SOUTH 4 GROUP FIRE
PORT NECHES, TEXAS
WASTE MANAGEMENT PLAN

VERSION 1.0

Prepared on behalf of:
TCP Group

Prepared By:
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WASTE MANAGEMENT PLAN MANAGEMENT OF CHANGE

Change 001			
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1. INTRODUCTION AND PURPOSE

This Waste Management Plan was prepared by TPC Group LLC. (TPC), supporting Unified Command (UC) to provide a plan for the management of waste during the South 4 Group Fire response activities. A map of the general facility location is presented in Attachment A.

This Waste Management Plan describes procedures and protocols to be followed for waste materials, recovered and generated during response and recovery efforts including materials generated during decontamination processes. The plan provides for the management, transportation, interim storage and final disposal of the expected waste streams and categories that may be generated. The procedures and protocols set forth in this document for sample collection and analysis will follow TCEQ's QAP, and EPA's SW-846 methods.

The collection, storage, transportation, treatment and disposal of waste will be conducted in a manner that is both safe and environmentally sound.

2. HEALTH AND SAFETY

Safety is the most important consideration when implementing this plan. All site personnel will review and adhere to TPC's Site Safety and Control Plan and company/contractor-specific Health and Safety Plans (HASP), and ICS-206, as applicable. Daily tailgate safety briefings will be conducted prior to going into the field. The appropriate personal protective equipment (PPE) will be utilized for each task. Any health and safety-related incident will be promptly reported to the Safety Officer (SOFR).

3. *WASTE MANAGEMENT BEST PRACTICES*

The management of wastes generated during response and recovery efforts will be subject to the following best practices:

- Dispose or manage wastes and recoverable materials in permitted or otherwise authorized locations. Unauthorized disposal or management will not be tolerated.
- Obtain Safety Data Sheets (SDSs) for all known products and other incident derived materials (ex: fire-fighting foam) involved in waste management (the SDS's for the materials involved will be provided in Attachment B).
- All waste will be considered hazardous until such a time that analysis determines otherwise.

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- Reduce waste generation whenever practical. This is known as waste minimization or pollution prevention.

- Reuse or recycle materials whenever practical. This not only lowers a consumption of raw materials, it also eliminates the need for waste disposal. Recycling in reuse of recovered oil and oil and water is the preferred option.

- Prevent co-mingling wastes of different classifications. For example, never place non-hazardous wastes in the same container as hazardous waste or vice versa. In addition, keep recyclable material separate from nonrecyclable waste. It may be difficult or impossible to separate wastes after their co-mingled.

- Maintain good housekeeping practices. Employees and contractors should maintain neat, clean-up work areas to reduce the need for additional cleanup and the associated waste.

- Properly store wastes, especially hazardous waste, to prohibit releases to soil, water, or air, and to prevent contamination of or consumption by wildlife until they can be appropriately managed.

- Clearly identify waste containers. Use a label or other means to clearly identify the contents of containers of hazardous, nonhazardous and inert wastes and denote the date waste is placed in containers.

- Document quantities and disposition of all hazardous and non-hazardous wastes as instructed in this plan. Waste tracking is required for all wastes. This information will be included in the final report delivered at the conclusion of response activities.

- Recovered liquids (product, water, sludge) should be collected and stored in as large a container as possible (UN approved drum, tote tank, tanker truck, barge, etc.) to maximize dewatering potential, facilitate uninterrupted recovery, and to minimize equipment decontamination requirements.

- Communicate your ideas to the Operations Section Chief for waste minimization waste management improvements supervisors and fellow employees in different areas.

- Maintain security at all locations where waste is stored.

The Environmental Unit is responsible for determining whether any regulatory permits (e.g. NPDES) or plans (SWP3 or SPCC Plan) are required for areas where waste is stored.

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4. WASTE CHARACTERIZATION

Classification of the wastes/materials will be determined based sampling analytical results, waste characterization and, in some cases, generator knowledge. Currently, the estimated volumes of each waste stream and reclaimable/recyclable materials are unknown due to the nature of the incident. All waste streams will be carefully classified following the rules set forth in 30 TAC 335.501-521 Subchapter R.

4.1 WASTE PROFILE EVALUATION AND METHOLOGY

Representative sampling may be done on each waste stream for proper characterization, as deemed necessary, and used in the generation of waste profiles. Sampling will be conducted by representatives with the Environmental Unit; however, this activity will be coordinated with Safety and Operations in order to make certain that access is safe and the collection of samples is fully representative of the generated waste. Once collected, the samples will be handled and preserved as described in below.

4.1.A SAMPLING OF SOLID WASTES

Roll-off boxes generated from this incident will be representatively sampled, if it is not assumed using generator knowledge to be hazardous waste. Due to the volatility of the waste materials to be sampled, solid waste will not be composited in the field prior submitting to a laboratory for analysis. Aliquots from each roll-off box will be collected from all four corners and the approximate center from 2 discrete depths: 0.5-1.0 foot below surface and 1.5-2.0 feet below surface. Volatile organic compounds (VOCs) will be measured in the field from each of 10 aliquots collected from loaded roll boxes, using a properly calibrated photo-ionization detector (PID). Each aliquot, once collected, will be immediately placed into clean 1-quart sized re-sealable zipper storage bags, sealed, and allowed to volatilize for 5 minutes prior to measuring VOCs using the PID. The location from which the aliquot with the highest PID reading was recorded will be sampled and submitted to the laboratory for analysis. Each sample will be placed in the appropriate sample container described in Table 1 below.

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Solid waste samples (solids) will be analyzed for the following:

Table 1: Sampling analyses, methods, containers, and preservation times for various parameters.

Parameter	EPA SW-846 Test Method	Sample Container	Preservation/Hold Time
volatile organic compounds (TCLP-VOCs	EPA Method 1311/8260	2/9oz jars	14 days
semi-volatile organic compounds (TCLP-SVOCs)	EPA Method 1311/8260	2/9oz jars	14 days
TAL Metals	EPA Method 6020/6010/7470	2/9 oz jars	14 days
Reactivity	EPA Method 7.3.3.2/7.3.4.2	2/9 oz jars	14 days
Corrosivity	EPA Method 9045	2/9 oz jars	14 days
Ignitibility	EPA Method 1030	2/9 oz jars	14 days
polyfluoroalkyl substances (PFAS).	EPA Method537M	1/250ml HDPE or 4oz jar	7 days
Polynuclear aromatics (PNA)	EPA Method 8270	2/9oz jars amber	14 days
TPH	TX1005	Terracore Kit	14 days

Commented [RJ1]: Method 8270 instead of 8260

5. POTENTIAL WASTE CATEGORIES

Waste Stream	Sources	Materials Generated
Non-Hazardous: Would be considered Class 1 material when documented via analysis		
Liquid Material	Skimming, vacuuming, equipment decon	• Recovered or skimmed mixtures • Wash waters from cleaning equipment • Decon waters • ~~Rinseate~~Rinsate from Wildlife Rehabilitation Efforts, if conducted
Solids	Recovery and Remediation ops	• Sediment, vegetation, woody material • Empty foam totes
Sorbents	Recovery operations	• Contaminated sorbent materials
PPE	Worker protection	• Outer garments
General Household Trash	Daily activities	• Food and beverage debris
Hazardous*		
Waste determination made on case by case basis (e.g. soil, liquids exhibiting corrosive, toxic, or flammability characteristics, liquids with a listed constituent)		
Non-Hazardous: Wastes not considered Class 1 nor Class 3		
Waste Determinations that demonstrate a waste is not Class 1 nor a Class 3 waste shall be considered Class 2 non-hazardous wastes. These wastes would typically be General Household Trash, some solids and debris, and some PPE.		

6. WASTE MATERIAL MANAGEMENT

Description of potential material/Waste	Waste Category	Method of Removal	Temporary Storage	Ultimate Disposal
Contaminated Water/Recoverable product	Class 1 or/Hazardous Waste (classification TBD by waste determination), Recoverable product	Pump to vac trucks (removed from outfalls, drains, bayou, and various locations along the ship channel)	Frac Tanks	Separate and decant water to be sent to the JWWTP, if acceptable
Uncontaminated Household Trash	Non-Hazardous Solid Waste	Dumpsters provided by Waste Management (WM)	Various staged locations	
Debris/other solids / sorbent materials – Class 1	Class 1 or/ Hazardous Waste (classification TBD by waste determination)	Poly lined Roll Off Containers	Roll off boxes in designated areas	
Debris/other solids / sorbent materials – Class 2	Class 2 or/ Hazardous Waste (classification TBD by waste determination)	Poly lined Roll Off Containers	Roll off boxes in designated areas	
PPE – Class 1	Non-Hazardous Solid Waste/Class 1 Solid Waste (classification TBD by waste determination)	Poly lined Roll Off Containers	Roll off boxes in designated areas	
PPE – Class 2	Non-Hazardous Solid Waste/Class 2 Solid Waste (classification by waste determination)	Poly lined Roll Off Containers	Roll off boxes in designated areas	
Sorbent materials	Class 1 or / Hazardous waste (classification TBD by waste determination)	Poly lined Roll Off Containers	Roll off boxes in designated areas	
Materials identified as hazardous waste	Hazardous Solid Waste	Poly lined Roll Off Containers	Roll off boxes in designated areas or covered roll-off boxes as appropriate for volatile wastes (40 CFR 265.1083 and 1087)	
Materials identified as hazardous waste	Hazardous Liquid Waste	Pump to vac truck and move to onsite storage tanks	Frac Tanks	

6.1 Offsite Materials

Materials collected offsite will be managed under the provisions of 40 CFR 270.1(c)(3), 40 CFR 263.20(b), and 30 TAC 335.93(b). These materials include boxes containing collected sorbents, vacuum trucks with

liquid materials, and trash/refuse. The material is to be recovered at an offsite location (map can be found in ATTACHMENT X) and transported directly to the TPC site to be offloaded into tanks or to be held in one of the temporary staging areas designated in ATTCHMENT D. Prior to being offloaded or staged, the transporter and a designated TPC representative will complete the "Emergency Response Shipping Paper", which can be found in ATTACHMENT G. The materials will not be in possession or control of any party other than TPC. The material will be assessed and the required waste determination and characterization made at the TPC site in accordance with state and federal regulations prior to disposal or recovery. Once the immediate response ends, the onsite management of any material that is, or potentially is, hazardous waste will occur in accordance with the permit exemption criteria set forth in 40 CFR 262.17(a).

7. STAGING AREAS

Several waste staging areas for solid wastes (soil, sorbents, vegetation, PPE, trash/debris/refuse) have been identified, and a complete list along with map can be found in Attachment D. The TPC dock may serve as the staging area for full roll-off boxes and for frac tanks that may need to accept transferred liquids from frac tanks staged along Highway 366 near the intersection with Orchard Avenue.

Bagged class 1 and hazardous waste will be segregated to avoid mixture and disposed of in separate roll off boxes. Other solid waste will be containerized at the staging areas in poly-lined Roll off boxes. Solid waste will be separated according to its contents.

Water wastes will be managed in accordance with the Water Management Plan, dated December 1, 2019, which was developed for this incident and approved by UC.

Waste containers will be clearly identified. Each container is to be visibly labeled on all sides indicating the contents (e.g. impacted soil, contaminated vegetation/debris, PPE, etc.) and the date the container began collecting waste.

The waste flow process will consist of receiving waste at the designated staging areas or WMU's, sorting waste to separate items that can be recycled or reused, and packing/labeling/manifesting. This may include, but is not limited to, recovered scrap metal, piping, concrete, decanted product, and soil. These determinations will be made in accordance with 40 CFR 261.6. Any waste that is deemed recyclable or reusable will be shipped via BOL or similar document. Any potentially recyclable material that has been impacted by the fire and has a residue will be subject to the testing standards set forth in section 4.1 of this document before a determination is made.

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8. DOCUMENTATION AND STORAGE AREA CONTROL

The Waste Specialist reporting to the Environmental Unit Leader (EUL) and supporting the Situation Unit Leader (SITL) will be responsible for coordinating all daily waste stream activities. Coordination activities include, but are not limited to, the following:

- Perform special projects and other tasks requested by UC;
- Continually analyze situations and make or recommend judgmental decisions to maintain assets in the best safety, compliance and business position possible;
- Perform daily inspections to ensure that all containers are in good condition, boxes are not leaking, boxes are properly tarped and free of liquids that could cause delays or problems during shipment and notify waste management personnel when containers need to be overpacked or the contents transferred to a more suitable container. This is in accordance with 40 CFT 265.170-174. Report any discrepancies. This process will be documented using the checklist provided in Attachment F;
- Inspect all containers and confirm labels are in place and correct prior to the loading of the transportation vehicle to ensure that the load(s) will be received at the disposal facility without discrepancy;
- Continually look for ways to reduce the total waste stream; and,
- Assist with the identification, inventory, and proper storage of all waste materials at waste staging areas.

Daily verbal reports are to be provided for the following:

- Quantity of each category of waste generated for that operational period;
- Quantity of each category of waste stored on site; and
- Quantity of each category of waste transferred.

Waste at the consolidation sites will be controlled when entering and leaving the staging areas. The following form will be used to document waste management. This form is to be updated at least once daily and forwarded at the end of the week to the environmental team.

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8.1 Staging Area Log Example

Date Onsite	Date Full	Date Offsite	Contractor	Type	Location	Container No.	Product	Tank #	Customer	Notes/Comments
			Cameron	RO	4 Dock	2006	Copper	*	TCP	Road leading to the 1 dock
			Sprint	RO	S. Drum Shed	4154	Debris	*	TCP	From construction, south of 4th 100's

8.2 Waste Disposal Log Example

Date	Manifest #	Transporter	EPA ID	Class	Designated Facility	EPA/SWT	Waste Code	PUKFD Codes	Waste Description	QTY	UOM	Management Codes	Return Date	Box #	Container Type
3/5/2019	01258841 JJK	Cima	54321	H	Clean Harbors	67891	012399 9H	D001	UN3077, Hazardous Waste Solid, n.o.s.	3000	P	H040		30-20	1 CM

9. ADDITIONAL ASSISTANCE

If additional help or assistance is required, immediately contact TCP Environmental representative at Sanders, Jason <Jason.Sanders2@tpcgrp.com>; Jaschek, Becky <Rebecca.Jaschek@tpcgrp.com>; Brechtel, Scott [HYPERLINK "mailto:Scott.Brechtel@tpcgrp.com"].

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ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

ATTACHMENT D

ATTACHMENT E

ATTACHMENT F: DAILY INSPECTION CHECKLIST

INSPECTION INFORMATION			
DATE:			
TIME:			
INSPECTOR AND INITIALS:			
HAZARDOUS WASTE CONTAINERS	Y/N	CORRECTIVE ACTION	OTHER COMMENTS
ARE THE CONTAINERS PROPERLY AND CLEARLY LABELED?			
ARE THE CONTAINERS TIGHTLY CLOSED?			
IS THERE ANY EVIDENCE OF DETERIORATION?			
ARE THE INCOMPATIBLES SEPARATED?			
ARE THERE ANY SIGNS OF LEAKS OR SPILLS?			
IS THE AREA AROUND THE CONTAINERS CLEAR OF DEBRIS?			
IS SPILL RESPONSE EQUIPMENT ACCESSIBLE?			
ARE THE ROLL TARPS DAMAGED OR WORN?			
ARE THE STRAPS DAMAGED OR WORN?			
ARE THE BUNGEE CORDS CRACKED OR DAMAGED?			
IS THERE ADEQUATE ISLE SPACE TO CONDUCT INSPECTIONS?			
ARE THERE ANY HIGH READINGS IN THE AREA WHERE THE CONTAINERS ARE BEING STORED? IF YES, PLEASE NOTE READING TYPE AND MEASUREMENT.			

ATTACHMENT G

South 4 Group Fire
Waste Management Plan