for scrubbing Ammonia is Sulfuric Acid.

**Table 3 - Organo Silanes**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Chlorosilane	99%	17
Dichlorosilane	99%	13
Dimethyl Chlorosilane	99%	17
Hexachlorodisilane	98%	10
Hexafluorodisilane	97%	10
Methyl Dichlorosilane	99%	13
Methyl Trichlorosilane	99%	10
Trichlorosilane	99%	10
Trifluorosilane	98%	10

**Table 4 - Fluorinated Organic Acids**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
(Fluorosulfonyl) difluoroacetyl fluoride, 2-	98%	10
Heptafluoro butyryl Fluoride	90%	10
Nitrogen Trifluoride	50%	10
Tetraethylortho silicate	98%	10

**Section X - Attachment A - Tables 1- 8**

Removal Efficiencies / Maximum outlet concentration (ppmv) and outlet grain loading for the following scrubbers: Caustic Scrubber: EPN: SCR010211, FINs: SCR 36 and SCR 30, SPCAU36 and EPN: SCR12 and FIN: WPS12 - Wet particulate scrubber.

Tetrakis (Dimethylamido) Hafnium	99%	<10
Tetrakis (Dimethylamido) Platinum	99%	<10
Tetramethyl disiloxane	90%	10
Trifluoromethane sulfonyl Fluoride	90%	10

**Table 5 - NOx**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Nitric Oxide	50%	10
Nitrogen Dioxide	70%	10
Nitrogen Trioxide	70%	10
Nitrosyl Chloride	98%	10

**Table 6 - Hydrides**

Compound	Removal efficiency	Max. Outlet gr/DSCF
Arsine - Arsenic Pentoxide	99.6%	0.01
Diborane - Boric Acid	99.6%	0.01
Phosphine - Phosphorous Pentoxide	99.6%	0.01
Diethyl Telluride - Tellurium Dioxide	99.6%	0.01
Germane - Germanium Dioxide	99.6%	0.01
Silane - Silicon Dioxide	99.6%	0.01
Iridium Hexafluoride - Iridium Dioxide	99.6%	0.01
Stannic Chloride - Stannic Dioxide	99.6%	0.01
Titanium Trichloride - Titanium Dioxide	99.6%	0.01
Titanium Tetrachloride - Titanium Dioxide	99.6%	0.008
Vanadium Tetrachloride - Vanadium Pentoxide	99.6%	0.01

**Section X - Attachment A - Tables 1- 8**

Removal Efficiencies / Maximum outlet concentration (ppmv) and outlet grain loading for the following scrubbers: Caustic Scrubber: EPN: SCR010211, FINs: SCR 36 and SCR 30, SPCAU36 and EPN: SCR12 and FIN: WPS12 - Wet particulate scrubber.

Stannic Chloride - Stannic Dioxide	99.6%	0.01
Titanium Trichloride - Titanium Dioxide	99.6%	0.01

**Table 7 - Acutely Toxic Corrosive**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Arsenic Pentafluoride	97%	10
Arsenic Trifluoride	90%	10
Bromine	98%	10
Carbonyl Fluoride	99%	13
Cyanogen Chloride	90%	10
Germanium Tetrafluoride	97%	10
Hydrogen Cyanide	99%	50
Phosgene	95%	10
Sulfur Tetrafluoride	97%	10
Sulfuryl Chloride	95%	10
Sulfuryl Chloro Fluoride	90%	10
Sulfuryl Fluoride		10

**Table 8 - Fluorinated Oxidizers**

Compound	Scrubber Removal Efficiency	Max Outlet PPMV (ppmv)
Bromine Chloride	99%	25
Bromine Pentafluoride	98%	10
Bromine Trifluoride	99%	13
Chlorine Monofluoride	99%	25
Chlorine Trifluoride	99%	13
Fluoroxytrifluoro methane	50%	10
Iodine Heptafluoride	50%	10
Iodine Pentafluoride	99%	10
Perchloryl Fluoride	50%	10
Tetrafluoro hydrazine	50%	10

**Section X - Attachment A - Tables 1- 8**

Removal Efficiencies / Maximum outlet concentration (ppmv) and outlet grain loading for the following scrubbers: Caustic Scrubber: EPN: SCR010211, FINs: SCR 36 and SCR 30, SPCAU36 and EPN: SCR12 and FIN: WPS12 - Wet particulate scrubber.

Trifluoromethyl hypofluorite	50%	10
Xenon Difluoride	98%	10
Fluorine	99%	25

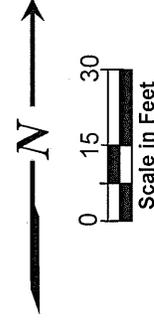
**Attachment A - Legal Description of Facility**

Lots Nine (9), Ten (10), Eleven (11), Twelve (12), Thirteen (13), Fourteen (14), Fifteen (15), Sixteen (16) of Block 38 of Kings Court, an addition in the City of Houston, Harris County, Texas according to the map thereof, recorded on Volume 7, Page 65, of the Map of Records of Harris County, Texas.

**LEGEND**

- Secondary Containment
- Fence
- Blind Sump
- Well
- Concrete Berm
- Carbon Bed
- Caustic Scrubber
- Sump to Storm Sewer
- Pump House
- Nitrogen Tank
- Fire Suppression Water Tank
- Guard House
- Ignitable Storage Area
- 4 Hour Fire Wall

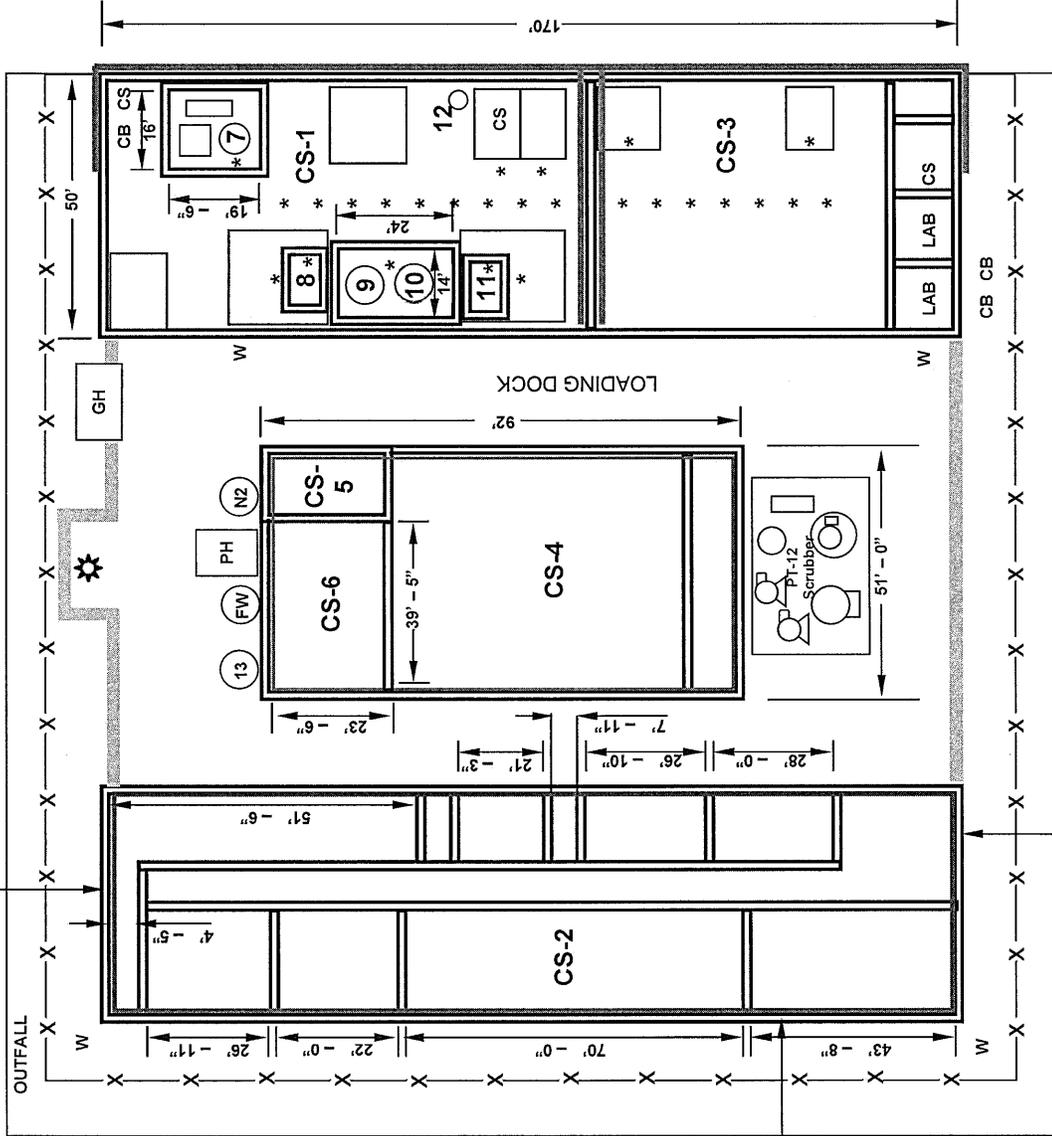
Item	Name	NOR No.	Permit No.
1	CS-1	1	1
2	CS-2	3	2
3	CS-3	17	3
4	CS-4	2	4
5	CS-5	15	5
6	CS-6	16	6
7	PT-2	20	8
8	PT-11	21	9
9	PT-5	30	14
10	WW-2	39	15
11	PT-12	51	16
12	90 Day Tank	25	NA
13	Stormwater tank	48	NA



CHESWOOD

JOYNER

ETHERIDGE



**FIGURE V-1**  
 Facility Layout Plan  
 Houston, Texas



### **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
  - D. Interim Status Land Disposal Unit(s) Certification (Reserved)
    - 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 (Reserved)
  - C. Additional Requirements for Waste Piles (Reserved)
  - D. Additional Requirements for Storage Surface Impoundments (Reserved)
  - E. Additional Requirements for Landfills (and Surface Impoundments Closed as Landfills with Wastes in Place) (Reserved)
  - F. Flooding
  - G. Additional Information Requirements
    - 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

### Attachment D - List of Incorporated Application Materials

- A. Waste Management Information (Reserved)
- B. Wastes Managed In Permitted Units
- C. Sampling and Analytical Methods
- D. Waste Analysis Plan

Table IV.B. - Wastes Managed in Permitted Units  
Table IV.C. - Sampling and Analytical Methods

#### V. Engineering Reports

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

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

#### VI. Geology Report

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

#### VII. Closure And Post-Closure Plans

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

Table VII.A. - Unit Closure  
Table VII.B. - Unit Closure Cost Estimate

#### VIII. Financial Assurance

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

**Attachment D - List of Incorporated Application Materials**

Information for Applicants Subject to Financial Capability Requirements (Reserved)

- IX. Releases From Solid Waste Units And Corrective Action
  - A. Preliminary Review Checklists
    - For Applications for a New Hazardous Waste Permit (Reserved)
    - 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
  - B. Equipment Leaks
  - C. Tanks, Surface Impoundments, and Containers
  - D. "One - Stop" Permit
  - Table X.A. - Process Vents
  - Table X.B. - Equipment Leaks
  - Table X.C. - Tanks, Surface Impoundments, and Containers Subject to Air Emission Controls
  - Table X.D.1(a) - Emission Point Parameters
  - General Instructions for Table X.D.1(a)
  - Table X.D.7 - For Fugitive Sources
  - Table 74-82 - Storage Tank Summary
  
- XI. Compliance Plan (Reserved)
- XII. Hazardous Waste Permit Application Fee
  - Table XII.A. - Hazardous Waste Units (For Application Fee Calculations)
  - Table XII.B. - Hazardous Waste Permit Application Fee Worksheet
  
- XIII. Confidential Material (Reserved)

**Attachment E - List of Permitted Facility Units**

**Authorized Permitted Units**

TCEQ Permit Unit No. <sup>1</sup>	Unit Name	NOR No. <sup>1</sup>	Unit Description	Capacity	Unit Status <sup>2</sup>
1	Process Container Storage Area, CS-1	001	Container Storage Area	6,600	Active
2	Process Container Storage Area, CS-2	003	Container Storage Area	88,880	Active
3	Process Container Storage Area, CS-3	017	Container Storage Area	11,110	Active
4	Process Container Storage Area, CS-4	002	Container Storage Area	48,400	Active
5	Process Container Storage Area, CS-5	015	Container Storage Area	880	Active
6	Process Container Storage Area, CS-6	016	Container Storage Area	15,840	Active
8	PT-2	020	Tank	1,870	Active
9	PT-11	021	Tank	1,615	Active
14	PT-5	030	Tank	7,000	Active
15	WW-2	039	Tank	6,500	Proposed to Close
16	PT-12	051	Tank	1,548	Active

**Historical Permitted Units No Longer Subject to this Permit<sup>4</sup>**

TCEQ Permit Unit No. <sup>1</sup>	Unit Name	NOR No. <sup>1</sup>	Unit Description <sup>3</sup>	Capacity	Unit Status <sup>2</sup>
7	PT-1	019	Tank, Clean Closed 10-7-2003, Cut-up and Disposed		Closed

**Attachment E - List of Permitted Facility Units**

10	FB-1	008	Tank, Clean Closed 5-29-2009 Cut-up and Disposed	4,000	Closed
11	FB-2	009	Tank, Clean Closed 5-29-2009 Cut-up and Disposed	4,000	Closed
12	FB-3	010	Tank, Clean Closed 5-29-2009 Cut-up and Disposed	4,000	Closed
13	FB-4	011	Tank, Clean Closed 5-29-2009 Cut-up and Disposed	4,000	Closed

<sup>1</sup>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.

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

<sup>3</sup>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.

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

**Attachment F - Emission Sources - Maximum Allowable Emission Rates**

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
CAR010211	Carbon Bed 010211 and Scrubber SCR010211  PT-2 and PT-11 through SCR010211	VOC (5)	1.80	3.29
		Cl2 (5)	1.06	0.19
		HCl (6)	0.72	0.91
		SO2 (6)	0.76	0.27
CAR30	Carbon Bed controlling Lab Pack Fume Hoods	VOC	0.11	0.50
SCR30	Scrubber controlling Lab Packs	HCl	<0.01	<0.01
SPCT 010211	Chemical Treatment Area Caustic Scrubber	IOC	<0.01	<0.01
SCR 36 / SPCAU36	Cylinder QC Caustic Scrubber	HCl	<0.01	<0.01
PT-5	Caustic Storage Tank	IOC	<0.01	<0.01
Fugitives	Fugitives (7)	VOC	0.63	2.76
SCR12	PT-12 Process Tank PT-12 through WPS12 and SCR12	PM	0.10	0.08
		PM10	0.10	0.08
		PM2.5	0.02	0.02
		NOX	0.91	0.23
		SO2	0.06	0.25
		HF	0.15	0.66
		HCL	1.58	2.39

**Attachment F - Emission Sources - Maximum Allowable Emission Rates**

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		CL2	0.36	0.79
		Ammonia	1.50	6.57
		H2S	0.83	0.50
		IOC	11.08	26.22

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1. Total VOC includes HAPs.
  - IOC-U - inorganic compounds (unspeciated)
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emissions when controlling Process Tank PT-11.
- (6) Emissions when controlling Process Tank PT-2.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.



## 7.0 EVACUATION PLAN

Should evacuation of the facility be required, the following procedures will be implemented by the EC:

- Personnel will be notified by one or more of the following methods:

- Alarm

An automatic fire suppression system is equipped with three warning devices. When the system first detects an ambient temperature increase of 15°F in one minute or less or a total ambient temperature of 190°F, an alarm bell will sound, notifying employees of a potential problem. When an adjacent monitor detects these temperatures, a horn will sound, and a strobe will begin to flash. Evacuation of the facility by all employees except those responding to the emergency is required when the first alarm sounds.

- Voice, signal and/or

If necessary, the EC will phone the receptionist at the 5738 Cheswood Street office and provide instructions on appropriate evacuation or instruction on shelter in place.

- All processing and operations will be safely and quickly concluded.

If possible, the following operations will be shut down to prevent the spread of fire:

- All open drums and exposed hazardous waste will be covered.
- Tank trucks will be shut off or removed from the facility.
- Drum compactor will be stopped.
- Close all valves of compressed gas cylinders being processed.
- Close valve to flash point tester in lab if being used.

- Personnel will evacuate through the nearest facility emergency exit.
- The primary command center where employees will be evacuated to is the area South of the 5738 Cheswood Street Office. However, if the wind direction (determined by windsocks located at the facility), is towards this area, the primary command center is the nearest safe intersection upwind of the facility Etheridge and Moline or Etheridge and Joyner (see evacuation plan and map shown in Figure C-2).
- Immediately after the facility is evacuated, each supervisor will report to the Emergency Coordinator whether their employees have successfully evacuated the facility. If any employee(s) are not accounted for, the supervisor will identify the area where they are believed to be located within the facility. A current list of employees arranged by supervisor will be maintained with copies of this plan to assist in accounting for all employees.
- If complete evacuation of the facility is required, it will proceed in orderly fashion

# OSHA's Form 300A (Rev. 01/2004)

## Summary of Work-Related Injuries and Illnesses

Year 2021



U.S. Department of Labor  
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

### Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	0	0
(G)	(H)	(I)	(J)

### Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	0
(K)	(L)

### Injury and Illness Types

Total number of... (M)			
(1) Injury	0	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor OSHA Office of Statistics, Room N-3644 200 Constitution Ave. NW Washington, DC 20210. Do not send the completed forms to this office.

### Establishment information

Your establishment name SET Environmental Inc.

Street 5738 Cheswood

City Houston State TX Zip 77087

Industry description (e.g., Manufacture of motor truck trailers)  
Waste Treatment and Storage

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)  
4 9 5 3

OR North American Industrial Classification (NAICS), if known (e.g., 336212)  
5 6 2 2 1 1

### Employment information

Annual average number of employees 43

Total hours worked by all employees last year 91,878

### Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

Daniel Didier  
Company executive

(713) 645-8710  
Phone

General Manager  
Title

1/17/2022  
Date

# OSHA's Form 300A (Rev. 01/2004)

## Summary of Work-Related Injuries and Illnesses

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employers former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35; in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

### Number of Cases

Total number of deaths	Total number of cases away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (G)	0 (H)	0 (I)	0 (J)

### Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0 (K)	0 (L)

### Injury and Illness Types

Total number of... (M)	(4) Poisoning	0
(1) Injury	(5) Hearing Loss	0
(2) Skin Disorder	(6) All Other illnesses	0
(3) Respiratory Condition		

### Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA, Office of Statistics, Room N-3644, 200 Constitution Ave. NW, Washington, DC 20210. Do not send the completed forms to this office.



Year 2022

U.S. Department of Labor  
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

### Establishment information

Your establishment name SET Environmental Inc.  
 Street 5738 Cheswood State TX Zip 77087  
 City Houston  
 Industry description (e.g., Manufacture of motor truck trailers)  
Waste Treatment and Storage  
 Standard Industrial Classification (SIC), if known (e.g., SIC 3715)  
4 9 5 3  
 OR North American Industrial Classification (NAICS), if known (e.g., 336212)  
5 6 2 2 1 1

### Employment information

Annual average number of employees 44  
 Total hours worked by all employees last year 97,138

### Sign here

Knowing falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

Cheryl Kilgus General Manager  
 Company executive  
 (713) 645-8710 Phone  
 1/16/2023 Date



Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Bobby Janecka, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

April 14, 2020

CERTIFIED MAIL #91 7199 9991 7038 7442 6487  
RETURN RECEIPT REQUESTED

Mr. Daniel A. Didier, Compliance Director  
SET Environmental, Inc.  
5738 Cheswood St.  
Houston, Texas 77087

Re: Notice of Enforcement for Compliance Evaluation Investigation at:  
SET Environmental, 5738 Cheswood St., Houston (Harris County), Texas  
Regulated Entity No.: 100607126, TCEQ SWR No.: 50267, Permit No.: 50267, EPA ID No.:  
TXD055135388

Dear Mr. Didier:

On October 8, 2019, Mr. Casimir Onwuka of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for industrial solid waste. During this investigation, certain outstanding alleged violations were documented and have been resolved based on subsequent corrective action. In addition, a certain alleged violation and additional issues were documented which remain outstanding. Enclosed is a summary which lists the investigation findings and recommended corrective actions. Additional recommended corrective actions may be provided by the Enforcement Division.

In the listing of the alleged violations, we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled *Obtaining TCEQ Rules* (GI 032) are located on our agency website at <http://www.tceq.texas.gov> for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Houston Region Office at (713) 767-3500 or the Central Office Publications Ordering Team at 512-239-0028. Copies of applicable federal regulations may be obtained by calling Environmental Protection Agency's Publications at 800-490-9198.

Also, please be advised that the Legislature has granted enforcement powers to the TCEQ to carry out its mission to protect human health and the environment. Due to the apparent seriousness of one of the alleged violations, formal enforcement action has been initiated, and additional violations may be cited upon further review. We encourage you to immediately begin taking actions to address the outstanding alleged violation and additional issues.

**In responding with prompt corrective action, the administrative penalty to be assessed may be limited.**

The Commission recognizes that the great majority of the regulated community wants to prevent pollution and to comply with environmental laws. We dedicate considerable resources toward making voluntary compliance achievable. But where compliance has not been met it is our duty to protect the public and the environment by enforcing the state's environmental laws, regulations, and permits.

Mr. Daniel A. Didier  
Page 2  
April 14, 2020

Also, if you believe the violations documented in this notice have been cited in error, **and** you have additional information that we are unaware of, you may request a meeting to discuss this enforcement matter. To request a meeting, send a letter describing the additional information to the address shown below.

Manager, Waste Section  
Enforcement Division, MC 219  
Re: Enforcement Meeting Request  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

If you or members of your staff have any questions, please feel free to contact Mr. Onwuka in the Houston Region Office at (713) 767-3606.

Sincerely,

*Carlos Romo*

*for Guadalupe Quiroz*

Guadalupe Quiroz, Team Leader  
Waste Section  
Houston Region Office

GQ/CEO/na

Enclosures: Summary of Investigation Findings

## Summary of Investigation Findings

SET ENVIRONMENTAL

5738 CHESWOOD ST  
HOUSTON, HARRIS COUNTY, TX 77087

Investigation #  
1612830  
Investigation Date: 10/08/2019

Additional ID(s): 50267  
P00724  
TXD055135388  
50267

### AREA OF CONCERN

Track No: 742002

30 TAC Chapter 335.69(d)(1)  
40 CFR Chapter 262.34(c)(1)(i)  
40 CFR Chapter 265.173(a)

**Alleged Violation:**

Investigation: 1612830

Comment Date: 03/30/2020

The facility failed to ensure that containers holding hazardous waste remain closed except when adding or removing waste.

Investigation of the Satellite Accumulation Areas (SAAs) in the facility's laboratory revealed two open containers holding hazardous waste when waste was not being added to or removed from the containers. Containers holding hazardous waste must remain closed except when adding or removing from the containers.

**Recommended Corrective Action:** The facility was requested to ensure that containers in SAAs remain closed except when adding or removing waste and provide documentation to the TCEQ to verify compliance.

**Resolution:** This alleged violation has been resolved as an area of concern based on subsequent corrective action performed by the facility. The laboratory technician closed both containers at the time of investigation.

## Summary of Investigation Findings

SET ENVIRONMENTAL

Investigation # 1612830

5738 CHESWOOD ST  
HOUSTON, HARRIS COUNTY, TX 77087

Investigation Date: 10/08/2019

Additional ID(s): 50267  
P00724  
TXD055135388  
50267

### OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 741974      Compliance Due Date: To Be Determined  
30 TAC Chapter 305.125(1)

PERMIT II.A.2./IV.B.3.a.

**Alleged Violation:**

Investigation: 1612830

Comment Date: 04/13/2020

No person may cause, suffer, allow, or permit any activity of storage or disposal of any industrial solid waste or municipal hazardous waste unless such activity is authorized by a permit, amended permit, or other authorization from the Texas Commission on Environmental Quality (commission) or its predecessor agencies; or permit its wastes to be stored, processed, or disposed of at an unauthorized facility or in violation of a permit.

The facility failed to prevent the receipt, storage, and shipment of unauthorized waste without the required permit.

On August 22, 2018, the facility accepted and stored for 36 days one 55-gallon drum containing 226 kilograms of polychlorinated biphenyl (PCB) contaminated waste without first obtaining authorization from the TCEQ. The facility also shipped the unauthorized waste to an unauthorized facility, US Ecology Texas, Robstown, Texas, for disposal in a landfill.

During the investigation, the facility representative indicated the waste had been excavated and disposed of at an authorized facility, Veolia ES Technical Solutions in Port Arthur, Texas.

**Recommended Corrective Action:** The facility shall ensure that only authorized wastes are received and stored onsite. The facility shall also ensure that wastes are disposed of at authorized facilities.

### ALLEGED VIOLATION(S) NOTED AND RESOLVED ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track No: 741985

30 TAC Chapter 335.152(a)(7)  
40 CFR Chapter 264.173

PERMIT II.C.1.j. and C.2.g.

**Alleged Violation:**

Investigation: 1612830

Comment Date: 04/02/2020

The facility failed to ensure that containers holding hazardous waste were always closed except when adding or removing waste.

During the investigation of permitted Container Storage Areas (CSAs) CS-2 and CS-3, two 55-gallon drums and one 55-gallon drum, respectively, containing hazardous waste were open.

**Recommended Corrective Action:** The facility shall close the drums and provide documentation of corrective action taken to the TCEQ to verify compliance.

**Resolution:** This alleged violation has been resolved based on documentation, including photographs, received from the facility on December 20, 2019, indicating the drums have been fitted with new lids ensuring they remain closed.

Track No: 741993

30 TAC Chapter 305.125(1)

PERMIT V.A.1.

**Alleged Violation:**

Investigation: 1612830

Comment Date: 04/02/2020

The facility failed to clearly identify authorized units with signs indicating the "TCEQ Permit Unit No.", as required by the permit.

During the investigation, it was noted that permitted tank, PT-12, had no identifying sign, and signs on permitted Container Storage Areas (CSAs), CS1 and CS3 had faded and were illegible.

**Recommended Corrective Action:** The facility was requested to clearly identify the permitted units with signs indicating the authorized units as listed in the permit and provide documentation demonstrating corrective action taken to the TCEQ to verify compliance.

**Resolution:** This alleged violation has been resolved based on documentation including photographs, received from the facility on December 20, 2019, indicating that identifying signs have been placed on the identified permitted tank and CSAs.

### ADDITIONAL ISSUES

**Description**

Item #2

**Additional Comments**

During the investigation, debris and equipment were observed in the secondary containment associated with a permitted tank, PT-2. The secondary containment should be operated free of debris and equipment to ensure maintenance of 100 percent capacity of the largest tank within its boundary.

The facility was requested to clear the secondary containment of debris and equipment and to provide documentation demonstrating corrective action taken to the TCEQ to verify compliance.

This additional issue has been addressed based on documentation received from the facility on December 20, 2019, indicating that the items and the equipment observed in the secondary containment have been removed.

---

Item #6

During the investigation of Container Storage Area (CSA), CS1, waste drums were observed with multiple labels, some indicating both hazardous and non-hazardous waste on the same drum. The facility representative explained that the labels became invalid once the waste drums and accompanying shipping manifests were processed to confirm the waste and barcodes generated to replace the labels for identification.

The facility is advised to review the procedures for consideration of having markers or labels immediately removed or crossed out from containers once they become invalid to minimize mishandling of waste.

---



December 20, 2019

TCEQ  
Casimir Onwuka  
5425 Polk Street, Suite H  
Houston, TX 77023

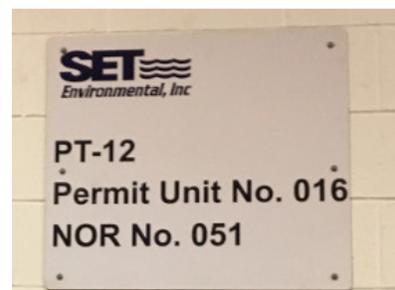
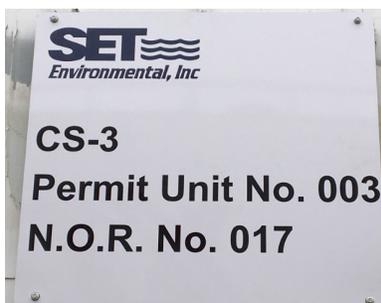
Re: Response to October 8, 2019 CEI  
Registration/Permit No. 50267  
EPA I.D. No. TXD055135388  
CN600360200, RN100607126

Dear Mr. Onwuka,

Please accept this letter and attachments in response to issues identified during the October 8, CEI. Resolution of the investigation findings are summarized below and listed in the same order as they are listed in Exit Interview.

Issue 1: Missing Permit Sign for PT-12 and illegible permits signs for CS-1 and CS-3

**Response:** On 10/9/2019 SET Environmental added the sign for PT-12 and replaced the signs for CS-1 and CS-3 as pictured below.



***Integrity • Innovation • Excellence***

5738 Cheswood Street · Houston, Texas 77087 · (713) 645-8710 (800) 598-7328 · FAX (713) 649-1027  
Visit our website @ [www.setenv.com](http://www.setenv.com)

Issue 2: Secondary containment was not free of debris for tank PT-2

**Response:** On 10/8/2019 SET Environmental removed pallets, a stool and a bucket from the containment system for PT-2.



Issue 3: Open containers in laboratory satellite accumulation area and in container storage area CS-2.

**Response:** During the inspection on 10/8/2019 SET Environmental closed the two satellite accumulation area containers in the laboratory fume hood. On 10/8/19 SET Environmental purchased new container lids for PPE disposal in the lab and CS-2. Lids were delivered and installed on Monday October 14th.

Satellite Accumulation in Lab Hood



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PPE Drum in Lab



PPE Drums in CS-2



Remaining Issues 4-6: SET received and shipped unauthorized waste to an unauthorized facility. TCEQ requested a copy of clean-up plan and waste removal documentation.

**Response:** SET reported this issue to the TCEQ on July 28, 2019. US Ecology also reported to TCEQ Region 14 – Corpus Christi. During the CEI on October 8, 2019, SET explained and provided documents (manifests) that the unauthorized waste was removed from the landfill and disposed of properly. SET Environmental requested a copy of the clean-up plan from US Ecology on October 8<sup>th</sup>; however, the document SET received is attached.

If you have any questions regarding this response or require any additional information, please feel free to contact me at your convenience, [ddidier@setenv.com](mailto:ddidier@setenv.com) of (713) 641-7574.

Sincerely,

Daniel A. Didier, CHMM  
Compliance Director  
SET Environmental, Inc

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5738 Cheswood Street · Houston, Texas 77087 · (713) 645-8710 (800) 598-7328 · FAX (713) 649-1027  
Visit our website @ [www.setenv.com](http://www.setenv.com)



3277 County Road 69, P.O. Box 307, Robstown, TX 78380  
800.242.3209 361.387.0794

September 26, 2019

Tim Perdue  
Waste Section Manager  
Texas Commission on Environmental Quality  
6300 Ocean Dr., Unit 5839  
Corpus Christi, TX 78412-5839

**RE: Notification of Incident- PCB drum  
US Ecology Texas, Inc. - Robstown, Texas  
TCEQ Permit No. HW-50052  
EPA ID: TXD069452340-1  
RN101445666/CN603247974**

Dear Mr. Purdue,

As previously notified and discussed with TCEQ-Region 14 team members on July 19, 2019 and August 5, 2019 this letter serves as the report involving the 55-gallon PCB drum that was mistakenly sent to USET by SET Environmental for disposal as a non-TSCA regulated waste.

In summary, on September 28, 2018, the SET Environmental Houston facility sent, what was believed to be, one 55-gallon drum of non-hazardous waste to US Ecology Texas (USET). The SET Houston facility was later notified by the generator (North Shore Gas Company) that the drum apparently contained 116 ppm PCBs. Documents submitted to the SET Houston facility before the waste was received indicated that the waste was not TSCA regulated. The waste profile specified that waste contained less than 50 ppm PCB and the analysis submitted with the waste profile indicated that PCBs were below laboratory detection limits. During the review of the Annual PCB Summary Report, a SET program manager determined that the PCB analysis reported in ug/kg were incorrectly converted to ppm and the wrong analysis was submitted with the waste profile to the SET Houston facility.

The incident report was sent to USET on July 29, 2019 and includes the detailed investigation findings and corrective actions, please see Appendix 1. USET immediately notified TCEQ-Region 14 (Stephanie Lichtblau) on July 29, 2019 and began removal of the material from the landfill on July 30, 2019. USET completed the removal actions on August 2, 2019. The removed

material was then placed into two-rolloff boxes and taken offsite for incineration to Veolia (Port Arthur, TX 77640) on September 18, 2019.

If you have any questions or need additional information regarding this incident, please contact me via email at [celina.camarena@usecology.com](mailto:celina.camarena@usecology.com) or by phone at 361-387-3518 ext. 2223.

Sincerely,



Celina Camarena, Ph.D.  
Environmental, Health and Safety Manager

cc: Mr. Srinath Venkat, P.E.

Industrial and Hazardous Waste Permits Section  
Texas Commission on Environmental Quality  
12100 Park 35 Circle, MC-130  
Austin, Texas 78573

# APPENDIX 1

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**SET Environmental, Inc.  
Root-Cause Analysis Report**

**SET Environmental, Inc.**  
**Root Cause Analysis Report**

**Incident Number:** 2019-1327

**Date of Incident:** September 28, 2018

**Description:** A 55-gallon drum of waste liquids containing 116 ppm PCB-1254 was incorrectly transported to and disposed at the US Ecology Texas Landfill, Robstown, TX as non-TSCA regulated waste.

**Prepared by:** Stevan Pavlovich, CSP, CHMM Director, HSE

**Approved by:** Joel Taming, President

**Date Approved:** July 29, 2019

**Investigation Participants:** Stevan Pavlovich, Kevin Kiefer, Nate Bartley

**Executive Summary:**

On Friday, September 28, 2018, a 55-gallon drum containing 226 kilograms of PCB-contaminated liquids was incorrectly transported from the SET Environmental, Inc. treatment, storage and disposal facility in Houston TX (SET TSDF) to the US Ecology hazardous waste landfill in Robstown TX as non-regulated waste where the waste was treated and disposed.

The drum was originally generated by the North Shore Gas Company, Libertyville, IL and SET Environmental, Inc. (SET) was contracted to transport and dispose of the waste. A sample was taken from the drum on June 6, 2018 and analysis of the sample completed on June 21, 2018. The analytical results report the sample as containing 116000 µg/kg (116 ppm) of PCB-1254 (Arochlor 1254).

An error was made by an SET Account Manager in converting the units from µg/kg, as reported on the analytical report, to ppm. This error contributed to an incorrect waste determination being made and this documented on the waste profile which describes the waste as containing < 50 ppm PCB. An additional error was made by an SET customer services representative who mistakenly attached the analytical results associated with another waste container at the same site which contained no detectable concentration of PCBs.

The waste profile and incorrect analytical report were submitted to the SET TSDF Approvals Coordinator who approved the waste for acceptance at the SET TSDF.

The waste drum was transported to the SET TSDF and received on 8/22/18. The drum was then stored at the SET TSDF until 9/27/18 when it was shipped to the US Ecology landfill for disposal.

On June 11, 2019, during review of the Annual PCB Summary Report for North Shore Gas Company, an SET program manager recognized that this report included an entry for waste shipped to the SET TSDF on 8/17/18. Follow up investigation after this review ultimately led to the discovery that one drum containing 116 ppm PCBs had been shipped to the Houston TSDF.

#### **Detailed Description and Timeline of Events:**

On June 1, 2018, SET received a request from WEC Energy Group (WEC), to collect samples for the purpose of disposing of several 55-gallon drums of waste located at North Shore Gas Company, 2101 W. Peterson Road, Libertyville, IL 60048.

North Shore Gas is a subsidiary of WEC which delivers natural gas to customers in Chicago's northern suburbs. Regulated levels of PCB contamination have previously been detected in the North Shore Gas (NSG) distribution system. The source of the PCB contamination is believed to be from PCB-containing lubricants that were used at one time in the propane injection system air compressors at the Peterson Road facility. This equipment was removed from the facility in 2017 during remediation and decommissioning of the affected engines. It is believed that the remaining source of PCB's at this facility, that were detected during analysis of waste drums, is associated with residual amounts present in piping or other similar equipment. There are no other known sources as defined in the EPA PCB regulations (e.g. scrubbers or filter separators that would accumulate PCB liquid) installed in the North Shore Gas distribution system.

On June 6, 2018, an SET Account Manager travelled to the site and sampled three, 55-gallon drums containing liquids. The drums were assigned and marked with the numbers 1, 2 and 3, respectfully. Both drum number 1 and drum number 2 had been previously labeled by the generator with a "Used Oil" and "Nonhazardous Waste" label. Drum Number 3 had been previously marked and labeled by the generator as containing "Antifreeze and Glycol" and a "Universal Waste" label was affixed to the drum.

A chain of custody form was created by the SET Account Manager and sample numbers were assigned on the chain of custody form as: "NSG Peterson Rd #1", "NSG Peterson Rd #2, and "NSG Peterson Rd #3" to correspond with the three drums (1, 2, and 3). The chain of custody and the three samples were then shipped to Pace Analytical Services, LLC (Pace) in Minneapolis, MN for analysis for PCB Oil.

The samples were received by Pace on 6/16/18 and analysis of the samples was completed on 6/21/18. The sample results, recorded on the "Pace Project No. 40170981" report (*Attachment*

A.), were provided to a WEC Senior Environmental Consultant (representative) and the SET Account Manager on 6/25/18.

Analytical results recorded on this report specify that:

Sample "NSG Peterson Rd #2" contains 10700 µg/kg of PCB-1254 (Arochlor 1254),

Sample "NSG Peterson Rd #3" contains 116000 µg/kg of PCB-1254 (Arochlor 1254) and,

Sample "NSG Peterson Rd #1" contains no PCB's at the limit of detection.

The WEC representative submitted an email to the SET Account Representative the same day indicating that 2 of the three drums contained greater than 10 ppm PCB's.

The SET Account Manager reviewed the analytical report and correctly converted the results for sample "NSG Peterson Rd #2" from 10700 µg/kg to 10.7 ppm. However, he incorrectly converted the results of sample NSG Peterson Rd #3" from 116000 µg/kg to 11.6 ppm. On 6/27/18 the Account Manager forwarded an email to his designated SET customer services representative (CSR) with a summary of the results for all three drums including the notation "Sample 3 55-gallon drum of used antifreeze – PCB at 11.6 ppm."

On 7/19/18, the same SET Account Manager returned to the North Shore Gas Site in Libertyville, IL to collect an additional sample from one, 55-gallon drum containing used oil. The Account Manager assigned and marked this container as # 5 and a corresponding sample Identification number was assigned and recorded on the chain of custody as "Peterson Rd Oil #5." This sample was delivered to the same Pace laboratory to test for the presence of PCB oils and the results documented on the "Pace Project No. 40173016" report (*Attachment B*).

This report, which specified that no PCB's were present at the detection limit, was provided by Pace to a WEC representative on 7/30/18 and then forwarded to the SET CSR on 7/31/18.

On 8/01/18 the SET CSR submitted a request to the SET Profile Coordinator to determine if the SET TSDF, located in Houston, TX (USEPA ID number TXD055135388) could accept "low level PCB's in oily water and antifreeze." The email request included the description that Sample 2 represented a 55-gallon drum containing oily water containing PCB's at 10.7 ppm and that Sample 3 represented a 55-gallon drum of used antifreeze containing PCB's at 11.6 ppm. A copy of the "Pace Project No. 40170981" analytical report was also submitted to the profile coordinator. After requesting additional information regarding the process generating the waste and verification that the PCB's were not from a TSCA source, the SET Profile Coordinator created SET Profile number 134458 (*Attachment C*) on 8/7/18 to request acceptance of the two waste drums at the SET TSDF. The SET profile describes the waste name as "Oily water /

Antifreeze, non-TSCA PCB” and, in the Waste Composition section of the profile, lists PCB concentration at < 50 ppm.

On 8/20/18, the SET CSR submitted SET Profile 134458 to the WEC representative for signature. However, the CSR mistakenly attached the “Pace Project No. 40173016” laboratory report that listed the results for the “Peterson Rd Oil #5” sample that was obtained from Drum #5. The signed profile and incorrect analytical report were then submitted by the SET CSR to the SET TSDF Approvals Coordinator who approved the waste for acceptance at the SET Houston TSDF.

The waste drums were removed by an SET Chicago division driver on 8/17/18 and transported to the SET Houston TSDF where they were accepted on 8/22/18. Uniform Hazardous Waste Manifest number 017176269 JJK (*Attachment D*) was used as the tracking and shipping document for the waste shipment.

The drums were stored at the SET Houston TSDF until 9/28/18 on which date they were transported to US Ecology Landfill for disposal. Uniform Hazardous Waste Manifest number 019420893 JJK (*Attachment E*) was used as the tracking and shipping document for the waste shipment from the SET Houston TSDF to the US Ecology Landfill for disposal.

On June 11, 2019, during review of the Annual PCB Report Summary prepared for North Shore Gas Company, an SET Program Manager discovered this report included an entry for waste shipped to the SET TSDF on 8/17/18. The annual summary had been generated by SET to assist North Shore Gas (WEC) in meeting its annual recordkeeping and reporting requirements as specified in 40 CFR 761.180, Subpart J.

Follow up investigation from this review ultimately led to the discovery that one of the drums shipped to the Houston TSDF contained 116 ppm PCB’s and that the total weight of material shipped in the drums was 226 kg.

Following this discovery, notification was made to officials at the Houston TSDF, US Ecology and to WEC Energy Group on July 18, 2019.

### **Causal Analysis:**

#### Direct Causes

1. Human performance errors by SET Account Manager and Profile Coordinator in evaluating analytical results and correctly converting units from  $\mu\text{g}/\text{kg}$  to ppm.

In reviewing the analytical results provided on the “Pace Project No. 40170981” report, the SET Account Manager, mistakenly converted the units for sample “NSG Peterson Rd #3” from 116000  $\mu\text{g}/\text{kg}$  of PCB-1254 to 11.6 ppm. The Account Manager correctly

converted the results reported for “NSG Peterson Rd #2” sample from 10700 µg/kg of PCB-1254 to 10.7 PPM.

When questioned, the Account Manager stated he understands how to convert units between µg/kg and ppm and was able to demonstrate the correct conversion of units.

The Account Manager distributed an email to the SET CSR stating the results for “Sample 3” as 11.6 ppm PCB’s which was then communicated to the SET Profile Coordinator. The Profile Coordinator is responsible for characterizing wastes in accordance with applicable regulations and completing waste profiles for disposal facilities on behalf of SET clients. Although, the Profile Coordinator had the correct analytical report, she failed to recognize that the results for sample number “NSG Peterson Rd #3”, reported at 116000 µg/kg of PCB-1254, would, after conversion of units, indicate a concentration of 116 ppm and not 11.6 ppm as stated on the email received from the SET CSR.

The Approvals Coordinator has extensive knowledge and experience in reviewing analytical reports and characterizing wastes on behalf of SET clients. It appears this human performance error was not due to a lack of knowledge.

2. Human performance error by SET Customer Service Representative when attaching the incorrect analytical report.

After receiving the completed SET profile 134458 from the SET Approvals Coordinator, the SET Customer Services Representative mistakenly submitted an incorrect analytical report (Pace Project 40173016), in association with the waste profile, to the WEC representative for signature. Additionally, both the signed profile and incorrect analysis was submitted to the SET TSDF Approvals Coordinator. As a result, the Approvals Coordinator received a profile that incorrectly listed the waste name as “Oily water / Antifreeze, non-TSCA PCB” and listed the PCB concentration of the waste at < 50 ppm as well as an analytical report that specified no detectable levels of PCB’s.

Based on the information listed on the profile and analytical report, the waste was approved for acceptance at the SET TSDF as a non-TSCA regulated waste.

## Contributing Factors

1. Characterizing waste for regulatory requirements required conversion of units  
While regulatory requirements for disposal of PCB's are expressed in parts per million (ppm), the analytical report expressed the results of the PCB analysis in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). This required a conversion of units to milligrams per kilogram ( $\text{mg}/\text{kg}$ ) which is equal to ppm. If the analytical report had expressed the PCB concentrations in ppm, conversion of units would not have been required and the likelihood of errors in classifying the waste for disposal would have been significantly reduced.
2. Communication of incorrect results by Account Manager and CSR  
The Profile Coordinator assumed that the PCB concentration of 11.6, specified in the email correspondence from the CSR, for "Sample 3" was correct.

## Root Cause

1. Inadequate safeguards to correct errors during waste characterization and profiling  
The current process used by SET to characterize waste streams in accordance with regulatory requirements and complete accurate waste profiles includes provisions to assure quality. Included among these are:
  - Limiting the role of waste characterization and profile creation to qualified individuals dedicated to this task and;
  - In the case of waste streams shipped to the SET TSDF, having an Approvals Coordinator, independent of the waste characterization role, who verifies information provided on waste profiles, analytical reports and other sources of information.

In this incident, due to the errors made by the Account Manager, Profile Coordinator and Customer Services Representative, the SET TSDF Approvals Coordinator received an inaccurate waste profile and the wrong analytical report which eliminated the possibility of recognizing the discrepancy which existed between the profile and correct analytical report.

Investigation of this incident discovered some significant findings, related to the waste characterization and profile creation process, which include:

- a. The waste profile does not include a reference to the associated analytical reports. Having a reference on the profile, or associated document, to the analytical report number could provide an additional quality assurance safeguard.
- b. The CSR, after receiving the signed profile, submitted the profile and wrong analysis directly to the Approvals Coordinator. The preferred practice, during SET's waste approval process, is for the signed profile to be submitted back to the Profile Coordinator who then submits the signed profile, analysis and other supporting documentation to the Approvals Coordinator. Had this occurred, it is less likely that the incorrect analysis would have being submitted to the Approvals Coordinator.

**Corrective Actions:**

SET is currently in the late stages of development of an updated waste tracking management system that will be used in association with SET's TSDf and all third party TSDf. This upgrade will offer significantly improved quality assurance features and support to personnel tasked with characterization of waste streams and creation of waste profiles, manifests, and labels. Preliminary testing of the new software is scheduled to begin in August 2019 and a company-wide roll out is planned for January 1, 2020.

The following are some of the features of the revised program to help eliminate errors during characterization of waste streams and creation of profiles:

1. Defined user roles are established that limit system access to qualified staff who are authorized to characterize waste and create waste profiles.
2. The system will require that results for key analytes (including PCB, RCRA metals, etc.) must be entered into the waste profile section as they appear on the analytical report. Programming will automatically convert units for comparison with regulatory levels.
3. An enhanced attachments tab has been developed that allows for multiple documents (analytical results, correspondence, signed documents) to be uploaded for review/approval at the time of profile creation.

4. Newly created Analytical tab has been created which will require, for all waste streams, the entry of the laboratory report number, sample ID number and chain of custody number, when an analytical report has been submitted as part of waste characterization.
5. The creation of a new SET profile document which includes a section that identifies the analytical report numbers associated with the waste stream to alert the generator and the Approval Coordinator.

### List of Attachments

Attachment A	Pace Project No. 40170981 Analytical Results
Attachment B	Pace Project No. 40173016 Analytical Results
Attachment C	SET Profile Number 134458
Attachment D	Uniform Hazardous Waste Number 017176269 JJK
Attachment E	Uniform Hazardous Waste Number 019420893 JJK



July 29, 2019

Texas Commission on Environmental Quality  
Industrial and Hazardous Waste Permits Section, MC130  
Waste Permits Division  
P.O. Box 13087  
Austin, Texas 78711-3087  
Attn: Mr. Michael Pimentel

Re: Improper Disposal of PCB Contaminated Waste  
Industrial and Solid Waste Registration No. 50267  
Hazardous Waste Permit No. 50267  
EPA ID No. TXD055135388  
CN600360200; RN100607126

Dear Mr. Pimentel,

On September 28, 2018, the SET Environmental Houston facility forwarded, what was believed to be, one 55-gallon drum of non-hazardous waste to US Ecology in Robstown Texas. The SET Houston facility was subsequently notified that the drum apparently contained 116 ppm PCBs.

The SET Environmental Houston facility was notified of this incident in writing today. The notification that includes detailed investigation findings and corrective actions is attached.

In summary, documents submitted to the SET Houston facility before the waste was received indicated that the waste was not TSCA regulated. The waste profile specified that waste contained less than 50 ppm PCB (Attachment C of Incident Investigation) and the analysis submitted with the waste profile indicated that PCBs were below laboratory detection limits (Attachment B of Incident Investigation).

The investigation determined that the PCB analysis reported in ug/kg were incorrectly converted to ppm and the wrong analysis was submitted with the waste profile to the SET Houston facility.

The investigation report was sent to US Ecology and the generator of the waste today. US Ecology intends to notify the TCEQ and the generator stated that they intend on notifying the USEPA.

If you have any questions regarding this incident, please feel free to contact me at your convenience [ddidier@setenv.com](mailto:ddidier@setenv.com).

Sincerely,

A handwritten signature in black ink that reads "Daniel A. Didier". The signature is written in a cursive style.

Daniel A. Didier, CHMM  
Compliance Director  
SET Environmental, Inc

cc: Ms. Nicole Bealle, Program Manager, Industrial and Hazardous Waste, TCEQ - Region 12

***Integrity • Innovation • Excellence***

5738 Cheswood Street · Houston, Texas 77087 · (713) 645-8710 (800) 598-7328 · FAX (713) 649-1027  
Visit our website @ [www.setenv.com](http://www.setenv.com)



July 29, 2019

Texas Natural Resource Conservation Commission, Region 12  
Industrial and Hazardous Waste  
5425 Polk Avenue, Suite H  
Houston, Texas 77023-1486  
Attn: Ms. Nicole Bealle

Re: Improper Disposal of PCB Contaminated Waste  
Industrial and Solid Waste Registration No. 50267  
Hazardous Waste Permit No. 50267  
EPA ID No. TXD055135388  
CN600360200; RN100607126

Dear Nicole,

Please see attached notification to our Permit Writer in Austin regarding the improper disposal of TSCA regulated PCB waste at US Ecology in Robstown, TX.

On September 28, 2018, the SET Environmental Houston facility forwarded, what was believed to be, one 55-gallon drum of non-hazardous waste to US Ecology in Robstown Texas. The SET Houston facility was subsequently notified that the drum apparently contained 116 ppm PCBs.

In summary, documents submitted to the SET Houston facility before the waste was received indicated that the waste was not TSCA regulated. The waste profile specified that waste contained less than 50 ppm PCB (Attachment C of Incident Investigation) and the analysis submitted with the waste profile indicated that PCBs were below laboratory detection limits (Attachment B of Incident Investigation).

The investigation determined that the PCB analysis reported in ug/kg were incorrectly converted to ppm and the wrong analysis was submitted with the waste profile to the SET Houston facility.

If you have any questions regarding this incident, please feel free to contact me at your convenience [ddidier@setenv.com](mailto:ddidier@setenv.com).

Sincerely,

A handwritten signature in black ink that reads "Daniel A. Didier". The signature is written in a cursive style with a large initial "D".

Daniel A. Didier, CHMM

Compliance Director

***Integrity • Innovation • Excellence***

5738 Cheswood Street · Houston, Texas 77087 · (713) 645-8710 (800) 598-7328 · FAX (713) 649-1027  
Visit our website @ [www.setenv.com](http://www.setenv.com)

**SET Environmental, Inc.**  
**Root Cause Analysis Report**

**Incident Number:** 2019-1327

**Date of Incident:** September 28, 2018

**Description:** A 55-gallon drum of waste liquids containing 116 ppm PCB-1254 was incorrectly transported to and disposed at the US Ecology Texas Landfill, Robstown, TX as non-TSCA regulated waste.

**Prepared by:** Stevan Pavlovich, CSP, CHMM Director, HSE

**Approved by:** Joel Tameling, President

**Date Approved:** July 29, 2019

**Investigation Participants:** Stevan Pavlovich, Kevin Kiefer, Nate Bartley

**Executive Summary:**

On Friday, September 28, 2018, a 55-gallon drum containing 226 kilograms of PCB-contaminated liquids was incorrectly transported from the SET Environmental, Inc. treatment, storage and disposal facility in Houston TX (SET TSDF) to the US Ecology hazardous waste landfill in Robstown TX as non-regulated waste where the waste was treated and disposed.

The drum was originally generated by the North Shore Gas Company, Libertyville, IL and SET Environmental, Inc. (SET) was contracted to transport and dispose of the waste. A sample was taken from the drum on June 6, 2018 and analysis of the sample completed on June 21, 2018. The analytical results report the sample as containing 116000 µg/kg (116 ppm) of PCB-1254 (Arochlor 1254).

An error was made by an SET Account Manager in converting the units from µg/kg, as reported on the analytical report, to ppm. This error contributed to an incorrect waste determination being made and this documented on the waste profile which describes the waste as containing < 50 ppm PCB. An additional error was made by an SET customer services representative who mistakenly attached the analytical results associated with another waste container at the same site which contained no detectable concentration of PCBs.

The waste profile and incorrect analytical report were submitted to the SET TSDF Approvals Coordinator who approved the waste for acceptance at the SET TSDF.

The waste drum was transported to the SET TSDF and received on 8/22/18. The drum was then stored at the SET TSDF until 9/27/18 when it was shipped to the US Ecology landfill for disposal.

On June 11, 2019, during review of the Annual PCB Summary Report for North Shore Gas Company, an SET program manager recognized that this report included an entry for waste shipped to the SET TSDF on 8/17/18. Follow up investigation after this review ultimately led to the discovery that one drum containing 116 ppm PCBs had been shipped to the Houston TSDF.

#### **Detailed Description and Timeline of Events:**

On June 1, 2018, SET received a request from WEC Energy Group (WEC), to collect samples for the purpose of disposing of several 55-gallon drums of waste located at North Shore Gas Company, 2101 W. Peterson Road, Libertyville, IL 60048.

North Shore Gas is a subsidiary of WEC which delivers natural gas to customers in Chicago's northern suburbs. Regulated levels of PCB contamination have previously been detected in the North Shore Gas (NSG) distribution system. The source of the PCB contamination is believed to be from PCB-containing lubricants that were used at one time in the propane injection system air compressors at the Peterson Road facility. This equipment was removed from the facility in 2017 during remediation and decommissioning of the affected engines. It is believed that the remaining source of PCB's at this facility, that were detected during analysis of waste drums, is associated with residual amounts present in piping or other similar equipment. There are no other known sources as defined in the EPA PCB regulations (e.g. scrubbers or filter separators that would accumulate PCB liquid) installed in the North Shore Gas distribution system.

On June 6, 2018, an SET Account Manager travelled to the site and sampled three, 55-gallon drums containing liquids. The drums were assigned and marked with the numbers 1, 2 and 3, respectfully. Both drum number 1 and drum number 2 had been previously labeled by the generator with a "Used Oil" and "Nonhazardous Waste" label. Drum Number 3 had been previously marked and labeled by the generator as containing "Antifreeze and Glycol" and a "Universal Waste" label was affixed to the drum.

A chain of custody form was created by the SET Account Manager and sample numbers were assigned on the chain of custody form as: "NSG Peterson Rd #1", "NSG Peterson Rd #2, and "NSG Peterson Rd #3" to correspond with the three drums (1, 2, and 3). The chain of custody and the three samples were then shipped to Pace Analytical Services, LLC (Pace) in Minneapolis, MN for analysis for PCB Oil.

The samples were received by Pace on 6/16/18 and analysis of the samples was completed on 6/21/18. The sample results, recorded on the "Pace Project No. 40170981" report (*Attachment*

A.), were provided to a WEC Senior Environmental Consultant (representative) and the SET Account Manager on 6/25/18.

Analytical results recorded on this report specify that:

Sample "NSG Peterson Rd #2" contains 10700 µg/kg of PCB-1254 (Arochlor 1254),

Sample "NSG Peterson Rd #3" contains 116000 µg/kg of PCB-1254 (Arochlor 1254) and,

Sample "NSG Peterson Rd #1" contains no PCB's at the limit of detection.

The WEC representative submitted an email to the SET Account Representative the same day indicating that 2 of the three drums contained greater than 10 ppm PCB's.

The SET Account Manager reviewed the analytical report and correctly converted the results for sample "NSG Peterson Rd #2" from 10700 µg/kg to 10.7 ppm. However, he incorrectly converted the results of sample "NSG Peterson Rd #3" from 116000 µg/kg to 11.6 ppm. On 6/27/18 the Account Manager forwarded an email to his designated SET customer services representative (CSR) with a summary of the results for all three drums including the notation "Sample 3 55-gallon drum of used antifreeze – PCB at 11.6 ppm."

On 7/19/18, the same SET Account Manager returned to the North Shore Gas Site in Libertyville, IL to collect an additional sample from one, 55-gallon drum containing used oil. The Account Manager assigned and marked this container as # 5 and a corresponding sample Identification number was assigned and recorded on the chain of custody as "Peterson Rd Oil #5." This sample was delivered to the same Pace laboratory to test for the presence of PCB oils and the results documented on the "Pace Project No. 40173016" report (*Attachment B*).

This report, which specified that no PCB's were present at the detection limit, was provided by Pace to a WEC representative on 7/30/18 and then forwarded to the SET CSR on 7/31/18.

On 8/01/18 the SET CSR submitted a request to the SET Profile Coordinator to determine if the SET TSDF, located in Houston, TX (USEPA ID number TXD055135388) could accept "low level PCB's in oily water and antifreeze." The email request included the description that Sample 2 represented a 55-gallon drum containing oily water containing PCB's at 10.7 ppm and that Sample 3 represented a 55-gallon drum of used antifreeze containing PCB's at 11.6 ppm. A copy of the "Pace Project No. 40170981" analytical report was also submitted to the profile coordinator. After requesting additional information regarding the process generating the waste and verification that the PCB's were not from a TSCA source, the SET Profile Coordinator created SET Profile number 134458 (*Attachment C*) on 8/7/18 to request acceptance of the two waste drums at the SET TSDF. The SET profile describes the waste name as "Oily water /

Antifreeze, non-TSCA PCB” and, in the Waste Composition section of the profile, lists PCB concentration at < 50 ppm.

On 8/20/18, the SET CSR submitted SET Profile 134458 to the WEC representative for signature. However, the CSR mistakenly attached the “Pace Project No. 40173016” laboratory report that listed the results for the “Peterson Rd Oil #5” sample that was obtained from Drum #5. The signed profile and incorrect analytical report were then submitted by the SET CSR to the SET TSDF Approvals Coordinator who approved the waste for acceptance at the SET Houston TSDF.

The waste drums were removed by an SET Chicago division driver on 8/17/18 and transported to the SET Houston TSDF where they were accepted on 8/22/18. Uniform Hazardous Waste Manifest number 017176269 JJK (*Attachment D*) was used as the tracking and shipping document for the waste shipment.

The drums were stored at the SET Houston TSDF until 9/28/18 on which date they were transported to US Ecology Landfill for disposal. Uniform Hazardous Waste Manifest number 019420893 JJK (*Attachment E*) was used as the tracking and shipping document for the waste shipment from the SET Houston TSDF to the US Ecology Landfill for disposal.

On June 11, 2019, during review of the Annual PCB Report Summary prepared for North Shore Gas Company, an SET Program Manager discovered this report included an entry for waste shipped to the SET TSDF on 8/17/18. The annual summary had been generated by SET to assist North Shore Gas (WEC) in meeting its annual recordkeeping and reporting requirements as specified in 40 CFR 761.180, Subpart J.

Follow up investigation from this review ultimately led to the discovery that one of the drums shipped to the Houston TSDF contained 116 ppm PCB’s and that the total weight of material shipped in the drums was 226 kg.

Following this discovery, notification was made to officials at the Houston TSDF, US Ecology and to WEC Energy Group on July 18, 2019.

## **Causal Analysis:**

### Direct Causes

1. Human performance errors by SET Account Manager and Profile Coordinator in evaluating analytical results and correctly converting units from µg/kg to ppm.

In reviewing the analytical results provided on the “Pace Project No. 40170981” report, the SET Account Manager, mistakenly converted the units for sample “NSG Peterson Rd #3” from 116000 µg/kg of PCB-1254 to 11.6 ppm. The Account Manager correctly

converted the results reported for “NSG Peterson Rd #2” sample from 10700 µg/kg of PCB-1254 to 10.7 PPM.

When questioned, the Account Manager stated he understands how to convert units between µg/kg and ppm and was able to demonstrate the correct conversion of units.

The Account Manager distributed an email to the SET CSR stating the results for “Sample 3” as 11.6 ppm PCB’s which was then communicated to the SET Profile Coordinator. The Profile Coordinator is responsible for characterizing wastes in accordance with applicable regulations and completing waste profiles for disposal facilities on behalf of SET clients. Although, the Profile Coordinator had the correct analytical report, she failed to recognize that the results for sample number “NSG Peterson Rd #3”, reported at 116000 µg/kg of PCB-1254, would, after conversion of units, indicate a concentration of 116 ppm and not 11.6 ppm as stated on the email received from the SET CSR.

The Approvals Coordinator has extensive knowledge and experience in reviewing analytical reports and characterizing wastes on behalf of SET clients. It appears this human performance error was not due to a lack of knowledge.

2. Human performance error by SET Customer Service Representative when attaching the incorrect analytical report.

After receiving the completed SET profile 134458 from the SET Approvals Coordinator, the SET Customer Services Representative mistakenly submitted an incorrect analytical report (Pace Project 40173016), in association with the waste profile, to the WEC representative for signature. Additionally, both the signed profile and incorrect analysis was submitted to the SET TSDF Approvals Coordinator. As a result, the Approvals Coordinator received a profile that incorrectly listed the waste name as “Oily water / Antifreeze, non-TSCA PCB” and listed the PCB concentration of the waste at < 50 ppm as well as an analytical report that specified no detectable levels of PCB’s.

Based on the information listed on the profile and analytical report, the waste was approved for acceptance at the SET TSDF as a non-TSCA regulated waste.

## Contributing Factors

1. Characterizing waste for regulatory requirements required conversion of units  
While regulatory requirements for disposal of PCB's are expressed in parts per million (ppm), the analytical report expressed the results of the PCB analysis in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). This required a conversion of units to milligrams per kilogram ( $\text{mg}/\text{kg}$ ) which is equal to ppm. If the analytical report had expressed the PCB concentrations in ppm, conversion of units would not have been required and the likelihood of errors in classifying the waste for disposal would have been significantly reduced.
2. Communication of incorrect results by Account Manager and CSR  
The Profile Coordinator assumed that the PCB concentration of 11.6, specified in the email correspondence from the CSR, for "Sample 3" was correct.

## Root Cause

1. Inadequate safeguards to correct errors during waste characterization and profiling  
The current process used by SET to characterize waste streams in accordance with regulatory requirements and complete accurate waste profiles includes provisions to assure quality. Included among these are:
  - Limiting the role of waste characterization and profile creation to qualified individuals dedicated to this task and;
  - In the case of waste streams shipped to the SET TSDF, having an Approvals Coordinator, independent of the waste characterization role, who verifies information provided on waste profiles, analytical reports and other sources of information.

In this incident, due to the errors made by the Account Manager, Profile Coordinator and Customer Services Representative, the SET TSDF Approvals Coordinator received an inaccurate waste profile and the wrong analytical report which eliminated the possibility of recognizing the discrepancy which existed between the profile and correct analytical report.

Investigation of this incident discovered some significant findings, related to the waste characterization and profile creation process, which include:

- a. The waste profile does not include a reference to the associated analytical reports. Having a reference on the profile, or associated document, to the analytical report number could provide an additional quality assurance safeguard.
- b. The CSR, after receiving the signed profile, submitted the profile and wrong analysis directly to the Approvals Coordinator. The preferred practice, during SET's waste approval process, is for the signed profile to be submitted back to the Profile Coordinator who then submits the signed profile, analysis and other supporting documentation to the Approvals Coordinator. Had this occurred, it is less likely that the incorrect analysis would have been submitted to the Approvals Coordinator.

**Corrective Actions:**

SET is currently in the late stages of development of an updated waste tracking management system that will be used in association with SET's TSDf and all third party TSDf's. This upgrade will offer significantly improved quality assurance features and support to personnel tasked with characterization of waste streams and creation of waste profiles, manifests, and labels. Preliminary testing of the new software is scheduled to begin in August 2019 and a company-wide roll out is planned for January 1, 2020.

The following are some of the features of the revised program to help eliminate errors during characterization of waste streams and creation of profiles:

1. Defined user roles are established that limit system access to qualified staff who are authorized to characterize waste and create waste profiles.
2. The system will require that results for key analytes (including PCB, RCRA metals, etc.) must be entered into the waste profile section as they appear on the analytical report. Programming will automatically convert units for comparison with regulatory levels.
3. An enhanced attachments tab has been developed that allows for multiple documents (analytical results, correspondence, signed documents) to be uploaded for review/approval at the time of profile creation.

4. Newly created Analytical tab has been created which will require, for all waste streams, the entry of the laboratory report number, sample ID number and chain of custody number, when an analytical report has been submitted as part of waste characterization.
5. The creation of a new SET profile document which includes a section that identifies the analytical report numbers associated with the waste stream to alert the generator and the Approval Coordinator.

### **List of Attachments**

Attachment A	Pace Project No. 40170981 Analytical Results
Attachment B	Pace Project No. 40173016 Analytical Results
Attachment C	SET Profile Number 134458
Attachment D	Uniform Hazardous Waste Number 017176269 JJK
Attachment E	Uniform Hazardous Waste Number 019420893 JJK

**Attachment A**

**Pace Project No. 40170981 Analytical Results**

June 25, 2018

Andi Gregg  
WEC Energy Group  
333 W. Everett St.  
Milwaukee, WI 53203

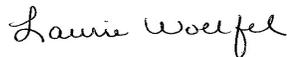
RE: Project: WE ENERGIES-NSG PETERSON RD  
Pace Project No.: 40170981

Dear Andi Gregg:

Enclosed are the analytical results for sample(s) received by the laboratory on June 16, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Laurie Woelfel  
laurie.woelfel@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Bob Nimmo, SET Environmental



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: WE ENERGIES-NSG PETERSON RD  
Pace Project No.: 40170981

---

### Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485  
A2LA Certification #: 2926.01  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014  
Arkansas Certification #: 88-0680  
California Certification #: 2929  
CNMI Saipan Certification #: MP0003  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605  
Georgia Certification #: 959  
Guam EPA Certification #: MN00064  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: 03086  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064  
Maryland Certification #: 322  
Massachusetts Certification #: M-MN064

Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137  
Mississippi Certification #: MN00064  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081  
New Jersey Certification #: MN002  
New York Certification #: 11647  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification #: CL101  
Oklahoma Certification #: 9507  
Oregon NwTPH Certification #: MN300001  
Oregon Secondary Certification #: MN200001  
Pennsylvania Certification #: 68-00563  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192  
Utah Certification #: MN00064  
Virginia Certification #: 460163  
Washington Certification #: C486  
West Virginia DW Certification #: 9952 C  
West Virginia DEP Certification #: 382  
Wisconsin Certification #: 999407970

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## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: WE ENERGIES-NSG PETERSON RD

Pace Project No.: 40170981

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40170981001	NSG PETERSON RD #1	Non Aqueous	06/06/18 10:00	06/16/18 09:20
40170981002	NSG PETERSON RD #2	Non Aqueous	06/06/18 10:05	06/16/18 09:20
40170981003	NSG PETERSON RD #3	Non Aqueous	06/06/18 10:10	06/16/18 09:20

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: WE ENERGIES-NSG PETERSON RD

Pace Project No.: 40170981

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40170981001	NSG PETERSON RD #1	EPA 8082A	SNG	12	PASI-M
40170981002	NSG PETERSON RD #2	EPA 8082A	SNG	12	PASI-M
40170981003	NSG PETERSON RD #3	EPA 8082A	SNG	12	PASI-M

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: WE ENERGIES-NSG PETERSON RD

Pace Project No.: 40170981

---

**Sample: NSG PETERSON RD #1**      **Lab ID: 40170981001**      Collected: 06/06/18 10:00      Received: 06/16/18 09:20      Matrix: Non Aqueous Liquid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB Oil</b>		Analytical Method: EPA 8082A    Preparation Method: EPA 3580							
PCB-1016 (Aroclor 1016)	<1980	ug/kg	6590	1980	1	06/20/18 08:49	06/21/18 09:50	12674-11-2	
PCB-1221 (Aroclor 1221)	<1820	ug/kg	6060	1820	1	06/20/18 08:49	06/21/18 09:50	11104-28-2	
PCB-1232 (Aroclor 1232)	<1760	ug/kg	5860	1760	1	06/20/18 08:49	06/21/18 09:50	11141-16-5	
PCB-1242 (Aroclor 1242)	<2030	ug/kg	6760	2030	1	06/20/18 08:49	06/21/18 09:50	53469-21-9	
PCB-1248 (Aroclor 1248)	<2850	ug/kg	9490	2850	1	06/20/18 08:49	06/21/18 09:50	12672-29-6	
PCB-1254 (Aroclor 1254)	<2850	ug/kg	9490	2850	1	06/20/18 08:49	06/21/18 09:50	11097-69-1	
PCB-1260 (Aroclor 1260)	<2120	ug/kg	7060	2120	1	06/20/18 08:49	06/21/18 09:50	11096-82-5	
PCB-1262 (Aroclor 1262)	<2580	ug/kg	8590	2580	1	06/20/18 08:49	06/21/18 09:50	37324-23-5	
PCB-1268 (Aroclor 1268)	<1960	ug/kg	6530	1960	1	06/20/18 08:49	06/21/18 09:50	11100-14-4	
PCB, Total	<1760	ug/kg	5860	1760	1	06/20/18 08:49	06/21/18 09:50	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	97	%	75-127		1	06/20/18 08:49	06/21/18 09:50	877-09-8	
Decachlorobiphenyl (S)	86	%	75-134		1	06/20/18 08:49	06/21/18 09:50	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: WE ENERGIES-NSG PETERSON RD

Pace Project No.: 40170981

**Sample: NSG PETERSON RD #2**      **Lab ID: 40170981002**      Collected: 06/06/18 10:05      Received: 06/16/18 09:20      Matrix: Non Aqueous Liquid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB Oil</b>		Analytical Method: EPA 8082A Preparation Method: EPA 3580							
PCB-1016 (Aroclor 1016)	<1980	ug/kg	6590	1980	1	06/20/18 08:49	06/21/18 11:22	12674-11-2	
PCB-1221 (Aroclor 1221)	<1820	ug/kg	6060	1820	1	06/20/18 08:49	06/21/18 11:22	11104-28-2	
PCB-1232 (Aroclor 1232)	<1760	ug/kg	5860	1760	1	06/20/18 08:49	06/21/18 11:22	11141-16-5	
PCB-1242 (Aroclor 1242)	<2030	ug/kg	6760	2030	1	06/20/18 08:49	06/21/18 11:22	53469-21-9	
PCB-1248 (Aroclor 1248)	<2850	ug/kg	9490	2850	1	06/20/18 08:49	06/21/18 11:22	12672-29-6	
PCB-1254 (Aroclor 1254)	10700	ug/kg	9490	2850	1	06/20/18 08:49	06/21/18 11:22	11097-69-1	
PCB-1260 (Aroclor 1260)	<2120	ug/kg	7060	2120	1	06/20/18 08:49	06/21/18 11:22	11096-82-5	
PCB-1262 (Aroclor 1262)	<2580	ug/kg	8590	2580	1	06/20/18 08:49	06/21/18 11:22	37324-23-5	
PCB-1268 (Aroclor 1268)	<1960	ug/kg	6530	1960	1	06/20/18 08:49	06/21/18 11:22	11100-14-4	
PCB, Total	10700	ug/kg	5860	1760	1	06/20/18 08:49	06/21/18 11:22	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	93	%	75-127		1	06/20/18 08:49	06/21/18 11:22	877-09-8	
Decachlorobiphenyl (S)	79	%	75-134		1	06/20/18 08:49	06/21/18 11:22	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: WE ENERGIES-NSG PETERSON RD

Pace Project No.: 40170981

**Sample: NSG PETERSON RD #3**      **Lab ID: 40170981003**      Collected: 06/06/18 10:10      Received: 06/16/18 09:20      Matrix: Non Aqueous Liquid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB Oil</b>		Analytical Method: EPA 8082A    Preparation Method: EPA 3580							
PCB-1016 (Aroclor 1016)	<9900	ug/kg	33000	9900	5	06/20/18 08:49	06/21/18 11:52	12674-11-2	
PCB-1221 (Aroclor 1221)	<9100	ug/kg	30300	9100	5	06/20/18 08:49	06/21/18 11:52	11104-28-2	
PCB-1232 (Aroclor 1232)	<8800	ug/kg	29300	8800	5	06/20/18 08:49	06/21/18 11:52	11141-16-5	
PCB-1242 (Aroclor 1242)	<10200	ug/kg	33800	10200	5	06/20/18 08:49	06/21/18 11:52	53469-21-9	
PCB-1248 (Aroclor 1248)	<14200	ug/kg	47500	14200	5	06/20/18 08:49	06/21/18 11:52	12672-29-6	
PCB-1254 (Aroclor 1254)	116000	ug/kg	47500	14200	5	06/20/18 08:49	06/21/18 11:52	11097-69-1	
PCB-1260 (Aroclor 1260)	<10600	ug/kg	35300	10600	5	06/20/18 08:49	06/21/18 11:52	11096-82-5	
PCB-1262 (Aroclor 1262)	<12900	ug/kg	43000	12900	5	06/20/18 08:49	06/21/18 11:52	37324-23-5	
PCB-1268 (Aroclor 1268)	<9800	ug/kg	32600	9800	5	06/20/18 08:49	06/21/18 11:52	11100-14-4	
PCB, Total	116000	ug/kg	29300	8800	5	06/20/18 08:49	06/21/18 11:52	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	98	%	75-127		5	06/20/18 08:49	06/21/18 11:52	877-09-8	D3
Decachlorobiphenyl (S)	87	%	75-134		5	06/20/18 08:49	06/21/18 11:52	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: WE ENERGIES-NSG PETERSON RD  
Pace Project No.: 40170981

QC Batch: 545787 Analysis Method: EPA 8082A  
QC Batch Method: EPA 3580 Analysis Description: 8082A GCS PCB Oil  
Associated Lab Samples: 40170981001, 40170981002, 40170981003

METHOD BLANK: 2967645 Matrix: Non Aqueous Liquid  
Associated Lab Samples: 40170981001, 40170981002, 40170981003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<1980	6590	06/21/18 08:49	
PCB-1221 (Aroclor 1221)	ug/kg	<1820	6060	06/21/18 08:49	
PCB-1232 (Aroclor 1232)	ug/kg	<1760	5860	06/21/18 08:49	
PCB-1242 (Aroclor 1242)	ug/kg	<2030	6760	06/21/18 08:49	
PCB-1248 (Aroclor 1248)	ug/kg	<2850	9490	06/21/18 08:49	
PCB-1254 (Aroclor 1254)	ug/kg	<2850	9490	06/21/18 08:49	
PCB-1260 (Aroclor 1260)	ug/kg	<2120	7060	06/21/18 08:49	
PCB-1262 (Aroclor 1262)	ug/kg	<2580	8590	06/21/18 08:49	
PCB-1268 (Aroclor 1268)	ug/kg	<1960	6530	06/21/18 08:49	
Decachlorobiphenyl (S)	%	96	75-134	06/21/18 08:49	
Tetrachloro-m-xylene (S)	%	106	75-127	06/21/18 08:49	

LABORATORY CONTROL SAMPLE: 2967646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	100000	92600	93	73-125	
PCB-1260 (Aroclor 1260)	ug/kg	100000	90900	91	75-132	
Decachlorobiphenyl (S)	%			101	75-134	
Tetrachloro-m-xylene (S)	%			109	75-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2967647 2967648

Parameter	Units	40170981001		2967648		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
PCB-1016 (Aroclor 1016)	ug/kg	<1980	100000	100000	93100	92700	93	93	48-150	0	30	
PCB-1260 (Aroclor 1260)	ug/kg	<2120	100000	100000	83100	82700	83	83	58-136	0	30	
Decachlorobiphenyl (S)	%						87	86	75-134			
Tetrachloro-m-xylene (S)	%						100	100	75-127			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: WE ENERGIES-NSG PETERSON RD  
Pace Project No.: 40170981

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: WE ENERGIES-NSG PETERSON RD  
Pace Project No.: 40170981

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40170981001	NSG PETERSON RD #1	EPA 3580	545787	EPA 8082A	545902
40170981002	NSG PETERSON RD #2	EPA 3580	545787	EPA 8082A	545902
40170981003	NSG PETERSON RD #3	EPA 3580	545787	EPA 8082A	545902

**REPORT OF LABORATORY ANALYSIS**

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# SET Environmental, Inc.

File

## Chain of Custody Record

40170981

450 Sunco Road, Wheeling, IL 60090

Ph: 847-537-9221 \* Fax: 847-537-9265

www.setenv.com

COC #: 33590

Analyses

Client: W/E Envelopes - NSG Peterson Rd  
 Address: 333 W Sunrise St.  
Millwaukee WI 53203  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
 P.O. #: \_\_\_\_\_ Proj #: \_\_\_\_\_  
 Client Contact: Andie Gregg  
 Sampler: Robert Nimmo

- Sample Type:**
- 1. Waste Water
  - 2. Drinking Water
  - 3. Soil
  - 4. Sludge
  - 5. Oil
  - 6. Groundwater
  - 7. Groundwater (filtered)
  - 8. Other Paint
- Container Type:**
- P-Plastic
  - G-Glass
  - V-VOC Vial
  - B-Tedlar Bag
  - O-Other \_\_\_\_\_
- Preservative:**
- 1. None
  - 2. H2SO4
  - 3. HNO3
  - 4. NaOH
  - 5. HCl
  - 6. MeOH
  - 7. On Ice
  - 8. Other \_\_\_\_\_

Sample I.D. / Drum Numbers	Sample Type	Container		Sampling				Preservation			
		Size	Type	No.	pH	Temp	Date	Time	Field	Lab	
NSG <del>4414</del> Peterson Rd # 1 4/14	5	1 qt	G	1	-	-	6/14	10:20	-	-	X
NSG Peterson Rd # 2 6/6/13	5	1 qt	G	1	-	-	6/6/13	10:25	-	-	X
NSG Peterson Rd # 3 6/6/12	8	1 qt	G	1	-	-	6/6/12	8:10	-	-	X
Relinquished By: _____	Date: <u>6/13</u>	Time: <u>11:30</u>	Received By: <u>Kathy Donald</u>	Date: <u>6/15/13</u>	Time: <u>11:15</u>						
Relinquished By: <u>Kathy Donald</u>	Date: <u>6/15/13</u>	Time: <u>6:17:00</u>	Received By: <u>CS Logistics</u>	Date: <u>6/15/13</u>	Time: _____						
Relinquished By: <u>CS Logistics</u>	Date: <u>6/16/13</u>	Time: <u>09:20</u>	Received By: <u>Paul Pace</u>	Date: <u>6/16/13</u>	Time: <u>09:20</u>						

**SPECIAL INSTRUCTIONS:**

Turnaround Time: \_\_\_\_\_

Rush (circle one)

Routine (5-10 days)

Due Date: \_\_\_\_\_

SET Contact: \_\_\_\_\_

Lab: \_\_\_\_\_

Robert Nimmo

Pace

Notes/Waste Generated: \_\_\_\_\_

Received On Ice  Yes  No

Temperature: \_\_\_\_\_ °C



**Sample Condition Upon Receipt Form (SCUR)**

Project #: \_\_\_\_\_

Client Name: We Energies

**WO#: 40170981**

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Walco  
 Client  Pace Other: \_\_\_\_\_



Tracking #: \_\_\_\_\_  
Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no  
Custody Seal on Samples Present:  yes  no Seals intact:  yes  no  
Packing Material:  Bubble Wrap  Bubble Bags  None  Other  
Thermometer Used SR - 76 Type of Ice:  Wet  Blue  Dry  None  
Cooler Temperature Uncorr: 2.5 Corr: 1

\_\_\_\_\_

Samples on ice, cooling process has begun

Temp Blank Present:  yes  no Biological Tissue is Frozen:  yes  no

Person examining contents:  
Date: 6/16/18  
Initials: \_\_\_\_\_

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>no collectrus</u>
-Includes date/time/ID/Analysis Matrix: <u>SOIL</u>		<u>6/16/18</u>
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: \_\_\_\_\_ If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: samples will be placed in free product fridge 6/16/18

Project Manager Review: OK Date: 6/18/18

**Attachment B**

**Pace Project No. 40173016 Analytical Results**

July 30, 2018

Andi Gregg  
WEC Energy Group  
333 W. Everett St.  
Milwaukee, WI 53203

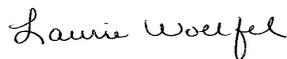
RE: Project: PETERSON RD  
Pace Project No.: 40173016

Dear Andi Gregg:

Enclosed are the analytical results for sample(s) received by the laboratory on July 25, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Laurie Woelfel  
laurie.woelfel@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Bob Nimmo, SET Environmental



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: PETERSON RD

Pace Project No.: 40173016

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### Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas DW Certification #: MN00064

Arkansas WW Certification #: 88-0680

California Certification #: 2929

CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-053-137

Florida Certification #: E87605

Georgia Certification #: 959

Guam EPA Certification #: MN00064

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky WW Certification #: 90062

Louisiana DEQ Certification #: 03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240

Mississippi Certification #: MN00064

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina WW Certification #: 530

North Dakota Certification #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001

Oregon Secondary Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification #: MN00064

South Carolina Certification #:74003001

Tennessee Certification #: TN02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia Certification #: 460163

Washington Certification #: C486

West Virginia DW Certification #: 9952 C

West Virginia DEP Certification #: 382

Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: PETERSON RD

Pace Project No.: 40173016

---

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40173016001	PETERSON RD OIL #5 7/19/18	Non Aqueous	07/19/18 10:00	07/25/18 09:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: PETERSON RD  
Pace Project No.: 40173016

---

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40173016001	PETERSON RD OIL #5 7/19/18	EPA 8082A	RAG	12	PASI-M

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: PETERSON RD

Pace Project No.: 40173016

**Sample:** PETERSON RD OIL #5      **Lab ID:** 40173016001      Collected: 07/19/18 10:00      Received: 07/25/18 09:50      Matrix: Non Aqueous Liquid  
7/19/18

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB Oil</b>									
Analytical Method: EPA 8082A    Preparation Method: EPA 3580									
PCB-1016 (Aroclor 1016)	<1980	ug/kg	6590	1980	1	07/27/18 10:19	07/27/18 17:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<1820	ug/kg	6060	1820	1	07/27/18 10:19	07/27/18 17:56	11104-28-2	
PCB-1232 (Aroclor 1232)	<1760	ug/kg	5860	1760	1	07/27/18 10:19	07/27/18 17:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<2030	ug/kg	6760	2030	1	07/27/18 10:19	07/27/18 17:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<2850	ug/kg	9490	2850	1	07/27/18 10:19	07/27/18 17:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<2850	ug/kg	9490	2850	1	07/27/18 10:19	07/27/18 17:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<2120	ug/kg	7060	2120	1	07/27/18 10:19	07/27/18 17:56	11096-82-5	
PCB-1262 (Aroclor 1262)	<2580	ug/kg	8590	2580	1	07/27/18 10:19	07/27/18 17:56	37324-23-5	
PCB-1268 (Aroclor 1268)	<1960	ug/kg	6530	1960	1	07/27/18 10:19	07/27/18 17:56	11100-14-4	
PCB, Total	<1760	ug/kg	5860	1760	1	07/27/18 10:19	07/27/18 17:56	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	91	%	75-127		1	07/27/18 10:19	07/27/18 17:56	877-09-8	
Decachlorobiphenyl (S)	82	%	75-134		1	07/27/18 10:19	07/27/18 17:56	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: PETERSON RD  
Pace Project No.: 40173016

QC Batch: 553109      Analysis Method: EPA 8082A  
QC Batch Method: EPA 3580      Analysis Description: 8082A GCS PCB Oil  
Associated Lab Samples: 40173016001

METHOD BLANK: 3004950      Matrix: Non Aqueous Liquid  
Associated Lab Samples: 40173016001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<1980	6590	07/27/18 16:55	
PCB-1221 (Aroclor 1221)	ug/kg	<1820	6060	07/27/18 16:55	
PCB-1232 (Aroclor 1232)	ug/kg	<1760	5860	07/27/18 16:55	
PCB-1242 (Aroclor 1242)	ug/kg	<2030	6760	07/27/18 16:55	
PCB-1248 (Aroclor 1248)	ug/kg	<2850	9490	07/27/18 16:55	
PCB-1254 (Aroclor 1254)	ug/kg	<2850	9490	07/27/18 16:55	
PCB-1260 (Aroclor 1260)	ug/kg	<2120	7060	07/27/18 16:55	
PCB-1262 (Aroclor 1262)	ug/kg	<2580	8590	07/27/18 16:55	
PCB-1268 (Aroclor 1268)	ug/kg	<1960	6530	07/27/18 16:55	
Decachlorobiphenyl (S)	%	92	75-134	07/27/18 16:55	
Tetrachloro-m-xylene (S)	%	97	75-127	07/27/18 16:55	

LABORATORY CONTROL SAMPLE: 3004951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	100000	87000	87	73-125	
PCB-1260 (Aroclor 1260)	ug/kg	100000	84300	84	75-132	
Decachlorobiphenyl (S)	%			97	75-134	
Tetrachloro-m-xylene (S)	%			102	75-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3004952      3004953

Parameter	Units	3004952		3004953		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40173016001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
PCB-1016 (Aroclor 1016)	ug/kg	<1980	100000	100000	97600	97200	98	97	48-150	0	30	
PCB-1260 (Aroclor 1260)	ug/kg	<2120	100000	100000	79000	81500	79	82	58-136	3	30	
Decachlorobiphenyl (S)	%						81	82	75-134			
Tetrachloro-m-xylene (S)	%						97	95	75-127			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: PETERSON RD

Pace Project No.: 40173016

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PETERSON RD

Pace Project No.: 40173016

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<b>Lab ID</b>	<b>Sample ID</b>	<b>QC Batch Method</b>	<b>QC Batch</b>	<b>Analytical Method</b>	<b>Analytical Batch</b>
40173016001	PETERSON RD OIL #5 7/19/18	EPA 3580	553109	EPA 8082A	553227

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### REPORT OF LABORATORY ANALYSIS

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# SFT Environmental, Inc.

skn

Chain of Custody Record

40173016

450 Sumac Road, Wheeling, IL 60090      Ph: 847-537-9221 \* Fax: 847-537-9265      www.setenv.com      COC #: 33703

Client: We Superics - Pcl Peterson Ed  
 Address: 335 W. Dwight - 413  
Milwaukee, WI 53223  
 Phone #: \_\_\_\_\_      Fax #: \_\_\_\_\_  
 P.O. #: \_\_\_\_\_      Proj #: \_\_\_\_\_  
 Client Contact: Anni Baagy / Robert Nimmo  
 Sampler: Robert Nimmo

**Sample Type:**  
 1. Waste Water      4. Sludge      7. Groundwater (filtered)  
 2. Drinking Water      5. Oil      8. Other \_\_\_\_\_  
 3. Soil      6. Groundwater

**Container Type:**  
 P-Plastic      V-VOC Vial      O-Other \_\_\_\_\_  
 G-Glass      B-Tedlar Bag

**Preservative:**  
 1. None      3. HNO3      5. HCl      7. On Ice  
 2. H2SO4      4. NaOH      6. MeOH      8. Other \_\_\_\_\_

**Analyses**

Sample I.D. / Dum Numbers	Sample Type	Container		Sampling				Preservation		Notes			
		Size	Type	No.	pH	Temp	Date	Time	Field		Ldb		
Peterson Ed 31 # 5	5	1 liter	G	1	-	-	7/19	10:30	-	-	X	PCB including 1262	001

Relinquished By: \_\_\_\_\_ Date: 7/20/18 Time: 12:30 Received By: KATHY WENDELL Date: 7/24/18 Time: 10:50  
 Relinquished By: \_\_\_\_\_ Date: 7/24/18 Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: 7/24/18 Time: \_\_\_\_\_  
 Relinquished By: KATHY WENDELL Date: 7/24/18 Time: 17:00 Received By: STIGISTICS Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: 7/25/18 Time: 09:50 Received By: \_\_\_\_\_ Date: 7/25/18 Time: 09:50

**SPECIAL INSTRUCTIONS:**

Turnaround Time: \_\_\_\_\_

SET Contact: \_\_\_\_\_

Lab: \_\_\_\_\_

Rush (circle one)  
 1    2    or    3    day TAT  
 Routine (5-10 days)  
 Due Date: 8-1-18

Robert Nimmo

date

**Notes/Waste Generated:**

Received On Ice  Yes     No  
 Temperature: 0.5 °C  
 Rev. May 2007



 1241 Bellevue Street, Green Bay, WI 54302	Document Name: <b>Sample Condition Upon Receipt (SCUR)</b>	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

Project #: \_\_\_\_\_

**WO#: 40173016**



40173016

**Client Name:** SET

**Courier:**  GS Logistics  Fed Ex  Speedee  UPS  Walto

Client  Pace Other: \_\_\_\_\_

**Tracking #:** \_\_\_\_\_

**Custody Seal on Cooler/Box Present:**  yes  no    **Seals intact:**  yes  no

**Custody Seal on Samples Present:**  yes  no    **Seals intact:**  yes  no

**Packing Material:**  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

**Thermometer Used:** SR - 50    **Type of Ice:** (Wet) Blue Dry None     Samples on ice, cooling process has begun

**Cooler Temperature:**    **Uncorr:** 0    **ICorr:** 0.5

**Temp Blank Present:**  yes  no    **Biological Tissue is Frozen:**  yes  no

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

**Person examining contents:**  
**Date:** 7/25/18  
**Initials:** IL

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>original copy</u>	<u>7/25/18 IL</u>
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.	
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:	
<b>Short Hold Time Analysis (&lt;72hr):</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.	
<b>Rush Turn Around Time Requested:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.	
Sufficient Volume:		8.	
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>no time</u>	<u>7/25/18 IL</u>
-Includes date/time/ID/Analysis    Matrix: <u>oil</u>			
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased): _____			

**Client Notification/ Resolution:** \_\_\_\_\_    If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_    Date/Time: \_\_\_\_\_

Comments/ Resolution: no sample will be located in free product fridge

7/25/18 IL 7/25/18 IL

**Project Manager Review:** \_\_\_\_\_ (IL)    **Date:** 7/25/18

**Attachment C**

**SET Profile Number 134458**



# SET PROFILE 134458

SET Number: **134458**

Name: **Oily water/Antifreeze, non-TSCA PCB**

Date Approved:

Sales Rep: **Bob Nimmo**

Contact Id: **Erik Ehrengren  
(414) 221-4778**

Cust Svc Rep: **Danielle Weiss**

Broker: **SET Env - Wheeling, IL  
450 Sumac Rd  
Wheeling, IL 60090-**

DOT Ship Name	<b>Non-DOT/RCRA Regulated</b>		
UN/NA:			
Hazard Class:		Packing Group:	
Rq: <input type="checkbox"/>		RQ Value:	

Qty containers: **2**

Frequency: **Once**

Process Desc: **Spent/used Draining of fluids from generator  
and cleaning of unit**

TSDf: **SET Environmental, Inc.**

Address: **5738 Cheswood Street, Houston, TX**

US EPA ID: **TXD055135388**

## Generators' Sites

Name	US EPA Id	St.Waste Cd	Site Address	TSDf Off Site Profile#
North Shore Gas Company	ILR000067751	OUTS2051	2101 W. Peterson Rd., North Shore Gas, Libertyville, IL 60048 T1	

Waste Composition		CAS #	% Average	% Low	% High
3	Water		95.0	50	95
2	Antifreeze		50.0	50	100
1	Oil		5.0	1	5
4	PCB <50ppm		0.0	0	0

Characteristic	Typical Value	LO Val	HI Val	UOM
COLOR	Varied			
LAYER	Homogenous			
ODOR	Mild			
PHYST	Liquid			
SOLID		0.0	0.0	5.0 %
FLASH	-			
OXIDIZ	-			
PH		7.0	4.0	10.0 pH
SPGRAV		1.000	0.900	1.100

- 1. Is the hazardous waste determination based on the generator's detailed knowledge of the waste? .....  No
- 2. Is the hazardous waste determination based on the analysis of the waste? If yes, please attach analysis.  Yes
- 3. Does this waste meet the definition of debris in 40 CFR 268.2(g)? .....  No
- 4. Does this waste meet the definition of Universal Waste in 40 CFR part 273? .....  No
- 5. If this is a characteristically hazardous waste (i.e., D-Coded), does it contain any underlying hazardous constituents as defined in 40 CFR 268.2(i)? If yes, identify each constituent and their percentages in Waste Composition.  No
- 6. Does this waste contain any of the EPCRA 313 chemicals identified in 40 CFR 372.65? If yes, list these chemicals, CAS # and their percentages in Waste Composition.  No
- 7. Does this waste contain any of the EHS identified in section 302 of EPCRA? If yes, list these chemicals, CAS # and their percentages in Waste Composition.  No
- 8. Is this waste regulated under the National Emissions Standard for Benzene Waste Operations (40 CFR Part 61 Subpart FF)?  No
- 9. Does this waste meet the definition of a wastewater (40 CFR 268.2(f))? .....  No
- 10. Is this waste being shipped in DOT specification packages authorized for the material they contain?  Yes
- 11. Is the total organic halogen (TOH) content of this used oil  $\geq$  1,000 ppm? If the answer is "Yes", this material will be considered a hazardous waste unless sufficient documentation is provided to rebut the presumption that the used oil is a hazardous waste (see 40 CFR §279.44).  N/A

I hereby certify that the information identified above and attached to this profile is complete and accurate to the best of my knowledge and ability to determine that no omissions of composition or properties exist, and that all known or suspected hazards have been disclosed. I also understand it is my responsibility to properly identify and classify my waste in accordance with USEPA, US DOT and State regulations.

Anndelee Gregg

PRINTED NAME



SIGNATURE

Sr. Environmental Consultant

TITLE

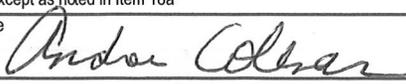
August 20, 2018

DATE

**Attachment D**

**Uniform Hazardous Waste Number 017176269 JJK**

Vlll

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>ILR000067751</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>877-437-7455</b>	4. Manifest Tracking Number <b>017176269 JJK</b>		
5. Generator's Name and Mailing Address <b>North Shore Gas Company 2101 W. Peterson Rd. North Shore Gas Libertyville, IL 60048</b>				Generator's Site Address (if different than mailing address) <b>2101 W. Peterson Rd. North Shore Gas Libertyville, IL 60048</b>			
6. Transporter 1 Company Name <b>SET Environmental, Inc.</b>		Generator's Phone: <b>312-946-6817</b>		U.S. EPA ID Number <b>ILD981957236</b>			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>SET Environmental, Inc. 5743 Cheswood</b>				U.S. EPA ID Number <b>TXD055135388</b>			
Facility's Phone: <b>Houston, TX 77087</b>		<b>(713) 645-8710</b>					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
1.	Non-DOT/RCRA Regulated	01	dm	55	G	OUTS2051	
2.	Non-DOT/RCRA regulated	01	df	55	G	OUTS2051	
3.							
4.							
14. Special Handling Instructions and Additional Information <b>1=134458:Oily water/Antifreeze, non-TSCA PCB 1X55 2=134458:Oily water/Antifreeze, Non TSCA PCB 1X55 1808 0393</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offorer's Printed/Typed Name <b>Louis Marticello</b>				Signature 		Month Day Year <b>108   17   18</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <b>Eric Canafax</b>				Signature 		Month Day Year <b>108   17   18</b>	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <b>H141</b>		2. <b>H141</b>		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name <b>Andrea Coleman</b>				Signature 		Month Day Year <b>108   22   18</b>	

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

**Attachment E**

**Uniform Hazardous Waste Number 019420893 JJK**

W 26108  
WO 136222

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXD055135388</b>	2. Page 1 of <b>4</b>	3. Emergency Response Phone <b>832-418-3636</b>	4. Manifest Tracking Number <b>019420893 JJK</b>		
5. Generator's Name and Mailing Address <b>SET Environmental, Inc. 5738 Cheswood Street Houston, TX 77087</b>				Generator's Site Address (if different than mailing address) <b>5743 Cheswood Street Houston, TX 77087</b>			
Generator's Phone: <b>713-645-8710</b>				U.S. EPA ID Number <b>ILD981957236</b>			
6. Transporter 1 Company Name <b>SET Environmental, Inc.</b>				U.S. EPA ID Number			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>US Ecology Texas 3277 County Road 69 Robstown, TX 78380-0000</b>				U.S. EPA ID Number <b>TXD069452340</b>			
Facility's Phone: <b>(800) 242-3209</b>							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
RC	1. <b>NA3077 Hazardous waste, solid, n.o.s. 9 PGIII (Dichloromethane)</b>	1	DF	190	P	F002	0510 319H
RC	2. <b>UN3219 Waste Nitrites, inorganic, aqueous solution, n.o.s. (Sodium Nitrite, Potassium Nitrite) 5.1 PGIII (D001 D002)</b>	7	DF	3064	P	D002 D001	0521 119H
RC	3. <b>UN3219 Waste Nitrites, inorganic, aqueous solution, n.o.s. (Sodium Nitrite, Potassium Nitrite) 5.1 PGIII (D001 D002)</b>	2	DF	1220	P	D002 D001	0521 119H
RC	4. <b>UN3219 Waste Nitrites, inorganic, aqueous solution, n.o.s. (Sodium Nitrite, Potassium Nitrite) 5.1 PGIII (D001 D002)</b>	1	TP	1785	P	D002 D001	0521 119H
14. Special Handling Instructions and Additional Information <b>LDR attached; certificate of disposal requested</b> 1=090047265-1:DEBRIS, HAZARDOUS [MACRO] 2=09-004-9289:OXIDIZER, LIQUIDS, NITRITES [NO2] 3=09-004-9289:OXIDIZER, LIQUIDS, NITRITES [NO2] 4=09-004-9289:OXIDIZER, LIQUIDS, NITRITES [NO2] <b>JAN#107</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offoror's Printed/Typed Name <b>Damon Gwinn</b>				Signature <i>Damon Gwinn</i>		Month Day Year <b>9   27   18</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ Transporter signature (for exports only): _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <b>Leo Pedron</b>				Signature <i>Leo Pedron</i>		Month Day Year <b>9   28   18</b>	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection <b>Line 2 &amp; 3s 090059006-0, UN1197, Nitrites Inorganic N.O.S., D1, SWC TSDF319H, D001, per Jay Sturges 10/31/18 AKJ</b> <b>Line 4: 125 090060344-0, UN3090, Oxidizing Liquid, Corrosive, N.O.S., SWC, TSDF110H</b> Manifest Reference Number: _____ U.S. EPA ID Number _____							
18b. Alternate Facility (or Generator) _____							
Facility's Phone: _____							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <b>H110 H130</b>		2. <b>H110 H141</b>		3. <b>H110 H141</b>		4. <b>H110 H141</b>	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name <b>Mark A. Brown</b>				Signature <i>Mark A. Brown</i>		Month Day Year <b>9   28   18</b>	

GENERATOR

TRANSPORTER INT'L

DESIGNATED FACILITY

DESIGNATED FACILITY TO GENERATOR

CC 52138  
WO 136222

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator ID Number <b>TXD055135388</b>	22. Page 2 of 4	23. Manifest Tracking Number <b>019420893.LIK</b>			
24. Generator's Name <b>SET Environmental, Inc. 5738 Cheswood Street Houston, TX 77087-</b>		713-645-8710		U.S. EPA ID Number <b>50267</b>			
25. Transporter _____ Company Name				U.S. EPA ID Number			
26. Transporter _____ Company Name				U.S. EPA ID Number			
27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers		29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes	
		No.	Type				
RQ	5 UN3266: Waste Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide) 8 PG:III (D002)	1	DF	360	P	D002	0535106H
RQ	6 UN3266: Waste Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide) 8 PG:III (D002)	1	TP	1660	P	D002	0535106H
X	7 UN3266: Waste Corrosive liquid, basic, inorganic, n.o.s. (4-(n-ethyl-n-2-methane sulfonyl aminoethyl)-2-methyl phenyl) 8 PG:III (D002)	2	DF	321	P	D002	TSDF110H
RQ	8 UN2922: Waste Corrosive liquids, toxic, n.o.s. (Hydrofluoric Acid, Ammonium Bifluoride) 8 (6.1) PG:II (D002)	4	DF	1884	P	D002	0536103H
X	9 UN1830: Waste Sulfuric acid 8 PG:II (D002)	1	TP	1277	P	D002	TSDF103H
	10 Non-Regulated Material	1	DF	50	P		05073191
X	11 NA2212: Asbestos 9 PG:III	3	DM	861	P		05283111
	12 Non Regulated Material	7	DF	322	P		05316091
	13 Non Regulated Material	6	DM	2489	P		05316091
	14 Non Regulated Material	4	TP	8124	P		05316091
32. Special Handling Instructions and Additional Information 5=090052566:BASES, UNLISTED [VAT] 6=090052566:BASES, UNLISTED [VAT] 7=09-007-3191:BASES, DEVELOPER-H 8=09-008-2167:SST Waste 9=09-008-9710:ACIDS, SULFURIC, CONCENTRATED 93% 10=090049025:NON-HAZ - COMMPK [NH PACK] 11=09-004-0086:ASBESTOS [ASBESTOS] 12=090042153-1:NON-HAZ, LIQUIDS / SLUDGES 13=090042153-1:NON-HAZ, LIQUIDS / SLUDGES 14=090042153-1:NON-HAZ, LIQUIDS / SLUDGES							
33. Transporter _____ Acknowledgment of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
34. Transporter _____ Acknowledgment of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
35. Discrepancy							
36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
H121 H132		H121 H132		H121 H132		H110 H132	
H100 H132		H132 H170		H110 H132		H110 H132	

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

Please print or type.

Form Approved. OMB No. 2050-0039

CC 32138  
WC 136222

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator ID Number <b>TXD055135388</b>	22. Page 3 of 4	23. Manifest Tracking Number <b>019420893JJK</b>			
24. Generator's Name <b>SET Environmental, Inc. 5738 Cheswood Street Houston, TX 77087-</b>		713-645-8710		50267			
25. Transporter _____ Company Name				U.S. EPA ID Number			
26. Transporter _____ Company Name				U.S. EPA ID Number			
27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers		29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes	
		No.	Type				
	15 Not Regulated (MDI)	1	DM	68	P	05314091	
	16 Not Regulated (MDI)	1	DF	56	P	05314091	
	17 Non Regulated Solids	3	DF	1098	P	05073191	
	18 Non Regulated Solids	14	DM	3546	P	05073191	
	19 Non Regulated Solids	2	DF	150	P	05073191	
	20 Non Regulated Solids	2	DF	130	P	05073191	
	21 Non Regulated Solids	1	CF	480	P	05073191	
X	22 UN326Z: Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide) 8 PG:III	4	DF	760	P	05073191	
X	23 UN326Z: Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide) 8 PG:III	1	CW	480	P	05073191	
	24 Non Regulated Material	1	DF	497	P	TSDFI191	
32. Special Handling Instructions and Additional Information 15=09-004-6978:NON-HAZ, LIQUIDS, MDI 16=09-004-6978:NON-HAZ, LIQUIDS, MDI 17=090050175-1:NON-HAZ, SOLIDS [COS] 18=090050175-1:NON-HAZ, SOLIDS [COS] 19=090050175-1:NON-HAZ, SOLIDS [COS] 20=090050175-1:NON-HAZ, SOLIDS [COS] 21=090050175-1:NON-HAZ, SOLIDS [COS] 22=090050175-1:NON-HAZ, SOLIDS, BASES 23=090050175-1:NON-HAZ, SOLIDS, BASES 24=090042153-1:NS: NON-HAZ, LIQUIDS / SLUDGES							
TRANSPORTER	33. Transporter _____ Acknowledgment of Receipt of Materials		Signature		Month	Day	Year
	Printed/Typed Name						
TRANSPORTER	34. Transporter _____ Acknowledgment of Receipt of Materials		Signature		Month	Day	Year
	Printed/Typed Name						
DESIGNATED FACILITY	35. Discrepancy						
DESIGNATED FACILITY	36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
	H100 H132	H100 H132	H132	H132	H132	H132	
	H132	H132	H132	H132	H100 H132		

Please print or type.

CC 32108  
WC 134222

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator ID Number <b>TXD055135388</b>	22. Page 4 of 4	23. Manifest Tracking Number <b>019420893.LJK</b>			
24. Generator's Name <b>SET Environmental, Inc. 5738 Cheswood Street Houston, TX 77087- 713-645-8710</b>							
25. Transporter _____ Company Name						U.S. EPA ID Number <b>50267</b>	
26. Transporter _____ Company Name						U.S. EPA ID Number	
27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers		29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes	
		No.	Type				
	25 Non Regulated Material	1	DM	505	P	TSD F1191	
32. Special Handling Instructions and Additional Information 25-090042153-1: N/S: NON-HAZ, LIQUIDS / SLUDGES							
33. Transporter _____ Acknowledgment of Receipt of Materials	Printed/Typed Name		Signature		Month	Day	Year
34. Transporter _____ Acknowledgment of Receipt of Materials	Printed/Typed Name		Signature		Month	Day	Year
35. Discrepancy							
36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
H100 H120							

GENERATOR  
TRANSPORTER  
DESIGNATED FACILITY

853498

Please print or type.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number TXD089452340	2. Page 1 of 1	3. Emergency Response Phone (800) 838-3975	4. Manifest Tracking Number 020115799 JJK			
5. Generator's Name and Mailing Address US ECOLOGY TEXAS, INC 3277 COUNTY ROAD 69 ROBSTOWN TX 78380 Generator's Phone: (361) 387-3518				Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name ACTION RESOURCES INC				U.S. EPA ID Number ALR000007237				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address VEOLIA HWY 73, 3.5 MILES WEST OF TAYLOR BAYOU PORT ARTHUR TX 77640 Facility's Phone: (409) 736-2821				U.S. EPA ID Number TXD000838896				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 342 (H) 9-23-19 1. UN3472, WASTE POLYCHLORINATED BIPHENYLS, SOLID, 9, PI TSD F3981			10. Containers No.	Type	11. Total Quantity <del>25489</del> 28660	12. Unit Wt./Vol. EA	13. Waste Codes
X				1	CM			
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information OF4898 1:585912 Box # RT2153 PTA565912 OOSD 6-1-18 SEP 23 '19 8:47								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Qiana Myles				Signature 		Month Day Year 09 13 19		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name JOHN MESA				Signature 		Month Day Year 09 18 19		
Transporter 2 Printed/Typed Name				Signature		Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____								
18b. Alternate Facility (or Generator) U.S. EPA ID Number								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator)						Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H040		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Leslie Carpenter				Signature 		Month Day Year 09 23 19		

GENERATOR

INT'L TRANSPORTER

DESIGNATED FACILITY

853574

Please print or type.

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number TXD069452340	2. Page 1 of 1	3. Emergency Response Phone (800) 839-3975	4. Manifest Tracking Number <b>020115800 JJK</b>			
5. Generator's Name and Mailing Address <b>US ECOLOGY TEXAS, INC</b> 3277 COUNTY ROAD 69 ROBSTOWN TX 76380 Generator's Phone: (351) 387-3518				Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name <b>ACTION RESOURCES INC</b>				U.S. EPA ID Number <b>ALR000007237</b>				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address <b>VEOLIA</b> HWY 73, 3.5 MILES WEST OF TAYLOR BAYOU PORT ARTHUR TX 77640 Facility's Phone: (409) 735-2821				U.S. EPA ID Number <b>TXD000838896</b>				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	UN3412, WASTE POLYCHLORINATED BIPHENYLS, SOLID, 9, PII TSD F3981	1	CM	<del>28000</del> 23640 JAN	P			
14. Special Handling Instructions and Additional Information OF4897 1:585912 BOX # RT4187 OOSD 6-1-18 Trailer RT4167 SEP 23 '19 8:47								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name <b>Qiana Myles</b>				Signature 		Month <b>09</b>	Day <b>13</b>	Year <b>19</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <b>Jorge A. Nolasco</b>				Signature 		Month <b>9</b>	Day <b>18</b>	Year <b>19</b>
Transporter 2 Printed/Typed Name				Signature		Month	Day	Year
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number:								
18b. Alternate Facility (or Generator)				U.S. EPA ID Number				
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)						Month	Day	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>	2.	3.	4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Tesle Carpenter</b>				Signature 		Month <b>9</b>	Day <b>28</b>	Year <b>19</b>

US Ecology Texas, Inc.  
 P.O. Box 307  
 3277 County Road 69  
 Robstown, TX 78380

Phone: (800) 242 3209  
 (361) 387-3518  
 Fax: (361) 387 0794  
 (361) 387-0577

# US Ecology Texas, Inc.

a US Ecology Inc. company

## INVOICE

Page 1 of 1

SET ENVIRONMENTAL  
 Attn : ACCOUNTS PAYABLES  
 5738 CHESWOOD ST  
 HOUSTON, TX 77087--400

Invoice #: **TC163951**  
 Invoice date: **04/20/2020**  
 Customer ID: 7566 / 7566

AX Customer ID: C002779  
 AX Invoice Customer ID: C002779

Please remit checks to:  
 P O Box 936227  
 Atlanta, GA 31193-6227

Terms: 30 Days

Please wire to:

Bank: Wells Fargo Bank, N.A.  
 ABA: 121000248 Account #: 4140909680  
 Account Name: US Ecology Livonia, Inc.

*PO# 213276*

Quantity	Unit	DESCRIPTION	Rate	Total
----------	------	-------------	------	-------

Reference #:

28448	POUNDS	DISPOSAL OF TRANSFORMER OIL/PCB'S DUG UP FROM USET, MANIFEST 020115799JJK, 9/13/19	\$0.9605	\$27,324.30
23468	POUNDS	DISPOSAL OF TRANSFORMER OIL/PCB'S DUG UP FROM USET, MANIFEST 020115800JJK, 9/13/19	\$0.9605	\$22,541.01
2	PER HOUR	ROLL-OFF TRUCK	\$95.00	\$190.00
4	PER HOUR	DOZER	\$150.00	\$600.00
16	PER HOUR	EXCAVATOR	\$150.00	\$2,400.00
1	LOAD	TRANSPORTATION (MANIFEST 020115800JJK)	\$1,500.00	\$1,500.00
16	PER HOUR	ENVIRONMENTAL SUPERVISOR	\$65.00	\$1,040.00
1.5	EACH	LANDFILL EXCAVATION (\$7,500/10 FT)	\$7,500.00	\$11,250.00
1	LOAD	TRANSPORTATION (MANIFEST 020115799JJK)	\$1,500.00	\$1,500.00
1	EACH	FUEL SURCHARGE 22%	\$330.00	\$330.00
1	EACH	FUEL SURCHARGE 22%	\$330.00	\$330.00
16	PER HOUR	ENVIRONMENTAL TECH/OPERATOR	\$45.00	\$720.00

Total

\$69,725.31

*Code Down per Dawn*

*01-16-Much*

REV'D	APRVD
GL ACCT#	AMOUNT
-06-4200	69,725.31
00-2025	
3209	
PER 4	TOTAL 69,725.31

*\*ok per Michael Dawn*

ENTERED APR 21 2020

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



**IN THE MATTER OF AN  
ENFORCEMENT ACTION  
CONCERNING  
SET ENVIRONMENTAL, INC.  
RN100607126**

**§  
§  
§  
§  
§**

**BEFORE THE  
  
TEXAS COMMISSION ON  
  
ENVIRONMENTAL QUALITY**

**AGREED ORDER  
DOCKET NO. 2020-0592-IHW-E**

**I. JURISDICTION AND STIPULATIONS**

On \_\_\_\_\_, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding SET ENVIRONMENTAL, INC. (the "Respondent") under the authority of TEX. HEALTH & SAFETY CODE ch. 361 and TEX. WATER CODE ch. 7. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent together stipulate that:

1. The Respondent owns and operates a hazardous waste treatment and disposal facility located at 5738 Cheswood Street in Houston, Harris County, Texas (the "Facility"). The Facility involves or involved the management of industrial and hazardous waste ("IHW") as defined in TEX. HEALTH & SAFETY CODE ch. 361.
2. The Executive Director and the Respondent agree that the TCEQ has jurisdiction to enter this Order pursuant to TEX. WATER CODE §§ 7.002, 7.051, and 7.073, and that the Respondent is subject to TCEQ's jurisdiction. The TCEQ has jurisdiction in this matter pursuant to TEX. WATER CODE § 5.013 because it alleges violations of TEX. HEALTH & SAFETY CODE ch. 361 and the rules of the TCEQ.
3. The occurrence of any violation is in dispute and the entry of this Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
4. An administrative penalty in the amount of \$15,764 is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent paid \$12,612 of the penalty and \$3,152 is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Order. The deferred amount shall be waived only upon full compliance with all the terms and conditions contained in this Order. If the Respondent fails to timely and satisfactorily comply with any of the terms or requirements contained in this Order, the Executive Director may demand payment of all or part of the deferred penalty amount.

5. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a). Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.
6. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Order.
7. This Order represents the complete and fully-integrated agreement of the parties. The provisions of this Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Order unenforceable, the remaining provisions shall be valid and enforceable.
8. This Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Order, whichever is later.
9. The Executive Director recognizes that the Respondent implemented the following corrective measures at the Facility:
  - a. Placed new lids on two 55-gallon drums located in container storage area ("CS") 2 and one 55-gallon drum in CS-3 containing hazardous waste with new lids on December 20, 2019;
  - b. Provided signage for permitted tank PT-12 and two permitted container storage areas CS-1 and CS-2 on December 20, 2019; and
  - c. Disposed of the polychlorinated biphenyl ("PCB") contaminated waste at an authorized facility on September 23, 2019.

## **II. ALLEGATIONS**

During an investigation conducted on October 8, 2019, an investigator documented that the Respondent:

1. Failed to prevent the receipt and storage of IHW without the required permit and allowed the disposal of IHW at an unauthorized facility, in violation of 30 TEX. ADMIN. CODE §§ 305.125(1), 335.2, and 335.4(3) and Hazardous Waste Permit No. 50267 Permit Provision ("PP") II.A.2, II.A.7, and IV.B.3.a. Specifically, the Facility accepted and stored for 36 days one 55-gallon drum containing 226 kilograms of PCB contaminated waste before shipping it to an unauthorized disposal facility.
2. Failed to ensure that hazardous waste containers remain closed when in storage except when adding or removing waste, in violation of 30 TEX. ADMIN. CODE § 335.152(a)(7) and 40 Code of Federal Regulations § 264.173(a) and Hazardous Waste Permit No. 50267 PP II.A.2, II.C.1.j, and C.2.g. Specifically, two 55-gallon drums located in container storage area CS-2 and one 55-gallon drum in CS-3 were open.

3. Failed to clearly identify authorized storage units with signs indicating "TCEQ Permit Unit No." , in violation of 30 TEX. ADMIN. CODE § 305.125(1) and Hazardous Waste Permit No. 50267 PP II.A.2 and V.A.1. Specifically, permitted tank PT-12 did not have an identifying sign and signs on permitted container storage areas CS-1 and CS-2 were faded and illegible.

### **III. DENIALS**

The Respondent generally denies each allegation in Section II ("Allegations").

### **IV. ORDERING PROVISIONS**

NOW, THEREFORE, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORDERS that:

1. The Respondent is assessed a penalty as set forth in Section I, Paragraph No. 4. The payment of this penalty and the Respondent's compliance with all of the requirements set forth in this Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: SET ENVIRONMENTAL, INC., Docket No. 2020-0592-IHW-E" to:

Financial Administration Division, Revenue Operations Section  
Attention: Cashier's Office, MC 214  
Texas Commission on Environmental Quality  
P.O. Box 13088  
Austin, Texas 78711-3088

2. All relief not expressly granted in this Order is denied.
3. The duties and provisions imposed by this Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of this Order to personnel who maintain day-to-day control over the Facility operations referenced in this Order.
4. The Executive Director may grant an extension of any deadline in this Order or in any plan, report, or other document submitted pursuant to this Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
5. This Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
6. This Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Order may be copied, scanned, digitized,

converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms: electronic transmission, owner, person, writing, and written, shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.

7. The effective date of this Order is the date it is signed by the Commission. A copy of this fully executed Order shall be provided to each of the parties.

## SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

\_\_\_\_\_  
For the Commission

\_\_\_\_\_  
Date

\_\_\_\_\_  
For the Executive Director

\_\_\_\_\_  
Date

I, the undersigned, have read and understand the attached Order. I am authorized to agree to the attached Order, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I also understand that failure to comply with the Ordering Provisions, if any, in this Order and/or failure to timely pay the penalty amount, may result in:

- A negative impact on compliance history;
- Greater scrutiny of any permit applications submitted;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions;
- Automatic referral to the Attorney General's Office of any future enforcement actions; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Printed or typed)  
Authorized Representative of  
SET ENVIRONMENTAL, INC.

\_\_\_\_\_  
Title

*If mailing address has changed, please check this box and provide the new address below:*

**Instructions:** Send the original, signed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Ordering Provision 1 of this Order.



# Penalty Calculation Worksheet (PCW)

Policy Revision 4 (April 2014)

PCW Revision March 26, 2014

<b>DATES</b>	<b>Assigned</b>	20-Apr-2020			
	<b>PCW</b>	23-Apr-2020	<b>Screening</b>	22-Apr-2020	<b>EPA Due</b>

<b>RESPONDENT/FACILITY INFORMATION</b>					
<b>Respondent</b>	SET ENVIRONMENTAL, INC.				
<b>Reg. Ent. Ref. No.</b>	RN100607126				
<b>Facility/Site Region</b>	12-Houston	<b>Major/Minor Source</b>	Major		

<b>CASE INFORMATION</b>					
<b>Enf./Case ID No.</b>	59252	<b>No. of Violations</b>	3		
<b>Docket No.</b>	2020-0592-IHW-E	<b>Order Type</b>	1660		
<b>Media Program(s)</b>	Industrial and Hazardous Waste	<b>Government/Non-Profit</b>	No		
<b>Multi-Media</b>		<b>Enf. Coordinator</b>	Stephanie McCurley		
		<b>EC's Team</b>	Enforcement Team 7		
<b>Admin. Penalty \$ Limit</b>	<b>Minimum</b>	\$0	<b>Maximum</b>	\$25,000	

## Penalty Calculation Section

<b>TOTAL BASE PENALTY (Sum of violation base penalties)</b>	<b>Subtotal 1</b>	\$24,250
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### ADJUSTMENTS (+/-) TO SUBTOTAL 1

Subtotals 2-7 are obtained by multiplying the Total Base Penalty (Subtotal 1) by the indicated percentage.

<b>Compliance History</b>	-10.0%	Adjustment	<b>Subtotals 2, 3, &amp; 7</b>	-\$2,425
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<b>Notes</b>	Reduction for High Performer classification.
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<b>Culpability</b>	No	0.0%	Enhancement	<b>Subtotal 4</b>	\$0
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<b>Notes</b>	The Respondent does not meet the culpability criteria.
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<b>Good Faith Effort to Comply Total Adjustments</b>	<b>Subtotal 5</b>	-\$6,061
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<b>Economic Benefit</b>	0.0%	Enhancement*	<b>Subtotal 6</b>	\$0
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Total EB Amounts	\$3,804	*Capped at the Total EB \$ Amount
Estimated Cost of Compliance	\$70,875	

<b>SUM OF SUBTOTALS 1-7</b>	<b>Final Subtotal</b>	\$15,764
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<b>OTHER FACTORS AS JUSTICE MAY REQUIRE</b>	0.0%	Adjustment	\$0
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Reduces or enhances the Final Subtotal by the indicated percentage.

<b>Notes</b>	
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<b>Final Penalty Amount</b>	\$15,764
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<b>STATUTORY LIMIT ADJUSTMENT</b>	<b>Final Assessed Penalty</b>	\$15,764
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<b>DEFERRAL</b>	20.0%	Reduction	Adjustment	-\$3,152
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Reduces the Final Assessed Penalty by the indicated percentage.

<b>Notes</b>	Deferral offered for expedited settlement.
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<b>PAYABLE PENALTY</b>	\$12,612
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Screening Date 22-Apr-2020

Docket No. 2020-0592-IHW-E

PCW

Respondent SET ENVIRONMENTAL, INC.

Policy Revision 4 (April 2014)

Case ID No. 59252

PCW Revision March 26, 2014

Reg. Ent. Reference No. RN100607126

Media Industrial and Hazardous Waste

Enf. Coordinator Stephanie McCurley

### Compliance History Worksheet

#### >> Compliance History Site Enhancement (Subtotal 2)

Component	Number of...	Number	Adjust.
NOVs	Written notices of violation ("NOVs") with same or similar violations as those in the current enforcement action ( <i>number of NOVs meeting criteria</i> )	0	0%
	Other written NOVs	0	0%
Orders	Any agreed final enforcement orders containing a denial of liability ( <i>number of orders meeting criteria</i> )	0	0%
	Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal government, or any final prohibitory emergency orders issued by the commission	0	0%
Judgments and Consent Decrees	Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government ( <i>number of judgments or consent decrees meeting criteria</i> )	0	0%
	Any adjudicated final court judgments and default judgments, or non-adjudicated final court judgments or consent decrees without a denial of liability, of this state or the federal government	0	0%
Convictions	Any criminal convictions of this state or the federal government ( <i>number of counts</i> )	0	0%
Emissions	Chronic excessive emissions events ( <i>number of events</i> )	0	0%
Audits	Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 ( <i>number of audits for which notices were submitted</i> )	0	0%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 ( <i>number of audits for which violations were disclosed</i> )	0	0%
Other	Environmental management systems in place for one year or more	No	0%
	Voluntary on-site compliance assessments conducted by the executive director under a special assistance program	No	0%
	Participation in a voluntary pollution reduction program	No	0%
	Early compliance with, or offer of a product that meets future state or federal government environmental requirements	No	0%

Adjustment Percentage (Subtotal 2) 0%

#### >> Repeat Violator (Subtotal 3)

No

Adjustment Percentage (Subtotal 3) 0%

#### >> Compliance History Person Classification (Subtotal 7)

High Performer

Adjustment Percentage (Subtotal 7) -10%

#### >> Compliance History Summary

Compliance History Notes

Reduction for High Performer classification.

Total Compliance History Adjustment Percentage (Subtotals 2, 3, & 7) -10%

#### >> Final Compliance History Adjustment

Final Adjustment Percentage \*capped at 100% -10%

**Screening Date** 22-Apr-2020  
**Respondent** SET ENVIRONMENTAL, INC.  
**Case ID No.** 59252  
**Reg. Ent. Reference No.** RN100607126  
**Media** Industrial and Hazardous Waste  
**Enf. Coordinator** Stephanie McCurley

**Docket No.** 2020-0592-IHW-E

**PCW**

*Policy Revision 4 (April 2014)*  
*PCW Revision March 26, 2014*

**Violation Number** 1

**Rule Cite(s)** 30 Tex. Admin. Code §§ 305.125(1), 335.2, and 335.4(3) and Hazardous Waste Permit No. 50267 Permit Provision ("PP") II.A.2, II.A.7, and IV.B.3.a

**Violation Description** Failed to prevent the receipt, storage, and shipment of industrial and hazardous waste ("IHW") without the required permit and allowed disposal of the IHW at an unauthorized facility. Specifically, the Facility accepted and stored for 36 days one 55-gallon drum containing 226 kilograms of polychlorinated biphenyl contaminated waste before shipping it to an unauthorized disposal facility.

**Base Penalty** \$25,000

**>> Environmental, Property and Human Health Matrix**

OR	Release	Harm			Percent
		Major	Moderate	Minor	
		Actual			
Potential		x			

**>> Programmatic Matrix**

Matrix Notes	Falsification	Major	Moderate	Minor	Percent

Human health or the environment will or could be exposed to significant amounts of pollutants that would not exceed levels that are protective of human health or environmental receptors as a result of the violation.

**Adjustment** \$21,250

\$3,750

**Violation Events**

Number of Violation Events 5 397 Number of violation days

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

**Violation Base Penalty** \$18,750

Five quarterly events are recommended from the August 22, 2018 date waste was accepted at the facility to the September 23, 2019 date of compliance.

**Good Faith Efforts to Comply**

25.0%

Reduction \$4,687

	Before NOE/NOV	NOE/NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary	x	
N/A		

Notes The Respondent came into compliance on September 23, 2019 prior to the NOE dated April 14, 2020.

**Violation Subtotal** \$14,063

**Economic Benefit (EB) for this violation**

**Statutory Limit Test**

**Estimated EB Amount** \$3,792

**Violation Final Penalty Total** \$12,188

**This violation Final Assessed Penalty (adjusted for limits)** \$12,188

# Economic Benefit Worksheet

**Respondent** SET ENVIRONMENTAL, INC.  
**Case ID No.** 59252  
**Reg. Ent. Reference No.** RN100607126  
**Media** Industrial and Hazardous Waste  
**Violation No.** 1

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Costs Saved	EB Amount
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### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/Construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal	\$69,725	22-Aug-2018	23-Sep-2019	1.09	\$3,792	n/a	\$3,792
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

**Notes for DELAYED costs**

Actual cost per invoice (rounded to the dollar) to dig up and transport the waste to an authorized facility. The Date Required is the date the Respondent accepted the waste and the Final Date is the date of compliance.

### Avoided Costs

**ANNUALIZE avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/Equipment				0.00	\$0	\$0	\$0
Financial Assurance				0.00	\$0	\$0	\$0
ONE-TIME avoided costs				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

**Notes for AVOIDED costs**

<b>Approx. Cost of Compliance</b>	\$69,725	<b>TOTAL</b>	\$3,792
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**Screening Date** 22-Apr-2020  
**Respondent** SET ENVIRONMENTAL, INC.  
**Case ID No.** 59252  
**Reg. Ent. Reference No.** RN100607126  
**Media** Industrial and Hazardous Waste  
**Enf. Coordinator** Stephanie McCurley

**Docket No.** 2020-0592-IHW-E

**PCW**

*Policy Revision 4 (April 2014)*  
*PCW Revision March 26, 2014*

**Violation Number**

**Rule Cite(s)**

30 Tex. Admin. Code § 335.152(a)(7) and 40 Code of Federal Regulations § 264.173(a) and Hazardous Waste Permit No. 50267 PP II.A.2, II.C.1.j, and C.2.g

**Violation Description**

Failed to ensure that hazardous waste containers remain closed when in storage except when adding or removing waste. Specifically, two 55-gallon drums located in container storage area CS-2 and one 55-gallon drum in CS-3 were open.

**Base Penalty**

>> **Environmental, Property and Human Health Matrix**

OR

Release	Harm		
	Major	Moderate	Minor
Actual	<input type="text"/>	<input type="text"/>	<input type="text"/>
Potential	<input type="text"/>	<input checked="" type="text" value="x"/>	<input type="text"/>

**Percent**

>> **Programmatic Matrix**

Falsification	Major	Moderate	Minor
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Percent**

Matrix Notes

Human health or the environment will or could be exposed to significant amounts of pollutants that would not exceed levels that are protective of human health or environmental receptors as a result of the violation.

**Adjustment**

**Violation Events**

Number of Violation Events   Number of violation days

daily	<input type="text"/>
weekly	<input type="text"/>
monthly	<input type="text"/>
quarterly	<input checked="" type="text" value="x"/>
semiannual	<input type="text"/>
annual	<input type="text"/>
single event	<input type="text"/>

**Violation Base Penalty**

One quarterly event is recommended from the October 8, 2019 investigation date to the December 20, 2019 date of compliance.

**Good Faith Efforts to Comply**

**Reduction**

Before NOE/NOV NOE/NOV to EDPRP/Settlement Offer

Extraordinary	<input type="text"/>	<input type="text"/>
Ordinary	<input checked="" type="text" value="x"/>	<input type="text"/>
N/A	<input type="text"/>	<input type="text"/>

Notes

Respondent came into compliance by providing photographs of the drums with new lids on December 20, 2019 prior to the Notice of Enforcement ("NOE") dated April 14, 2020.

**Violation Subtotal**

**Economic Benefit (EB) for this violation**

**Statutory Limit Test**

**Estimated EB Amount**

**Violation Final Penalty Total**

**This violation Final Assessed Penalty (adjusted for limits)**

# Economic Benefit Worksheet

**Respondent** SET ENVIRONMENTAL, INC.  
**Case ID No.** 59252  
**Reg. Ent. Reference No.** RN100607126  
**Media** Industrial and Hazardous Waste  
**Violation No.** 2

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Costs Saved	EB Amount
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### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/Construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$150	8-Oct-2019	20-Dec-2019	0.20	\$2	n/a	\$2

Notes for DELAYED costs

Estimated delayed cost to fit the three drums with new lids (\$50 per lid). The Date Required is the investigation date and the Final Date is the date of compliance.

### Avoided Costs

**ANNUALIZE avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/Equipment				0.00	\$0	\$0	\$0
Financial Assurance				0.00	\$0	\$0	\$0
ONE-TIME avoided costs				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance \$150

**TOTAL** \$2

Screening Date 22-Apr-2020

Docket No. 2020-0592-IHW-E

PCW

Respondent SET ENVIRONMENTAL, INC.

Policy Revision 4 (April 2014)

Case ID No. 59252

PCW Revision March 26, 2014

Reg. Ent. Reference No. RN100607126

Media Industrial and Hazardous Waste

Enf. Coordinator Stephanie McCurley

Violation Number 3

Rule Cite(s) 30 Tex. Admin. Code § 305.125(1) and Hazardous Waste Permit No. 50267 PP II.A.2 and V.A.1

Violation Description Failed to clearly identify authorized storage units with signs indicating "TCEQ Permit Unit No.". Specifically, permitted tank PT-12 did not have an identifying sign and signs on permitted container storage areas CS-1 and CS-2 were faded and illegible.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR	Release	Harm			Percent
		Major	Moderate	Minor	
	Actual				0.0%
	Potential				

>> Programmatic Matrix

Matrix Notes	Falsification	Harm			Percent
		Major	Moderate	Minor	
			x		7.0%
30-70% of the rule requirement was not met.					

Adjustment \$23,250

\$1,750

Violation Events

Number of Violation Events 1 73 Number of violation days

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

Violation Base Penalty \$1,750

One quarterly event is recommended from the October 8, 2019 investigation date to the December 20, 2019 date of compliance.

Good Faith Efforts to Comply

25.0%

Reduction \$437

Before NOE/NOV NOE/NOV to EDRP/Settlement Offer

Extraordinary	
Ordinary	x
N/A	

Notes Respondent came into compliance by providing photographs of the signage on December 20, 2019 prior to the NOE dated April 14, 2020.

Violation Subtotal \$1,313

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$10

Violation Final Penalty Total \$1,138

This violation Final Assessed Penalty (adjusted for limits) \$1,138

# Economic Benefit Worksheet

**Respondent** SET ENVIRONMENTAL, INC.  
**Case ID No.** 59252  
**Reg. Ent. Reference No.** RN100607126  
**Media** Industrial and Hazardous Waste  
**Violation No.** 3

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Costs Saved	EB Amount
------------------	-----------	---------------	------------	-----	----------------	-------------	-----------

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/Construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$1,000	8-Oct-2019	20-Dec-2019	0.20	\$10	n/a	\$10

**Notes for DELAYED costs**

Estimated delayed cost to provide signage for the tank and two storage areas. The Date Required is the investigation date and the Final Date is the date of compliance.

### Avoided Costs

**ANNUALIZE avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/Equipment				0.00	\$0	\$0	\$0
Financial Assurance				0.00	\$0	\$0	\$0
ONE-TIME avoided costs				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

**Notes for AVOIDED costs**

Approx. Cost of Compliance \$1,000

**TOTAL** \$10

Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Bobby Janecka, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

February 3, 2022

Mr. Daniel Didier, Compliance Director  
SET Environmental, Inc.  
5738 Cheswood Street  
Houston, Texas 77087

Re: Compliance Evaluation Investigation at:  
SET Environmental, 5738 Cheswood Street, Houston (Harris County), Texas  
TCEQ SWR No.: 50267; Permit No.: 50267; EPA ID No.: TXD055135388

Dear Mr. Didier:

On December 02, 2021, Ms. Naomi Hall, of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for industrial solid waste. No violations are being alleged as a result of the investigation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Hall in the Houston Region Office at (713) 767-3702.

Sincerely,

*Carlos R. Romo*

Carlos R. Romo Team Leader  
Waste Section  
Houston Region Office

CRR/NGH/lm

Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Bobby Janecka, *Commissioner*  
Kelly Keel, *Interim Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 8, 2023

Mr. Daniel Didier, Compliance Director  
Set Environmental, Inc.  
5738 Cheswood Street  
Houston, Texas 77087

Re: Compliance Evaluation Investigation at:  
Set Environmental, 5738 Cheswood Street, Houston (Harris County), Texas  
TCEQ SWR No.: 50267; Permit No. 50267; EPA ID No.: TXD055135388

Dear Mr. Didier:

On October 23, 2023, Ms. Oindrila Das of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for industrial solid waste and municipal solid waste. Enclosed is a summary which lists the investigation findings.

During the investigation, some concerns were noted which were alleged violations that have been resolved as Areas of Concern based on subsequent corrective action. In addition, some additional issues were identified that have been addressed. No further response from you is necessary concerning this investigation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Das in the Houston Region Office at (713) 767-3749.

Sincerely,

*Kendra Bernhagen*

Kendra Bernhagen, Team Leader  
Waste Section  
Houston Region Office

KB/OD/sj

Enclosure: Summary of Investigation Findings

## Summary of Investigation Findings

SET ENVIRONMENTAL

5738 CHESWOOD ST  
HOUSTON, HARRIS COUNTY, TX 77087

Investigation #  
1924719  
Investigation Date: 10/23/2023

Additional ID(s): 50267  
TXD055135388  
50267

### AREA OF CONCERN

Track No: 860610

30 TAC Chapter 335.6(c)

PERMIT 50267, Permit Provision (PP) II.C.1.h.

**Alleged Violation:**

Investigation: 1924719

Comment Date: 12/07/2023

The facility failed to maintain and update their Notice of Registration (NOR) as required.

The facility's NOR needs to be updated as follows:

a. Add waste currently managed at unit to NOR No. 045 or update waste management unit (Nonhazardous miscellaneous storage container) as inactive.

**Recommended Corrective Action:** The facility is requested to update the NOR through the State of Texas Environmental Electronic Reporting System (STEERS) and/or by sending a form (Notification for hazardous and industrial waste management) to the TCEQ Registration and Reporting Section (PO Box 13087, Mail Code 129, Austin, Texas 78711-3087).

**Resolution:** The alleged violation has been resolved as an area of concern based on the documentation submitted on October 29, 2023, to the TCEQ Houston Region Office, indicating that the NOR has been updated.

Track No: 860612

30 TAC Chapter 305.142

PERMIT 50267, PP II.A.2./V.A.1.

**Alleged Violation:**

Investigation: 1924719

Comment Date: 11/08/2023

The facility failed to label or mark the authorized waste management unit, permitted tank (Permit No. 015/NOR No. 039) with a sign indicating "TCEQ Permit Unit No. 015, as required by the permit.

**Recommended Corrective Action:** The facility was required to label the permitted tank properly and provide photographic documentation to the TCEQ Houston Region Office to verify compliance.

**Resolution:** The alleged violation has been resolved as an area of concern based on the photographic documentation submitted on October 29, 2023, to the TCEQ Houston Region Office.

### ADDITIONAL ISSUES

Description

Additional Comments

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Item #3

During the walkthrough, the SAAs 3, 4, and 5 were noted without the label or mark 'Satellite Accumulation Area.

The facility was requested to label or mark the area properly and send the photographic documentation to the TCEQ Houston Region Office.

The additional issue has been addressed based on the documentation submitted on October 29, 2023, to the TCEQ Houston Region Office.

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Item #4

During the investigation, the permitted tank, NOR No. 051, was noted to be inactive. Additionally, it was noted that the permitted tank, NOR No. 039, has not been in use for a year.

The facility was requested to review the permitted tanks for closure per 30 TAC §335.8 - Closure and Remediation, and 30 TAC §350 - Texas Risk Reduction Program.

The additional issue has been addressed based on the documentation submitted on November 16, 2023, to the TCEQ Houston Region Office, stating that the facility reviewed and elected to close the tank, NOR No. 039 and to retain the tank, NOR No. 051 for future use.

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Jon Niermann, *Chairman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

July 17, 2024

Mr. Walter Kilgus  
General Manager  
SET Environmental, Inc.  
5738 Cheswood Street  
Houston, Texas 77087-4002  
Via Email

Re: General Compliance Letter for the Modified Comprehensive Compliance Investigation at:  
SET Environmental, Inc. 5743 Cheswood Street, Houston, Harris County, Texas  
Regulated Entity No.: 100607126, TCEQ ID No.: WQ0004123000, EPA ID No.: TX0119211  
Investigation No.: 1994541

Dear Mr. Kilgus:

On June 18, 2024, Ms. Jimi Savage of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for wastewater treatment. No violations are being alleged as a result of the investigation; however, please see the attached Area of Concern.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Jimi Savage in the Houston Region Office at (713) 767-3657.

Sincerely,

A handwritten signature in black ink, appearing to read "Elaine Fowler".

Elaine Fowler  
Water Section Team Leader  
Houston Region 12

EF/JS/kg

cc: Mr. Daniel Didier, Compliance Director, SET Environmental, Inc.  
Via Email

Enclosure: Summary of Investigation Findings

# Summary of Investigation Findings

SET ENVIRONMENTAL

Investigation # 1994541

5738 CHESWOOD ST

Investigation Date: 06/18/2024

HOUSTON, HARRIS COUNTY, TX 77087

Additional ID(s): WQ0004123000  
TX0119211

## AREA OF CONCERN

Track No: 883609

30 TAC Chapter 305.125(1)

30 TAC Chapter 319.7(d)

PERMIT WQ0004123000, Monitoring & Reporting Requirements 1

EPA ID TX0119211, Monitoring & Reporting Requirements 1

### Alleged Violation:

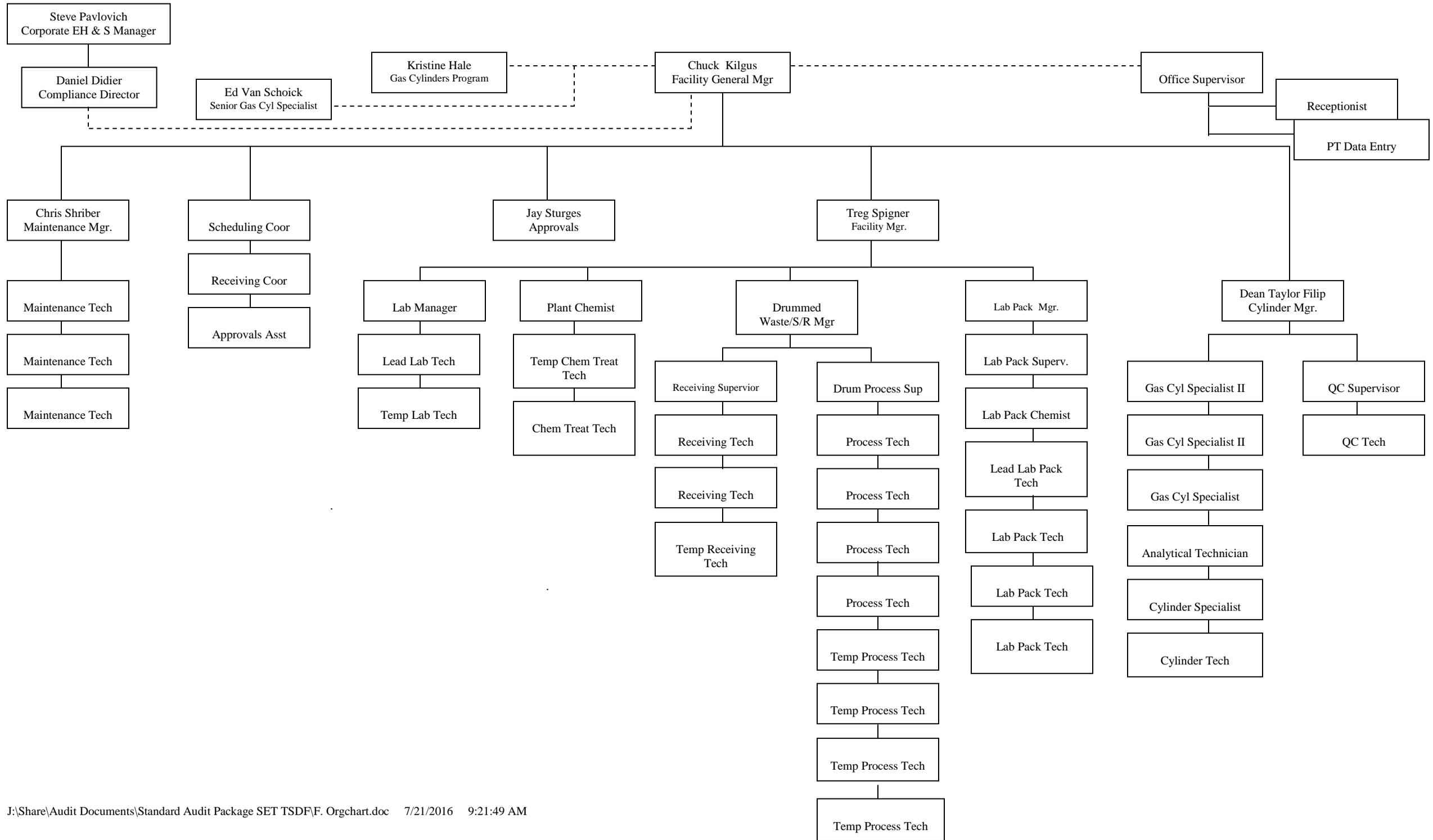
Investigation: 1994541

Comment Date: 06/21/2024

Failure to submit the discharge monitoring reports (DMRs) within the required timeframe. Specifically, during the record review period of June 2023 through June 2024, three (3) monthly DMRs (October 2023, February 2024, and March 2024) were submitted after the 20th day of the following months (November 28, 2023, March 28, 2024, and April 22, 2024, respectively).

**Recommended Corrective Action:** DMRs must be submitted by the 20th day of the month following the month in which the DMR was submitted for. The regulated entity shall submit documentation indicating that DMRs are being submitted on time.

**Resolution:** DMRs for the months of April and May 2024 were submitted on time by the regulated entity.



## **XVII. PERSONNEL TRAINING PROGRAM**

### **1.0 PURPOSE**

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The purpose of this program is to establish procedures for effective classroom and on-the-job training in company and governmental environmental, health and safety requirements. To this end training will focus on:

1. The hazardous nature of chemicals and chemical wastes.
2. The purpose of applicable governmental regulations and the importance of maintaining compliance with these regulations.
3. Proper handling and storage procedures.
4. Emergency procedures.
5. Standard operating and safety procedures.
6. Cardiopulmonary resuscitation (CPR) and standard first aid.

SET Environmental training program is divided into the following five categories:

- Administrative
- Safety
- Technical
- Regulatory
- Operational

Provisions are made for updating or revising training programs as necessary to ensure compliance with company and government requirements.

### **2.0 FREQUENCY, TYPE AND AMOUNT OF TRAINING**

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Training must be completed prior to actual work participation. New employees spend their first three months of employment in training. Initial training includes a minimum of forty hours of classroom instruction and demonstration for each new employee. Initial training obtained prior to employment at SET Environmental will be accepted for non-site specific topics if proof of training can be provided to SET Environmental. In addition to classroom training, each new employee is required to complete 456 hours (or the balance of three months) of on-the-job training under the direct supervision of an employee trained and experienced in the same or similar job position.

Employees will receive a minimum of eight hours of annual review training to maintain their competencies obtained through initial training in a classroom instruction format. Although authorized by 1910.120(q)(8), SET Employees may not demonstrate competency in lieu of actual annual classroom instruction. When successfully completed a certificate of training will be issued. Review training provided on an annual, biannual or triennial frequency is specified in

Figures 1 and 2. Annual review for TSDF employees will also include discussion on the following topics:

1. The status of storage and operating conditions and procedures, noting any areas where there are problems or potential problems. Employees participate in developing effective solutions.
2. The requirements of the facility's RCRA permit, noting any changes that have occurred in the past year. Areas where maintenance of compliance is a problem are identified and discussed; effective solutions are sought.
3. Incidents that occurred in the past year that required implementation of the contingency plan or emergency action. This review focuses on the cause of the incident and identification of steps to be taken to prevent or to ensure better handling of such events in the future.

The chart below summarizes the amount of initial and continued training.

Initial Training

Classroom instruction	40 hours
On-the-job training	456 hours

Continuation Training

Annual review	8 hours/year
---------------	--------------

Training is supplemented by memorandum format updates on new or modified policies and procedures required as a result of regulatory changes, receipt of new equipment, etc. This information will be presented to employees during daily tailgate meetings, monthly safety meetings or formal classroom instruction. For administrators and managers, ongoing training will also include outside technical seminars or training programs on hazardous waste management and emergency response.

### **3.0 TRAINER CREDENTIALS**

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Program administrator for each location identified below directs SET Environmental's training program.

LOCATION	PLAN ADMINISTRATOR
Houston	Daniel A. Didier
Dallas	Tad Defrange
Wheeling	Steve Pavlovich
Bridgeview	Mike Ortiz

In order to maximize training efficiency and effectiveness, SET Environmental personnel or off-site training organizations may present actual classroom instruction.

Trainers shall have satisfactorily completed a training course for teaching the subjects they are expected to teach or they shall have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach. SET will choose trainers that have obtained a high level of expertise either through education and/or experience.

No one individual can provide expertise in every area. Therefore SET's will utilize the talents of several employees throughout the organization, including but not limited to:

- Compliance Director
- Safety Officer
- General Manager
- Chemical Engineer
- Department Heads
- Project and Area Manager
- Supervisor
- Chemists

### **4.0 JOB DESCRIPTIONS**

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As an environmental management company virtually all SET employees (with the exception of certain administrative staff) perform or have the potential to perform tasks that involve handling hazardous waste, substances and/or materials. SET Environmental requires all employees to be involved in the degree of training appropriate to their responsibilities. The following is a description of divisions within the SET organization.

1. Administration is concerned primarily with overall division management at the facility with a focus on the regulatory and policy oriented aspects of hazardous waste management at the facility.
2. The Environmental Field Services Division provides lab-packing services for; drum surveys and sampling, site remediation, and emergency response for SET Environmental customers.
3. The Approval and Permitting Division is responsible for regulatory and technical approval of waste stream profiles and lab pack inventories submitted by customers. Personnel in this division will also profile waste streams and lab packs destined for off-site treatment, disposal, recycling or use.
4. The Laboratory Division is responsible for sample prequalification (verification of analytical data provided with waste stream profile and assessment for treatability), load fingerprinting, characterization of materials for off-site disposal and testing required for process monitoring.
5. The Transportation Division is responsible for the safe loading, unloading and movement of hazardous and non-hazardous materials from the generator to disposal facility.
6. The TSDF Production Division is directly involved in hazardous waste handling at SET's TSDF in Houston. This division is responsible for the processing (fuel blending, neutralization, chlorination, hydrolysis, segregation and consolidation) of hazardous wastes, sampling incoming loads, truck loading and unloading and facility housekeeping and maintenance.
7. The Industrial Cleaning Division is primarily involved with site remediation activities.

Each SET location will maintain a list of current employees, with job titles and descriptions (see Figure 4).

## **5.0 TRAINING SUBJECT MATTER**

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Figure 1 outlines area of instruction by major training topics (e.g., Administration, Safety). Figure E-2 identifies training required by regulatory agencies that applies to activities performed by SET Environmental personnel. Depending on job responsibilities, each employee may not be required to complete every area of instruction under the major training topic. With respect to the Topic entitled "Hazardous Waste And Emergency Response" Training shall be based on the duties and function to be performed by each employee as detailed below.

### **5.1 First Responder Awareness Level**

These are employees who are likely to witness or discover a hazardous substance release and have been trained to initiate an emergency response sequence by notifying proper company officials or proper authorities of the release (e.g., maintenance worker or security guard). To this end training will focus on recognizing, identify and understanding the hazards associated with hazardous substances when released. In the event of a hazardous substance release, the employee will have received training that enables them to notify appropriate company employees and/or out side entities. Employees trained at the first responder awareness level would not take part in further emergency response activities. The length of training will be sufficient to train the employee to perform these functions.

## **5.2 First Responder Operations Level**

These employees would respond to releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. Their primary objective will be to contain the release from a safe distance, keep it from spreading, and prevent exposures without actually trying to stop the release. These employees will receive training equivalent to that provided to the first responder awareness level employee. In addition the first responder operations level employee will be trained to understand the following:

- Basic hazard and risk assessment techniques.
- Selection and use proper PPE.
- An understanding of basic hazardous materials terms.
- Perform basic control, containment operations.
- Implementation of basic decontamination procedures.
- Standard operating and termination procedures.

The length of training is a minimum of 8 hours.

## **5.3 Hazardous Materials Technician**

These are employees that respond to releases for the purpose of stopping the release. Hazardous materials technicians will be provided with a minimum of 24 hours of training equal to the first responder operations level and have understand the following:

- Implementation of SET's emergency response plan.
- Classification, identification and verification of known and unknown materials by using field survey instruments and equipment.
- Be able to function within an assigned role in the Incident Command System.
- Selection and use proper specialized chemical personal protective equipment.

- Hazard and risk assessment techniques.
- Perform advance control, containment operations.
- Decontamination procedures.
- Termination procedures.
- Basic chemical and toxicological terminology and behavior.

#### **5.4 Hazardous Materials Specialist**

These employees respond with and provide support to hazardous materials technicians. Their duties are similar to the hazardous materials technician, however, will have a higher level of knowledge of the substance. The specialist may also act as the site liaison with Federal, state, local and other government authorities when authorized for that role by the incident commander. Hazardous materials specialists will receive a minimum of 24 hours of training equal to the technician level and understand the following areas:

- Implementation of the local emergency response plan.
- Classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.
- State emergency response plan.
- Selection and use proper specialized chemical personal protective equipment.
- In-depth hazard and risk techniques.
- Perform specialized control, and containment operations.
- Decontamination procedures.
- Develop a site safety and control plan.
- Chemical, radiological and toxicological terminology and behavior.

#### **5.5 On Scene Incident Commander**

This individual will assume control of the incident scene beyond the first responder awareness level and will receive at least 24 hours of training equal to the first responder operations level and in addition have understand the following areas:

- Implementation of SET's incident command system.
- Implementation of SET's emergency response plan.
- Hazards and risks associated with employees working in chemical protective clothing.
- Implementation of local emergency response plan.
- The state emergency response plan and knowledge of the Federal Regional Response Team.
- Importance of decontamination procedures.

## **5.6 Certification of Training**

SET will certify that training has been successfully completed. This certification will include the employees name, level/position of training (e.g., technician, specialist), number of hours completed, and the date of completion.

## **6.0 RECORD KEEPING**

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Records documenting the job title for each position, job descriptions, names of employees, and completed training will be kept at the SET Environmental office. These records and other documents verifying training will be kept for all current employees and for three years from the date of the individual employee's termination.

**FIGURE 1**  
**SET TRAINING OUTLINE**

**ADMINISTRATIVE**

- Internal Policies
- Internal Forms and Recordkeeping

**SAFETY TOPICS**

Workplace Hazards and Safety

- Bloodborne Pathogens
- Chemical and Physical Hazards
- Confined Space Entry
- Control of Hazardous Energy (Lockout/Tagout)
- Electrical Safety
- Fall Protection
- First Aid and CPR
- Hazard Communication
- Hazardous Waste Operations and Emergency Response
- Introduction to Toxicology
- Occupational Exposure to Hazardous Chemicals in Laboratories
- Portable Fire Extinguishers
- Scaffolding
- Trenching and Shoreing
- Welding Cutting and Hotwork

Personnel Protective Equipment

- Respiratory Protection Program
- Personnel Protective Equipment

Contingency Plan and Emergency Procedures

- Emergency Procedures
- Emergency Equipment
- Emergency Systems
- Procedures for using, inspection, repairing and replacing facility emergency and monitoring equipment.
- Key parameters for manual waste feed cutoff systems.
- Communications and alarm systems
- Response to fires or explosions
- Shutdown of operations

## **TECHNICAL TOPICS**

Hazardous Waste Chemistry

Sampling Techniques

## **REGULATORY TOPICS**

Hazardous Waste and Materials Management<sup>3</sup>

- Waste Classification (RCRA)
- Hazardous Substance Determination and Reporting Requirements (CERCLA)
- Hazardous Materials Classification (DOT)
- Shipping Descriptions
- Packaging
- Container Marking
- Container Labeling
- Hazardous Materials Segregation
- Manifest System
- Land Disposal Restriction Regulations
- Placarding for Highway Transportation

## **OPERATIONAL TOPICS**

Equipment

- Drum Movement/Operating Equipment (Forklift Operation)
- Equipment and Capabilities

Record Keeping and RCRA Requirements

- Waste Inventory System
- Operating Record System
- Inspection Procedures
- Waste Analysis

Standard Operating Procedures

- Shipping and Receiving
- Organic Liquids Processing
- Waste Consolidation
- Chemical Treatment (Neutralization, Re-Dox, Hydrolysis)
- Lab Pack Operations
- Laboratory Operations

**FIGURE 2  
GOVERNMENTAL TRAINING REQUIREMENT SUMMARY**

DESCRIPTION	REGULATORY SITE		INITIAL (Hours)	ANNUAL REVIEW (Hours)	OTHER REVIEW FREQUENCY (See foot notes)	CERTIFICATION REQUIRED <sup>1</sup> (Yes, No)
	CFR	Paragraph				
Emergency Action Plans	29	1910.38(e)&(f)	X		2	N
Hearing Conservation	29	1910.95(k)	X	X		N
Hazwoper Uncontrolled Waste Sites	29	1910.120(e)	40	8		Y
Hazwoper TSDF Operations	29	1910.120(p)(7)	24	8		Y
Hazwoper ER First Responder Awareness Level	29	1910.120(q)(6)(i)	X			N
Hazwoper ER First Responder Operations Level	29	1910.120(q)(6)(ii)	8	X		Y
Hazwoper ER Hazardous Materials Technician	29	1910.120(q)(6)(iii)	24	X		Y
Hazwoper ER Hazardous Materials Specialist	29	1910.120(q)(6)(iv)	24	X		Y
Hazwoper ER On Scene Incident Commander	29	1910.120(q)(6)(v)	24	X		Y
Personal Protective Equipment (Eye, Head and Hand)	29	1910.132(f)	X		3	Y
Respiratory Protection	29	1910.134(k)	X	X	3	N
Confined Space Entry	29	1910.146(g)	X		3	Y
Confined Space Entry Rescue Training with CPR and First Aid	29	1910.146(k)(2)	X	X		N
First Aid and CPR	29	1910.146(k)(2)	X	X	3	Y
Control of Hazardous Energy (Lockout/Tagout)	29	1910.147(c)(7)	X		3	Y
Portable Fire Extinguishers	29	1910.157(g)	X	X		N
Powered Industrial Trucks (e.g., Forklifts)	29	1910.178(l)	X		4	Y
Welding Cutting and Hotwork	29	1910.253	X			N
Electrical Safety	29	1910.332(b)	X		3	N
Asbestos Abatement	29	1910.1001	X	X		N
Bloodborne Pathogens	29	1910.1030(g)(2)	X	X		N
Hazard Communication	29	1910.1200(h)	X		5	N
Occupational Exposures to Hazardous Chemicals in Laboratories	29	1910.1450(f)	X		5	N
Scaffolding	29	1926.454	X		3	N
Fall Protection	29	1926.503	X		3	Y
Trenching and Shoreing	29	1926.651	X			N
Contingency Plan and Emergency Preparedness (RCRA)	40	265.16	X	X		N
Hazardous Materials (DOT)	49	172.700	X		4	Y

- 1 Although a specific certification may not be required by the standard, SET must document training and demonstrate that the employee understands the material covered. Most of these standards specify areas of training that must be covered and understood.
  - 2 When the plan or the employees responsibilities under the plan change.
  - 3 Recurrent training is required when changes in the workplace or safety procedures render previous training obsolete; or an employees use or knowledge of the safety procedures are inadequate.
  - 4 Recurrent training is required every three (3) years.
  - 5 Recurrent training is required when a new physical or health hazard is introduced into the employees work area that they have not previously received training on.
- X Initial and/or recurrent training is required; however, the number of hours is not mandated by law.

**FIGURE 3**  
HOUSTON CURRENT EMPLOYEES, DIVISION, and JOB TITLES

Available upon request.

**FIGURE 4  
JOB DESCRIPTIONS**

Available upon request.





Cylinder ID Number(s): \_\_\_\_\_

Total Number Cylinders Exactly Matching this Report:

**COMPRESSED GAS CYLINDER INSPECTION REPORT**

**I. GENERAL INFORMATION**

GENERATOR: \_\_\_\_\_

BROKER NAME: \_\_\_\_\_

EPA CODE(S):

TEXAS WASTE CODE:

CONTENTS \_\_\_\_\_

(enter gas name here)

Content Information is based on:  Mfg Lable  Suspected  Analysis (Please Attach)

SHIPMENT MODE \_\_\_\_\_

Boxes  Drums  Palletized

Other (Specify) \_\_\_\_\_

**II. CYLINDER INFORMATION:**

DIMENSIONS (Inches): \_\_\_\_\_ X \_\_\_\_\_  
Length (not including valve) Diameter

WEIGHT (Pounds): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Gross Tare Net

SIZE \_\_\_\_\_

Lecture <3" x <12"  Small <4" x <24"  
 Medium <10" x <36"  Large <16' x <54"

EXTERNAL CONDITION \_\_\_\_\_

Excellent  Good  Fair  
 Poor  Questionable

CYLINDER COMMENTS \_\_\_\_\_

PHYSICAL STATE \_\_\_\_\_

Liquefied Compressed Gas  Compressed Gas  Non-Pressurized Liquid

MFG LABEL ATTACHED \_\_\_\_\_

Yes  No

VALVE PROTECTIVE CAP \_\_\_\_\_

Present:  Yes  No  
Removable:  Yes  No

DOT/ICC Spec: \_\_\_\_\_

Last Hydrostatic Test Date:

COLORS: \_\_\_\_\_

**III. VALVE INFORMATION:**

EXTERNAL CONDITION \_\_\_\_\_

Excellent  Good  Fair  
 Poor  Questionable

WORKING CONDITION \_\_\_\_\_

Yes  No  Unknown

VALVE COMMENTS \_\_\_\_\_

Pressure Relief:  Yes  No

Location:  On Valve  On Cylinder

Type:  Plug  Disk  Spring Loaded

CGA OUTLET NUMBER(If known):

**IV. SHIPPING INFORMATION:**

DOT SHIPPING DESCRIPTION: \_\_\_\_\_

HAZARD CLASS:

UN/NA:

Poison Inhalation:  Yes  No ZONE:  A,  B,  C,  D

NOTE: GASES WITH CLASS 2.3 MUST HAVE A VALVE OUTLET PLUG OR CAP.

Inspection Completed by: \_\_\_\_\_

Date: \_\_\_\_\_





## WASTESTREAM PROFILE

### Treatment One Use Only

 Approval No: \_\_\_\_\_  
 Sales Rep: \_\_\_\_\_

 Treatment/Handling Code: \_\_\_\_\_  
 Disposal Accrual: \_\_\_\_\_  
 Pricing: \_\_\_\_\_

### I. GENERATOR INFORMATION

 Generator \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Fax \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 City, State Zip \_\_\_\_\_  
 Site Address \_\_\_\_\_  
 City, State Zip \_\_\_\_\_

 Broker Name \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Fax \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 City, State Zip \_\_\_\_\_

U.S. EPA ID No: \_\_\_\_\_ Texas Generator ID No: \_\_\_\_\_

### II. GENERAL WASTE INFORMATION

**Wastestream Name:** \_\_\_\_\_

FREQUENCY	
<input type="checkbox"/> One Time	<input type="checkbox"/> Yearly
<input type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly
<input type="checkbox"/> Other _____	

CONTAINER TYPE	
<input type="checkbox"/> Metal	<input type="checkbox"/> Wood
<input type="checkbox"/> Poly	<input type="checkbox"/> Fiber

QUANTITY			
<input type="checkbox"/> Drum	<input type="checkbox"/> Gallons	<input type="checkbox"/> Pounds	<input type="checkbox"/> Tote
<input type="checkbox"/> Cu Yard			

CONTAINER SIZE			
_____ Gal	_____ Gal	_____ Gal	_____ Cu Yd
_____ Gal	_____ Gal	_____ Gal	_____ Tote

### III. SPECIFIC HAZARDS Please identify all that apply.

Explosive <input type="checkbox"/> Yes <input type="checkbox"/> No	Organic Peroxide <input type="checkbox"/> Yes <input type="checkbox"/> No	Polymerizer <input type="checkbox"/> Yes <input type="checkbox"/> No
Shock Sensitive <input type="checkbox"/> Yes <input type="checkbox"/> No	Poison <input type="checkbox"/> Yes <input type="checkbox"/> No	PCB >1 ppm <input type="checkbox"/> Yes <input type="checkbox"/> No
Compressed Gas <input type="checkbox"/> Yes <input type="checkbox"/> No	Infectious <input type="checkbox"/> Yes <input type="checkbox"/> No	
Flammable <input type="checkbox"/> Yes <input type="checkbox"/> No	Carcinogen <input type="checkbox"/> Yes <input type="checkbox"/> No	
Pyrophoric <input type="checkbox"/> Yes <input type="checkbox"/> No	Radioactive <input type="checkbox"/> Yes <input type="checkbox"/> No	
Water Reactive <input type="checkbox"/> Yes <input type="checkbox"/> No	Corrosive <input type="checkbox"/> Yes <input type="checkbox"/> No	
Oxidizer <input type="checkbox"/> Yes <input type="checkbox"/> No	Dioxin or Suspect <input type="checkbox"/> Yes <input type="checkbox"/> No	

### IV. PROCESS

Describe the process generating the waste, including raw materials and final product.

 Unused (Attach MSDS)  
 Used/Spent (Attach laboratory analysis)







**TABLE I - WASTE CODE SUBCATEGORIES**

Code	A	B	C	D	E
D001	High TOC ignitable characteristic liquids.	All other ignitable characteristic waste.			
D003	Reactive cyanides	Reactive sulfides	Explosives	Water reactives	Other Reactives
D006	Cadmium containing batteries				
D008	Lead acid batteries				
D009	High Mercury - Organic (Nonwastewaters)	High Mercury - Inorganic (Nonwastewaters)	Low Mercury (Nonwastewaters)	Mercury Containing Wastewaters	
P047	4,6-Dinitro-o-cresol	4,6-Dinitro-o-cresol salts			
P065 & P092	Non-incinerator or non-RMERC residues.	Incinerator or RMERC residues with $\geq 260$ mg/kg total mercury.	RMERC residues with $< 260$ mg/kg total mercury.	Incinerator residues with $< 260$ mg/kg total mercury.	All wastewaters
U151	High mercury	RMERC residues with $< 260$ mg/kg total mercury.	Non-RMERC residues with $< 260$ mg/kg total mercury.	All wastewaters.	
U240	2,4-Dichlorophenoxyacetic acid	2,4-Dichlorophenoxyacetic acid salts and esters.			
F003 & F005	Waste that contain only the F-listed solvents Carbon disulfide, Cyclohexanone and/or Methanol.	Wastes that contain only the F-listed solvent 2-Nitropropane.	Wastes that contain only the F-listed solvent 2-Ethoxyethanol.		

**TABLE II - F CODE SOLVENT CONSTITUENTS**

Code	Constituent	Code	Constituent	Code	Constituent	Code	Constituent
5	Acetone	11	Cresol (o, m, or p isomers)	17	Ethyl ether	23	Nitrobenzene
6	Benzene	12	Cresylic acid	18	Isobutanol	24	Pyridine
7	n-Butyl alcohol	13	Cyclohexanone	19	Methanol	25	Tetrachloroethylene
8	Carbon disulfide	14	1,2-Dichlorobenzene	20	Methylene chloride	26	Toluene
9	Carbon tetrachloride	15	Ethyl acetate	21	Methyl ethyl ketone	27	1,1,1-Trichloroethane
10	Chlorobenzene	16	Ethyl benzene	22	Methyl isobutyl ketone	28	1,1,2-Trichloroethane
						29	1,1,2-Trichloro-1,2,2-trifluoroethane
						30	Trichloroethylene
						31	Trichlorofluoromethane
						32	Xylene



**TABLE III - UNIVERSAL TREATMENT STANDARDS  
(Underlying Hazardous Constituents (UHC))**

33	Acenaphthylene	109	2,6-Dichlorophenol	187	N-Nitrosopyrrolidine
34	Acenaphthene	110	1,2-Dichloropropane	275	Oxamyl
35	Acetone	111	cis-1,3-Dichloropropylene	188	Parathion
36	Acetonitrile	112	1,3-Dichloropropylene, trans	276	Pebulate
37	Acetophenone	113	Dieldrin	189	PCBs, Total (sum of all PCB isomers, or all Aroclors)
38	2-Acetylaminofluorene	114	Diethyl phthalate	190	Pentachlorobenzene
39	Acrolein	115	2,4-Dimethylphenol	191	PeCDDs (All pentachlorodibenzo-p-dioxins)
40	Acrylamide	116	Dimethyl phthalate	192	PeCDFs (All Pentachlorodibenzo-furans)
41	Acrylonitrile	117	Di-n-butyl phthalate	193	Pentachloroethane
251	Aldicarb sulfone	118	1,4-Dinitrobenzene	194	Pentachloronitrobenzene
42	Aldrin	119	4,6-Dinitro-o-cresol	195	Pentachlorophenol
43	4-Aminobiphenyl	120	2,4-Dinitrophenol	196	Phenacetin
44	Aniline	121	2,4-Dinitrotoluene	197	Phenanthrene
45	Anthracene	122	2,6-Dinitrotoluene	198	Phenol
46	Aramite	123	Di-n-octyl phthalate	199	Phorate
47	alpha-BHC	124	p-Dimethylaminoazobenzene	200	Phthalic acid
48	beta-BHC	125	Di-N-propylnitrosamine	201	Phthalic anhydride
49	delta-BHC	126	1,4-Dioxane	279	Physostigmine salicylate
50	gamma-BHC (Lindane)	127	Diphenylamine	278	Physostigmine
252	Barban	128	Diphenylnitrosamine	280	Promecarb
254	Bendiocarb	129	1,2-Diphenylhydrazine	202	Pronamide
255	Benomyl	130	Disulfoton	281	Propham
51	Benzene	265	Dithioncarbamates	282	Propoxur
52	Benz(a)anthracene	131	Endosulfan I	283	Prosulfocarb
53	Benzal chloride	132	Endosulfan II	203	Pyrene
54	Benzo(b)fluoranthene	133	Endosulfan Sulfate	204	Pyridine
55	Benzo(k)fluoranthene	134	Endrin	205	Safrole
56	Benzo(g,h,i)perylene	135	Endrin Aldehyde	206	Silvex
57	Benzo(a)pyrene	266	EPTC	207	2,4,5-Trichlorophenoxyacetic acid
58	Bromodichloromethane	136	Ethyl acetate	208	1,2,4,5-Tetrachlorobenzene
59	Methyl bromide	137	Ethyl cyanide (Propanenitrile)	209	TCDDs (All Tetrachlorodibenzo-p-dioxins)
60	4-Bromophenyl phenyl ether	138	Ethyl benzene	210	TCDFs (All tetrachlorodibenzo-furans)
61	n-Butanol	139	Ethyl ether	211	1,1,1,2-Tetrachloroethane
62	Butyl benzyl phthalate	140	bis(2-Ethylhexyl) phthalate	212	1,1,2,2-Tetrachloroethane
63	2-sec-Butyl-4,6-dinitrophenol	141	Ethylmethacrylate	213	Tetrachloroethylene
256	Butylate	142	Ethylene oxide	214	2,3,4,6-Tetrachlorophenol
257	Carbaryl	143	Famphur	284	Thiodicarb
258	Carbenzadim	144	Fluoranthene	285	Thiophanate-methyl
260	Carbofuran	145	Fluorene	215	Toluene
259	Carbofuran phenol	267	Formetanate hydrochloride	216	Toxaphene
64	Carbon disulfide	146	Heptachlor	287	Triallate
65	Carbon tetrachloride	147	Heptachlor epoxide	217	Tribromomethane
261	Carbosulfan	148	Hexachlorobenzene	288	2,4,6-Tribromophenol
66	Chlordane (alpha and gamma isomers)	149	Hexachlorobutadiene	218	1,2,4-Trichlorobenzene
67	p-Chloroaniline	150	Hexachlorocyclopentadiene	219	1,1,1-Trichloroethane
68	Chlorobenzene	151	HxCDDs (All hexachlorodibenzo-p-dioxins)	220	1,1,2-Trichloroethane
69	Chlorobenzilate	152	HxCDFs (All Hexachlorodibenzo-furans)	221	Trichloroethylene
70	2-Chloro-1,3-butadiene	153	Hexachloroethane	222	Trichlorofluoromethane
71	Chlorodibromomethane	154	Hexachloropropylene	223	2,4,5-Trichlorophenol
72	Chloroethane	155	Indeno (1,2,3-c,d) pyrene	224	2,4,6-Trichlorophenol
73	bis(2-Chloroethoxy)methane	156	Iodomethane	225	1,2,3-Trichloropropane
74	bis(2-Chloroethyl)ether	157	Isobutyl alcohol	226	1,1,2-Trichloro-1,2,2-trifluoroethane
75	Chloroform	158	Isodrin	289	Triethylamine
76	bis(2-Chloroisopropyl)ether	159	Isosafrole	227	2,3-tris-(Dibromopropyl) phosphate
77	p-Chloro-m-cresol	160	Kepone	290	Vernolate
78	2-Chloroethyl vinyl ether	161	Methacrylonitrile	228	Vinyl chloride
79	Chloromethane	162	Methanol	229	Xylene mixed isomers
80	2-Chloronaphthalene	163	Methapyrilene		
81	2-Chlorophenol	270	Methiocarb		
82	3-Chloropropylene	271	Methomyl		
83	Chrysene	164	Methoxychlor		
84	o-Cresol	165	3-Methylcholanthrene		
85	m-Cresol	166	4,4-Methylene-bis-(2-chloroaniline)		
86	p-Cresol	167	Methylene chloride		
262	m-Cumyl methylcarbamate	168	Methyl ethyl ketone		
87	Cyclohexanone	169	Methyl isobutyl ketone		
88	1,2-Dibromo-3-chloropropane	170	Methyl methacrylate		
89	Ethylene dibromide	171	Methyl methansulfonate		
90	Dibromomethane	172	Methyl parathion		
91	2,4-Dichlorophenoxyacetic acid	272	Metolcarb		
92	o,p'-DDD	273	Mexacarbate		
93	p,p'-DDD	274	Molinat		
94	o,p'-DDE	173	Naphthalene		
95	p,p'-DDE	174	2-Naphthylamine		
96	o,p'-DDT	175	o-Nitroaniline		
97	p,p'-DDT	176	p-Nitroaniline		
98	Dibenzo(a,h)anthracene	177	Nitrobenzene		
99	Dibenz(a,e)pyrene	178	5-Nitro-o-toluidine		
100	m-Dichlorobenzene	179	o-Nitrophenol		
101	o-Dichlorobenzene	180	p-Nitrophenol		
102	p-Dichlorobenzene	181	N-Nitrosodiethylamine		
103	Dichlorodifluoromethane	182	N-Nitrosodimethylamine		
104	1,1-Dichloroethane	183	N-Nitroso-di-n-butylamine		
105	1,2-Dichloroethane	184	N-Nitrosomethylethylamine		
106	1,1-Dichloroethylene	185	N-Nitrosomorpholine		
107	trans-1,2-Dichloroethylene	186	N-Nitrosopiperidine		
108	2,4-Dichlorophenol			249	None Apply

**Inorganic Constituents**

230	Antimony
231	Arsenic
232	Barium
233	Beryllium
234	Cadmium
235	Chromium [Total]
236	Cyanides (Total)
237	Cyanides (Amenable)
239	Lead
240	Mercury-Nonwastewater from retort
241	Mercury (All others)
242	Nickel
244	Silver
246	Thallium





