Response Protocols: Disposal

Annex 6b May 2022

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1000 Introduction 1100 Purpose

The purpose of this policy is to provide guidance for making a waste determination for proper disposal of materials (i.e. sorbents, solidifiers, etc.) and debris (i.e., Personal Protective Equipment (PPE), rags, soil, etc.) contaminated by hydrocarbons. This guidance describes the chronology of activities necessary for decision making for coordinating proper disposal of materials contaminated by hydrocarbons in accordance with all local, state and federal regulations.

It should be noted that waste determinations are made by the generator of the waste such that the generator may: 1) manage the waste appropriately and legally (in accordance with all local, state and federal regulations); and 2) provide valid proof (i.e., analytical and/or SDS) to the disposal facility regarding the matrix/constituents of the waste generated such that the disposal facility may make a determination as to whether they will accept the waste in compliance with their operating permit(s).

1200 Definitions

Discharge or hazardous waste discharge: The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water. **Disposal:** The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Disposal facility: A facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

Exploration and Production Waste (E&P Waste): drilling wastes, salt water, and other wastes associated with the exploration, development, or production of crude oil or natural gas wells and which is not regulated by the provisions of the Louisiana Hazardous Waste Regulations and the Federal Resource Conservation and Recovery Act, as amended. (LAC 43:XIX.501).

Hazardous Waste: See 40 CFR 261.3 **Incinerator:** Any enclosed device that:

- Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit.
- Meets the definition of infrared incinerator or plasma arc incinerator.

Industrial Solid Waste: solid waste generated by a manufacturing, industrial, or mining process, or that is contaminated by solid waste generated by such a process. This term does not include hazardous waste regulated under the Louisiana hazardous waste regulations or under federal law, or waste that is subject to regulation under the LDNR Office of Conservation's Statewide Order No. 29-B or by other agencies (LAC 33:VII.115).

Landfill: A disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

Oil: Oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Petroleum oil: Petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products.

Solid Waste: See 40 CFR 261.2

Solidifier: Product composed of dry high molecular weight polymers that have a porous matrix and large oleophilic surface area which form a physical bond with oil.

Sorbent: An insoluble material or mixture of materials used to recover liquids through the mechanisms of absorption or adsorption, or both.

Organic Compounds: Include, but are not limited to: peat moss; straw; cellulose fibers; cork; corn cobs; chicken, duck or other bird feathers, etc.

Mineral Compounds: Include, but are not limited to: volcanic ash, perlite, vermiculite, zeolite, etc.

Synthetics Products: Include, but are not limited to: polypropylene, polyethylene, polyurethane, polyester, etc.

Type I Facility: a facility used for disposing of industrial solid wastes (e.g., a landfill, surface impoundment, or land farm). (LAC 33:VII.115)

2000 Waste Determination for Disposal Coordination

The Generator and/or Responsible Party (RP) are responsible for the characterization and classification of the waste stream. In addition, it is up to the discretion and acceptance criteria (i.e. state issued permit & operating procedures) of the disposal facility with respect to waste disposal. In determining a waste stream's classification, a generator may use *process knowledge* and/or *analytical testing* by approved EPA methods (i.e. SW-846).

Process knowledge is applying knowledge of the hazardous characteristics of the waste in light of the materials or processes used. For example, a safety data sheet (SDS) may indicate that a material used in a process contains no hazardous constituents or exhibits no hazardous characteristic. The waste may be determined non-hazardous if the process itself contributes no hazardous constituents and does not result in the waste exhibiting a hazardous characteristic.

Analytical testing is information about a waste provided from laboratory analysis. Waste classification must be properly documented in a written and/or electronically stored format that is reasonably accessible and easily reproducible. The first step in classifying your waste is referred to as "making a *hazardous waste determination*."

The waste determination will determine how and where (e.g., landfill, incinerator, etc.) the waste will be properly disposed. A hazardous waste determination is made based on the following questions:

- Is the waste a "solid waste?" Does it meet the regulatory definition of a "solid waste" in accordance with 40 CFR §261?
- Is the waste a listed hazardous waste in accordance with 40 CFR §261?
- Does the waste exhibit any of four (4) characteristics: ignitability, corrosiveness, reactivity, or toxicity?
- Is the waste toxic?
- Is it a mixture?

If a hazardous waste and a non-hazardous waste are mixes, the resulting mixture may inherit the hazardous classification. Mixing in any amount of a listed waste will cause the mixture to be considered hazardous. Mixing in a characteristic waste will cause the mixture to become hazardous only if the mixture itself exhibits the characteristic.

2100 Listed Hazardous Waste Determination

The EPA lists some 400 hazardous wastes. Descriptions of listed waste are found in 40 CFR Part 261, Subpart D, Sections 261.31–33. These wastes are often referred to as follows:

- "F" listed waste (waste from nonspecific sources, Section 261.31)
 - o The first five F listed categories, F001-F005, cover a range of solvents used in a variety of applications.
- "K" listed waste (wastes from specific sources, Section 261.32)
- "P" listed waste (unused acutely hazardous off-specification materials as well as container residues and spill residues of these materials, Section 261.33)
 - o There are about 239 different "acutely toxic" substances listed under about 135 different waste codes.
- "U" listed waste (unused toxic hazardous off-specification materials as well as container residues and spill residues of these materials, Section 261.33).
 - o There are about 472 distinct materials listed under about 247 different waste codes.

2101 Characteristic Hazardous Waste Determination.

Wastes may be hazardous if they display any of four characteristics: ignitability, corrosiveness, reactivity, or toxicity.

Ignitability (D001) Wastes that are hazardous because they may ignite include the following:

- Liquid wastes (other than those aqueous waste containing less than 24 percent alcohol by volume) that have a flash point less than 60°C (140°F). (The test method is the Pensky-Martens closed cup tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, or a Setaflash closed cup tester, using the test method specified in ASTM Standard D-3278-78.)
- Non-liquid wastes that, under standard temperature and pressure, are capable of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burn so vigorously and persistently that they create a hazard.
- Wastes that meet the definition of an ignitable compressed gas (see 49 CFR Section 173.300).
- Wastes that meet the definition of an oxidizer (see 49 CFR Section 173.151).
- Corrosiveness (D002) Wastes that are hazardous because they are corrosive include the following:

- Aqueous wastes with a pH of 2 units or below or of 12.5 units or above;
- A liquid wastes that corrode steel at a rate greater than 6.35 mm (0.250 inches) per year.
- Reactivity (D003) A waste is considered reactive if it meets any of the following conditions:
- It is capable of detonation or explosive decomposition or reaction at standard temperature and pressure,
- If subjected to a strong ignition source, or if heated under confinement.
- When mixed with water, it is potentially explosive, reacts violently, or generates toxic gases or vapors.
- If a cyanide or sulfide-bearing waste is exposed to pH conditions between 2 and 12.5, it can generate enough toxic gases, vapors, or fumes to present a danger to human health or the environment.
- If a waste generates 250 ppm or more of reactive cyanides or 500 ppm or more of reactive sulfides, it is considered a reactive waste. (It should be noted that these levels of reactive compounds are just guidance. Each waste must be evaluated for reactivity on a case-by-case basis).
- It is normally unstable and readily undergoes violent change without detonating.
- It is a forbidden explosive (as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53).
- It is a Class B explosive (see 49 CFR Section 173.88).

Toxicity (D004-D043) A waste is toxic if the toxicity characteristic leaching procedure (TCLP) shows that a representative sample from the waste contains one or more constituents at or above the levels listed in Table 1. The TCLP is described in EPA Method 1311 (SW-846).

For certain wastes, you can test for total constituent content and apply the "Rule of Twenty" (apply the 20-fold dilution factor inherent in the TCLP method) to determine whether a sample has to be tested using the TCLP method. The TCLP test method is generally more expensive than the test required determining Total constituent concentrations. A TCLP test is not required if total analysis demonstrates that contaminants are not present or are present in such low concentrations they could not possibly exceed the toxicity regulatory limits. The assumption in the "Rule of Twenty" is that all of the contaminant of concern is dissolved in the extraction fluid, which is then analyzed. Since this calculation assumes a 100% extraction efficiency of the TCLP, it represents a conservative assumption that the waste is not TC hazardous. Therefore, if the analytical total concentration of a constituent in a solid is "x," and "x" divided by 20 is still less than the regulatory TCLP concentration, then the solid can be assumed not to fail the TCLP test and not to exhibit the hazardous characteristic of toxicity. Note that this "rule" will not work for any waste that has greater than or equal to 0.5% liquids. This calculation can only be used for materials that are in a solid form since liquids themselves (i.e., wastes containing less than 0.5% dry solid material) are defined as the TCLP extract; hence, the 20-fold dilution factor calculation is not relevant. Therefore, this procedure is acceptable for soils and other wastes in a dry, solid form.

For the purpose of this guidance document, analytical testing should be utilized for disposal coordination with respect to spent materials impacted with hydrocarbons. Please note that it is up to the discretion of the disposal facility to accept the waste based on information provided regarding the waste. Once waste materials have been properly recovered, a representative sample of the waste should be obtained for analytical testing by an accredited environmental laboratory. Material Safety Data Sheets (MSDS) for the material released may be utilized for waste disposal

profiling if the disposal facility allows, however, sampling provides a better representation of the waste stream.

2101.1 Analytical Testing.

Analytical testing should be conducted as follows:

Diesel fuel:

- Total Petroleum Hydrocarbons (TPH)
- Total Lead (Pb). Note that TCLP Pb may be required for acceptance by the landfill. See "Rule of Twenty" reference above.
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

Unleaded fuel:

- Total Petroleum Hydrocarbons (TPH)
- Total Lead (Pb). Note that TCLP Pb may be required for acceptance by the landfill. See "Rule of Twenty" reference above.
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

Used Oil:

- Total Petroleum Hydrocarbons (TPH)
- Total RCRA Metals
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX)
- TOX

Virgin Oil impacted:

- Total Petroleum Hydrocarbons (TPH)
- Total Lead (Pb). Note that TCLP Pb may be required for acceptance by the landfill. See "Rule of Twenty" reference above.
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

Crude Oil impacted:

- Total Petroleum Hydrocarbons (TPH)
 - Total Lead (Pb). Note that TCLP Pb may be required for acceptance by the landfill. See "Rule of Twenty" reference above.
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

Once analytical results have been reported and the waste determination made, a waste profile will be required to be completed and submitted to the designated disposal facility. The waste profile is specific to each disposal facility. Therefore, contact the disposal facility to obtain a copy of their waste profile form. Analytical documentation and/or SDSs will be required to be submitted with the waste profile before review and approval by the disposal facility. Please note that independent waste disposal facilities (i.e. landfills, incinerators, etc.) have different acceptance criteria for wastes as prescribed in their permits.

For the sake of reference, the below is a list of Maximum Allowable Levels which differentiate between hazardous constituent and non-hazardous constituents. If analytical methods determine that the analyzed levels are at or above these listed levels, then the waste is considered hazardous and will maintain the waste code associated with the waste.

Table 1 Toxicity Characteristic Leaching Procedure (TCLP) Max Allowable Levels

	MAX. ALLOWABLE				
PARAMETER	WASTE CODE	LEVELS	LEVELS		
	CODE	TCLP (mg/L)	TOTAL (mg/kg)		
TCLP METALS					
Arsenic	D004	<5.0	100	SW-846-1311/SW-846-6010	
Barium	D005	<100.00	2000	SW-846-1311/SW-846-6010	
Cadmium	D006	<1.0	20	SW-846-1311/SW-846-6010	
Chromium	D007	<5.0	100	SW-846-1311/SW-846-6010	
Lead	D008	<5.0	100	SW-846-1311/SW-846-6010	
Mercury	D009	<0.2	4	SW-846-1311/SW-846-7470	
Selenium	D010	<1.0	20	SW-846-1311/SW-846-7740	
Silver	D011	<5.0	100	SW-846-1311/SW-846-6010	
TCLP VOLATILES					

		MAX. ALLOW		
PARAMETER	WASTE CODE	LEVELS	ANALYTICAL METHODS	
	CODE	TCLP (mg/L)	TOTAL (mg/kg)	
Benzene	D018	<0.5	10	SW-846-1311/SW-846-8260
Carbon Tetrachloride	D019	<0.5	10	SW-846-1311/SW-846-8260
Chlorobenzene	D021	<100.0	2000	SW-846-1311/SW-846-8260
Chloroform	D022	<6.0	120	SW-846-1311/SW-846-8260
1,2-Dichloroethane	D028	<0.5	10	SW-846-1311/SW-846-8260
1,1-Dichloroethylene	D029	<0.7	14	SW-846-1311/SW-846-8260
Methyl Ethyl Ketone	D035	<200.0	4000	SW-846-1311/SW-846-8260
Tetrachloroethylene	D039	<0.7	14	SW-846-1311/SW-846-8260
Trichloroethylene	D040	<0.5	10	SW-846-1311/SW-846-8260
Vinyl Chloride	D043	<0.2	4	SW-846-1311/SW-846-8260

		MAX. ALLOW	ABLE				
PARAMETER	WASTE CODE	LEVELS	ANALYTICAL METHODS				
	COBE	TCLP (mg/L)	TOTAL (mg/kg)				
TCLP SEMI-VOLATILES (F	TCLP SEMI-VOLATILES (Base Neutrals)						
1,4 Dichlorobenzene	D027	<7.5	150	SW-846-1311/SW-846-8270			
Hexachlorobenzene	D032	<0.13	2.6	SW-846-1311/SW-846-8270			
Hexachlorobutadiene	D033	<0.5	10	SW-846-1311/SW-846-8270			
Hexachloroethane	D034	<3.0	60	SW-846-1311/SW-846-8270			
Nitrobenzene	D036	<2.0	40	SW-846-1311/SW-846-8270			
Pyridine	D038	<5.0	100	SW-846-1311/SW-846-8270			
2,4-Dinitrotoluene	D030	<0.13	2.6	SW-846-1311/SW-846-8270			

		MAX. ALLOW					
PARAMETER	WASTE CODE	LEVELS	ANALYTICAL METHODS				
	CODE	TCLP (mg/L)	TOTAL (mg/kg)				
TCLP SEMI-VOLATILES (A	TCLP SEMI-VOLATILES (Acid Compounds)						
o-Cresol	D023	<200.0	4000	SW-846-1311/SW-846-8270			
m-Cresol	D024	<200.0	4000	SW-846-1311/SW-846-8270			
p-Cresol	D025	<200.0	4000	SW-846-1311/SW-846-8270			
Cresol, Total	D026	<200.0	4000	SW-846-1311/SW-846-8270			
Pentachlorophenol	D037	<100.0	2000	SW-846-1311/SW-846-8270			
2,4,5-Trichlorophenol	D041	<400.0	8000	SW-846-1311/SW-846-8270			
2,4,6-Trichlorophenol	D042	<2.0	40	SW-846-1311/SW-846-8270			

		MAX. ALLOW		
PARAMETER	WASTE CODE	LEVELS		ANALYTICAL METHODS
	CODE	TCLP (mg/L)	TOTAL (mg/kg)	
TCLP HERBICIDES				
2,4-D	D016	<10.0	200	SW-846-1311/SW-846-8080
2,4,5-TP (Silvex)	D017	<1.0	20	SW-846-1311/SW-846-8080
TCLP PESTICIDES				
Chlorodane	D020	<0.03	0.6	SW-846-1311/SW-846-8080
Endrin	D012	<0.02	0.4	SW-846-1311/SW-846-8080
Heptachlor	D031	<0.008	0.16	SW-846-1311/SW-846-8080
Lindane	D013	<0.4	8	SW-846-1311/SW-846-8080
Methyoxychlor	D014	<10.0	200	SW-846-1311/SW-846-8080
Toxaphene	D015	<0.5	10	SW-846-1311/SW-846/8080

		MAX. ALLOW		
PARAMETER	WASTE	LEVELS	ANALYTICAL METHODS	
	CODE	TCLP (mg/L)	TOTAL (mg/kg)	
GENERAL				
pH	D002	≤ 2.0 ≥ 12.5		SW-846-9045
Ignitability (Liquids Only)	D001	>140.0 F (60 C)		SW-846-C7
Free Liquids		NO FREE LIQUIDS allowed at Landfills (must pass Paint Filter)		SW-846-9095
PCB's		<50 mg/kg or ppm		SW-846-8080
ТРН		Varies by Disposal facility and/or disposal application		SW-846-8015, EPA 418.1 API-(GC/FID), ASTM-D3987-85/SW-846-9070

3000 U.S. EPA Exploration and Production (E&P) Waste Exemption

In 1988, the EPA issued a regulatory determination stating that control of E&P wastes under RCRA Subtitle C regulations is not warranted. E&P wastes have hence remained exempt from Subtitle C regulations. The RCRA Subtitle C exemption, however, did not preclude these wastes from control under state regulations, under the less stringent RCRA Subtitle D solid waste regulations, or under other federal regulations. In addition, although they are relieved from regulation as hazardous wastes, the exemption does not mean these wastes could not present a hazard to human health and the environment if improperly managed.

With respect to crude oil, primary field operations include activities occurring at or near the wellhead and before the point where the oil is transferred from an individual field facility or a centrally located facility to a carrier for transport to a refinery or a refiner. With respect to natural gas, primary field operations are those activities occurring at or near the wellhead or at the gas plant, but before the point where the gas is transferred from an individual field facility, a centrally located facility, or a gas plant to a carrier for transport to market. Examples of carriers include trucks, interstate pipelines, and some intrastate pipelines.

Primary field operations include exploration, development, and the primary, secondary, and tertiary production of oil or gas. Crude oil processing, such as water separation, de-emulsifying, degassing, and storage at tank batteries associated with a specific well or wells, are examples of primary field operations. Furthermore, because natural gas often requires processing to remove water and other impurities prior to entering the sales line, gas plants are considered to be part of production operations regardless of their location with respect to the wellhead.

The exempt status of an E&P waste depends on how the material was used or generated as waste, not necessarily whether the material is hazardous or toxic. It is important to remember that *all* E&P wastes require proper management to ensure protection of human health and the environment.

Mixing exempt and non-exempt wastes creates additional considerations. Determining whether a mixture is an exempt or non-exempt waste requires an understanding of the nature of the wastes prior to mixing and, in some instances, might require a cycle analysis of the mixture. Whenever possible, avoid mixing non-exempt wastes with exempt wastes. If the non-exempt waste is a listed or characteristic hazardous waste, the resulting mixture might become a non-exempt waste and require management under RCRA Subtitle C regulation. Furthermore, mixing a characteristic hazardous waste with a non-hazardous or exempt waste for the purpose of rendering the hazardous waste non-hazardous or less hazardous might be considered a treatment process subject to appropriate RCRA Subtitle C hazardous waste regulation and permitting requirements.

In a policy letter dated September 25, 1997, EPA clarified that a mixture is exempt if it contains exempt oil and gas exploration and production (E&P) waste mixed with non-hazardous, non-exempt waste. Mixing exempt E&P waste with non-exempt characteristic hazardous waste, however, for the purpose of rendering the mixture non-hazardous or less hazardous, could be considered hazardous waste treatment or impermissible dilution.

Exempt and non-exempt E&P Waste is listed herein. Please consult with state regulations for state-specific waste exemptions.

3100 Exempt E&P Waste

- Produced water
- Drilling fluids
- Drill cuttings
- Rig wash
- Drilling fluids and cuttings from offshore operations disposed of onshore
- Geothermal production fluids
- Hydrogen sulfide abatement wastes from geothermal energy production
- Well completion, treatment, and stimulation fluids
- Basic sediment, water, and other tank bottoms from storage facilities that hold product and exempt waste
- Accumulated materials such as hydrocarbons, solids, sands, and emulsion from production separators, fluid treating vessels, and production impoundments
- Pit sludge and contaminated bottoms from storage or disposal of exempt wastes
- Gas plant dehydration wastes, including glycol-based compounds, glycol filters, and filter media, backwash, and molecular sieves
- Work over wastes
- Cooling tower blow-down
- Gas plant sweetening wastes for sulfur removal, including amines, amine filters, amine filter media, backwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge
- Spent filters, filter media, and backwash (assuming the filter itself is not hazardous and the residue in it is from an exempt waste stream)
- Pipe scale, hydrocarbon solids, hydrates, and other deposits removed from piping and equipment prior to transportation
- Produced sand
- Packing fluids
- Hydrocarbon-bearing soil
- Pigging wastes from gathering lines
- Wastes from subsurface gas storage and retrieval, except for the non-exempt wastes listed herein
- Constituents removed from produced water before it is injected or otherwise disposed of
- Liquid hydrocarbons removed from the production stream but not from oil refining

3200 Non-Exempt E&P Waste

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Waste solvents
- Oil and gas service company wastes such as empty drums, drum rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom re-claimers
- Used equipment lubricating oils
- Waste compressor oil, filters, and blow-down
- Used hydraulic fluids
- Waste in transportation pipeline related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Boiler scrubber fluids, sludge, and ash
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation, and miscellaneous solids

Although non-E&P wastes generated from crude oil and tank bottom reclamation operations (e.g., waste equipment cleaning solvent) are non-exempt, residuals derived from exempt wastes (e.g., produced water separated from tank bottoms) are exempt. For a further discussion, see the Federal Register notice, Clarification of the Regulatory Determination for Waste from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy, March 22, 1993, Federal Register Volume 58, Pages 15284 to 15287.

4000 Louisiana Waste Management

In Louisiana, the regulatory responsibilities of waste/materials generated during an oil spill(s) are shared by the Louisiana Department of Environmental Quality (LDEQ) and Louisiana Department of Natural Resources, Office of Conservation (LDNR). LDEQ has authority over any industrial, municipal, or medical waste(s) as defined in LAC 33: VII generated during an oil spill. While LDNR has authority over any E&P waste(s) generated as defined in LAC 43: XIX.

The following solid wastes are not subject to the provisions of the LDEQ's solid waste regulations (LAC 33:VII, Parts 1 and 2):

- produced-waste fluids and mud resulting from the exploration for or production of petroleum and geothermal energy, and
- all surface and storage waste facilities, incidental to oil and gas exploration and production, within the jurisdiction of the Department of Natural Resources, Office of Conservation. LAC 33:VII.301.A.1.c.

This exemption applies specifically to E&P Wastes Type 1 (Salt Water (produced brine or produced water), Type 2 (Oil-based drilling wastes (mud, fluids, and cuttings), and Type 16 (Crude oil spill cleanup waste).

The following solid waste are not subject to the provisions of the LDEQ's hazardous waste regulations (LAC 33:V.Subpart 1):

- drilling fluids,
- produced waters,
- and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy (LAC 33:V.105.D.2.e.)

4100 Louisiana Solid Waste Management

Debris from the Oil Spill shall be managed in accordance with the LDEQ Comprehensive Plan for Disaster Clean-up and Debris Management ("the DMP") (revised September 29, 2010 or current version). Specifically, portions of Section 9, "Final Disposal Options," address oil contaminated debris and hazardous waste.

Additional Solid Waste Management requirements may be required by any Emergency Declaration and Administrative Orders issued by the State of Louisiana and/or the LDEQ.

Waste(s) under the jurisdiction of the LDNR will be managed in accordance with their rules, regulations, and/or emergency orders.

4200 Louisiana Waste Classification

Louisiana has identified the following categories of waste/materials to be managed during a crude oil spill. Tables C-1 and C-2 include guidance from the LDEQ and LDNR regarding the classification(s) and disposal options for identified E&P waste.

Table 2 Louisiana Waste Classifications

Waste Stream	Waste Classification	State	Disposal/Treatment Option
Disposable Oil Booms – Oil has been removed to the extent practical	Solid Waste/Industrial Waste	Solid	Disposed of at a LDEQ- permitted Type I landfill
Containment booms – Final Disposal – Oil has been removed to extent practical			
Oil Contaminated Rags, Gloves, Disposal Personal Protective Equipment, etc.			
Oil Contaminated Debris – Cups, Styrofoam Containers, etc. Tar balls / tar patties			
Oil Contaminated Soils and Vegetative Debris	E&P waste, waste type 16, Crude oil spill clean-up waste	Solid	Disposed of at LDNR permitted transfer station or commercial facility site or at LDEQ-permitted Type 1 landfill.
Containment Booms – Wash-off waste fluids and solids not contaminated with hazardous waste.	E&P waste, waste type 16, Crude oil spill clean-up waste	Liquid	Dispose of at approved LDNR permitted site

Waste Stream	Waste Classification	State	Disposal/Treatment Option
Oily Wastewater not contaminated with hazardous waste			
Dead or Injured Wildlife		Solid	This will be managed by LDWF and will only be managed as a waste, if and when directed by the agency.
Oil Removed from Booms	E&P waste, waste type 16, crude oil spill cleanup waste or waste type 50, salvageable hydrocarbons bound for permitted salvage oil operators	Liquid	Disposed of at approved LDNR permitted site.

Other materials/waste that can be expected:

Table 3 Additional Louisiana Waste Classifications

Material Type	Waste Stream	State	Disposal/Reclaim Recycle Option
Crude oil skimmed from the water and spill source or Oil removed from booms	Reclaimable / Recyclable oil / E&P Waste	Liquid	Recovered Oil
Potential hazardous waste collected as part of oil spill cleanup operations	Potential hazardous waste	Liquid /Solid / Mixed	Approved RCRA Permitted TSD facility
Uncontaminated Trash (Food waste, wrappings, paper, cardboard, soda can, etc.)	Municipal Trash	Liquid /Solid / Mixed	Disposed of at LDEQ Permitted Type II facility
Plastic bottles and aluminum cans	Recyclables	Solid	Recycling Facility

The Responsible Party (RP) shall develop oil spill specific plans necessary to characterize and manage the wastes generated pursuant to applicable Federal, State, and local requirements. These

plans may include waste sampling and analysis plans, waste management plans, site safety plans, SPCC, etc.

4201 Waste Recovery and Recycling

The RP will develop a strategy to facilitate the reclamation or recycling of as much materials/oil as practical prior to sending the material for disposal. These strategies may include but not be limited to the following:

- Recovery of oil prior to disposal;
- Reuse/recycling of containment boom;
- Recycling of municipal solid waste such as paper, aluminum, plastics, etc.

The RP will also develop Best Management Plan(s) (BMP) and/or Standard Operation Procedures (SOP) which will include waste/material management procedures for the collection, staging, transportation, and final disposal/recycling of the waste/materials.

4300 Louisiana Type 1 and Type 2 Solid Waste Landfills Table 4 Louisiana Type 1 and Type 2 Solid Waste Landfills

Parish	Master AI #	Name	Company Phone	Type 1	Type 2	Facility's physical address
Acadia	20036	Acadia Parish Police Jury- Acadia Parish Sanitary Landfill	(337) 783-4834		X	611 Petal Rd. Egan, LA 70531
Allen	52277	IESI Corp- Timerlane Landfill	(337) 753-2296	X		1158 Landfill Rd. Oakdale, LA 71463
Ascension	4803	BFI- Colonial Landfill	(225) 675-8021	X	X	5328 Hwy 70 Sorrento, LA 70778
Ascension	51910	Belle Co LLC- Landfill	(225) 473-7251	X	X	4 Mi N of HWYs 70 & 1 Donaldsonville LA 70346
Jefferson	6961	Jefferson Parish Sanitary Landfill	(504) 436-0152	X	X	5800 HWY 90 W Avondale, LA 70094
Jefferson	32219	River Birch Inc- River Birch Landfill	(504) 436-1288	X	X	2000 S Kenner Ave Avondale, LA 70094
Jefferson Davis	12389	Jefferson Davis Parish Sanitary	(337) 734-4135	X	X	16157 Landfill Rd Welsh, LA 70591

Response Protocols: Disposal, Annex 6b

Parish	Master AI#	Name	Company Phone	Type 1	Type 2	Facility's physical address
		Landfill Commissi on				
St. Mary	9340	St Mary Parish Governem tn- Harold J "Babe" Landry Landfill	(985) 385-4531	X	X	752 Thorguson Dr. Berwick, LA 70342
Terrebonne		Ashland	(985) 446-5465			277 Ashland Landfill Road, Houma, LA 70363
Plaquemine	20061	Tidewater Landfill LLC- Coast Guard Road Sanitary Landfill	(504) 361-0094	X	X	266 Coast Guard Rd. Venice, LA 70091
Vermilion	148	Vermilion Parish Police Jury- Municipal Landfill	(337) 898-4228		X	HWY 696 Meaux, LA 70555

A complete list of LDEQ permitted solid waste landfills can be found at the link below: http://www.deq.louisiana.gov/portal/DIVISIONS/WastePermits/SolidWastePermits.aspx

4400 Louisiana Commercial E&P Waste Facilities

Table 5 Louisiana Commercial E&P Waste Facilities

Parish	Site ID	Name	Phone # Typ		Facility's Physical Address	
Acadia	101	Guillory Tank Truck Service	` /		200 Saltwater Lane Eunice, La 70535	
Acadia	102	Saline Injection Systems Co	(337) 783-5028			
Acadia	104	Habetz Oilfield Saltwater Service Inc.	(337) 783-4677	В	P.O. Box 1552 Crowley, LA 70527	
Ascension	301	Colonial Solid Waste Landfill	(225) 252-9038	DE	5328 Hwy 70 Sorrento, LA 70778	
Calcasieu	1003	Louisiana Tank, Inc	(337) 436-1000	В	Old Town Road Lake Charles, LA 70615	
Calcasieu	1005	Chemical Waste Management	(337) 583-3613	A	7170 John Brannon Road Sulphur, LA 70665	
Cameron	1205	Newpark Environmental Services – Cameron	(888) 984-4445	Т	434 Davis Road Cameron, LA 70631	
Cameron	1207	US Liquids of LA - Cameron	(337) 824-3194	Т	Wakefield Road Cameron, LA 70631	
Jefferson	2602	River Birch - Avondale	(504) 436-1288	D,E	2000 South Kenner Road Avondale, LA 70094	
Jefferson Davis	2701	US Liquids of LA - Mermentau	(337) 824-3194	A	Hwy 90 East Jennings, LA 70546	
Jefferson Davis	2704	SWD, Inc	(337) 433-5929	В	18342 Miller Oilfield Road Iowa, LA 70647	
Jefferson Davis	2705	MBO, Inc Lacassine	(337) 588-4558	A	19141 GRO Racca Road Iowa, LA 70647	

Response Protocols: Disposal, Annex 6b

Parish	Site ID	Name	Phone #	Туре	Facility's Physical Address	
Jefferson Davis	2707	CHI - Jennings	(337) B 824-8184		4050 Hwy 1126 Jennings, LA 70546	
Lafourche	2901	US Liquids of LA - Bourg	(337) A 824-3194 A		771 Bourg-Larose Hwy Bourg, LA 70343	
Lafourche	2910	Newpark Environmental Services - Fourchon I	(888) 984-4445	Т	17th Street Pass Fourchon, LA 70357	
Lafourche	2911	US Liquids of LA - Port Fourchon	(337) 824-3194	Т	17th Street at E-Slip Pass Fourchon, LA 70357	
Lafourche	2913	Newpark Environmental Services - Fourchon II	(888) 984-4445	Т	16th StreetGolden Meadow, LA 70357	
Lafourche	2919	US Liquids of LA - Port Fourchon 2	(337) 824-3194	Т	153 17th Street Port Fourchon, LA 70357	
Plaquemines	3809	Newpark Environmental Services - Venice	(888) 984-4445	Т	213 Coast Guard Rd Venice, LA 70091	
Plaquemines	3813	US Liquids of LA - Venice	(337) 824-3194	Т	367 Tidewater Road Venice, LA	
Plaquemines	3815	Premier Environmental SFI	(985) 626-8758	A	20487 Hwy 15 Bohemia, LA	
St. Martin	5001	FAS Environmental Services	(985) 252-8825	В	1081 "B" Hwy Pierre Part, LA 70339	
St. Martin	5002	FAS Environmental Services	(985) 252-8825	Т	Atchafalaya River Basin Belle River, LA 70339	
St. Mary	5101	US Liquids of LA - Bateman Island	(337) 824-3194	A	On Intracoastal Waterway	

Parish	Site ID	Name	Phone # Type		Facility's Physical Address	
					Bateman Island, LA 70381	
St. Mary	5102	Newpark Environmental	(888) 984-4445	Т	Hwy 90 East Morgan City, LA 70381	
St. Mary	5108	PSC Industrial Outsourcing, Inc.	(337) 233-4889	A	LA Hwy 87 Jeanerette, LA 70544	
St. Mary	5109	US Liquids of LA - Berwick	(337) 824-3194	T	Berry Bros Dock Berwick, LA 70342	
St. Mary	5111	US Liquids of LA - MCY	(337) 824-3194	T	1200 Youngs Road Morgan City, LA 70380	
Terrebonne	5501	Houma SaltWater Disposal Corp	(985) 868-2477	В	1034 Coteau Road Houma, LA 70364	
Terrebonne	5503	Houma SaltWater Disposal	(985) 868-2477	Т	1035 Coteau Road Houma, LA 70364	
Vermilion	5703	Newpark Environmental Services - Intracoastal City Yard	(888) 868-2477	Т	Broussard Bros Doc Intracoastal City, LA 70510	
Vermilion	5710	US Liquids of LA - Intracoastal City Yard	(337) 824-3194	Т	24915 Highway 333 Intracoastal City, LA 70519	

A complete list of LDNR E&P Waste Facilities can be found at the links below:

List: http://reports.dnr.state.la.us/reports/rwservlet?SRCN4683O_p

Map:

 $\frac{http://dnr.louisiana.gov/assets/OC/env_div/ep_waste_sec/LA_Commercial_Facilities_102610.pd}{\underline{f}}$

4500 LA Commercial Hazardous Waste Treatment, Storage & Disposal Facilities (TSDF)

Table 6 LA Commercial Hazardous Waste Treatment, Storage & Disposal Facilities (TSDF)

Parish	Master #	Name	Company Phone	Facility's Physical Address	HW ID No.
East Baton Rouge	1516	Clean Harbors Baton Rouge, LLC	(225) 778- 3511	13351 Scenic Highway, Baton Rouge, LA 70807	LAD0103951 27
Rapides	32096	Clean Harbors Colfax, LLC	(318) 627- 3443	3763 Highway 471 Colfax, LA 71417	LAD9810557 91
Tangipahoa	24512	Lamp Environmental	(985) 345- 4775	46257 Morris Road, Hammon d, LA 707401	LAO0003656 68
Calcasieu	742	Chemical Waste Management	(337) 583- 2169	7170 John Brannon Road, Sulphur, LA 70665	LAD0007772 01

Parish	Master #	Name	Company Phone	Facility's Physical Address	HW ID No.
East Baton Rouge	1314	Rhodia, Inc	(225) 359- 3722	1275 Airline Highway, Baton Rouge, LA 70805	LAD0081612 34