REDACTED VERSION

9586083

EPAHO003001024

Certificate Of Analysis

Ship-To Address:

Material	: 5017 MONOETHYLENE GLYCOL POLYESTER GRADE	Customer Order No.	:
		Customer Number	: 8794
Batch Number	: BM8415PEGA	Date Shipped	:
Estimated Quantity	: 0.000		

Test Description	Test Result	Specifications Minimum	Specifications Maximum	Unit of Measure
Vehicle Type	TANKTRUCK			
Vehicle ID	TT# 49-6766			
Monoethylene Glycol	100.0	99.9		weight %
Diethylene Glycol	0.03		0.05	weight %
Ash	0.000		0.003	weight %
Acidity, as acetic acid	0.001		0.003	weight %
Color, APHA	2		5	APHA Color
Total Chlorides,ppm	0.0		0.1	ppm
Iron	0.01		0.07	ppm
UV Transmittance 350 nm	100	98		%Trans
UV Transmittance 275nm	97	93		%Trans
UV Transmittance 220nm	93	70		%Trans
Water	0.01		0.05	weight %
Appearance	Substan. Free of Susp. Matter	Substan. Free of Susp. Matter		

Data reported was generated in an approved
Quality Assurance Lab.

This Certificate of Analysis contains the most current information available as of the print date.
This document shall not be reproduced except in full, without the written approval of the Issuer.

Certificate Of Analysis

Certificate of Analysis Contact:
TRICON ENERGY LTD
777 POST OAK BOULEVARD STE 650
HOUSTON TX 77056
USA

Ship-To Address:

Equistar Material	: 5017 MONOETHYLENE GLYCOL POLYESTER GRADE	**Customer Order No.**	:
Batch Number	: BM8415PEGA	**Customer Number**	: 8794
Estimated Quantity	: 0.000	**Date Shipped**	:
		Equistar Order No.	:
		Delivery Item No.	:

Test Description	Test Result	Specifications Minimum	Specifications Maximum	Unit of Measure
Vehicle Type	TANKTRUCK			
Vehicle ID	TT# 49-6786			
Monoethylene Glycol	100.0	99.9		weight %
Diethylene Glycol	0.03		0.05	weight %
Ash	0.000		0.003	weight %
Acidity, as acetic acid	0.001		0.003	weight %
Color, APHA	2		5	APHA Color
Total Chlorides,ppm	0.0		0.1	ppm
Iron	0.01		0.07	ppm
UV Transmittance 350 nm	100	98		%Trans
UV Transmittance 275nm	97	93		%Trans
UV Transmittance 220nm	83	70		%Trans
Water	0.01		0.05	weight %
Appearance	Substan. Free of Susp. Matter	Substan. Free of Susp. Matter		

Data reported was generated in an approved Quality Assurance Lab.

Print Date: April 15, 2008 MAALLISO
This information is available 24 hours a day at www.CustomerXPRESS.com
Questions ? Call Customer Service: 888-777-0232

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EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3265
Variant: Asia-EN
Version No: 1.1
Validation Date: 08.02.2006

ETHYLENE GLYCOL, POLYESTER GRADE

SECTION 1: IDENTIFICATION

Product Name: ETHYLENE GLYCOL, POLYESTER GRADE

Product Number: 000000000000005017

Internal ID: 4219

Chemical Family: Ethylene Glycols

CAS Number: 107-21-1

Chemical Name: 1,2-Ethanediol

Synonyms: All Grades include: Antifreeze, High Purity, Industrial, Polyester Grade

Manufacturer
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946

24 Hour Emergency Contact
EQUISTAR 800-245-4532

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%*		Risk	Symbol
1,2-Ethanediol	107-21-1	203-473-3	95.0	<= 100.0	R22	Xn
Diethylene glycol	111-46-6	203-872-2		<= 5.0	R22	Xn
Water	7732-18-5	231-791-2		<= 1.0		

* Concentration of gaseous products or materials is given in Mole %

Compositions given are typical values not specifications.

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Physical State
Viscous liquid.

Color
Clear, colorless.

Odor
Slight sweet odor.

Odor Threshold
No Data Available.

Potential Health Effects

Routes of Exposure

EPAHO003001027

Eye Skin. Inhalation

Signs and Symptoms of Acute Exposure
See component summary.

- *1,2-Ethanediol 107-21-1*

Ingestion hazard. Ingestion may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Cardiopulmonary effects including tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome, as well as, renal failure are also possible. May also produce a local irritation effect on the digestive system, and cause pain and bleeding. Irritation of the eyes and respiratory system. Effects of eye irritation are reversible. High aerosol concentrations may cause respiratory irritation. Mildly irritating to the skin but not a skin sensitizer. Not a skin absorption hazard.

- *Diethylene glycol 111-46-6*

This substance may cause effects on the central nervous system, liver and kidneys.

Skin
May be mildly irritating to the skin. Not a sensitizer. Not expected to be a skin absorption hazard.

Inhalation
High aerosol concentrations may cause respiratory irritation.

Eye
May cause mild eye irritation. Effects of eye irritation are reversible.

Ingestion
Ingestion may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Cardiopulmonary effects including tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome, as well as, renal failure are also possible. May also produce a local irritation effect on the digestive system, and cause pain and bleeding.

Chronic Health Effects
See component summary.

- *1,2-Ethanediol 107-21-1*

Repeated or prolonged exposure may result in kidney damage. May produce symptoms of central nervous system depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness and respiratory arrest.

- *Diethylene glycol 111-46-6*

No adverse chronic human health effects have been reported for this material.

Conditions Aggravated by Exposure
Exposure may aggravate one or more of the following medical conditions: Kidney disease. Skin contact may aggravate an existing dermatitis. May cause central nervous system depression.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

Skin
Remove contaminated clothing and wash skin with plenty of soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

Inhalation

EPAHO003001028

If overcome by exposure, remove victim to fresh air immediately. If breathing is difficult, give oxygen. Obtain medical attention if breathing difficulty persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
DO NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Obtain emergency room treatment immediately.

Note to Physician
Principal effects produced by Ethylene Glycols, especially by acute overexposure from swallowing the liquid, are kidney injury and metabolic acidosis. Treatment of metabolic acidosis, administration of ethanol, and hemodialysis may be indicated. Hemodialysis may be indicated for more complete elimination.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
Slightly combustible.

Flash Point:
116 °C (240.8 °F) PMCC

Auto-Ignition Temperature
398 °C (748.4 °F)

Lower Flammable Limit
3.2 vol%

Upper Flammable Limit
15.3 vol%

Extinguishing Media

Suitable: SMALL FIRE: Use dry chemicals, CO_2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Unsuitable: Even if material is water soluble, may not be practical to extinguish fire by water dilution.

Protection of Firefighters

Protective Equipment/Clothing: Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear. Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance: Ethylene glycol mist in air is a moderate fire and explosion hazard. Individuals should perform only those fire-fighting procedures for which they have been trained. Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products. Cool tanks and containers exposed to fire with water. Cool containers with flooding quantities of water until well after fire is out.

Hazardous Combustion Products: Carbon oxides (CO, CO_2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response

EPAHO003001029

Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. Report spills or leaks to the proper regulatory authorities.

SECTION 7: HANDLING AND STORAGE

Handling
Avoid open heating or agitation that may generate vapors or mists. Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not eat, drink or smoke in areas where this material is used.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Ground all equipment containing this material. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
General room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants below exposure limits.

Personal Protection
Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Where unknown concentrations are encountered or during an emergency, use NIOSH approved supplied air respirators.

Skin Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact. The equipment must be cleaned thoroughly after each use.

Eye Safety glasses are recommended for normal use. Use splash goggles when eye contact due to splashing or spraying liquid is possible.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.

Occupational Exposure Limits

Component Name	Source / Date	Value	Type	Notation
1,2-Ethanediol	US (ACGIH)	100 mg/m3 Aerosol	CEILING	
	OEL (CN)	20 mg/m3	8 HRS/TWA	No
	OEL (CN)	40 mg/m3	15 MIN/STEL	No
	OEL (HK)	100 mg/m3	CEILING	No

EPAHO003001030

	OEL (ID)	100 mg/m3	CEILING	No
	OEL (KR)	50 ppm	CEILING	No
	OEL (MY)	38.4 ppm	CEILING	No
	OEL (NZ)	50 ppm	CEILING	No
	OEL (SG)	50 ppm	15 MIN/STEL	No
	OEL (TW)	50 ppm	8 HRS/TWA	No
Diethylene glycol	US (ACGIH)	N/L		
	OEL (NZ)	23 ppm	8 HRS/TWA	No

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous liquid. Clear, colorless.

Odor: Slight sweet odor.

Odor Threshold: No Data Available.

pH: Not applicable.

Boiling Point/Boiling Range: 197.5 °C (387.5 °F)

Freezing Point/Melting Point: -13 °C (8.6 °F) Freezing Point.

Flash Point: 116 °C (240.8 °F) PMCC

Auto-ignition: 398 °C (748.4 °F)

Flammability: Slightly combustible.

Lower Flammable Limit: 3.2 vol%

Upper Flammable Limit: 15.3 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.05 mm Hg @ 20 °C (68 °F)

Evaporation Rate: No Data Available.

Relative Density: 1.1135 @ 20 °C (68 °F) (Water = 1)

Relative Vapor Density: 2.14 (Air = 1.0)

Viscosity: No Data Available.

Solubility (Water): soluble in all proportions.

Partition Coefficient (Kow): Log Kow = -1.36

Additional Physical and Chemical Properties: Hygroscopic.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Heat, sparks, open flames and strong oxidizing conditions.

Substances to Avoid
Strong oxidizer. Strong acids. Permanganates. Peroxides. Dichromates. Reactive sodium compounds. Sulfur compounds. Alkali metals. Nitrates.

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Hazardous polymerization will not occur.

Reactions with Air and Water
Does not react with air or water.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
Monoethylene glycol (ethylene glycol) has low acute toxicity in experimental animals following oral, inhalation, or dermal exposure. Accidental or intentional acute ingestions in humans, however, have caused poisoning and death. High aerosol concentrations may cause respiratory irritation. Ethylene glycol is not rapidly absorbed through skin. Repeated oral exposures of high doses may result in deposition of calcium oxalate crystals in the kidney resulting in kidney failure; however, human exposures at occupationally relevant concentrations are unlikely to cause this effect. Ethylene glycol is not expected to cause genotoxic, developmental, reproductive or carcinogenic effects in humans.

Other Information
Human acute toxicity has three recognized stages: Stage 1. (0.5 to 12 hours post ingestion) may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Stage 2. (12-24 hours) cardiopulmonary effects include tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome. Stage 3. (24-72 hours) renal failure. Ethylene glycol may also produce a local irritation effect on the digestive system, and cause pain and bleeding.

COMPONENT INFORMATION

- *1,2-Ethanediol 107-21-1*

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	6890 - 13,400 MG/KG BWT
NOAEL	Rabbit	> 3549 MG/KG BWT (SKIN)

EPAHO003001032

ETHYLENE GLYCOL, POLYESTER GRADE

Irritation
Skin May be irritating to the skin. Not expected to be a sensitizer. No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin absorption exposure.

Eye May cause minor eye irritation. Effects of eye irritation are reversible.

Sensitization
Not expected to be a sensitizer.

Target Organ Effects
Central nervous system effects. Blood (metabolic acidosis). Respiratory system. Cardiovascular system. Kidneys.

Repeated Dose Toxicity
If exposures are sufficiently high to cause accumulation of calcium oxalate crystals, kidney pathology may occur. In male rats, crystal nephropathy has been seen after dietary administration of 500 mg/kg/day bwt for 16 weeks, whereas no effects were seen in rats that ingested 200 mg/kg/day bwt for 2 years or in several animal species that inhaled 12 mg/m3 for 3 months . Human exposures at occupational relevant concentrations are unlikely to cause crystal nephropathy.

Reproductive Effects
No evidence of adverse effects on reproductive organs or fertility in rats and rabbits have occurred from ethylene glycol exposure. Mice exposed to doses considerably higher than those associated with developmental effects or kidney effects in rats exhibited reduced number of litters and smaller litters. No reproductive effects expected from human exposures.

Developmental Effects
Doses of ethylene glycol that result in high levels of the metabolite glycolic acid induce developmental/teratogenic effects in rats and mice, although at doses greater than those associated with kidney effects in rats. Human exposure is not expected to generate sufficient levels of glycolic acid; therefore, no developmental effects are expected in humans.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Ethylene glycol was not carcinogenic in two year studies in rats and mice. This material is not classified as a carcinogen. Not listed by IARC, NTP, or OSHA.

Other Information
Human acute toxicity has three recognized stages: Stage 1. (0.5 to 12 hours post ingestion) may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Stage 2. (12-24 hours) cardiopulmonary effects include tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome. Stage 3. (24-72 hours) renal failure. Ethylene glycol may also produce a local irritation effect on the digestive system, and cause pain and bleeding.

- *Diethylene glycol* ***111-46-6***

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	25,300 MG/KG BWT
	Mouse	13,300 MG/KG BWT
LD50 (Skin)	Rabbit	11,900 MG/KG

Acute Toxicity - Effects
Inhalation None expected.

Irritation
Skin Slight skin irritant. Not expected to be a sensitizer.

Eye May cause minor eye irritation.

EPAHO003001033

Repeated Dose Toxicity
Diethylene glycol given to rats in the diet for two years caused bladder stones, tumors, and kidney and liver damage. These effects were probably due to contaminating ethylene glycol, and the bladder stones were formed from oxalate crystals.

Reproductive Effects
Reproductive and developmental effects have been noted in animals following very large (> 3000 mg/kg bw/day) oral doses. However, comparable internal dose levels are not possible with dermal or inhalation exposures under normal conditions of use. Therefore, diethylene glycol is not considered a possible reproductive or developmental hazard except during very large oral doses.

Carcinogenicity
Not listed by IARC, NTP, or OSHA. No evidence for carcinogenicity was found with a chronic skin-painting study in mice. No carcinogenic or tumor promoting effects in rats exposed up to 2.5% solutions in drinking water for 108 weeks. Older feed studies utilizing limited number of tissues but very high doses also provide no evidence of carcinogenicity. Therefore, this substance should not be considered a concern for carcinogenicity.

- *Water 7732-18-5*

Repeated Dose Toxicity
No known chronic health effects.

Carcinogenicity
Not listed by IARC, NTP, or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

This material is expected to be non-hazardous to aquatic species. See component summary. Terrestrial plant and avian NOEC (No Observed Effect Concentration) data are available upon request.

Environmental Fate and Pathway

Mobile in soil. Not expected to volatilize from surface waters or soils. Not likely to adsorb to suspended solids and sediment in water. Environmental half-life of 0.35 to 24 days in soil, air, surface and ground water. Not expected to undergo hydrolysis. Undergoes photooxidation with hydroxyl radicals in air with a half-life of 8.3 to 83 hours.

Persistance and Degradability
Biodegradation: Biodegradable under aerobic conditions. See component summary.
Bioaccumulation: This material is not expected to bioaccumulate. See component summary.

COMPONENT INFORMATION

- *1,2-Ethanediol 107-21-1*

Ecotoxicity

Terrestrial plant and avian NOEC (No Observed Effect Concentration) data are available upon request.

EPAHO003001034

ETHYLENE GLYCOL, POLYESTER GRADE

Acute toxicity to fish
LC50 / 96 HOUR rainbow trout. 22,810 mg/l

LC50 / 96 HOUR fathead minnow 49,000 mg/l

Summary: This material is not classified as harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
EC50 / 48 HOUR Daphnia magna. 41,000 mg/l

EC50 / 48 HOUR daphnia 10,000 mg/l

Summary: This material is not classified as harmful or toxic to invertebrates.

Toxicity to aquatic plants
Toxicity Threshold / 7 DAY blue green algae. 2,000 mg/l

Summary: This material is not classified as harmful or toxic to algae or higher aquatic plants.

Toxicity to microorganisms
Toxicity Threshold / 16 HOUR bacteria. > 10,000 mg/l

Chronic toxicity to fish
LC50 / 12 DAY rainbow trout. 20,403 mg/l

Chronic toxicity to aquatic invertebrates
LC50 / 7 DAY daphnia 30,461 mg/l

Environmental Fate and Pathway

Mobile in soil. Not expected to volatilize from surface waters or soils. Not likely to adsorb to suspended solids and sediment in water. Environmental half-life of 0.35 to 24 days in soil, air, surface and ground water. Not expected to undergo hydrolysis. Undergoes photooxidation with hydroxyl radicals in air with a half-life of 8.3 to 83 hours.

Persistance and Degradability
Biodegradation: Reported biodegradation studies show ethylene glycol with 97% biodegradation after 20 days, and 96% biodegradation after 28 days. Biodegradable under aerobic conditions.
Bioaccumulation: BCF = 0.21 - 0.61 (crawfish) BCF = 10.0 (fish) This material is not expected to bioaccumulate.

- *Diethylene glycol 111-46-6*

Ecotoxicity

Diethylene glycol (DEG) is highly soluble in water. Laboratory tests indicate that DEG is not significantly toxic to fish or aquatic invertebrates. While there is no wildlife toxicity data available on DEG, laboratory tests on rats would indicate that it should not be highly toxic to mammals.

Environmental Fate and Pathway

EPAHO003001035

ETHYLENE GLYCOL, POLYESTER GRADE

This material is volatile and water soluble. It is not expected to adsorb onto soils or sediments. Expected to have high mobility in soils. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Particulate-phase of this material may be physically removed from the air by wet and dry deposition. This material is not expected to persist in the environment.

Persistence and Degradability
Stability in Water: Diethylene glycol (DEG) is highly soluble in water.
Biodegradation: This material is expected to be readily biodegradable.
Bioaccumulation: BCF < 1.0 This material is not expected to bioaccumulate.

- *Water 7732-18-5*

Ecotoxicity

Not applicable.

Environmental Fate and Pathway

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible. Use only licensed transporters and permitted facilities for waste disposal. Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYLENE GLYCOL)
ID No.	UN3082
Hazard Class	9
PG	III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

Country	Inventory		
Australia	AICS	X	X = All components are included or are otherwise exempt from inclusion on this inventory.
Canada	DSL	X	
Canada	NDSL		
China	IECS	X	
European Union	EINECS	X	
European Union	ELINCS		C = Contact Lyondell/Equistar by e-mail at

EPAHO003001036

ETHYLENE GLYCOL, POLYESTER GRADE

European Union	NLP		product.safety@lyondell.com or product.safety@equistarchem.com for additional information.
Japan	ENCS	X	
Korea	ECI	X	
Philippines	PICCS	X	
United States	TSCA	X	

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Conversion to SAP template. Revised Section(s): 3 11 12 15 Date of Revision: February 19 2004 Logo change. Date of Revision: February 8 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg

Language Translations
The information presented in this document has been translated from English by a vendor Lyondell believes to be reliable. Lyondell and its vendor have made a good-faith effort to verify the accuracy of the translation, but assume no responsibility for any errors that may have occurred. Please refer to our web sites (www.lyondell.com and www.equistarchem.com) for the original document written in English.

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EPAHO003001037

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

RELEASE # GHBF1413-14V

CERTIFICATE of ANALYSIS

Date: May 13, 2008 **P.O. #:**

Product: Methyl Alcohol - Flashed

Customer:

TT/TC No(s): **TRL# 249**

Lot No:

TEST(Unit)	Result
Color (Visual)	Clear, Water White
Density	0.81 g/ml
% Methanol (By Density Calc.)	89%
Water (By Density Calc.)	11%
Haze Test	Clear/Pass
pH	6
Chlorides (Chlor-detect)	

Gary Lenertz

Signature

Site: Griggs Road

This analysis is not to be construed as a warranty. Customer is responsible to verify the lot and code numbers of product received with the numbers contained on this report and perform any other analyses necessary to determine suitability of the product described above for the use intended by the customer. No representations as to FDA regulated use are made for this product unless it is designated as meeting either USF, NF, Cosmetic grade or Food Grade Status.

Trlr 10932

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

CERTIFICATE of ANALYSIS

Date: April 28, 2008 **P.O. #:**

Product: **Restricted Light Ends**

Customer: Southeastern Chemical Ind. Inc.

Pick Up Date: **TBD**

Ship to Address: **TBD**

TT/TC No(s):

Lot No: **1-0804-9601-00**

TEST(Unit)	Result
Color (Visual)	Water White Clear
C7 – C8 Aliphatics	60.7 Area %
Toluene	39.0 Area %
Methanol	0.0 Area %
Ethanol	0.0 Area %
Isopropanol	0.0 Area %
Other Solvents	0.3 Area %
Water Content	<0.1 Wt. %

Gary Lenertz

Signature

Site: Griggs Road

This analysis is not to be construed as a warranty. Customer is responsible to verify the lot and code numbers of product received with the numbers contained on this report and perform any other analyses necessary to determine suitability of the product described above for the use intended by the customer. No representations as to FDA regulated use are made for this product unless it is designated as meeting either USF, NF, Cosmetic grade or Food Grade Status.

Kim Harmon

From: Gary Lenertz
Sent: Monday, April 28, 2008 5:42 PM
To: Kim Harmon
Subject: RE: Stream 3 Plan
Attachments: CES COA Aliphatics 042808.doc

They do. I have them at my desk. Let me know if you need a copy.....

Tomorrow, I will be out of the office (Trade Show). However, I will need the following on trl 932 (it should come in tonight)

1. Remove the water layer
2. Verify the solvent layer is water white and clear
3. Verify how much solvent we have in the trailer (after they remove the water layer).. You will have to get BO to get someone to strap the trailer.
4. Verify the solvent has a "paint thinner" smell. It should not smell like acid, fish, sulfur etc.

5. Once we have this information, we can call Jim Mylan at Southeaster chemical for pickup. I have the COA attached (send him copy by fax, we should not send out an unprotected COA to anyone).

I think he will be able to get in a day or two after receiving this information.

Regards,

Gary Lenertz

glenertz@cesenvironmental.com

From: Kim Harmon
Sent: Monday, April 28, 2008 5:29 PM
To: Gary Lenertz
Subject: RE: Stream 3 Plan

I thought the analysis needed to come before the pickup of material?

From: Gary Lenertz
Sent: Monday, April 28, 2008 9:26 AM
To: Kim Harmon
Subject: Stream 3 Plan

Kim.

Looks like I am selling trailer 215 to Carolyn
Trailer 932 to Southeastern Chemical

Subject to final approval. I should have this firmed up later today. Let me know when we expect the trailers to be on our yard. Also, if you see the analysis show up, let me know.

Best Regards,

MISC.

EPAHO003001041

~~901116 249~~
901117

~~248~~ [redacted]

~~Smith~~

[redacted] Scott Rainey - All
[redacted] wendy @ PAR - Mec12
Lou Matice
Jeff West - Four R Marketing
Jason - Hall
Ken Reese
Arsenio
Carolyn
Carrie Reese
Charlie - Alamo
Lloyd - Midstate
Dave Alberts
Eric Duke
Eric - Petroleum Exp.
Mark Speets
Knut

Ball Corp
6600 Will Rogers Blvd
Ft Worth 76140
TX

Attn: Marty

water .52
[redacted] 1.5
dehydrated approx 3.5
if dehydrate
@ 100c it would
be approx 8

Kim Harmon

From: SRams@aol.com
Sent: Monday, April 28, 2008 5:55 PM
To: Kim Harmon
Subject: Re: Return Load

Kim:

See below:

HRR Fuel Oil Pricing

Up Dated: 12/5/07

Flash Point: Min. 135 F

BS&W: Max. 1%

Ash	Discount to 3.5% F.O.
0 – 0.3%	$16.00/net bbl
0.3 – 0.6	$19.00/net bbl
0.6 – 0.9	$21.00/net bbl
0.9 – 1.0	$25.00/net bbl

BS&W	Additional Discount
1.1 – 3%	$4.00/net bbl
3.1 – 6	$6.00/net bbl
6.1 – 10	$10.00/net bbl
10.1 – 15	$12.00/net bbl

Spot loads: Date of delivery

Thanks.

Scott

In a message dated 4/28/2008 5:51:55 P.M. Central Daylight Time, kharmon@cesenvironmental.com writes:

Ok. Can you forward me that Matrix table we discussed earlier?

Thanks,
Kim

EPAHO003001043

Kim Harmon

From: Jennifer Rust
Sent: Tuesday, July 22, 2008 10:33 AM
To: Kim Harmon
Subject: RE: Contact info for Nash
Attachments: Michael Maynard.vcf

Michael Maynard
PRM Corporation

(704) 905-7686 Work
(704) 905-7686 Mobile
mike@prmcorporation.com

I am trying to find outlets for this week – but all he has are two way out of the way.

Thank You,
Jennifer Rust

Direct: 713-800-7913
Cell: 713-367-8581

From: Kim Harmon
Sent: Tuesday, July 22, 2008 9:55 AM
To: Jennifer Rust
Subject: Contact info for Nash

Jenni,

Matt asked me to get the contact information for the person you have been speaking to regarding moving the nash material, so that I can start contacting him from this point forward. Would you mind briefing me where you are on it with him?

Thanks,
Kim

QUALITY CARRIERS
PO BOX 20635
BEAUMONT, TX 77720
PHONE: 1-800-925-8265
FAX: 409-842-4948

QUALITY CARRIERS

Fax

Pat Kim

To: Kim Harmon From: Pat Cathren

Fax: (713)676-1676 Pages:

Phone: Date: 6/6/08

Re: CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Cr. App.

Quality Carriers
4041 Park Oaks Blvd Suite 200
Tampa, FL 33610
Fax: 813-569-1680

Applicant Information Part 1

Applicant Parent Company: CES Environmental

Address:

City/State/Zip:

Phone: Fax: Contact Name:

Email: Website:

Date Business Started: Federal Tax ID #:

Does this company have a previous name, if so what is that previous name:.

Applicant Information Part 2

Applicant Name: SEE ATTACHED

Address: PO Box

City/State/Zip:

Phone: Fax: Email:

Website: Contact Name:

Federal Tax ID #

Date Business Started:

Does this applicant have a previous name, if so what is that previous name:

Type of Business: Sole Proprietorship ☐ Partnership ☐ Partnership Limited ☐ Corporation ☐ Limited Liability Company ☐

Are you a Division of another company? Yes ☐ No ☐

If yes, what company

Are you a Subsidiary of another Company? Yes ☐ No ☐

If yes, what company

Company Officers

Name	Title	Ownership Percentage

Please attach any special Billing Instructions that your company requires to pay invoices in a timely manner.

Billing Information - if Different from above information

Applicant Name:

Address:

City/State/Zip:

Phone: Fax:

Contact Name (responsible for Freight Invoices):

Email Address:

Please attach any special Billing Instructions that your company requires to pay invoices in a timely manner.

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676
E-mail: cesenvironmental@yahoo.com

Credit Application

Billing Address:	CES Environmental Services 4904 Griggs Rd. Houston, TX 77021
Physical Address:	Same
Phone:	(713) 676-1460
Fax:	(713) 676-1676
E-Mail:	cesenvironmental@yahoo.com
Federal Tax I.D. #:	76-0592985
Type of Business:	Environmental Services
Bank References:	Bank of America 12605 East Frwy Houston, TX 77015 Phone: (888) 852-5000 ext. 5113 Fax: (713) 451-6309 Acct#: 005772224533 Officer: Jose Madrigal
Dun & Bradstreet#:	00-173-6581
Better Business Bureau:	Member

Trade Credit References:

Henek Manufacturing, Inc.
Attn: Terri
9700 Almeda Genoa Rd Bldg 601
Houston, TX. 77075
Phone: (713) 943-7543
Fax: (713) 943-3213

A-One Chemicals
Attn: Bill Doyle
7782 Braniff
Houston, TX 77061
Phone: (713) 644-1492
Fax: (713) 644-1493

Hoffland Environmental
Attn: Credit Dept.
10391 Silver Springs Rd
Conroe, TX. 77303
Phone (713) 649-1900
Fax: (713) 649-1808

Clean Coast Technologies
Attn: Ronnie Reeves
2843 Westside Bldg 14C
Pasadena, TX
Phone (713) 378-0000
Fax: (713) 378-0404

We certify that the above information is true. We hereby authorize credit information to be released by the above listed references. This information is to be used only for opening an account.

Signature _____ Title _____ Date _____

obtain credit information from the sources referenced; and B) attests to shipper's financial respo: sibility and willingness to pay invoices in accordance with terms.
Credit terms are 30 days unless otherwise specified in a written contract.

Kim Harmon Product Sales 6-9-08
Name Title Date

ECOA Notice

The federal Equal Credit Opportunity Act prohibits creditors from discriminating against Credit Ap: licants on the basis of race, color, religion, national origin, sex, marital status, age (provided the Applicant has the capacity t: enter into a binding contract); because all or part of the Applicant's income derives from any public assistance progra n; or because the Applicant has in good faith exercised any right under the Consumer Credit Protection Act. The federal ager cy that administers compliance with this law concerning this credit is the Federal Trade Commission, Division of Credi t Practices, 6th and Pennsylvania Ave NW, Washington, DC 20580.

FCC environmental

Date	
Sales Rep	
Branch	
Waste Destination	

HYDROCARBON RECOVERY SERVICES, INC.
WASTE OR PRODUCT CHARACTERIZATION FORM

REQUIRED FIELDS ARE NOTED IN BOLD

WASTE OR PRODUCT DESIGNATION				
☐ **Wastewater**	☐ **Off Spec Fuel**	☐ **Used Oil**	☐ **Used Filters**	☐ **Oily Absorbents**
☐ **Used Anti-Freeze**	☐ **Petroleum Contact Water**		☐ **Other**	

CUSTOMER INFORMATION		GENERATOR INFORMATION	
Company Name	CES Environmental	**Generating Facility**	CES Environmental
Mailing Address	4904 Griggs Rd	**Facility Address**	SAME
City, State, Zip	Houston, TX 77021	**City, State, Zip**	
Company Contact		Facility Contact	
Telephone Number	713-676-1460	Facility Phone	
Fax Number	713-676-1676	Facility Fax	

ADDITIONAL GENERATOR INFORMATION			
Is this facility a Conditionally Exempt Small Quantity Generator as defined by 40 CFR 261.5?		☐ **Yes** ☒ **No**	
If no, EPA ID Number	TXD008950461	EPA Waste Code	NA
State ID Number	30900	State Waste Code	NA

GENERAL DESCRIPTION OF WASTE OR PRODUCT	
Process Generating Waste	Consolidation of base oils from various petroleum sources
General Description of Waste	NA

Color	Dark brown	Flash Point	☐< ☒> 140 ☐ F ☐ C
% Solids	0 %	Sample pH	NA
Sp. Gravity	☐< ☐> .87	BTU	NA lbs/ hr
Viscosity @70F	☐ Heavy ☐ Light ☐ Slurry	Total Halogens	☐< ☐> ppm
Layers	☐ Multi ☐ Bi ☒ Single		

WASTE COMPOSITION							
	Primary Constituents	**%min**	**%max**		Secondary Constituents		
1.)	**Paraffinic base oil**	**100**	**100**		Chemical Oxygen Demand	NA	mg/l
2.)					Oil and Grease	NA	mg/l
3.)					Total Suspended Solids	NA	mg/l
4.)					Total Solids	NA	%
5.)					Ammonia	NA	mg/l

METALS								
Indicate Type	☐ Total ☐ TCLP							
Arsenic	NA	☐ppm ☐ppb	Copper	NA	☐ppm ☐ppb	Nickel	NA	☐ppm ☐ppb
Barium	NA	☐ppm ☐ppb	Lead	NA	☐ppm ☐ppb	Selenium	NA	☐ppm ☐ppb
Cadmium	NA	☐ppm ☐ppb	Mercury	NA	☐ppm ☐ppb	Silver	NA	☐ppm ☐ppb
Chromium	NA	☐ppm ☐ppb	Molybdenum	NA	☐ppm ☐ppb	Zinc	NA	☐ppm ☐ppb

ADDITONAL INFORMATION				
Is this waste a "Hazardous Waste" as defined by 40 CFR 261.3?	☐ **Yes** ☒ **No**			
Does this waste contain PCB's?	☐ **Yes** ☒ **No**	If yes, PCB Content		ppm
Is this waste subject to any Categorical Pretreatment Standards listed in 40 CFR 400-499?	☐ Yes ☒ No			
If yes, list				
Is this waste a DOT Hazardous Material as defined by 49 CFR 171.8?	☐ Yes ☒ No			
If yes, provide	Proper Shipping Name		Packing Group	
	Hazard/Class Division		UN/NA/ ID#	
	Other Shipping Information			
Estimated Volume	**6000**	☒ **Gallons**	☐ **Drums**	☐ **Cubic Yard Box**
Frequency	☒ **Week**	☐ **Month**	☐ **Quarter**	☐ **Year**

GENERATOR'S CERTIFICATION

On behalf of the Generator, I hereby certify that the information provided on this Waste or Product Characterization Form and other material attached hereto is a complete and accurate description of the waste material; identifies any and all known or suspected handling hazards; and, that no willful omissions or misrepresentations as to the waste character, composition, and/or properties have been made.

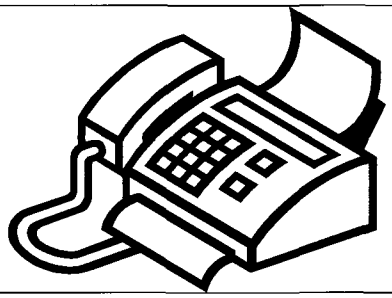
☒ **Generator** ☐ **Agent**

Name	Kim Harmon	**Title**	Product Sales
Company	CES Environmental	**Date**	1-23-09
Signature	Kim Harmon		

FCC Environmental USE ONLY				
Date		Status	☐ APPROVED	☐ REJECTED
Lab Manager			Treatment Category	
Notes				
Signature			WCF #	

Faces

EPAHO003001051



A facsimile from

CES Environmental Svcs

To: Hugo

Fax number: 256-796-2905

Date: 2-6-09

Regarding:

Total pages: 10

Hugo,

Here is an MSDS for some material that I am looking to bring in. Let me know if this is something you might be interested in.

I also have 2 loads of the heptanes/toluene mixed solvents coming in Monday.

Give me a call and I can give you the specs on the mixed solvent material.

Thanks,
Kim Harmon
832-607-7590

Material Safety Data Sheet

Product Name: Power Additive

MSDS Number: 00000211
MSDS Date: 17/05/06
Product Name: Power Additive
Manufacturer: C.L.E.A.N. Power Additives Inc.

I. Product Identification

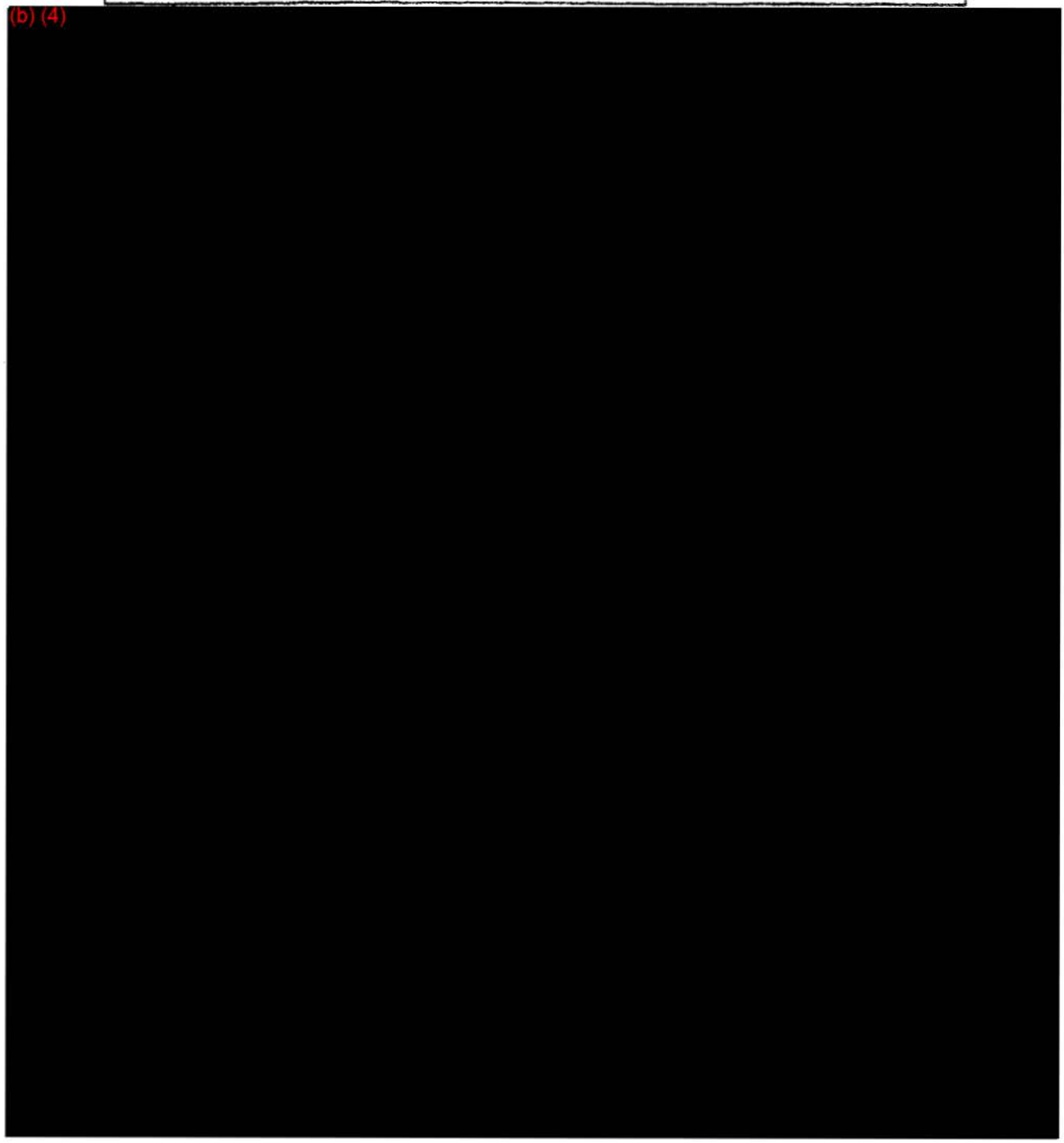
(b) (4)

[redacted]

Material Safety Data Sheet

Product Name: Power Additive

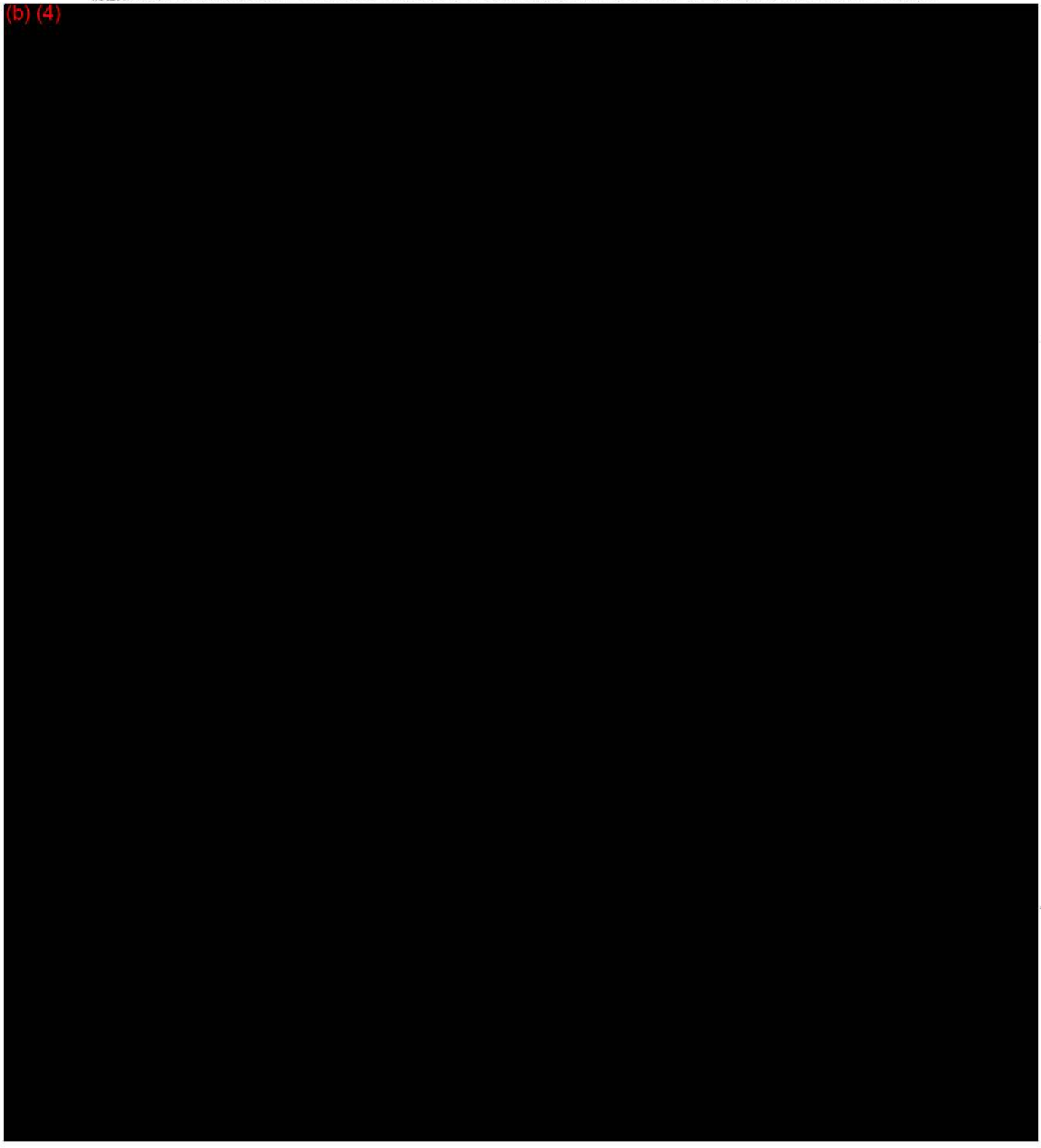
(b) (4)



Material Safety Data Sheet

Product Name: Power Additive

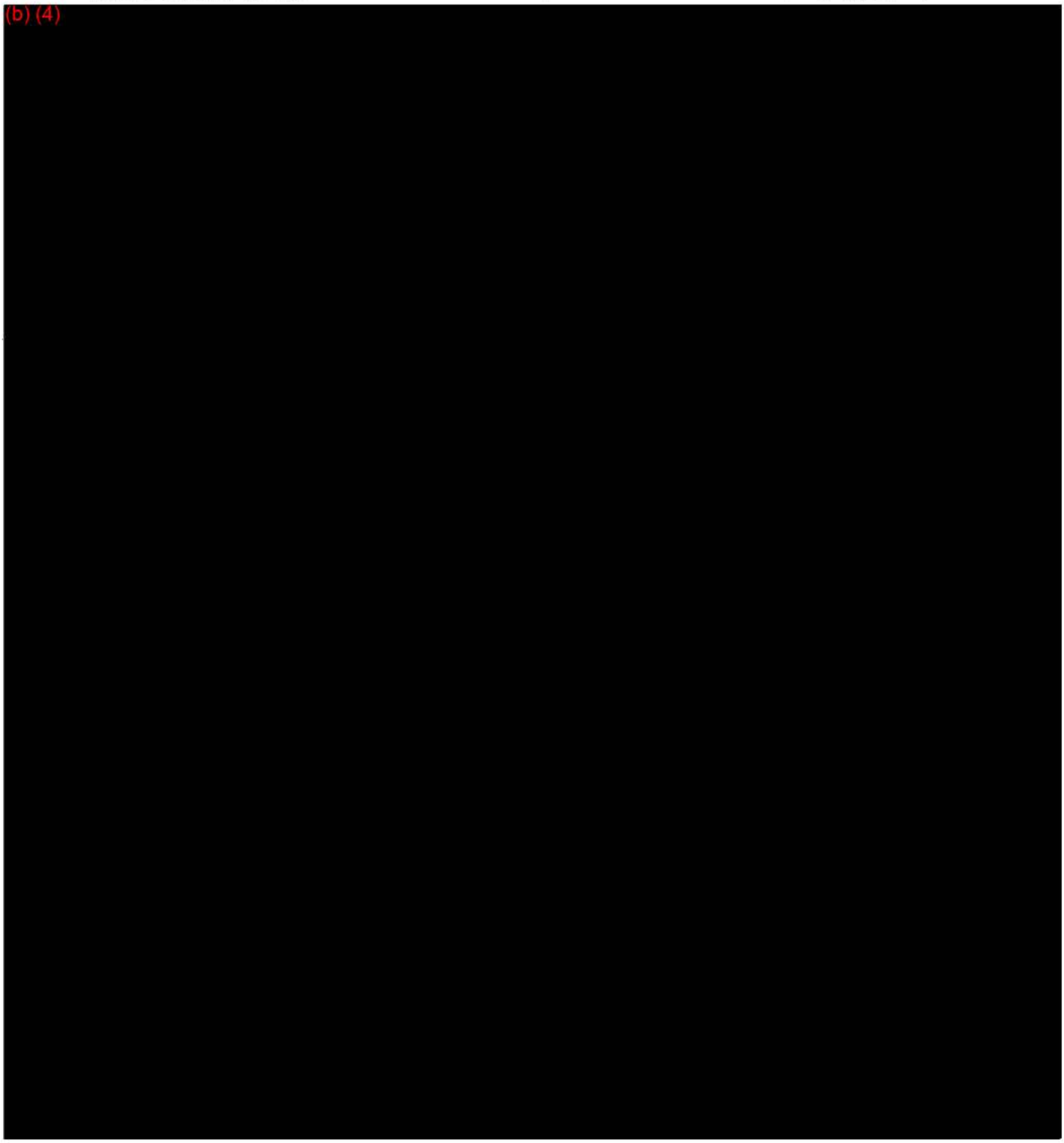
(b) (4)



Material Safety Data Sheet

Product Name: Power Additive

(b) (4)



Material Safety Data Sheet

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

Product Name: Power Additive

(b) (4)

[redacted]

To: Charlie Fpamport
Alamo Petroleum

From: Kim Harmon
CES Environmental

Fax: 979-5425505

RE: Light Ends load 3/19/09

This load will be billed @ $0.40/gallon

********** -IND. XMT Journal- ********** Date MAR-19-2009 ***** Time 13:02 ********

Date/Time = MAR-19-2009 13:00

Journal No. = 177

Comm. Result = OK

Page(s) = 001/001

Duration = 00:00:42

File No. = 468

Mode = Memory Transmission

Destination = 19795425505

Received ID = / 979 542 5505

Resolution = Fine

-CES ENVIROMENTAL -

***** DP-C264 ********** - - ***** - 7137488664- *********

To: Charlie Fpamport
Alamo Petroleum

From: Kim Harmon
CES Environmental

RE: Oil prices

Charlie,

As per our conversation, effective 3/1/09 all oil loads will be billed at $0.40/gallon, until further notice.

Sincerely,
Kim Harmon

********** -IND. XMT Journal- ********** Date MAR-11-2009 ***** Time 09:34 ********

Date/Time = MAR-11-2009 09:30

Journal No. = 052

Comm. Result = OK

Page(s) = 001/001

Duration = 00:00:50

File No. = 343

Mode = Memory Transmission

Destination = 19795425505

Received ID = / 979 542 5505

Resolution = Fine

-CES ENVIROMENTAL -

***** DP-C264 ********** - - ***** - 7137488664- *********

Attn: Mia
Pg. 5

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
8/27/2008	48985

Bill To: Century Asphalt and Materials
Attn: Otis Matthews
5303 Navagation Rd.
Houston, TX 77011

P.O. No.	Terms	Project
	Net 30	

Quantity	Description	Manifest #	Rate	Amount
	8/25/08			
7,786.37	Management of Non DOT regulated black oil @ $1.50 per gallon	BOL 70873	1.50	11,679.56
	Per Mia will submit payment 12/1			
	CES Job # 70873			

We appreciate your business!

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 6%, unless otherwise stated in a formalized contract.

Subtotal	$11,679.56
Sales Tax (8.25%)	$0.00
Total	$11,679.56

CES Environmental Services, Inc.

Bill Of Lading # : 70873

Form No. CES Environmental Services
Date of Black Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc	11a) 2366
4904 Griggs Rd	11b)
Houston TX 77021	11c)
(713) 678-1460	11c)

[illegible]

[illegible]

CONSIGNED TO :
Century Asphalt and Materials (Navigation Rd)
5303 Navigation Road
Houston TX 77011

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd
Houston TX 77021

"This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(a) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the rendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	CT	6500	G	UN1993 Flammable Liquids, n.o.s., PG III

Shipper : CES Environmental Services, Inc.
Per : MILES ROOT Signature : Miles Root Date : 8/25/08

Carrier CES Environmental Services, Inc.
Per : JUAN MENDOZA Signature : Juan Mendoza Date : 8-25-08

Receiving Facility Century Asphalt and Materials (Navigation Rd)
Per : Signature : CARMEN C. GOMEZ Date :

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO003001067

CES Environmental Services, Inc.

1021 Briggs Road
Houston, TX 77021
Tel: (713) 876-1480
Fax: (713) 876-1676

Transportation Work Ticket

Folder ID : CES Environmental Services
Sale of Black Oil

Date : 8/25/2000

Manifest # :

Client : CES Environmental Services, Inc.

Ticket : 70873

Phone : 7126761400

Consignee : Century Asphalt and Materials (Navigation Rd)

Transporter : CES Environmental Services, Inc.

Signature: Mike Scott

Signature

Leave CES Yard :	7100 Am	Arrive At Destination	(2001) 7130 Am	292 12:30 Pm
Arrive At Customer :	~~7:30 A~~ /m	Begin Unloading :		
Begin Loading :		Finish Unloading :		
Finish Loading :		Leave Destination :	9:15	2:30 Pm
Leave Customer :		Arrive At CES Yard :	945	3:00 Pm

Customer PC #:

Total Hours:

CES Unload: ☐

			Truck # 2001	Truck # 292
Gross Weight :		Ending Odometer :	114033	118014
Tare Weight :		Begining Odometer :	114001	117982
Net Weight :		Total Miles :	32	32

Driver : Mendoza, Juan

Tractor # : 2001

Tote # :

Signature : Juan Mendoza

Trailer # : 206

Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO003001068

CENTURY ASPHALT

CONTROL# CA- 409222

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Rosenberg
855 Highway 36 N
832-595-1460

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Houston Plant:
5303 Navigation St.

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNERFUEL	00	FOB	08/25/08	536542
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				14:13	BURNERFUEL

Product Code	Product Description
2000000-05	FUEL TN

Driving Instructions

TO NAVIGATION PLANT

Scale Weights

Loads Today:	1
Tons Today:	20.91
Gross Wt:	44.90
Tare Wt:	15.99
Net Wt:	28.91

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:	
Tax:	
Total:	

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Outbound Load Report

Report Number : 636
Type of Material: Black Oil

Job Date: 8/25/2008 **Job Number :** 70873
Bill of Lading #: 70873
Customer: Century Asphalt and Materials

Gross Weight: 89800
Tare Weight: 31980 **OR** **Total Gallons Shipped:**
Net Weight: 57820

Shipping Information

Carrier: CES Environmental Services, Inc.
Truck Number: 2001
Trailer Number: 255

CES Laboratory Use Only

Specific Gravity:	.880
Pounds per Gallon:	7.33
Temperature:	
Total Gross Gallons:	7888.13
% Water	1.29%
% Solids	0.0
Total Net Gallons:	7786.37

(minus water and solids)

Misc Notes:

Api=29
btu=14,482

Sample Analyst: _____
(signature)

Sample Analyst: Sam Brown **Date:** 8/25/2008

5:13 PM
11/25/08

CES Environmental Services, Inc. (2005)
A/R Aging QuickZoom
As of November 25, 2008

	Date	Num	Name	Open Balance
Century Asphalt Navagation Rd				
	08/19/2008	48653	Century Asphalt Navagation Rd	1,466.86
	08/27/2008	48985	Century Asphalt Navagation Rd	11,679.56
Total Century Asphalt Navagation Rd				13,146.42
				13,146.42

Mia
1-421-2627

Fax
1-421-9662

3548.82
3401.20

1.0 PRODUCT IDENTIFICATION

Date Revised: 09-24-99

Synonyms:	Petroleum Distillate; Petroleum Hydrocarbons, Feedstock.
Chemical Name and/or Family Description:	Petroleum Hydrocarbon; a variable mixture of gasoline, diesel fuel, kerosene and petrochemicals.
Shipping Information:	DOT Hazard Class-Flammable Liquid, n.o.s.; UN 1993

COMPOSITION

Product Transmix	CAS Number Mixture	Wt% 100	Occupational Exposure Limits* OSHA PEL N.A.	ACGIH TLV N.A.	Other	Unit
Ingredient(s):						
Gasoline, which has:	Mixture	Varies	N.A.	300	500 STEL	PPM
- Benzene	71-43-2	0-5.0	1	10	5 STEL	ppm
- Toluene	108-88-3	0-25.0	100	100	150 STEL	ppm
- Xylene	1330-20-7	0-25.0	100	100	150 STEL	ppm
- Ethylbenzene	100-41-4	0-5.0	100	100	125 STEL	ppm
- n-Hexane	110-54-3	0-3.0	50	50		ppm
- Hexane (other isomers)	N.A.	<8.5	500	500	1000 STEL	ppm
- Pseudocumene	95-63-3	0-5.0	25	25		ppm
- Butane	106-97-8	<9.0	800	800		ppm
- Pentane	109-66-0	<5.0	600	600	750 STEL	ppm
- t-Butyl Alcohol	75-65-0	0-10.0	100	100	150 STEL	ppm
- Methyl t-butyl Ether (MTBE)	1634-04-4	0-15.0	N.A.	N.A.		
Kerosene	8008-20-6	Varies	N.A.	N.A.	14 NIOSH	ppm
Diesel Fuel No. 2	68476-34-6	Varies	5	5	10 STEL	mg/

* = 8 Hr. TWA unless otherwise secified.
STEL = Short Term Exposure Limit; 15 minutes
SKIN = May be skin absorbed.
N.A. = Not Available

Boiling Point 760 mmHg: 70-690°F
Vapor Pressure mmHg @ 20C: 1.6-525
Solubility in H_20 %: Negligible
Specific Gravity 60/60F: 0.7 – 0.9
% Volatile by Volume: 100
Viscosity (method temp): 1.4-4.1 @ 40°C cSt
Appearance: Dark bronze liquid

Melting Point: N.A.
Vapor Density (Air=1) = >5
pH: N.A.
Evaporation Rate: N.A.
Odor: Hydrocarbon odor

2.0 FIRE AND EXPLOSION DATA

Flash Point: - 45°F to 125°F (PM)

Flammable Limits in Air % by Vol. Lower: 0.6 Upper: 7.5

Autoignition Temperature: 410-850°F

Extinguishing Media: Dry chemical, carbon dioxide, foam and water spray.

Special Fire Fighting Procedure: Use a water spray to cool fire-exposed containers. Use a smothering technique for extinguishing fire of combustible liquid. Do not use a forced water stream directly on fires as this will scatter the fire. Firefighters should wear self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazard: Flowing liquid can be ignited by self generated static electricity; containers should be grounded and bonded.

3.0 REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid/Incompatibility: Strong oxidizing agents, heat, sparks, flame and build-up of static electricity.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur dioxide and hydrocarbons.

4.0 HEALTH HAZARD DATA

Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No
Occupational Exposure Limits; See COMPOSITION section.
Effects of Overexposure:
Acute:

Eyes:	Slight to moderate eye irritation.
Skin:	Moderately irritating; causing redness, drying of skin.
Inhalation:	Irritating to mucous membranes and respiratory tract. Will produce symptoms of intoxication such as headache, dizziness, nausea, vomiting and loss of coordination.
Ingestion:	Mild excitation, loss of consciousness, convulsions, cyanosis congestion and capillary hemorrhaging of the lung and internal organs.

Prolonged or repeated skin contact may cause dermatitis.

May cause a reduction of erythrocytes, marrow hypoplasia, and changes in formed elements of the blood. Recent studies on gasoline exposure indicate kidney damage and kidney cancer in rats and liver cancer in mice.

Additional Medical and Toxicological Information: May aggravate pre-existing dermatitis.

5.0 EMERGENCY FIRST AID PROCEDURES

Eye Contact:	Flush thoroughly with water for at least 15 minutes. Get medical attention.
Skin Contact:	Remove contaminated clothing. Immediately wash affected areas with soap and water.
Inhalation:	Remove to fresh air. Apply artificial respiration if not breathing. Get medical attention.
Ingestion:	Do not induce vomiting. If spontaneous vomiting occurs, hold the victim's head lower than hips to prevent aspiration.

6.0 SPECIAL PROTECTION INFORMATION

Eye Protection:	Remove contact lenses and wear chemical safety glasses or goggles where contact with liquid or mist may occur.
Skin Protection:	Wear impervious gloves when contact with skin may occur.
Inhalation:	Use approved respiratory protective equipment for cleaning large spills or entry into large tanks, vessels or other confined spaces.
Ventilation:	Provide adequate ventilation to keep mist or vapors below allowable exposure levels.

7.0 SPILL OR LEAK AND DISPOSAL PROCEDURES

Spill Procedures: Remove sources of heat or ignition including internal combustion engines and power tools. Clean-up spill, but do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

Waste Disposal: Dispose through a licensed waste disposal company. Follow federal, state and local regulations.

8.0 SPECIAL PRECAUTIONS AND COMMENTS

Storage Requirements: Store in tightly closed containers in a dry place, away from sources of heat or ignition. Ground and bond transfer and storage equipment to prevent static sparks. Empty containers may contain residue (liquid/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they can explode and cause injury or death.

9.0 EPA SARA TITLE III INFORMATION

Section 311/312 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive
X	X	X		

SARA Hazardous Substances

Ingredient	CAS No.	% Wt.	Sec. 313	Sec. 302	RQ. lb	TPQ
Benzene	71-43-2	0-5.0	X	X	1000	
Toluene	108-88-3	0-25.0	X			
Xylene	1330-20-7	0-25.0	X			
Ethylbenzene	100-41-4	0-5.0	X			
t-Butyl Alcohol	75-65-0	0-10.0	X			
Methyl t-Butyl Ether (MTBE)	1634-04-4	0-15.0	X			

Key: Sec. 313 = Toxic Chemicals, Section 313
Sec. 303 = Extremely Hazardous Substances (EHS), Section 302
RQ = Reportable Quantity of EHS
TPQ = Threshold Planning Quantity of EHS

Note: Percentage listed above represent SARA Hazardous Substances in regular gasoline. SARA Hazardous Substances in Transmix may be obtained by multiplying % Gasoline in Transmix by the above

10.0 CALIFORNIA PROPOSITION 65 WARNING

Chemicals known to the State of California to cause cancer, birth defects or other reproductive harm may be found in crude oil and petroleum products. Although it is possible to sufficiently refine a crude oil or its end products to remove the potential for cancer, we are advising that one or more of the listed chemicals may be present in some detectable quantities. Read and follow directions and use care when handling crude oil and petroleum products.

Industrial Hygiene Review: Daniel J. Kowal, CIH
Date Prepared: 09/24/99

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of this company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to the accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitableness and completeness.

To: Hugo
E&E Coatings
Fax: 256-796-2905

From: Kim Harmon
CES Environmental Services
Phone: 832-607-7590

RE: Mixed Solvents

Hugo,

As per our phone conversation, I am submitting the information on the Heptanes/Toluene loads that I currently have available. I move this material very quickly, so if there is a load you are interested in, please let me know right away.

215
Heptanes = 38.2
Toluene = 57.9
Color = yellow tint

216
Heptanes = 62.9
Toluene = 37
Color = water white

1305
Heptanes = 9.4
Toluene = 81.5
Color = yellow tint

Thank You,
Kim Harmon
832-607-7590

SOUTHERN
CRUSHED CONCRETE

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2009898**

UID: 1229022720

Griggs

Date: 12/11/2008 Time: 1:14:57PM

Customer: JB8L CES ENVIRONMENTAL SERVICES,INC

Order: 109898 WEIGH TRUCKS

P.O.: Job:

Product: 010 WEIGH TRUCK

Carrier: Vehicle: CES2003

Delivery Instructions:
GROSS 33180 LBS

Gross: 16.59 * Tare: 0.01 * Net: 16.58 *
* Manual Weight

Loads Today:	6	Qty Today:	6.00 Load
Order Loads:	637	Qty To Date:	629.00

Weighmaster: CHRIS ARSOLA

PUBLIC WEIGHER STATE OF TEXAS

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

COPY 2 CUSTOMER

Customer Signature: _____

Carrier Signature: _____

State Certification of Weights and Measures

A1 Public Scales

727 McCarty Dr. (Highway 90, Beaumont Rd.)
Mail to: P.O. Box 1281, Houston, TX 77251
Tel: (713) 675-9500, Fax: (713) 675-9501

Ticket No.
A102106
1st Weigh Ticket
Date: 12/11/200
Time: 09:16:05

Certified
DEPARTMENT OF AGRICULTURE • TEXAS •

Account No 03185
Customer CES ENVIRONMENTAL SERVICES, INC.
Truck No 2003 Trailer 280
Pay Type Charge Amount $6.00
Coming From Going To
Comments

Driver's Name J Ervin
Driver's Signature _____

Weights

Gross	78140
Tare	
Net LB	0
Net TON	0
Steer	
Drive	
Trailer	

Wood George,
DEPUTY PUBLIC WEIGHER,
Harris County, Texas

Weigher's Signature: _____
This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

77675
Fuel Oil

State Certification of Weights and Measures

A-1 Public Scales

727 McCarty Dr. (Highway 90, Beaumount Rd.)
Mail to: P.O. Box 1251, Houston, TX 77251
Tel. (713) 675-9500, Fax: (713) 675-9501

Ticket No.

A102132

ReWeighed Ticket

Date: 12/11/200
Time: 18:26:36

Certified

DEPARTMENT OF AGRICULTURE • TEXAS •

Account No	03185
Customer	CES ENVIRONMENTAL SERVICES, INC.
Truck No	278
Trailer	235
Pay Type	ReWeigh-Free
Amount	$0.00
Coming From	
Going To	
Comments	

Driver's Name: _____

Driver's Signature: _____

Weights

Gross	74440
Tare	35300
Net LB	39140
Net TON	19.57
Steer	
Drive	
Trailer	

Wood George,
Certified Public Weigher,
Harris County, Texas

Weigher's Signature: Blanco

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

77551
Process Oil

State Certification of Weights and Measures

A-1 Public Scales

727 McCarty Dr. (Highway 90, Beaumont Rd.)
Mail to: P.O. Box 1281, Houston, TX 77251
Tel: (713) 675-9500, Fax: (713) 675-9501

Ticket No.
A102395
ReWeighed Ticket
Date: 12/16/200
Time: 18:02:54

Certified

DEPARTMENT OF AGRICULTURE • TEXAS •

Account No	03185
Customer	CES ENVIRONMENTAL SERVICES, INC.
Truck No	291
Trailer	238
Pay Type	ReWeigh-Free
Amount	$0.00
Coming From	
Going To	
Comments	

Driver's Name: W. ABEGO
Driver's Signature: W Abego

Weigher's Signature: Blanco

Weights

Gross	75460
Tare	30220
Net LB	45240
Net TON	22.62
Steer	
Drive	
Trailer	

Wood George,
Certified Public Weigher,
Harris County, Texas

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

BOL 78180

Light Ends

BOL
77771.
Fuel Oil

INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2329834

☐ IF REWEIGH CHECK HERE
FIRST TICKET #

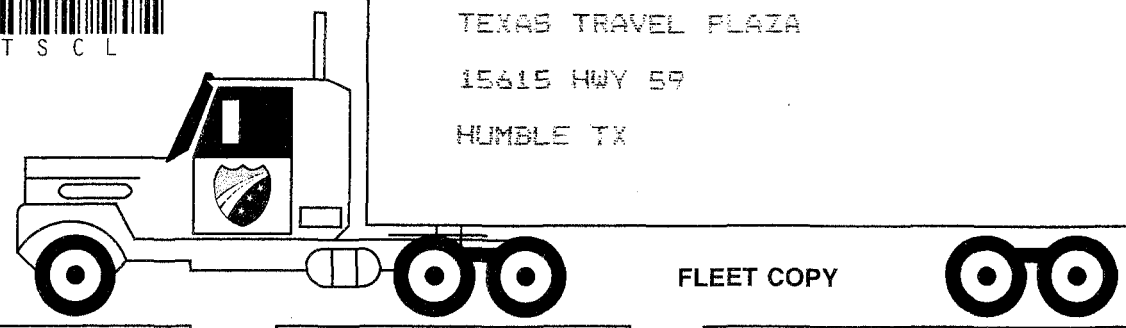
SCALE LOCATION 4124

I N T S C L

8:32 12-11-08
TEXAS TRAVEL PLAZA
15615 HWY 59
HUMBLE TX

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)

SM



FLEET COPY

8920 lb	28020 lb	29580 lb

WEIGH NUMBER
9834

GROSS 66520 lb
8.00

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING
THE GROSS WEIGHT IS THE CERTIFIED WEIGHT
ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED
This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 292 Trailer # 259

#1 Driver Code | P.O.# | Trip #

Company CES ENVIRO
Commodity FREIGHT ALL KINDS
Weighmaster LIZ
Weighmaster License No.

A102135
1st Weigh Ticket
Date: 12/11/2008
Time: 12:14:47

Account No. 03165
Customer: CES ENVIRONMENTAL SERVICES, INC.
Truck No. 292 Trailer 259
Pay Type Charge Amount $6.00
Coming From Going To
Comments

Drivers Name
Drivers Signature

Weights
Gross 31800
Tare
Net LB
Net TON
Steer
Drive

31800

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EPAHO003001079

Outbound Load

Outbound Number :	727
Outbound Search # :	727
Job Number :	73175
Type of Material:	Methylene Chloride
Job Date:	10/3/2008
Bill of Lading Number:	73175
Customer:	
Gross Weight:	
Tare Weight:	
Net Weight:	44360

OR **Total Gallons Shipped:** 4358

Shipping Information

Carrier:	Venezia
Truck Number:	
Trailer Number:	Independent

CES Laboratory Use Only

Specific Gravity:	1.22
Pounds per Gallon:	10.18
Temperature:	
Total Gross Gallons:	4358
% Water	
% Solids	
Total Net Gallons:	4358

(minus water and solids)

Misc Notes: Per the weight tickets the net pounds on this load were 44,360 pc density and pounds per gallon this load was 4,358 gallons.

Sample Analyst:	Gary Peterson
Date:	10/3/2008

401-884-0528

28216792

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

28216792

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

DEPARTMENT OF AGRICULTURE • TEXAS •

WEIGH NUMBER
6782

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

"WEIGH WHAT WE SAY OR WE PAY"®

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:
(1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: 10-08-2008

SCALE LOCATION: SUNMART MOBIL
I-10 EXIT 797
BAYTOWN TX

STEER AXLE	10340 lb
DRIVE AXLE	10900 lb
TRAILER AXLE	7280 lb
* GROSS WEIGHT	28520 lb

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: CES ENVIRONMENTAL — TRACTOR #: 289 — TRAILER #: 263

FEE: 1.00 — WEIGHMASTER OR WEIGHER SIGNATURE: JACKIE SARTORI — FULL WEIGH TICKET # (IF REWEIGH): 28216782

DRIVER IN-TRUCK UNLESS CHECKED HERE: ___

STOMER COPY

©CAT SCALE® FORM TEXAS 07/08

73488

28216782

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

THE CAT SCALE GUARANTEE

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"WEIGH WHAT WE SAY OR WE PAY"®

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CAT SCALE COLLECTOR CARD INSIDE!

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2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: 10-08-2008
APPROXIMATE TIME: 1122
SCALE LOCATION: 2844 SUNMART MOBIL I-10 EXIT 797 BAYTOWN TX

28216782

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

STEER AXLE	10260 lb
DRIVE AXLE	30620 lb
TRAILER AXLE	29280 lb
*GROSS WEIGHT	70160 lb

DEPARTMENT OF AGRICULTURE • TEXAS •

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Net 41640 lb

WEIGH NUMBER 6782

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED FREIGHT ALL KINDS

COMPANY CES ENVIRONMENTAL TRACTOR # 289 TRAILER # 263

FEE 8.50 WEIGHMASTER OR WEIGHER SIGNATURE THERESA ARDION FULL WEIGH TICKET # (IF REWEIGH)

DRIVER IN TRUCK UNLESS CHECKED HERE: ___

CUSTOMER COPY

®CAT SCALE® FORM TEXAS 07/08

C-345778

7 3488

EPAHQ003001082

28216726

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

"WEIGH WHAT WE SAY OR WE PAY"®

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:
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(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: 10-06-2008
APPROXIMATE TIME: 1356
SCALE LOCATION: 2844
SUNMART MOBIL
I-10 EXIT 797
BAYTOWN TX

28216726
PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

STEER AXLE	10380 lb
DRIVE AXLE	12680 lb
TRAILER AXLE	8960 lb
*GROSS WEIGHT	32020 lb

DEPARTMENT OF AGRICULTURE • TEXAS •

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: CES ENVIRONMENTAL — TRACTOR #: 289 — TRAILER #: LT2423

WEIGH NUMBER: 6713

FEE: 1.00

WEIGHMASTER OR WEIGHER SIGNATURE:

FULL WEIGH TICKET # (IF REWEIGH): 28216713

DRIVER IN TRUCK UNLESS CHECKED HERE: CARDELLA MAYES

©CAT SCALE® FORM TEXAS 07/08

STOMER COPY

#73228

28216713

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

"WEIGH WHAT WE SAY OR WE PAY"®

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:
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CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: *Operations Manager.*

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: 10-06-2008
APPROXIMATE TIME: 752
SCALE 2844
28216713 **LOCATION:** SUNMART MOBIL
I-10 EXIT 797
BAYTOWN TX

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

STEER AXLE	9580 lb
DRIVE AXLE	30220 lb
TRAILER AXLE	29620 lb
*GROSS WEIGHT	69420 lb

DEPARTMENT OF AGRICULTURE • TEXAS •

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

WEIGH NUMBER
6713

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED FREIGHT ALL KINDS

COMPANY CES ENVIRONMENTAL TRACTOR # 289 TRAILER # LT2423 (LT423)

FEE 8.50 WEIGHMASTER OR WEIGHER SIGNATURE D Ardion THERESA ARDION FULL WEIGH TICKET # (IF REWEIGH)

DRIVER IN TRUCK UNLESS CHECKED HERE: ___

©CAT SCALE® FORM TEXAS 07/08

TOMER COPY

73228

28216769

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

DEPARTMENT OF AGRICULTURE • TEXAS •

WEIGH NUMBER
6766

THE CAT SCALE GUARANTEE

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CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: [redacted]

SCALE [redacted]

LOCATION: 2844
SUNMART MOBIL
I-10 EXIT 797
BAYTOWN TX

STEER AXLE	10340 lb
DRIVE AXLE	10880 lb
TRAILER AXLE	7280 lb
* GROSS WEIGHT	28500 lb

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

net 41520

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED FREIGHT ALL KINDS

COMPANY CS TRACTOR # 289 TRAILER # 263

FEE 1.00

WEIGHMASTER OR WEIGHER SIGNATURE [signature]

FULL WEIGH TICKET # (IF REWEIGH) 28216766

DRIVER IN TRUCK UNLESS CHECKED HERE: CARDELLA MAYES

©CAT SCALE® FORM TEXAS 07/08

STOMER COPY

73419

EPAHO003001086

73419

28216766

TICKET NUMBER

CAT SCALE®

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

THE CAT SCALE GUARANTEE

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CAT SCALE COLLECTOR CARD INSIDE!

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*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed.

DATE: 10-07-2008

APPROXIMATE TIME: 1551

SCALE LOCATION: 2844
SUNMART MOBIL
I-10 EXIT 797
BAYTOWN TX

STEER AXLE	10180 lb
DRIVE AXLE	30680 lb
TRAILER AXLE	29160 lb
*GROSS WEIGHT	70020 lb

28216766
PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

DEPARTMENT OF AGRICULTURE • TEXAS •

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

WEIGH NUMBER
6766

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED FREIGHT ALL KINDS

COMPANY CS TRACTOR # 289 TRAILER # 243

FEE 8.50

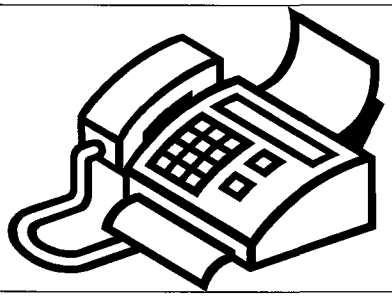
WEIGHMASTER OR WEIGHER SIGNATURE

FULL WEIGH TICKET # (IF REWEIGH)

DRIVER IN TRUCK UNLESS CHECKED HERE: CARDELLA MAYES

CUSTOMER COPY

*CAT SCALE® FORM TEXAS 07/08



A facsimile from

CES Environmental Svcs

To: Terry
Fax number: 401-884-0528

Date: 10/8/08

Regarding: Weight tickets

Total pages: 3

Terry,

Here are the weight tickets for the MEK loads. As soon as the paperwork for MeCl2 is brought up from the lab, I will get that to you. It should be this afternoon.

Thanks,
Kim

TR 21211

TR 21249

DATE 10-3-08 NO. 47329

MEK
T-233

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

SCALE TICKET
15

GROSS 10/03/2008 08:33:42 AM
31720
15

SCALE TICKET
15
10/03/2008 10:28:5
GROSS 76220

DRIVER ON ☐ OFF ☑

WEIGHED BY

6691.73 lbs

72984

76220
31720
44500

Terry -401-965-0011
FL-401-884-0528

JK 26901
JR 21400

MEK
T-233

DATE 10-1-08 NO. 47539

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

SCALE TICKET
15

G 72140
T 31220
N 40920

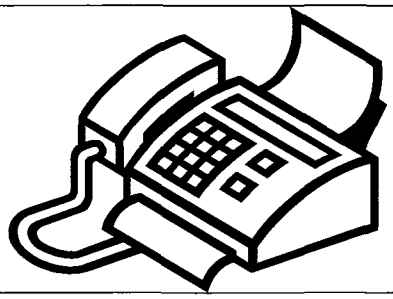
GROSS 10/01/2008 09:06:51 am
31220 lb

SCALE TICKET
15
10/01/2008 11:38:
GROSS 72140

DRIVER ON ☐ OFF ☑

WEIGHED BY

72983 6153.38lb



A facsimile from

CES Environmental Svcs

To: Matt Saragusa
Fax number: 985-748-2739

Date: 9-8-08

Regarding:

Total pages: 2

Matt,

As per our conversation, here is the GC analysis on the methanol with the green water based dye.

Please pass on to Dennis also. I have two loads of this material left, please let me know if you can take it.

Thanks,
Kim
CES Environmental
832-607-7590

LCS
10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 Fax

CERTIFICATE of ANLAYSIS

LCS Reference: T2008-3288H
CUSTOMER Reference:

GREEN

Solutions through Chemistry

FOR: CES
PRODUCT: Methanol
SAMPLE DRAWN FROM: Submitted
LOCATION: Pasadena, Texas
DATE of ANALYSIS: September 4, 2008

TEST	METHOD	RESULTS
	DRY BASIS	
Methanol, Wt%	G.C.	**99.93**
	WET BASIS	
Methanol, Wt%	G.C.	**84.22**
Water by Karl Fischer, Vol%	ASTM D-1744	**15.78**

Dan Potts PhD
LCS REPRESENTATIVE

866-376-2059

H+H

BOL
69981

Harris County, Texas

State Certification of Weights and Measures

Ticket no.: 191961

A 1 Public Scales

727 McCarty Highway 90 (Beaumont Rd)
Phone 713-675-9500 P.O. Box 1261 Houston, Texas 77251

Certified

Time In: 15:45:20 Date In: 08/12/2008
Time Out 19:46:36 Date Out 08/12/2008

Trailer :423 Tractor :285
Payment Type: Charge
Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185
From
To
Material
Total Charge 6.00
Weighmaster RS

Driver: Brent Sitty

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

Gross:	73500
Tare:	32520
Net:	40980
Tons:	20.49
Steer:	0
Drive:	0
Trailer:	0

Wood George
Certified Public Weigher
Harris County, Texas

EPAHO003001092

Outbound Load

Outbound Number :	605
Outbound Search # :	605
Job Number :	70374
Type of Material:	Black oil
Job Date:	8/16/2008
Bill of Lading Number:	70374
Customer:	
Gross Weight:	
Tare Weight:	
Net Weight:	
OR	
Total Gallons Shipped:	5000

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	255

CES Laboratory Use Only

Specific Gravity:	0.88
Pounds per Gallon:	7.34
Temperature:	
Total Gross Gallons:	
% Water	.85
% Solids	0
Total Net Gallons:	
(minus water and solids)	

Misc Notes: BTU 15591

Sample Analyst:	Godefroy Gbery
Date:	8/16/2008

ATTN: Otis

713-292-2885

5 pgs

Outbound Load

Outbound Number :	602
Outbound Search # :	602
Job Number :	70293
Type of Material:	Low Flash Recovered Black Oil
Job Date:	8/14/2008
Bill of Lading Number:	70293
Customer:	Century Asphalt
Gross Weight:	
Tare Weight:	
Net Weight:	

OR

Total Gallons Shipped:	6450

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	237

CES Laboratory Use Only

Specific Gravity:	.866
Pounds per Gallon:	7.23
Temperature:	
Total Gross Gallons:	6450
% Water	3.97
% Solids	
Total Net Gallons:	6450

(minus water and solids)

Misc Notes:

API gravity is 32.
The Btu is 10,540.

Sample Analyst:	Gary Peterson
Date:	8/14/2008

Outbound Load

Outbound Number :	601
Outbound Search # :	601
Job Number :	70172
Type of Material:	Low Flash Recovered Black Oil
Job Date:	8/14/2008
Bill of Lading Number:	70172
Customer:	Century Asphalt
Gross Weight:	
Tare Weight:	
Net Weight:	

OR

Total Gallons Shipped:	6450

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	237

CES Laboratory Use Only

Specific Gravity:	.918
Pounds per Gallon:	7.66
Temperature:	
Total Gross Gallons:	
% Water	1.27
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

The Btu of this material is 15,967.
The API gravity of this material is 23.
The load is approximately 6,450 gallons.

Sample Analyst:	Gary Peterson
Date:	8/14/2008

Outbound Load

Outbound Number :	606
Outbound Search # :	606
Job Number :	70411
Type of Material:	Low Flash Recovered Black Oil
Job Date:	8/17/2008
Bill of Lading Number:	70411
Customer:	Century Asphalt
Gross Weight:	
Tare Weight:	
Net Weight:	
OR	
Total Gallons Shipped:	6450

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	237

CES Laboratory Use Only

Specific Gravity:	0.90
Pounds per Gallon:	7.5
Temperature:	
Total Gross Gallons:	
% Water	.4 %
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

BTU is 15,837
The API gravity is 26.

Sample Analyst:	Godefroy Gbery
Date:	8/16/2008

Outbound Load

Outbound Number :	608
Outbound Search # :	608
Job Number :	70412
Type of Material:	Low Flash Recoverd Black Oil
Job Date:	5/18/2008
Bill of Lading Number:	70412
Customer:	Century Asphalt
Gross Weight:	
Tare Weight:	
Net Weight:	
OR	
Total Gallons Shipped:	6450

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	255

CES Laboratory Use Only

Specific Gravity:	.83
Pounds per Gallon:	6.93
Temperature:	
Total Gross Gallons:	6450
% Water	.29
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

API gravity is 39.
The Btu is 16,640.

Sample Analyst:	Gary Peterson
Date:	8/18/2008

BOL 166258

State Certification of Weights and Measures Ticket no.: 187152

A 1 Public Scales

727 McCarty Highway 90 (Beaumont Rd)
Phone 713-675-9600 P.O. Box 1251 Houston, Texas 77251

Time In: 07:11:58 Date In: 06/25/2008
Time Out: 10:29:32 Date Out: 06/25/2008

Certified

Trailer: 443 Tractor: 292
Payment Type: Charge
Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185
From
To
Material
Total Charge 0.00
Weighmaster: RS
Driver:
This is to certify that I have this day weighed the above described article and that the weight and conditions set forth are true and correct.

Gross:	69800
Tare:	28540
Net:	41360
Tons:	20.68
Steer:	0
Drive:	0
Trailer:	0

Wood George
Certified Public Weigher
Harris County, Texas

EPAHO003001098

#64280

Chem Org

tate Certification of Weights and Measures

Ticket no.: 182917

1 Public Scales

McCarty Highway 90 (Beaumont Rd)
one 713-675-9500 P.O. Box 1261 Houston, Texas 77251

me In: 08:53:26 Date In: 05/19/2008
me Out 07:04:10 Date Out 05/21/2008

Certified

ailer :347 Tractor :2003
ayment Type: Charge
Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185
om
RW
aterial
otal Charge 6.00
/eighmaster RS

Gross:	65780
Tare:	30840
Net:	34940
Tons:	17.47
Steer:	0
Drive:	0
Trailer:	0

river:
his is to certify that I have this day weighed the above described
rticles and that the weight and conditions set forth are true and correct.

Wood George
Certified Public Weigher
Harris County, Texas

MD 982 982

Chem Orph

State Certification of Weights and Measures Ticket no.: 182917

A 1 Public Scales

7 McCarty Highway 90 (Beaumont Rd)
lone 713-675-9500 P.O. Box 1261 Houston. Texas 77251

ime In: 08:52:22 Date In: 05/19/2008
ime Out 08:52:22 Date Out 05/19/2008

DEPARTMENT OF AGRICULTURE • TEXAS •

Certified

railer :347 Tractor :2003
ayment Type: Charge
Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185
rom
o
laterial
otal Charge 6.00
Veighmaster RS

Gross:	65780
Tare:	0
Net:	0
Tons:	0.00
Steer:	0
Drive:	0
Trailer:	0

river: JUAN Frias

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

Wood George
Certified Public Weigher
Harris County, Texas

MB 382 982

STATE CERTIFICATE OF WEIGHTS AND MEASURES

NO. H 1368263

Time In 14:35:54
Time Out 08:31:36

GROSS WEIGHT 75960

TARE WEIGHT 32820

NET WEIGHT 43140

TRAILER NO. ▶ 269

TRUCK NO. ▶ 295

A-1 PUBLIC SCALES

727 McCARTY HIGHWAY 90 (Beaumont Road)
Phone 675-9500 P.O. BOX 1261 HOUSTON, TEXAS 77251

ACCT. NO. 03185 HOUSTON, TEXAS, Date 04/10/2008

CES ENVIRONMENTAL SERVICES, I

THIS IS TO CERTIFY THAT I HAVE THIS DAY WEIGHED THE ABOVE DESCRIBED ARTICLES AND THAT THE WEIGHT AND CONDITIONS, SET FORTH, ARE TRUE AND CORRECT.

WOOD GEORGE
CERTIFIED PUBLIC WEIGHER
HARRIS COUNTY, TEXAS

6.00
24 HOUR SERVICE

ATTACHED AXLE WEIGHTS		
STEERING	DRIVE	TRAILER
0	0	0

X [signature]
DRIVER

DEPUTY FOR LIGHT WEIGHT
RS 264916

DEPUTY FOR HEAVY WEIGHT

ORIGINAL

ATTN:
Keri Magers
713-450-1591

Outbound Load

Outbound Number :	228
Outbound Search # :	228

Job Number :	61884
Type of Material:	Methanol
Job Date:	4/10/2008
Bill of Lading Number:	61884
Customer:	
Gross Weight:	
Tare Weight:	
Net Weight:	

OR

Total Gallons Shipped:	6000

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	269

CES Laboratory Use Only

Specific Gravity:	0.825
Pounds per Gallon:	6.88
Temperature:	
Total Gross Gallons:	
% Water	
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

PH 6
Pass the Chlor-D- Tec test

Sample Analyst:	Godefroy Gbery
Date:	4/10/2008

#16741P(1-5)

STATE CERTIFICATE OF WEIGHTS AND MEASURES

NO. H 1368148

Time In 15:41:57
Time Out 08:17:47

GROSS WEIGHT 74640

TARE WEIGHT 30280

NET WEIGHT 44360

TRAILER NO. ▶ 1264

TRUCK NO. ▶ 295

A-1 PUBLIC SCALES

727 McCARTY HIGHWAY 90 (Beaumont Road)
Phone 675-9500 P.O. BOX 1261 HOUSTON, TEXAS 77251

ACCT. NO. 03185 HOUSTON, TEXAS, Date 04/09/2008

CES ENVIRONMENTAL SERVICES, I

THIS IS TO CERTIFY THAT I HAVE THIS DAY WEIGHED THE ABOVE DESCRIBED ARTICLES AND THAT THE WEIGHT AND CONDITIONS, SET FORTH, ARE TRUE AND CORRECT.

WOOD GEORGE
CERTIFIED PUBLIC WEIGHER
HARRIS COUNTY, TEXAS

6.00
24 HOUR SERVICE

ATTACHED AXLE WEIGHTS		
STEERING	DRIVE	TRAILER
0	0	0

DEPUTY FOR LIGHT WEIGHT
RS 264916

X Preston
DRIVER

DEPUTY FOR HEAVY WEIGHT

ORIGINAL

FAXED

ATTN: Keri Magers
713-450-1591

Outbound Load

Outbound Number :	208
Outbound Search # :	208

Job Number :	61787
Type of Material:	Methanol
Job Date:	4/9/2008
Bill of Lading Number:	61787
Customer:	
Gross Weight:	74640
Tare Weight:	30280
Net Weight:	44360

OR

Total Gallons Shipped:	

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	1264

CES Laboratory Use Only

Specific Gravity:	0.825
Pounds per Gallon:	6.88
Temperature:	
Total Gross Gallons:	6447.67
% Water	
% Solids	
Total Net Gallons:	6447.67

(minus water and solids)

Misc Notes: PH 6

Sample Analyst:	Godefroy Gbery
Date:	4/9/2008

Kim Harmon

From: david67108@aol.com
Sent: Friday, March 28, 2008 8:13 AM
To: Kim Harmon
Subject: methanol delivery to Green Hunter

Kim, please fax both weight tickets to Keri Mager at Green Hunter today after the truck weighs empty. This is a request of Green Hunter. Thanks

David Alberts
Specialty Chemicals, Inc.

Attn: Keri Magers
(713) 458-1691

Planning your summer road trip? Check out AOL Travel Guides.

FAXED
3/28/08

#164141P(1-5)

STATE CERTIFICATE OF WEIGHTS AND MEASURES

NO. H 1367795

Time In 15:41:57
Time Out 18:17:55

GROSS WEIGHT 71340
TARE WEIGHT 30280
NET WEIGHT 41060

TRAILER NO. ▶ 1264
TRUCK NO. ▶ 295

A-1 PUBLIC SCALES

727 McCARTY HIGHWAY 90 (Beaumont Road)
Phone 675-9500 P.O. BOX 1261 HOUSTON, TEXAS 77251

ACCT. NO. 03185 HOUSTON, TEXAS, Date 03/28/2008

FROM CES ENVIRONMENTAL SERVICE

1367771

THIS IS TO CERTIFY THAT I HAVE THIS DAY WEIGHED THE ABOVE DESCRIBED ARTICLES AND THAT THE WEIGHT AND CONDITIONS, SET FORTH, ARE TRUE AND CORRECT.

WOOD GEORGE
CERTIFIED PUBLIC WEIGHER
HARRIS COUNTY, TEXAS

6.00
24 HOUR SERVICE

ATTACHED AXLE WEIGHTS		
STEERING	DRIVE	TRAILER
0	0	0

DEPUTY FOR LIGHT WEIGHT

x Driver
DRIVER

RS 264916
DEPUTY FOR HEAVY WEIGHT

ORIGINAL

ATTN: Keri Magers
713-450-1591

From: Kim Harman
CES Environmental

Outbound Load

Outbound Number :	165
Outbound Search # :	165

Job Number :	61131

Type of Material:	Methanol
Job Date:	3/28/2008
Bill of Lading Number:	61131
Customer:	
Gross Weight:	
Tare Weight:	
Net Weight:	

OR

Total Gallons Shipped:	

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	1264

CES Laboratory Use Only

Specific Gravity:	0.83
Pounds per Gallon:	6.92
Temperature:	
Total Gross Gallons:	
% Water	
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

ph 6
% of Methanol 84 %

Sample Analyst:	Godefroy Gbery
Date:	3/28/2008

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2000370**

UID: 1204997200

Griggs

78,700# ←

Gross: 39.35 * Tare: 0.02 * Net: 39.33 *
* Manual Weight

Date: 3/8/2008 Time: 12:02:55PM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: CES77133 License No.:
Delivery Instructions:

Loads Today:	1	Qty Today	1.00 Load
Order Loads:	333	Qty To Date:	333.00

Weighmaster: Chris Arsola

PUBLIC WEIGHER STATE OF TEXAS

NOTICE: The carrier/customer involved in the transportation or handling of materials covered by this document is an independent entity and shall not be deemed for any purpose to be an employee, agent, or representative of Southern Crushed Concrete (SCC). The carrier/customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to, such transportation or handling.

Customer Signature: _____

COPY 3 CARRIER

Carrier Signature: _____

Faxed to Sal 4/8/08

Del. to Green Hunter 4/23

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

CERTIFICATE of ANALYSIS

Date: April 21, 2008 **P.O. #:**

Product: Methyl Alcohol - Flashed

Customer:

TT/TC No(s): **TRL# 1264**

Lot No:

TEST(Unit)	Result
Color (Visual)	Clear, Water White
Density	0.81 g/ml
% Methanol (By Density Calc.)	92%
Water (By Density Calc.)	8%
Haze Test	Clear/Pass
pH	6
Chlorides (Chlor-detect)	

Gary Lenertz

Signature

Site: Griggs Road

This analysis is not to be construed as a warranty. Customer is responsible to verify the lot and code numbers of product received with the numbers contained on this report and perform any other analyses necessary to determine suitability of the product described above for the use intended by the customer. No representations as to FDA regulated use are made for this product unless it is designated as meeting either USF, NF, Cosmetic grade or Food Grade Status.

Green Hunter
4/23

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

CERTIFICATE of ANALYSIS

Date: April 21, 2008 **P.O. #:**

Product: Methyl Alcohol - Flashed

Customer:

TT/TC No(s): **TRL# 249**

Lot No:

TEST(Unit)	Result
Color (Visual)	Clear, Water White
Density	0.80 g/ml
% Methanol (By Density Calc.)	96%
Water (By Density Calc.)	4%
Haze Test	Clear/Pass
pH	6
Chlorides (Chlor-detect)	

Gary Lenertz
Signature

Site: Griggs Road

This analysis is not to be construed as a warranty. Customer is responsible to verify the lot and code numbers of product received with the numbers contained on this report and perform any other analyses necessary to determine suitability of the product described above for the use intended by the customer. No representations as to FDA regulated use are made for this product unless it is designated as meeting either USF, NF, Cosmetic grade or Food Grade Status.

281-40-0043

CES Environmental Services
Container / Tank Cleaning Division
4904 Griggs Rd. • Houston, TX 77021
Phone: (713) 676-1460 • Fax: (713) 676-1676

TANK WASH WORK ORDER

20821

PO # PPG	Customer: CES	Date 4-21-08
Tractor —	Address:	Time: -
Trailer / Container Number 226	Dropped By:	Need By: ASAP

CONTAINER TYPE: ☐ TOTE BIN ☐ ROLL DOOR BOX ☐ ISO CONTAINER ☐ DRY BULK
☐ TANK TRAILER ☐ ROLL TARP BOX ☐ VACUUM BOX ☐ FRAC TANK ☐ POLY TANK ☐ VACUUM TRUCK

Compartment #	Last Contained	Heel - Hazardous	Heel - Non-Haz	Drum / Rolloff
1	Xylene Hexane			
2				
3				
4				
5				

CLEANING CODES		WORK PERFORMED
1	Air Dry	
2	Quick Rinse	
3	Cold Water Rinse	
4	Hot Water Rinse	
5	Steam Only (Per Hour)	
6	Steam & Dry	
7	Rinse, Steam & Dry	
8	Detergent Wash, Rinse & Dry	✓
9	Caustic Wash & Dry	
10	Caustic Wash, Rinse & Dry	
11	Waste Water Surcharge	✓
12	Solvent Wash (Diesel # Hours)	
13	Solvent Wash (Stripper)	
14	Exterior Tractor Wash	
15	Exterior Trailer Wash (w/o Internal)	
16	Exterior Trailer Wash (with Internal)	
17	Exterior Acid Brite Wash	
18	Hand Labor (# Men / # Hours)	
19	Hydroblaster (# Hours)	
20	Solvent Wash (Green Stripper)	
21	Passivation	
	Hose Cleaning	
	Pump Cleaning	

Cleaned By: JT Date 4-21-08

Inspected By: _____ Date _____

TANK ENTRY PERMIT

Oxygen (19.5% -23.5%)	#1 21.9	#2	#3	#4	#5
LEL (<10%)	#1 0	#2	#3	#4	#5
CO^2 (<35 ppm)	#1 0	#2	#3	#4	#5
Toxic Vapor	#1 0	#2	#3	#4	#5

Signature: JT

Stripper Usage:

Comments: For Shop

Authorized Additional Services:

CES Environmental Services, Inc., Cleaning Division, makes no guarantees with respect to the thoroughness of the tank washing procedure or the total elimination of interior residues and/or moisture. Final inspection of the equipment remains the responsibility of the customer, and they hereby release CES Environmental Services, Inc., Cleaning Division, from any responsibility for claims arising from any allegations that the equipment was improperly cleaned, resulting in damage or loss.

CES Environmental Services, Inc., Cleaning Division, is in no manner responsible for any damages or losses of equipment and/or materials left in their yard.

Print Name: _____ Date _____

Signature: _____

EPAHO003001111

STATE CERTIFICATE OF WEIGHTS AND MEASURES

NO. H 1373077

#164141P (1-5)

FORM NO. 41900 (5/92)

Time In 15:21:53
Time Out 09:34:16

GROSS WEIGHT 75260

TARE WEIGHT 30920

NET WEIGHT 44340

TRAILER NO. ▶ 249

TRUCK NO. ▶ 294

A-1 PUBLIC SCALES

727 McCARTY HIGHWAY 90 (Beaumont Road)
Phone 675-9500 P.O. BOX 1261 HOUSTON, TEXAS 77251

ACCT. NO. 03185

HOUSTON, TEXAS, Date 04/23/2008

CES ENVIRONMENTAL SERVICES, INC.

THIS IS TO CERTIFY THAT I HAVE THIS DAY WEIGHED THE ABOVE DESCRIBED ARTICLES AND THAT THE WEIGHT AND CONDITIONS, SET FORTH, ARE TRUE AND CORRECT.

WOOD GEORGE
CERTIFIED PUBLIC WEIGHER
HARRIS COUNTY, TEXAS

6.00
24 HOUR SERVICE

ATTACHED AXLE WEIGHTS		
STEERING	DRIVE	TRAILER
0	0	0

X

DEPUTY FOR LIGHT WEIGHT

DRIVER

RS 264916

DEPUTY FOR HEAVY WEIGHT

ORIGINAL

#16471P (1-5)

STATE CERTIFICATE OF WEIGHTS AND MEASURES

NO. H 1373140

FORM NO. 41900 (5/92)

Time In 15:41:57
Time Out 15:22:44

GROSS WEIGHT 77660

TARE WEIGHT 30280

NET WEIGHT 47380

TRAILER NO. ▶ 1264

TRUCK NO. ▶ 295

A-1 PUBLIC SCALES

727 McCARTY HIGHWAY 90 (Beaumont Road)
Phone 675-9500 P.O. BOX 1261 HOUSTON, TEXAS 77251

ACCT. NO. 03185

HOUSTON, TEXAS, Date 04/23/2008

CES ENVIRONMENTAL SERVICES, INC.

THIS IS TO CERTIFY THAT I HAVE THIS DAY WEIGHED THE ABOVE DESCRIBED ARTICLES AND THAT THE WEIGHT AND CONDITIONS, SET FORTH, ARE TRUE AND CORRECT.

WOOD GEORGE
CERTIFIED PUBLIC WEIGHER
HARRIS COUNTY, TEXAS

6.00
24 HOUR SERVICE

ATTACHED AXLE WEIGHTS		
STEERING	DRIVE	TRAILER
0	0	0

DEPUTY FOR LIGHT WEIGHT

X Preston
DRIVER

RS 264916

DEPUTY FOR HEAVY WEIGHT

ORIGINAL

Outbound Load

Outbound Number :	283
Outbound Search # :	283

Job Number :	62824

Type of Material:	Methanol
Job Date:	4/23/2008
Bill of Lading Number:	62824
Customer:	
Gross Weight:	
Tare Weight:	
Net Weight:	

OR

Total Gallons Shipped:	6000

Shipping Information

Carrier:	CES Environmental Services, Inc.
Truck Number:	
Trailer Number:	1264

CES Laboratory Use Only

Specific Gravity:	0.81
Pounds per Gallon:	6.75
Temperature:	
Total Gross Gallons:	
% Water	
% Solids	
Total Net Gallons:	

(minus water and solids)

Misc Notes:

PH 6
94 % of Methanol

Sample Analyst:	Godefroy Gbery
Date:	4/23/2008

Naphthoxylic Acid

EPAHO00300115

LCS

10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 Fax

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1349H
CUSTOMER Reference:

FOR: C E S
PRODUCT: Nap Acid
SAMPLE DRAWN FROM: Submitted
LOCATION: Pasadena, Texas
DATE of ANALYSIS: February 18, 2009

TEST	METHOD	RESULTS
DENSITY @ 15°C	ASTM D-4052	**0.9775**
VISCOSITY CST @ 50°C	ASTM D-445	**8.69**
WATER BY DISTILLATION	ASTM D-95	**5.2**
ASH %WT	ASTM D-482	**0.489**
TOTAL ACID	ASTM D-664	**3.0**
COLOR	ASTM D-1500	**8 +**
UNSAPONIFIABLES, WT%	AOCS CA 6A-40	**1.10**

LCS REPRESENTATIVE

LCS

10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 Fax

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1349H
CUSTOMER Reference:

FOR: C E S
PRODUCT: Nap Acid
SAMPLE DRAWN FROM: Submitted
LOCATION: Pasadena, Texas
DATE of ANALYSIS: February 18, 2009

TEST	METHOD	RESULTS
DENSITY @ 15°C	ASTM D-4052	**0.9775**
VISCOSITY CST @ 50°C	ASTM D-445	**8.69**
WATER BY DISTILLATION	ASTM D-95	**5.2**
ASH %WT	ASTM D-482	**0.489**
TOTAL ACID	ASTM D-664	**3.0**
COLOR	ASTM D-1500	**8 +**
UNSAPONIFIABLES, WT%	AOCS CA 6A-40	**1.10**

LCS REPRESENTATIVE

8210 Mosley Rd.
Houston, TX 77075
713 943-9776 Telephone
713 943-3846 Facsimile

CORE LABORATORIES

KIM HARMON
CES ENVIRONMENTAL SERVICES
4904 GRIGGS RD
HOUSTON, TX 77021

Sample Number:	190685-001
Sample Date:	2/18/09
Date Reported:	3/2/09
Date Received:	2/27/09
Sample ID:	Napthenic Acid
Description:	T2009-1349H

Analytical Report

Test	Result	Units	Method	Date	Analyst
Acid Number	127	mg KOH/g	ASTM D-664	3/2/09	KC

Approved By: _____

Pat Gideons
Laboratory Supervisor

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal, or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

Certificate of Analysis

SINCE 1985

Quality Controlled Through Analysis

10830 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	CES Environmental	**REQUESTED BY:**	Ms. Kim Harmon
SAMPLE:	0309-11 (NAP Acid)	**REPORT DATE:**	March 12, 2009
LABORATORY NO:	54340-03	**PURCHASE ORDER NO:**	Pending

TEST	RESULTS
Acid Number, (TAN), ASTM D 664, mg KOH/g.....	142.9

Respectfully submitted
For Texas OilTech Laboratories, L.P.

A. Phil Soorubaksh
Director of Laboratory Operations

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Cert No. 5085

Kim Harmon

From: Miles Root
Sent: Monday, March 09, 2009 8:48 AM
To: Matt Bowman; Pete Alford; Clark Hickman; Kim Harmon
Subject: Cresylic Acid Update

The Citgo cresylic acid isomer distribution is below. I also have a copy of a Merisol cresylic acid MSDS for reference purposes.

Citgo Cresylic Acid Isomers	
Isomer	wt%
Phenol	46.0
o-cresol	15.9
p-cresol	8.9
m-cresol	20.7
0-ethyl phenol	0.2
2,4 xylenol	0.8
2,5 xylenol	0.9
2,3 xylenol	0.3
p-ethyl phenol	1.0
m-ethyl phenol	2.3
3,5 xylenol	1.8
3,4 xylenol	1.0
alkylated phenols	0.2
Totals	100.0

Miles Root
Laboratory and Quality Assurance Manager
CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Cell: 832-607-6678
Fax: 713-748-8664

ST Laboratories, Inc.
16023 East Freeway #36
Channelview, TX 77530
Phone: (281) 457-3460
Fax: (281) 457-5329
STLaboratories@aol.com

Certificate of Analysis
March 19, 2009

CES Environmental
4904 Griggs Rd.
Houston, TX 77021

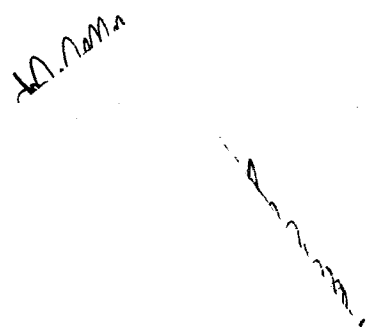
Lab No.: C0903-1602
Product: Cresylic Acid
Marks: No Marks
Recd: 3-16-09
Submitted By: CES Environmental

METHOD	TEST	RESULTS
Koppers	Neutral Oils, vol%	4.4
Koppers	Tar Bases, as Pyridine, wt%	0.09
D-1552	Total Sulfur, wt%	1.70
D-3227	Mercaptan Sulfur, wt%	0.25
D-891	Specific Gravity @ 25°/25°C	1.0364
E-203	Water, wt%	5.1

Chemist

Century Asphalt

EPAHO003001122



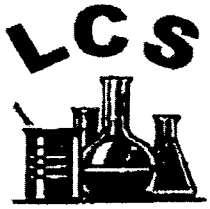
Out

Sparco™
File Folders
SP111-1/3

MDS
A5

EPAHO003001124

Century Asphalt



LABCAL SERVICES

10201 BAY AREA BLVD
PASADENA, TEXAS 77507
281-474-1334 PHONE 281-474-7707 FAX

CERTIFICATE OF ANALYSIS

COMPANY:	CES ENVIRONMENTAL
LAB REF:	T2008-3167H
DATE OF ANALYSIS:	August 26, 2008
PRODUCT:	CES OIL

PARAMETER	TEST METHOD	REPORTING LIMIT	TEST RESULTS
API GRAVITY @ 60°F	ASTM D-4052	XXXXXXXX	**26.3**
FLASHPOINT °F	ASTM D-93, METH. B	MINUS 10°F	**112**
TOTAL HALOGENS, ppm	SW 9075	100	**BDL**
WATER BY DISTILLATION	ASTM D-95	0.05	**1.0**
HEAT OF COMBUSTION, BTU/lb	ASTM D-240	1500	**14,928**
HEAT OF COMBUSTION, BTU/gal	ASTM D-240	1500	**111,467**

TOTAL METALS	TEST METHOD	METHOD PREPARATION	REPORTIN LIMITS	TEST RESULTS, ppm
ANTIMONY	EPA-6010B	EPA3040/3050	0.10	**BDL**
ARSENIC	EPA-6010B	EPA3040/3050	0.10	**BDL**
BERYLIUM	EPA-6010B	EPA3040/3050	0.10	**BDL**
CADMIUM	EPA-6010B	EPA3040/3050	0.10	**0.12**
CHROMIUM	EPA-6010B	EPA3040/3050	0.10	**0.19**
LEAD	EPA-6010B	EPA3040/3050	0.10	**2.7**
MERCURY	EPA-6010B	EPA3040/3050	0.10	**BDL**
NICKEL	EPA-6010B	EPA3040/3050	0.10	**BDL**
SELENIUM	EPA-6010B	EPA3040/3050	0.10	**BDL**
THALLIUM	EPA-6010B	EPA3040/3050	0.10	**BDL**
VANADIUM	EPA-6010B	EPA3040/3050	0.10	**2.30**

NOTE: BDL = BELOW DETECTABLE LIMITS

LABCAL REPRESENTATIVE:

LABCAL SERVICES,INC. RESPONSIBILITY FOR THE ABOVE ANALYSIS, OPIONIONS, OR INTERPRETATIONS IS LIMITED TO THE INVOICE AMOUNT.

PRECISION PETROLEUM LABS, INC.

5915 Star Lane Houston, TX 77057
Ph. 713-680-9425 Fax: 713-680-9564

CERTIFICATE OF ANALYSIS

Company:	Midstate Environmental Services
Invoice No.:	38252
Lab Reference No:	2008-07-509
Product ID:	Sales Tank 1 & 2 Sample ID 078 07-14-08
Date Received:	07-17-2008
Authorized By:	William Sturges

PARAMETER	TEST METHOD	REPORTING LIMIT	TEST RESULT
Gravity API @ 60°F	D-1298	------	27.8
Flash point, °F,	S.W. 1010	-10°F	170
Total Halogen, PPM	S.W. 9075	100	BRL
Water by Distillation, Vol%	D-95	0.05	0.2
Heat of combustion, BTU/Lb,	D-240	2,150	19,354
Heat of combustion, BTU/GAL	D-240	2,150	143,161

TOTAL METAL	TEST METHOD	PREPARATION METHOD	REPORTING LIMIT, PPM	TEST RESULTS, PPM
Antimony	EPA-6010B	EPA-3040/3050	0.330	BRL
Arsenic	EPA-6010B	EPA-3040/3050	0.500	BRL
Beryllium	EPA-6010B	EPA-3040/3050	0.100	BRL
Cadmium	EPA-6010B	EPA-3040/3050	0.100	BRL
Chromium	EPA-6010B	EPA-3040/3050	0.150	BRL
Lead	EPA-6010B	EPA-3040/3050	0.390	BRL
Mercury	EPA-6010B	EPA-3040/3050	0.170	BRL
Nickel	EPA-6010B	EPA-3040/3050	0.200	1.436
Selenium	EPA-6010B	EPA-3040-3050	0.630	BRL
Thallium	EPA-6010B	EPA-3040/3050	0.450	BRL
Vanadium	EPA-6010B	EPA-3040/3050	0.150	14.785

Daniel Zabihi
QA Manager
Date: 07-17-2008
BRL = Below Reporting Limit

PRECISION PETROLEUM LABS, INC.'S RESPONSIBILITY FOR THE ABOVE ANALYSIS, OPINIONS OR INTERPRETATIONS IS LIMITED TO THE INVOICE AMOUNT.

CENTURY ASPHALT

CONTROL# CA- 406034

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Rosenberg
855 Highway 36 N
832-595-1460

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Houston Plant:
5303 Navigation St.

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
ENTURY ASPHALT MATERIALS	05/BURNERFUEL80		FOR	08/16/08	536430
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
NCOMING				8:51	BURNERFUEL

Product Code	Product Description	
700000-05	FUEL C65	TN

Driving Instructions

TO NAVIGATION PLANT

BOL # 10374

Scale Weights

Loads Today:	1
Tons Today:	25.54
Gross Wt:	42.35
Tare Wt:	16.81
Net Wt:	25.54

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:	
Tax:	
Total:	

Pounds per Gallon:	7.34
Temperature:	
Total Gross Gallons:	
% Water	.85
% Solids	0
Total Net Gallons:	

(minus water and solids)

Sample Analyst:	Godefroy Gbery
Date:	8/16/2008

ATTN: Otis

713-292-2685

5 pgs

CENTURY ASPHALT

CONTROL# CA- 409125

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

rcola
515 FM 521
31-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Baytown Plant:
4008 SH 146 N
281-420-7540

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Houston Plant:
5303 Navigation St.

Rosenberg
855 Highway 36 N
832-595-1460

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNERFUEB0		FOB	08/15/08	536411
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				13:39	BURNERFUEL

Product Code	Product Description
700000-05	FUEL CES IN

Driving Instructions

TO NAVIGATION PLANT

BOL # 10294

Scale Weights

Loads Today:	1
Tons Today:	23.29
Gross Wt:	40.05
Tare Wt:	16.76
Net Wt:	23.29

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:	
Tax:	
Total:	

CENTURY ASPHALT

CONTROL# CA- 409025

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Houston Plant:
5303 Navigation St.

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Rosenberg
855 Highway 36 N
832-595-1460

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNERFUEL	00	FOB	08/14/08	536347
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				11:24	BURNERFUEL

Product Code	Product Description	
700000-05	FUEL	TN

Driving Instructions

TO NAVIGATION PLANT

BOL# 70293

Scale Weights

Loads Today:	1
Tons Today:	24.62
Gross Wt:	40.96
Tare Wt:	16.34
Net Wt:	24.62

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:	
Tax:	
Total:	

Pounds per Gallon:	7.66
Temperature:	
Total Gross Gallons:	
% Water	1.27
% Solids	
Total Net Gallons:	

(minus water and solids)

The load is approximately 6,450 gallons.

Sample Analyst:	Gary Peterson
Date:	8/14/2008

CENTURY ASPHALT CONTROL# CA- 404516

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Rosenberg
855 Highway 36 N
832-595-1460

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Houston Plant:
5303 Navigation St.

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNERFUEB0		FOB	08/14/08	536379
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				21:20	BURNERFUEL

Product Code	Product Description	
700000-05	FUEL CES	TN

Driving Instructions BOL# 70172

TO NAVIGATION PLANT

WE # 'D NOT DRIVER PAY ANY HAD PROBLEM WAITING TIME

Scale Weights

Loads Today:	2
Tons Today:	47.43
Gross Wt:	39.27
Tare Wt:	16.46
Net Wt:	22.81

Weigh Master:

Customer Signature:

Carrier Signature:

Cash Sale

Material:
Tax:
Total: a Tuel

Specific Gravity:	[illegible]
Pounds per Gallon:	7.23
Temperature:	
Total Gross Gallons:	6450
% Water	3.97
% Solids	
Total Net Gallons:	6450

(minus water and solids)

The Btu is 10,540.

Sample Analyst:	Gary Peterson
Date:	8/14/2008

CENTURY ASPHALT

CONTROL# CA- 404969

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Houston Plant:
5303 Navigation St.

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Rosenberg
855 Highway 36 N
832-595-1460

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNERFUEL		FOB	08/18/08	536494
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				17:41	BURNERFUEL

Product Code	Product Description	
~~700000-05~~	~~FUEL~~ CES	~~TN~~

Driving Instructions

TO NAVIGATION PLANT

Truck#2000 70411

Scale Weights

Loads Today:	~~2~~
Tons Today:	49.63
Gross Wt:	40.60
Tare Wt:	16.29
Net Wt:	24.31

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:	
Tax:	
Total:	

CENTURY ASPHALT

CONTROL# CA- 404968

Dispatch (713) 923-1988 ~ Sales/Accounting Office (281) 421-2621

Arcola
5615 FM 521
281-431-2520

Bender Plant (Humble):
15409 Old Humble Rd.
281-441-7003

Baytown Plant:
4008 SH 146 N
281-420-7540

Crushed Concrete
11250 I-10 East
Dispatch 281-303-0725

Genoa Plant:
9519 Old Galveston Rd.
713-943-9950

Houston Plant:
5303 Navigation St.

Katy Plant:
27734 Hwy Blvd (Hwy 90)
281-391-0569

Melendy (Jersey Village):
11913 FM 529
713-896-8519

Rosenberg
855 Highway 36 N
832-595-1460

Customer Name:	Order #	Customer #	Truck #	Date	Ticket #
CENTURY ASPHALT MATERIALS	05/BURNE	RFUEB0	FOB	08/18/09	536493
Job Description:	**Key Map**	**PO #**	**Zone #**	**Time**	**Job #**
INCOMING				17:40	BURNERFUEL

Product Code	Product Description
~~700000-05~~	~~FUEL~~ TN

CES

Driving Instructions

TO NAVIGATION PLANT

Truck # 289

70412

Scale Weights

Loads Today:	1
Tons Today:	25.32
Gross Wt:	41.67
Tare Wt:	16.35
Net Wt:	25.32

Weigh Master:

Customer Signature: _____

Carrier Signature:

Cash Sale

Material:
Tax:
Total:

8210 Mosley Rd.
Houston, TX 77075
713-943-9776 Telephone
713-943-3846 Facsimile

CORE LABORATORIES

MEK T-233 **CES 182924-001**

ASTM D-6733

Component Name	WT %
2- butanol	0.17
MEK	99.65
Toluene	0.17
Unidentified	0.01
	100.00

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Cesenviron

enviran 42

Rineco - Zach

EPAHO003001135

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	ZACH Systems
Contact:	John PARKER
Address:	
	LAPorte TX
Phone:	
Fax:	

Salesperson:	G R LENERTZ
Assigned:	Unassigned:

Folder I.D.#	
Job Contact:	
Phone:	
Fax:	

P.O Required:	Y:	N:	Fuel Surcharge:	Y:	N:
City of Houston:	Y:	(N)	4-hour Minimum:	Y:	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Stream3 to Rinco				
AS WASTE				

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO003001136

YELLOW

EPAHO003001137

MDS
A-5

CES Environmental Services, Inc.

Bill Of Lading # : 50203

Folder ID :	CES Environmental Sale of LOW FLASH OIL

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. 11a)
4904 Griggs Rd 11b)
Houston , TX 77021 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Midstate Environmental Services LLC
P.O. Box 261180
Corpus Christi , TX 78426

CARRIER :
Midstate Environmental Services LLC
P.O. Box 261180
Corpus Christi , TX 78426

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.9(a) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	TT	6732	G	Used Oil

Shipper : CES Environmental Services, Inc.

Per : SAM BROWN **Signature :** Sam Brown **Date :** 9.28.07

Carrier Midstate Environmental Services LLC

Per : Arnold Salinas **Signature :** [signature] **Date :** 9-28-07

Receiving Facility Midstate Environmental Services LLC

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered Oil

DATE : 9-27-07

BOL # : 50203

CUSTOMER : Midstate

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** ~~6200~~ 6732

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : Midstate

TRUCK / TRAILER NUMBER : 116 \ [redacted] 202

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : .900 POUNDS PER GALLON 7.50

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 5%

% SOLIDS _____

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Sam Brown **Date :** 9.28.07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

[redacted]

NO 022961

Midstate Environmental Services, LP
PO Box 261180
Corpus Christi, TX 78426-1180
(361) 387-2171
In Case of Emergency (866) 387-2171

☐ Robstown: EPA ID # TXR000051227 TRANSPORTER # A85752 TCEQ # A85752

☐ Waco: EPA ID # TXR000051235 TRANSPORTER # A85738 TCEQ # A85738

☐ Luling: EPA ID # TXR000036343 TRANSPORTER # A85653 TCEQ # A85653

☐ Valley: EPA ID # TXR000055376 TRANSPORTER # A85796 TCEQ # A85796

TYPE
D-DRUM
C-CARTON
B-BAG
T-TRUCK
P-POUNDS
Y-YARDS
O-OTHER

☐ HAZARDOUS ☑ NON-HAZARDOUS

FUEL OIL - USED OIL (DELIVERY ☐ PICKUP ☑)

GENERATOR/SHIPPERS/CUSTOMERS NAME: CES Environmental Service — EPA #:

LOC OF MATERIALS PICKED UP/DELIVERED — CITY: Houston — STATE: TX

BUSINESS MAILING ADDRESS — CITY — STATE — ZIP

DATE SHIPPED: 09-25-07 — TIME — TELEPHONE

GENERATOR SIGNATURE: X [signature] 9-25-07

PRINT GENERATOR NAME: [illegible]

TRANSPORTER

TRUCK # 116 — TRAILER # 202

TRANSPORTER NAME, (IF OTHER THAN MIDSTATE ENVIRONMENTAL SERVICE)

MIDSTATE ENVIRONMENTAL SERVICE, LP
P.O. BOX 261180
CORPUS CHRISTI, TX 78426-1180

DESCRIPTION	WASTE CODE	QTY	UNITS	CONTAINER NO. TYPE
FUEL OIL*3* NA1993* PGIII				
LOW SULFUR DIESEL*3* NA1993* PG III				
PETROLEUM CRUDE OIL *3*UN1267* PGI				
CONDENSATE*3*UN1203* PG II				
USED OIL		6732	GAL	T-T
OILY WATER				
WATER				
OTHER				

GAUGE	1ST	2ND	BS&W
OPEN			
CLOSE			
BS&W			
NET			

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS PICKED UP AT THE GENERATORS ABOVE

DRIVER SIGNATURE: X [signature] — SHIPMENT DATE: 09-25-07

PRINT DRIVER NAME: Arnold S Alinas

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS DELIVERED WITHOUT INCIDENT TO THE DESTINATION LISTED BELOW

DRIVER SIGNATURE: X — SHIPMENT DATE

PRINT DRIVER NAME: Arnold S Alinas

DESTINATION - FACILITY

SITE NAME: MIDSTATE ENVIRONMENTAL — PHONE #: 866 387-2171

ADDRESS: 422 Tower Rd Robstown TX 78380

US EPA ID NO. — STATE FACILITY'S ID

NAME OF AUTHORIZED AGENT — SIGNATURE: X — RECEIPT DATE

FORM #609 (REV. 7/05)

WHITE - ORIGINAL YELLOW - FACILITY PINK - TRANSPORTER GOLD - GENERATOR'S FIRST COPY

CES Environmental Services, Inc.

Bill Of Lading # : 50206

Folder ID :	CES Environmental Sale of LOW FLASH OIL

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. 11a)
4904 Griggs Rd 11b)
Houston , TX 77021 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which *said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees* to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, *must* be attached to the freight bill *submitted to Shipper or the "Billed to" party and sent to:*

CONSIGNED TO :
Midstate Environmental Services LLC
P.O. Box 261180
Corpus Christi , TX 78426

CARRIER :
Midstate Environmental Services LLC
P.O. Box 261180
Corpus Christi , TX 78426

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the *applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether* it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5**49** implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	TT		G	Used Oil

Shipper : CES Environmental Services, Inc.

Per : Gold[illegible] **Signature :** [signature] **Date :** 09-28-07

Carrier Midstate Environmental Services LLC

Per : Richard Casso **Signature :** [signature] **Date :** 9-28-07

Receiving Facility Midstate Environmental Services LLC

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

№ 022618

Midstate Environmental Services, LP
PO Box 261180
Corpus Christi, TX 78426-1180
(361) 387-2171
In Case of Emergency (866) 387-2171

☑ Robstown: EPA ID # TXR000051227 TRANSPORTER # A85752 TCEQ # A85752

☐ Waco: EPA ID # TXR000051235 TRANSPORTER # A85738 TCEQ # A85738

☐ Luling: EPA ID # TXR000036343 TRANSPORTER # A85653 TCEQ # A85653

☐ Valley: EPA ID # TXR000055376 TRANSPORTER # A85796 TCEQ # A85796

TYPE: D-DRUM, C-CARTON, B-BAG, T-TRUCK, P-POUNDS, Y-YARDS, O-OTHER

☐ HAZARDOUS ☑ NON-HAZARDOUS

FUEL OIL - USED OIL (DELIVERY ☐ PICKUP ☑)

GENERATOR/SHIPPERS/CUSTOMERS NAME: CES Environmental
EPA #:
LOC OF MATERIALS PICKED UP/DELIVERED: 4904 Briggs RD
CITY:
STATE:
BUSINESS MAILING ADDRESS: Houston R 77021
CITY:
STATE:
ZIP:
DATE SHIPPED: 9-28-07
TIME:
TELEPHONE:
GENERATOR SIGNATURE: X
PRINT GENERATOR NAME: Godelroy

DESCRIPTION	WASTE CODE	QTY	UNITS	CONTAINERS NO. TYPE
FUEL OIL*3* NA1993* PGIII				
LOW SULFUR DIESEL*3* NA1993* PG III				
PETROLEUM CRUDE OIL *3*UN1267* PGI				
CONDENSATE*3*UN1203* PG II				
USED OIL		4220	Alk	
OILY WATER				
WATER				
OTHER				

TRANSPORTER

TRUCK # 107 TRAILER # 203

TRANSPORTER NAME, (IF OTHER THAN MIDSTATE ENVIRONMENTAL SERVICE)

GAUGE	1ST	2ND	BS&W
OPEN			
CLOSE			
BS&W	5.0%	25.5	
NET			

MIDSTATE ENVIRONMENTAL SERVICE, LP
P.O. BOX 261180
CORPUS CHRISTI, TX 78426-1180

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS PICKED UP AT THE GENERATORS ABOVE

DRIVER SIGNATURE: X [signature] SHIPMENT DATE: 9-28-07
PRINT DRIVER NAME: Richard Cosso 9-28-07

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS DELIVERED WITHOUT INCIDENT TO THE DESTINATION LISTED BELOW

DRIVER SIGNATURE: X [signature] SHIPMENT DATE: 9-28-07
PRINT DRIVER NAME: Richard Cosso 9-28-07

DESTINATION - FACILITY

SITE NAME: Midstate Environmental Service
PHONE #:
ADDRESS: 2203 North Tower RD Robstown R 78380
US EPA ID NO.:
STATE FACILITY'S ID:
NAME OF AUTHORIZED AGENT:
SIGNATURE: X
RECEIPT DATE:

FORM #609 (REV. 7/05)

WHITE - ORIGINAL YELLOW - FACILITY PINK - TRANSPORTER GOLD - GENERATOR'S FIRST COPY

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered Oil

DATE : 9-26-07

BOL # : 50206

CUSTOMER : Midstate

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** 6000 GAL

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : _____

TRUCK / TRAILER NUMBER : 400

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : 0.88 POUNDS PER GALLON 7.34

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 5

% SOLIDS ϕ

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Cook/ny **Date :** 09/26/07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

CES Environmental Services, Inc.

Bill Of Lading # : 50213

Folder ID :	CES Environmental Services Sale of Black Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF)
4904 Griggs Road
Houston , TX 77021
(713) 676-1460

11a) 2363
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Pheonix Oil
Houston St
Humble , TX

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54@ implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	6000	P	Non DOT regulated Oil

Shipper : CES Environmental Services, Inc. (TSDF)
Per : Gode/Ny **Signature :** [signature] **Date :** 09/30/07

Carrier CES Environmental Services, Inc.
Per : Benjamin Mata **Signature :** Benjamin Mata **Date :** 10/01/07

Receiving Facility Pheonix Oil
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered oil

DATE : 09-29-07

BOL # : 50213

CUSTOMER : Phoenix

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** 600 (est.)

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : CES

TRUCK / TRAILER NUMBER : 293 / 222

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : 0.9 POUNDS PER GALLON 7.50

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 4

% SOLIDS 0

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Godefroy **Date :** 09-29-07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

CES Environmental Services, Inc.

Bill Of Lading # : 50214

Folder ID :	CES Environmental Services Gate of Black Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF)
4904 Griggs Road
Houston , TX 77021
(713) 676-1460

11a) 2363
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

Pheonix Oil
Houston St
Humble , TX

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(b) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	6000	PG	Non DOT regulated Oil

Shipper : CES Environmental Services, Inc. (TSDF)

Per : SAM BROWN **Signature :** [signature] **Date :** 10-1-07

Carrier CES Environmental Services, Inc.

Per : Alfredo Garza **Signature :** [signature] **Date :** 10-1-07

Receiving Facility Pheonix Oil

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered oil

DATE : 09-29-07

BOL # : 50214

CUSTOMER : Pre[illegible]

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** 6000

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : C[illegible]

TRUCK / TRAILER NUMBER : [illegible] / 410

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : 0.9 POUNDS PER GALLON 7.5

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 5

% SOLIDS 0

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Godfrey **Date :** 09/29-07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

CES Environmental Services, Inc.

Bill Of Lading # : 50107

Folder ID :	CES Environmental Services Sale of Black Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF)
4904 Griggs Road
Houston , TX 77021
(713) 676-1460

11a) 2363
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which *said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to* carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Pheonix Oil
Houston St
Humble , TX

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5[illegible] implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT		P	Non DOT regulated Oil

Shipper : CES Environmental Services, Inc. (TSDF)
Per : Good/[illegible] **Signature :** _____ **Date :** 09/28/07

Carrier : CES Environmental Services, Inc.
Per : Christopher Sils **Signature :** Christopher [illegible] **Date :** 9/28/07

Receiving Facility Pheonix Oil
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered Oil

DATE : 9-24-07

BOL # : 50107

CUSTOMER : Phoenix oil

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** 6000 GAL-

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : CES

TRUCK / TRAILER NUMBER : 285 / 1406

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : .900 POUNDS PER GALLON 7.50

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 5

% SOLIDS 0

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Godfrey **Date :** 09/28/07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

CES Environmental Services, Inc.

Bill Of Lading # : 50337

Folder ID :	CES Environmental Services Sale of Black Oil

Original -- Shipper Provided Short Form Straight Bill of Lading -- Not Negotiable -- Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF)
4904 Griggs Road
Houston , TX 77021
(713) 676-1460

11a) 2363
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

Pheonix Oil
Houston St
Humble , TX

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	6000	G	Non DOT regulated Oil

Shipper : CES Environmental Services, Inc. (TSDF)

Per : Sam Brown **Signature :** Sam Brown **Date :** 10-2-07

Carrier CES Environmental Services, Inc.

Per : Alfredo Cerda **Signature :** [signature] **Date :** 10-2-07

Receiving Facility Pheonix Oil

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered Oil

DATE : 10-2-07

BOL # : 50337

CUSTOMER : Phenix

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** 6000

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : CES

TRUCK / TRAILER NUMBER : 277 \ 406

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : .925 POUNDS PER GALLON 7.71

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 4%

% SOLIDS 0

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Sam Brown **Date :** 10-2-07

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

Trailer #410

CES Environmental Services, Inc.

Bill Of Lading # : 49674

Folder ID :	CES Environmental Services Sale of Black Oil

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF) 11a)
4904 Griggs Road 11b)
Houston , TX 77021 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

Pheonix Oil
Houston St
Humble , TX

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT		P	Non DOT regulated Oil

Shipper : CES Environmental Services, Inc. (TSDF)

Per : Gould/09 **Signature :** [signature] **Date :** 09/21/07

Carrier CES Environmental Services, Inc.

Per : _____ **Signature :** _____ **Date :** _____

Receiving Facility Pheonix Oil

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO003001153

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone (713) 676-1460

PROCESSING FACILITY MATERIAL ANALYSIS FORM

OUTBOUND LOADS

Type Of Material : Recovered oil

DATE : 9-20-17

BOL # : 49674

CUSTOMER : Phoenix oil

GROSS WEIGHT : _____

TARE WEIGHT : _____ **OR** **TOTAL GALLONS SHIPPED** _____

NET WEIGHT : _____

SHIPPING INFORMATION :

CARRIER : CES

TRUCK / TRAILER NUMBER : 284 / 410

(LABORATORY USE ONLY)

SPECIFIC GRAVITY : 0.90 POUNDS PER GALLON 7.50

TEMPERATURE _____ F

TOTAL GROSS GALLONS _____

% WATER 4

% SOLIDS /

TOTAL NET GALLONS _____ (minus water and solid %)

Sample Analyst : Code/07 **Date :** 09/20/17

White - Customer Copy Goldenrod - Transporter Copy Yellow - CES Office Copy Pink - Processing Facility Copy

CES Environmental Services, Inc.

Bill Of Lading # : 50291

Folder ID :	

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. (TSDF) 11a)
4904 Griggs Road 11b)
Houston , TX 77021 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Allied Petrochemical LLC
200 Avenue I
Alvin , TX 77511

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54® implementing the Intermodal Safe Container Act of 1982 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	36230	P	Non DOT Regulated Oronite Tetramer

Shipper : CES Environmental Services, Inc. (TSDF)
Per : Bo Cumberland **Signature :** Bo **Date :** 10-1-07

Carrier CES Environmental Services, Inc.
Per : Candido A. Rosales **Signature :** [signature] **Date :** 10-1-07

Receiving Facility Allied Petrochemical LLC
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO003001155

MSDS

EPAHO003001156

Profile 2031 Kinder Morgan. Unrestricted (Feedstock Oil / Light Ends)

Product Sales Profile Numbers
Please check all folder ID's to match!!

Acetic Acid 2349
This is the stuff we get form PPG

Acetic Acid, Glacial 2398
This profile should be used for 100% acetic acid

Base Oil 2481
This include line flushes without dyes.

Bleach 2509
This material comes from GATX and goes to Skyhawk

CES Fuel 2497
This material normally goes to ChemTrade A.K.A. Peak

CES Non-Haz Fuel 2485
This material is usually sent to Energis

Diluted Glycols 2484
(ethylene glycol, propylene glycol)

Ferric Chloride (Drums) 2508
This material comes from GATX and goes to Skyhawk

High Purity Ethylene Glycol 2364
Product we have processed at KMTEX.
Note that folder ID will be "Sale of Ethylene Glycol – RasGas"

Hydrochloric Acid (Drums) 2507
This material comes from GATX and goes to Skyhawk

Low Flash Recovered Black Oil 2366

Methylene Chloride 2350
Normally comes fro PPG

Morpholine 2361
This was a fluke; don't know where Leroy picked it up

Oronite Tetramer 2386
Joy brought this in and it went to Allied

Phosphoric Acid (Drums) 2510
This material comes from GATX and goes to Skyhawk

Polyethylene copolymer 2486
(Otherwise know as EVOH pellets or strands)

Stream 6 - 2529
(Restricted light ends)
Heptanes, Toluene

Recovered Black Oil 2363

This is our normal black oil with normal flash.

Restricted Light Ends/Solvents 2352

This number should be used for light ends/cutter stock/solvents that **originated from PPG** (may be other customers in the future). Product Sales Manager should provide this information. **This product MAY NOT be put directly into the fuels market.**

Unrestricted Light Ends/Solvents 2351

This number should be used for light ends/cutter stock/solvents that originated anywhere **except from PPG** (may be other customers in the future). Product Sales Manager should provide this information. **This product MAY be put directly into the fuels market.**

Viscosity Improver 2373

Joy normallu brings this in – could be bulk or drums

Revised 11/20/2007

Caustics: **You MUST BE VERY CAREFUL to match profile number with product!**

Spent Sulfidic Caustic 2375
Currently shipping to Mead Westvaco, Pineville

Spent Phenolic Caustic 2376
Currently shipping only to Pineville

Mixed Spent Caustics 2377
Currently shipping only to De Ridder

**** Folders should say
CES Environmental Services
Sale of _____ (profile name)
(Except high purity ethylene glycol – see above)

Revised 11/2/2007

Standard Operating Procedure

THINK... USE GOOD JUDGMENT	CES Environmental Services, Inc.	***YOUR ATTITUDE COUNTS***
Date Issued 01/09/2008	DEPARTMENT (S) - Operations - Processing - Maintenance and Field Services - Sales, Finance, and Administration	Revised Date 03/06/2008
Policy Number 08-037	SOP Title Product Sales and Management	SOP Description This SOP explains the procedures that should be followed beginning when a product load is scheduled into CES through the point where the load ships out of CES.

The purpose of this SOP is to describe the process that should be followed to bring in products, manage products, and sell products. This SOP does not cover waste, whether recycled or not.

INCOMING PRODUCTS:

For any incoming products that will be sold by CES, the **Director of Sales and Marketing** must be consulted to prior to any agreement with the customer. The **Director of Sales and Marketing** and **Sales Representative** will jointly determine the price/cost of the product to the customer (inbound side) and the time frame/logistics for bringing the product in. The standard rate sheet for commissions paid on product purchases is located in the SALES COMMISSION Calculations file (in the **Sales** folder on the **Shared Drive**).

The **Director of Sales and Marketing** must approve any "special case" situations involving commissions, such as paying commission on outbound product loads.

JOB FOLDERS:

On the Inbound Side, the appropriate **Sales Representative** should create the job folder as they would for any other job.

On the Outbound side, the **Director of Sales and Marketing** will create any necessary job folders to be labeled "CES Environmental Services – Sale of _____". The profile

number will also be written on the job folder. However, before any new folders are created, the **Director of Sales and Marketing** should be sure the product cannot be shipped under an existing profile (with an existing folder). These folders are kept in a separate filing cabinet next to the **Office Manager's** desk in **Billing**. It is the responsibility of the **Director of Sales and Marketing** to maintain all product sales folders and to enter cost structure for all customers. It is the responsibility of the **Director of Sales and Marketing** to be sure a copy of the profile and a copy of the MSDS is in the product job folder.

PROFILES:

It is the responsibility of the **Director of Sales and Marketing** to get the product profiles in place prior to the product being shipped to the customer. It is also the responsibility of the **Director of Sales and Marketing** to modify the product sales profile list on the shared drive in the "Profiles" folder (both lists) for reference by **Customer Service/Inside Sales** and the **Main Processing Facility Lab.** One copy of the product profile will be kept in the product sales job folder.

CES PRODUCT SALES SPREADSHEET

It is the responsibility of **Customer Service/Inside Sales** to maintain the CES Product Spreadsheet in the following manner.

1. The **Sales Reps** will alert the **Customer Service/Inside Sales Rep** working with **Product Sales** when a product load is scheduled into CES.
2. The **Customer Service/Inside Sales Rep** will enter the "Product", "Inbound Date", "Inbound Job Number," "Inbound Price", "Inbound Customer" and "Inbound Trailer Number" fields. The status field will also record the status as "Scheduled In".
3. The **Customer Service/Inside Sales Rep** (Product Sales) will coordinate with the **Main Processing Facility Lab Personnel** to track the load and update the status on the CES Product Spreadsheet. The trailer number, tank number, and/or processing unit will be recorded in the "Processing Location" field. If the trailer will remain loaded, the trailer number will be entered under "Processing Location".
4. When a load is ready to ship, the **Customer Service/Inside Sales Rep** (Product Sales) will change the status to "Ready to Ship" and enter the "Outbound Load Report Number". As a general rule, the status should not be changed to "Ready to Ship" without the Outbound Load Report completed.
5. When a load has been scheduled out, the **Customer Service/Inside Sales Rep** (Product Sales) will match the outbound load to the appropriate inbound load (if possible) and record information in the "Outbound Price", "Outbound Job #", "Outbound Trailer" and "Outbound Customer" fields. The status will change to "Scheduled Out".
6. Once a load has left, the status will be changed to "Shipped" and all previous information – especially "Customer", "Trailer Number", "Job Number", and "Outbound Report Number" will be verified.

7. If an inbound load gets cancelled, the entire row will be deleted from the CES Product Spreadsheet.
8. If an outbound load gets cancelled, the Status will change to "Cancelled (See notes)" and information will be recorded in the "Comments" field to include the BOL and customer of the cancelled load and why the load was cancelled. Enough information should be included in "Comments" to completely explain the situation.
9. When an outbound load gets rescheduled, the new information will be entered **but the original comments will remain**. Additional comments may always be added.

JOB SCHEDULING: OUTBOUND

When **Customer Service/Inside Sales** enters a product sales job, they MUST write the sell price in **billing comments** or write "folder pricing" in **billing comments** and include the correct profile number. The **Director of Sales and Marketing** should provide this information.

OUTBOUND LOAD REPORTS:

No product should ship from CES without an Outbound Load Report. Once a trailer is loaded and the sample is pulled, the **Main Processing Facility Lab Personnel** will create a new Outbound Load Report in the CES Access Program.

When the load is scheduled to go out and a BOL is created, the **Customer Service/Inside Sales Rep** will enter the BOL number on the Outbound Load Report in the CES Access Program. The **Customer Service/Inside Sales Rep** will also enter the correct Outbound Load Report number in the Job Write Up Screen in the CES Access Program for the correct BOL. The Outbound Load Report information should also be entered on the CES Product Spreadsheet as explained above.

METHYLENE CHLORIDE/MEHTANOL DISTILLATION

Methylene Chloride is the first phase of distillation. We currently use trailer 266 and 413 to hold the distilled product. Fill up one trailer before you start a new one. The density of the material that we are selling as methylene chloride is between 1.33 and 1.20. When the density gets below 1.2 we need to change trailers to the next phase which is **material between methylene chloride and methanol.** When you are in the methylene chloride phase your stack temperature will start around 105 F and ends around 125 F. Your iso container temperature should range 5 to 10 degrees F cooler than your stack. Heating too fast will cause methanol to flash over into the methylene chloride. YOU SHOULD ALWAYS USE THE DENSITY NUMBERS AND NOT STACK TEMPERATURES TO KNOW WHEN YOU NEED TO CHANGE TO THE NEXT PHASE. The key is to heat the iso container enough to get flow over into the holding tank with the least amount of heat you can.

Material between methanol and methylene chloride is second phase of distilling the load. We currently use trailer 213 and 414 to hold this material. The density of this phase is from 1.19 to .86. When the density gets below .86 we should switch trailers to the **methanol** phase. During this phase, the stack temperature starts at around 125 F and ends around 150 F. The iso container temperature should range 5 to 10 degrees cooler than your stack. YOU SHOULD USE THE DENSITY NUMBERS AND NOT STACK TEMPERATURES TO KNOW WHEN YOU NEED TO CHANGE TO THE NEXT PHASE. You can heat a little more aggressively in this phase but too much heat will flash methanol which you want to avoid. All the material you make here must be rerun.

Methanol is the final phase of distilling the load. We currently use trailer 1264 and 208 to hold this product. The density of this phase starts at .86 and can go as low as .79. You should start around .86, go down to as low as .79 and then the density will start to go back up toward **.90** When you get close to **.90** you should pull a sample of the liquid in the iso container (from the bottom valve) and have the lab run a TOC. You will be done with the methanol phase when the density goes above .90 and the TOC of the liquid in the distillation unit is about 40,000. The stack temperature in this phase should start as low as 150 F and go as high as 175 F. The iso container temperature should range from 5 to 10 degrees F cooler than your stack. YOU SHOULD USE THE DENSITY NUMBERS AND NOT STACK TEMPERATURES TO KNOW WHEN YOU ARE FINISHED. If you heat to fast in this phase you will flash over water vapor and make you density number too high. In all phases you should heat enough to get good flow over to the holding trailer but don't build up extra pressure in the iso container.

PPG

contains chlorides

TRAILER 210 - METHANOL DISTILLATION

Trailer 210 is the Methanol charge. On this run you will recover approximately 60% of the charge before the density becomes too high. We currently use trailers 1264 and 208 to hold this product. The density of this phase starts below 0.90 and can go as low at 0.79. You should test the initial product density of this material, which will be less than 0.90. The methanol density will then go down to as low as 0.79 before it begins to rise again. The density will start to go back up toward 0.90. When you get close to 0.90 you should pull a sample of the liquid in the iso container (from the bottom valve) and have the lab run a TOC. You will be done with the methanol phase when the density goes above 0.90 and the TOC of the liquid in the distillation unit is around 10,000 or less. The stack temperature in this phase should start as low as 150 deg F and go as high as around 175 deg F. The iso container temperature should range from 5 to 10 degree F cooler than your stack. **YOU SHOULD USE THE DENSITY NUMBERS AND NOT STACK TEMPERATURES TO KNOW WHEN YOU ARE FINISHED.** If you heat too fast in this phase you will flash over water vapor and make the density number too high. In all phases you should heat enough to get good flow over to the holding trailer but don't build up extra pressure in the iso container. At the end of this run you will have quite a bit of a plastic type material that will need to be removed from the distillation unit, with shovels and some manpower.

DISTILLATION TRAILERS

266 – METHYLENE CHLORIDE

413 – METHYLENE CHLORIDE

1264 – METHANOL FROM PPG DISTILLATION (FRONT UNIT)

~~266 – METHANOL FROM PPG DISTILLATION (FRONT UNIT)~~

208

~~210~~ – METHANOL FROM EVALCA DISTILLATION (BACK UNIT)

213 – IN BETWEEN METHYLENE CHLORIDE AND METHANOL, MUST BE RERUN

414 – IN BETWEEN METHYLENE CHORIDE AND METHANOL, MUST BE RERUN

415 – ALCOHOL WASTE WATER

7295 ALCOHOL WATER

MEC 4300 = 1 load

Methanol 6500 = 1 load

CALCULATING THE PERCENT METHANOL OF A LOAD

To calculate the percentage strength of the methanol in a trailer you are loading into you need to do the following:

- Run a density to obtain the specific gravity
- Then use the following calculation: Percentage methanol = (1 – specific gravity)/.2087

An example would be as follows:

You run a density on the sample from the trailer and it comes out .82 which is the specific gravity.

Then just apply the formula:

Percentage methanol = (1 - specific gravity)/.2087

So, Percent methanol = (1 - .82)/.2087

Next step, Percent methanol = .18/.2087

Last step is to divide .2087 into .18

Answer is .86. To convert to % just multiple by 100 and you get 86%

This means a methanol density of .82 will be 86% methanol.

The reason we need to know the % of methanol is that our new market requires no less than 70% methanol in a load we ship out. We will need to keep on top of the methanol % while we are making loads.

% Methanol vs. Density

Density @ 20 Deg C

Density	% Methanol
0.7917	100%
0.8034	96%
0.8089	94%
0.8148	92%
0.8259	88%
0.8365	84%
0.8468	80%
0.8568	76%
0.8667	72%
0.8715	70%
0.8763	68%
0.8856	64%
0.8944	60%
0.903	56%

CES Environmental Services, Inc.

% Ethanol vs. Density

Density @ 20 Deg C

Density	% Ethanol
0.789	100
0.801	96
0.812	92
0.823	88
0.834	84
0.844	80
0.853	76
0.863	72
0.872	68
0.882	64
0.891	60
0.900	56
0.910	52

% Ethanol vs. Density

Density @ 20 Deg C		Calculated
Density	**% Ethanol**	**% ethanol**
0.789	100	**100.0**
0.801	96	**94.3**
0.812	92	**89.1**
0.823	88	**83.9**
0.834	84	**78.7**
0.844	80	**73.9**
0.853	76	**69.7**
0.863	72	**64.9**
0.872	68	**60.7**
0.881	64	**56.4**
0.891	60	**51.7**
0.900	56	**47.4**
0.910	52	**42.7**

1738
1.0

ExxonMobil

6022362-00 MCP 2236
MATERIAL SAFETY DATA BULLETIN

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: [redacted]
SUPPLIER: EXXONMOBIL CHEMICAL COMPANY
SYNTHETICS DIVISION
2195 ROUTE 27
EDISON, NJ 08818

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency:
CHEMTREC: 800-424-9300 202-483-7616

Product and Technical Information: 732-321-6048

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SULFURIZED ISOBUTYLENE

GLOBALLY REPORTABLE MSDS INGREDIENTS:

None.

OTHER INGREDIENTS:

Substance Name	Approx. Wt%
SULFURIZED ISOBUTYLENE	100

See Section 8 for exposure limits (if applicable).

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3. HAZARDS IDENTIFICATION

This product is considered hazardous according to regulatory guidelines (See Section 15).

EMERGENCY OVERVIEW: Clear Brown Liquid. Material is combustible.
Exposure to fire can generate highly toxic fumes. DOT ERG No. :

POTENTIAL HEALTH EFFECTS: Low viscosity material-if swallowed may enter the lungs and cause lung damage. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Respiratory irritation, dizziness, nausea, loss of consciousness.

POTENTIAL ENVIRONMENTAL EFFECTS: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For further health effects/toxicological data, see Section 11.

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4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with bag-valve-mask device or use mouth-to-mouth resuscitation.
INGESTION: Do not induce vomiting. Get medical assistance.
NOTE TO PHYSICIANS: Material if ingested may be aspirated into the lungs and can cause chemical pneumonitis. Treat appropriately.

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5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is combustible. Exposure to fire can generate highly toxic fumes.
Flash Point C(F): 84(183) (ASTM D-93).
Flammable Limits (approx.% vol.in air) - LEL: NE, UEL: NE
NFPA HAZARD ID: Health: 2, Flammability: 2, Reactivity: 0

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6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.
PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant shovel and remove to

appropriate waste disposal facility in accordance with current applicable laws and regulations.
ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.
PERSONAL PRECAUTIONS: See Section 8

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7. HANDLING AND STORAGE

HANDLING: Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.
STORAGE: Store in a cool area away from all ignition sources. Store in a cool area.
EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

This product does not contain any components which have recognized exposure limits.

VENTILATION: Use local exhaust over heating operations. Use in well ventilated area. Ventilation desirable and equipment should be explosion proof.
RESPIRATORY PROTECTION: Use appropriate respiratory protective equipment during heating operations.
EYE PROTECTION: Normal industrial eye protection practices should be employed.
SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
COLOR: Clear Brown
ODOR: Sulfur
ODOR THRESHOLD-ppm: NE
pH: NA
BOILING POINT C(F): NE
MELTING POINT C(F): NA
FLASH POINT C(F): 84(183) (ASTM D-93)
FLAMMABILITY (solids): NE

AUTO FLAMMABILITY C(F): NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE-mmHg 20 C: NE
VAPOR DENSITY: NE
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 1.095
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: NE
VISCOSITY AT 40 C, cSt: NE
VISCOSITY AT 100 C, cSt: 2.0
POUR POINT C(F): NE
FREEZING POINT C(F): NE
VOLATILE ORGANIC COMPOUND: NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

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10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

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11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: 0 or greater but 6 or less). ---Based on testing of similar products and/or the components.
SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

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12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative products.

ECOTOXICITY:

Acute LC/EC50: Algae: Harmful ---Based on testing of similar products (EC50: >10-100 ppm).

MOBILITY: Not established.

PERSISTENCE AND DEGRADABILITY: Not readily biodegradable. Based upon test data for a similar product.

BIOACCUMULATIVE POTENTIAL: Not established.

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13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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14. TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Combustible Liquid, n.o.s. (contains SULFURIZED ISOBUTYLENE)
HAZARD CLASS & DIV:	COMBUSTIBLE LIQUID
ID NUMBER:	NA1993
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	NE
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	NA
PLACARD(s):	Combustible
PRODUCT RQ:	NA
MARPOL III STATUS:	NA

In accordance with 49 CFR 173.150(f)(2), non-bulk quantities of this material (<119 gallons per container) may be shipped as non regulated for USA domestic shipments.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

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15. REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EU Labeling: Product is dangerous as defined by the European Union Dangerous Substances/Preparations Directives.

Symbol: Not applicable.

Risk Phrase(s): R52/53.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s): S24-61-62.
Avoid contact with skin. Avoid release to the environment. Refer to special instructions/Safety data sheets. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, METI, and DSL.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
FIRE CHRONIC ACUTE

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS

*** NO REPORTABLE INGREDIENTS ***

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

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16. OTHER INFORMATION

USE: EXTREME PRESSURE ADDITIVE

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Precautionary Label Text:

CONTAINS SULFURIZED HYDROCARBONS

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR. MAY CAUSE NOSE, THROAT AND LUNG IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE.

PROLONGED, REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Keep away from heat and flame. Avoid contact with skin or clothing. Avoid breathing vapor. Keep container closed. Use with adequate ventilation.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician immediately. In case of contact, wash skin with soap and water. Remove contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container.

All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

Refer to product Material Safety Data Bulletin for further safety and health information.

****
For Internal Use Only: MHC: 0* 1* 0* 0* 1*, MPPEC: C, TRN: 6022362-00, REQ: CHEMICAL PRODUCTS, SAFE USE: C
EHS Approval Date: 03OCT2002
****

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For further information, contact:
Mobil Chemical Products International, Inc.
2, rue des Martinets
BP 270
92505 RUEIL MALMAISON CEDEX, France

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

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12

MCP 1397

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MCP 1397
SUPPLIER: EXXONMOBIL CHEMICAL COMPANY
SYNTHETICS DIVISION
2195 ROUTE 27
EDISON, NJ 08818

24 - Hour Emergency (call collect):	609-737-4411	
Product and MSDS Information:	732-321-6048	
CHEMTREC:	800-424-9300	202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SULFURIZED ISOBUTYLENE

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.

OTHER POTENTIALLY HAZARDOUS INGREDIENTS:

Substance Name	Wt%
SULFURIZED ALKENE	100

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.
EFFECTS OF OVEREXPOSURE: Respiratory irritation, dizziness, nausea, loss of consciousness. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.
EMERGENCY RESPONSE DATA: Amber Liquid. Material is combustible. Exposure to fire can generate highly toxic fumes. DOT ERG No. : 128 . SEC: 2

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a physician. If breathing has stopped, use mouth to mouth resuscitation.
INGESTION: Do not induce vomiting. Get medical assistance.
NOTE TO PHYSICIANS: Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is combustible. Exposure to fire can generate highly toxic fumes. Flash Point C(F): 81(178) (ASTM D-93). Flammable limits - LEL: NE, UEL: NE.
NFPA HAZARD ID: Health: 2, Flammability: 2, Reactivity: 0
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.

EPAHO003001179

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.
PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant shovel and remove to appropriate waste disposal facility in accordance with current applicable laws and regulations.
ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.
PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.
STORAGE: Store in a cool area away from all ignition sources. Store in a cool area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use local exhaust over heating operations. Use in well ventilated area. Ventilation desirable and equipment should be explosion proof.
RESPIRATORY PROTECTION: Use appropriate respiratory protective equipment during heating operations.
EYE PROTECTION: Normal industrial eye protection practices should be employed.
SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.
EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
COLOR: Amber
ODOR: Mercaptan
ODOR THRESHOLD-ppm: NE
pH: NA

(Section continued next page)

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

BOILING POINT C(F): NE
MELTING POINT C(F): NA
FLASH POINT C(F): 81(178) (ASTM D-93)
FLAMMABILITY: NE
AUTO FLAMMABILITY: NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE-mmHg 20 C: NE
VAPOR DENSITY: NE
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 1.03
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: NE
VISCOSITY AT 40 C, cSt: 5.3
VISCOSITY AT 100 C, cSt: 1.7
POUR POINT C(F): < -64(-83)
FREEZING POINT C(F): NE
VOLATILE ORGANIC COMPOUND: NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---
ORAL TOXICITY (RATS): Practically non-toxic.
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
EYE IRRITATION (RABBITS): Practically non-irritating. Eye irritation scores: 6.0 at 24 hours, 3.3 at 48 hours, 2.3 at 72 hours
SKIN IRRITATION (RABBITS): Practically non-irritating. Primary irritation score: 0.8/8
OTHER ACUTE TOXICITY DATA: ***DOT skin corrosivity (4 hours): Negative ***

---GENETIC TOXICOLOGY (SUMMARY)---
***Mouse Lymphoma (L5178Y/TK+/-) Assay: Positive. ***Negative Ames Test.

EPAHO003001181

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: After 28 days, 3.3% of this material was converted to CO2 in the OECD 301B (Modified Sturm) test.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Combustible Liquid, n.o.s. (contains SULFURIZED ISOBUTYLENE)
HAZARD CLASS & DIV:	COMBUSTIBLE LIQUID
ID NUMBER:	NA1993
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	NE
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	NA
PLACARD(s):	Combustible
PRODUCT RQ:	NA
MARPOL III STATUS:	NA

In accordance with 49 CFR 173.150(f)(2), non-bulk quantities of this material (<119 gallons per container) may be shipped as non regulated - for USA domestic shipments.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

(Section continued next page)

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, METI, and DSL.

EU Labeling:

Symbol: Not applicable.

Risk Phrase(s): Not applicable.

Safety Phrase(s): S24-62.
Avoid contact with skin. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains: Sulfurized Isobutylene.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
FIRE CHRONIC

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS

*** NO REPORTABLE INGREDIENTS ***

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA 2	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

Date Printed Thursday, March 07, 2002

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

16. OTHER INFORMATION

Precautionary Label Text:

CONTAINS SULFURIZED HYDROCARBONS

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR. MAY CAUSE NOSE, THROAT AND LUNG IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE.

PROLONGED, REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Keep away from heat and flame. Avoid contact with skin or clothing. Avoid breathing vapor. Keep container closed. Use with adequate ventilation.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician immediately. In case of contact, wash skin with soap and water. Remove contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container. All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

Refer to product Material Safety Data Bulletin for further safety and health information.

USE: EXTREME PRESSURE ADDITIVE

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

INGREDIENT	CAS NUMBER
1-PROPENE, 2-METHYL-, SULFURIZED	68511-50-2

****

For Internal Use Only: MHC: 0 1* 0* 0 1, MPPEC: C, TRN: 6013973-00, REQ: CHEMICAL PRODUCTS, SAFE USE: C
EHS Approval Date: 20APR1999

(Section continued next page)

EPAHO003001184

1738
1.0

ExxonMobil

6022362-00 MCP 2236
MATERIAL SAFETY DATA BULLETIN

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MCP 2236
SUPPLIER: EXXONMOBIL CHEMICAL COMPANY
SYNTHETICS DIVISION
2195 ROUTE 27
EDISON, NJ 08818

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency:
CHEMTREC: 800-424-9300 202-483-7616

Product and Technical Information: 732-321-6048

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SULFURIZED ISOBUTYLENE

GLOBALLY REPORTABLE MSDS INGREDIENTS:

None.

OTHER INGREDIENTS:

Substance Name	Approx. Wt%
SULFURIZED ISOBUTYLENE	100

See Section 8 for exposure limits (if applicable).

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3. HAZARDS IDENTIFICATION

This product is considered hazardous according to regulatory guidelines (See Section 15).

EMERGENCY OVERVIEW: Clear Brown Liquid. Material is combustible.
Exposure to fire can generate highly toxic fumes. DOT ERG No. :

POTENTIAL HEALTH EFFECTS: Low viscosity material-if swallowed may enter the lungs and cause lung damage. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Respiratory irritation, dizziness, nausea, loss of consciousness.

POTENTIAL ENVIRONMENTAL EFFECTS: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For further health effects/toxicological data, see Section 11.

---

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with bag-valve-mask device or use mouth-to-mouth resuscitation.
INGESTION: Do not induce vomiting. Get medical assistance.
NOTE TO PHYSICIANS: Material if ingested may be aspirated into the lungs and can cause chemical pneumonitis. Treat appropriately.

---

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is combustible. Exposure to fire can generate highly toxic fumes.
Flash Point C(F): 84(183) (ASTM D-93).
Flammable Limits (approx.% vol.in air) - LEL: NE, UEL: NE
NFPA HAZARD ID: Health: 2, Flammability: 2, Reactivity: 0

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6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.
PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant shovel and remove to

appropriate waste disposal facility in accordance with current applicable laws and regulations.
ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.
PERSONAL PRECAUTIONS: See Section 8

---

7. HANDLING AND STORAGE

HANDLING: Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.
STORAGE: Store in a cool area away from all ignition sources. Store in a cool area.
EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

---

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

This product does not contain any components which have recognized exposure limits.

VENTILATION: Use local exhaust over heating operations. Use in well ventilated area. Ventilation desirable and equipment should be explosion proof.
RESPIRATORY PROTECTION: Use appropriate respiratory protective equipment during heating operations.
EYE PROTECTION: Normal industrial eye protection practices should be employed.
SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
COLOR: Clear Brown
ODOR: Sulfur
ODOR THRESHOLD-ppm: NE
pH: NA
BOILING POINT C(F): NE
MELTING POINT C(F): NA
FLASH POINT C(F): 84(183) (ASTM D-93)
FLAMMABILITY (solids): NE

AUTO FLAMMABILITY C(F): NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE-mmHg 20 C: NE
VAPOR DENSITY: NE
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 1.095
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: NE
VISCOSITY AT 40 C, cSt: NE
VISCOSITY AT 100 C, cSt: 2.0
POUR POINT C(F): NE
FREEZING POINT C(F): NE
VOLATILE ORGANIC COMPOUND: NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

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10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

---

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: 0 or greater but 6 or less). ---Based on testing of similar products and/or the components.
SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

---

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative products.

ECOTOXICITY:

Acute LC/EC50: Algae: Harmful ---Based on testing of similar products (EC50: >10-100 ppm).

MOBILITY: Not established.

PERSISTENCE AND DEGRADABILITY: Not readily biodegradable. Based upon test data for a similar product.

BIOACCUMULATIVE POTENTIAL: Not established.

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13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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14. TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Combustible Liquid, n.o.s. (contains SULFURIZED ISOBUTYLENE)
HAZARD CLASS & DIV:	COMBUSTIBLE LIQUID
ID NUMBER:	NA1993
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	NE
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	NA
PLACARD(s):	Combustible
PRODUCT RQ:	NA
MARPOL III STATUS:	NA

In accordance with 49 CFR 173.150(f)(2), non-bulk quantities of this material (<119 gallons per container) may be shipped as non regulated for USA domestic shipments.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

---

15. REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EU Labeling: Product is dangerous as defined by the European Union Dangerous Substances/Preparations Directives.

Symbol: Not applicable.

Risk Phrase(s): R52/53.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s): S24-61-62.
Avoid contact with skin. Avoid release to the environment. Refer to special instructions/Safety data sheets. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, METI, and DSL.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
FIRE CHRONIC ACUTE

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS

*** NO REPORTABLE INGREDIENTS ***

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

16. OTHER INFORMATION

USE: EXTREME PRESSURE ADDITIVE

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Precautionary Label Text:

CONTAINS SULFURIZED HYDROCARBONS

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR. MAY CAUSE NOSE, THROAT AND LUNG IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE.

PROLONGED, REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Keep away from heat and flame. Avoid contact with skin or clothing. Avoid breathing vapor. Keep container closed. Use with adequate ventilation.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician immediately. In case of contact, wash skin with soap and water. Remove contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container.

All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

Refer to product Material Safety Data Bulletin for further safety and health information.

****

For Internal Use Only: MHC: 0* 1* 0* 0* 1*, MPPEC: C, TRN: 6022362-00, REQ: CHEMICAL PRODUCTS, SAFE USE: C
EHS Approval Date: 03OCT2002

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For further information, contact:
Mobil Chemical Products International, Inc.
2, rue des Martinets
BP 270
92505 RUEIL MALMAISON CEDEX, France

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

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12

MCP 1397

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MCP 1397
SUPPLIER: EXXONMOBIL CHEMICAL COMPANY
SYNTHETICS DIVISION
2195 ROUTE 27
EDISON, NJ 08818

24 - Hour Emergency (call collect): 609-737-4411
Product and MSDS Information: 732-321-6048
CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SULFURIZED ISOBUTYLENE

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.

OTHER POTENTIALLY HAZARDOUS INGREDIENTS:

Substance Name	Wt%
SULFURIZED ALKENE	100

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.
EFFECTS OF OVEREXPOSURE: Respiratory irritation, dizziness, nausea, loss of consciousness. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.
EMERGENCY RESPONSE DATA: Amber Liquid. Material is combustible. Exposure to fire can generate highly toxic fumes. DOT ERG No. : 128 . SEC: 2

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a physician. If breathing has stopped, use mouth to mouth resuscitation.
INGESTION: Do not induce vomiting. Get medical assistance.
NOTE TO PHYSICIANS: Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is combustible. Exposure to fire can generate highly toxic fumes. Flash Point C(F): 81(178) (ASTM D-93). Flammable limits - LEL: NE, UEL: NE.
NFPA HAZARD ID: Health: 2, Flammability: 2, Reactivity: 0
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.

EPAHO003001194

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.
PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant shovel and remove to appropriate waste disposal facility in accordance with current applicable laws and regulations.
ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.
PERSONAL PRECAUTIONS: See Section 6

7. HANDLING AND STORAGE

HANDLING: Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.
STORAGE: Store in a cool area away from all ignition sources. Store in a cool area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use local exhaust over heating operations. Use in well ventilated area. Ventilation desirable and equipment should be explosion proof.
RESPIRATORY PROTECTION: Use appropriate respiratory protective equipment during heating operations.
EYE PROTECTION: Normal industrial eye protection practices should be employed.
SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.
EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
COLOR: Amber
ODOR: Mercaptan
ODOR THRESHOLD-ppm: NE
pH: NA

(Section continued next page)

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

BOILING POINT C(F): NE
MELTING POINT C(F): NA
FLASH POINT C(F): 81(178) (ASTM D-93)
FLAMMABILITY: NE
AUTO FLAMMABILITY: NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE-mmHg 20 C: NE
VAPOR DENSITY: NE
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 1.03
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: NE
VISCOSITY AT 40 C, cSt: 5.3
VISCOSITY AT 100 C, cSt: 1.7
POUR POINT C(F): < -64(-83)
FREEZING POINT C(F): NE
VOLATILE ORGANIC COMPOUND: NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Sulfur oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---
ORAL TOXICITY (RATS): Practically non-toxic.
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
EYE IRRITATION (RABBITS): Practically non-irritating. Eye irritation scores: 6.0 at 24 hours, 3.3 at 48 hours, 2.3 at 72 hours
SKIN IRRITATION (RABBITS): Practically non-irritating. Primary irritation score: 0.8/8
OTHER ACUTE TOXICITY DATA: ***DOT skin corrosivity (4 hours): Negative ***

---GENETIC TOXICOLOGY (SUMMARY)---
***Mouse Lymphoma (L5178Y/TK+/-) Assay: Positive. ***Negative Ames Test.

EPAHO003001196

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: After 28 days, 3.3% of this material was converted to CO2 in the OECD 301B (Modified Sturm) test.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Combustible Liquid, n.o.s. (contains SULFURIZED ISOBUTYLENE)
HAZARD CLASS & DIV:	COMBUSTIBLE LIQUID
ID NUMBER:	NA1993
ERG NUMBER:	128
PACKING GROUP:	PG III
STCC:	NE
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	NA
PLACARD(s):	Combustible
PRODUCT RQ:	NA
MARPOL III STATUS:	NA

In accordance with 49 CFR 173.150(f)(2), non-bulk quantities of this material (<119 gallons per container) may be shipped as non regulated for USA domestic shipments.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

(Section continued next page)

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, METI, and DSL.

EU Labeling:

Symbol: Not applicable.

Risk Phrase(s): Not applicable.

Safety Phrase(s): S24-62.
Avoid contact with skin. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains: Sulfurized Isobutylene.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
FIRE CHRONIC

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS

*** NO REPORTABLE INGREDIENTS ***

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

EPAHO003001198

ExxonMobil **MATERIAL SAFETY DATA BULLETIN**

16. OTHER INFORMATION

Precautionary Label Text:

CONTAINS SULFURIZED HYDROCARBONS

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR. MAY CAUSE NOSE, THROAT AND LUNG IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE.

PROLONGED, REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Keep away from heat and flame. Avoid contact with skin or clothing. Avoid breathing vapor. Keep container closed. Use with adequate ventilation.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician immediately. In case of contact, wash skin with soap and water. Remove contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container. All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

Refer to product Material Safety Data Bulletin for further safety and health information.

USE: EXTREME PRESSURE ADDITIVE

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

INGREDIENT	CAS NUMBER
1-PROPENE, 2-METHYL-, SULFURIZED	68511-50-2

****

For Internal Use Only: MHC: 0 1* 0* 0 1, MPPEC: C, TRN: 6013973-00, REQ: CHEMICAL PRODUCTS, SAFE USE: C
EHS Approval Date: 20APR1999

(Section continued next page)

EPAHO003001199

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade name	ALFONIC® 1216 CO-7 Ethoxylate	
Synonyms	Ethoxylated Alcohol	
Manufacturer/Supplier	Sasol North America Inc.	
Address	900 Threadneedle, Houston, TX 77079	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424-9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(337) 494-5142
	MSDS and Product Information (8:00am-4:30pm CST)	(281) 588-3491
	Health and Safety Information (8:00am-4:00pm CST)	(281) 588-3492

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Alcohols, C10-16, ethoxylated	68002-97-1	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance Clear, colorless liquid

Odour Sweet, pungent

Precautions **WARNING!** CAUSES EYE IRRITATION. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Environmental precautions Do not flush into surface water or sanitary sewer system. Toxic to aquatic life. Rapidly and extensively biodegradable.

POTENTIAL HEALTH EFFECTS

Eyes Irritating to eyes. May cause corneal inflammation.

Skin Repeated or prolonged contact can cause redness, irritation and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.

Inhalation Irritating to respiratory system.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Additional advice This product contains residual levels of alcohols which, even under normal handling conditions, may smell and irritate the eyes, nose, and throats of some individuals.

(See Section 11 for Toxicological Information)

SECTION 4 FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Ingestion If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point 147 °C PM 297 °F

Autoignition temperature 354 °C 670 °F

Flammable limits in air % by volume **Lower explosion limit:** Approximately 0.1 %(V)
Upper explosion limit: Approximately > 0.9 %(V)

Fire and explosion NFPA Class IIIB combustible liquid.

Extinguishing media Water spray or fog, foam, dry chemical, CO2.

Fire fighting instructions Wear self contained breathing apparatus for fire fighting if necessary.

Further information Keep containers and surroundings cool with water spray. Do not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

EPAHO003001201

SECTION 6 ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Take precautionary measures against static discharges.

Storage/Transport pressure Ambient.

Load/Unload temperature 27 - 43 °C
80 - 110 °F

Storage and handling materials Suitable: Carbon steel coated with baked phenolic. Any moisture may cause rusting of carbon steel. If product is moisture free, uncoated carbon steel tanks.

Further information on storage conditions When stored in the liquid form, ethoxylates should be padded with a dry inert gas, such as nitrogen, to prevent oxygen or air from entering the tank. Prolonged storage in the presence of air or oxygen may cause product degradation. Oxidation is not expected when stored under a nitrogen atmosphere. Inert gas blanket and breathing system needed to maintain color stability. Use dry inert gas having at least -40 F dew point.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Mechanical ventilation may be necessary if working with this product in enclosed areas and/or at elevated temperatures. Trace amounts of ethylene oxide may be present in the product and could accumulate in vapor spaces of storage or transport vessels.

PERSONAL PROTECTIVE EQUIPMENT

Eyes When contact with liquid is possible, use a face shield and/or chemical splash goggles. Otherwise use safety glasses with side shields or goggles.

Skin Full protective clothing, chemical boots, and chemical gloves.

Inhalation NIOSH-approved organic vapor air-purifying respirator, self-contained breathing apparatus, or air-supplied respirators where there may be potential for overexposure.

EPAHO003001202

EXPOSURE GUIDELINES

Components	Exposure limit(s)
Ethylene Oxide	OSHA PEL 1 ppm (1.8 mg/m3) OSHA EL 5 ppm (9 mg/m3) ACGIH TLV (8-hour) 1 ppm (1.8 mg/m3)

There are no exposure limits established for this product. Trace amounts of ethylene oxide may be present in this product. The ethylene oxide in this product is not expected to result in significant exposures or present a health hazard.

PEL=	Permissible Exposure Limits	TWA=	Time Weighted Average (8 hr.)
TLV=	Threshold Limit Value	STEL=	Short Term Exposure Limit (15 min.)
EL=	Excursion Limit	WEEL=	Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Colour	Clear, colorless
Odour	Sweet, pungent
Form	liquid
Boiling point/range	193 °C 379 °F
Vapour pressure	< 0.1 psi @ 38 °C
Vapor density	16 - 18
Solubility (water)	Miscible.
Viscosity	15.0 cSt @ 38 °C
Melting point/range	7 - 18 °C 44 - 65 °F
Density	0.985 g/cm3 @ 22 °C

SECTION 10 STABILITY AND REACTIVITY

Conditions to avoid Reacts slowly with air or oxygen. Storage under heated conditions in the presence of air or oxygen increases reaction rate. For example, after storing at 95 F/35 C for 30 days in the presence of air, there is measureable oxidation of the ethoxylate. Lower temperatures will allow for longer storage time and higher temperatures will shorten the storage time if stored under an air or oxygen atmosphere.

Hazardous decomposition products When storing this product in air or oxygen, decomposition may occur, generating vapors which could be irritating. Mechanical ventilation or exhaust is recommended. Oxidation is not expected when stored under a nitrogen atmosphere.

Incompatability with other materials Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous polymerization None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks Some or all of the information provided below is from studies conducted on a similar product or products. Life-long consumption of a similar alcohol ethoxylate by laboratory animals was associated with alterations in organ to body weight ratios and inflammation of heart muscle, but only at doses well in excess of expected exposures. Consumption of high concentrations of a similar alcohol ethoxylate by rats was associated with certain effects on offspring (death and soft tissue abnomalities), but only a doses well in excess of expected exposures.

Eyes Primary irritation (rabbit): 26.3 (Maximum score is 110.)

Skin Primary irritation (rabbit): 4 hours 0.04 (Maximum score is 8.0.)

Acute dermal LD50 (rabbit): > 1,000 mg/kg

Inhalation Acute 4 hours LC50 (rat): 0.22 - 8 mg/l

Ingestion Acute oral LD50 (rat): 1,660 mg/kg

CARCINOGENICITY

Ethylene Oxide

NTP Known to be a human carcinogen.
OSHA Carcinogen and reproductive hazard.
IARC Carcinogenic to humans.

EPAHO003001204

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity Toxic to aquatic life.

LC50 (Daphnia) 48 hours 1.3 mg/l
Test Substance: (C1214-7.4 ethoxylate)
LC50 (Daphnia) 48 hours 1.2 mg/l
Test Substance: (C1214-8 ethoxylate)
LC50 (Daphnia) 48 hours 1.1 mg/l
Test Substance: (C1618-8 ethoxylate)

Biodegradation Rapidly and extensively biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.

Disposal methods Dispose of only in accordance with local, state, and federal regulations.

Empty containers. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT description Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, UN 3082, III , Marine pollutant
This product is regulated as a hazardous material according to the Department of Transportation in bulk quantities (greater than 119 gallons per package) only.

IATA description This product is not regulated as a dangerous good when shipped by air in quantities less than 119 gallons per package.

IMDG Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, UN 3082, III, Marine pollutant
This product is regulated as a Marine Pollutant when shipped by water in all quantities according to the IMDG Code.

EPAHO003001205

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA classification
Eye irritant

TSCA Inventory Listing

Components	CAS-No.
Alcohols, C10-16, ethoxylated	68002-97-1

SARA 302 Status

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 302 reporting.		

SARA 311/312 Classification
"Immediate (acute) health hazard"

SARA 313 Chemical

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 313 reporting.		

CERCLA Hazardous Substance

Components	CERCLA RQ	Weight %
Contains no chemicals subject to CERCLA.		

INTERNATIONAL REGULATIONS

Workplace Hazardous Materials Information System (WHMIS) Classification
Class D, Division 2, Subdivision B: Toxic material.

Australian Inventory of Chemical Substances (AICS) Listing
Listed on the AICS.

Japanese Minister of International Trade and Industry (MITI) Inventory Listing
Listed on MITI.

EPAHO003001206

Canadian Domestic Substance List (DSL) Inventory Listing
Listed on the DSL.

European Inventory of Existing Commercial Chemical Substances (EINECS) Listing
Listed on EINECS.

Phillipines Inventory List (PICCS)
Listed on PICCS.

Korean Inventory List
Listed on the ECL.

China Inventory List
Listed on the China inventory.

STATE REGULATIONS

California Safe Drinking Water Act (Prop 65) Listing

Components	CAS-No.
Ethylene Oxide	75-21-8

Sasol North America Inc. ethoxylates may contain detectable quantities of ethylene oxide which is a chemical on the California Proposition 65 list. The level is typically below 1.0 ppm, although it may vary. The manufacturing process is controlled to reduce the residual ethylene oxide content.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Reactivity
HMIS	2	1	0
NFPA	1	1	0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: RECYCLED METHANOL

Chemical name: Methanol

Supplier: AKZO NOBEL SURFACE CHEMISTRY LLC
525 West Van Buren Street
Chicago, IL 60607-3823, USA

Emergency telephone number: Akzo Nobel Emergency Response (24 hours) 914-693-6946
CHEMTREC (24 hours) 800-424-9300

For MSDS, Product Safety, or regulatory inquiries, call: Mike Curl 713-434-4421

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS#	CONCENTRATION
Methanol	67-56-1	82.0 - 88.0 %
Water	7732-18-5	12.0 - 18.0 %

3. HAZARDS IDENTIFICATION

APPEARANCE

Physical state	Liquid
Color	Almost water-white
Odor	Solvent

EMERGENCY OVERVIEW

WARNING!

FLAMMABLE LIQUID.

HARMFUL OR FATAL IF SWALLOWED.
MAY CAUSE EYE DAMAGE AND BLINDNESS IF SWALLOWED.
CAUSES EYE AND SKIN IRRITATION.

POTENTIAL HEALTH EFFECTS

Swallowing
Acute effects
Harmful or fatal if swallowed.
May cause eye damage and blindness if swallowed.

Skin absorption
Acute effects
Harmful if absorbed through skin.
Toxic.

Inhalation
Acute effects
Methanol vapor may cause dizziness, drowsiness, disturbances of vision, and tingling, numbness, and shooting pains in the hands and forearms.

Skin contact
Acute effects
Causes irritation.

Eye contact
Acute effects
Causes irritation.

POTENTIAL ENVIRONMENTAL EFFECTS

No information available.

4. FIRST AID MEASURES

Swallowing
Do not induce vomiting. If a large quantity (50 ml or more) has been swallowed, and if patient is fully conscious, give two glasses of water. Obtain medical attention immediately.

Skin
Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention if irritation persists.

Inhalation
Remove to fresh air. Give artificial respiration if not breathing. Obtain medical attention.

Eye contact
Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Flash point: 13 °C (55 °F)

Special fire fighting procedures
Evacuate all personnel from danger area. Be aware, extinguished fires have the potential to reignite in an explosive manner. Do not discharge extinguishing waters into streams, rivers and lakes.

Special protective equipment for firefighters
Self-contained breathing apparatus with full face-piece operated in positive pressure mode.

Extinguishing media
Suitable: Extinguish with:
- water fog
- dry chemical
- CO2
- alcohol resistant foam
- water spray

Unsuitable: None.

Unusual fire and explosion hazards
Vapors from this material may settle in low or confined areas or travel a long distance to an ignition source and flash back explosively. Cool containers with water; they could explode if subjected to high heat.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear suitable protective equipment.

Environmental precautions
May be harmful to aquatic life. Dike area of spill to prevent spreading and pump liquid to salvage tank. Prevent from entering sewers or drains. Should this product enter sewers or drains, it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.

Methods for cleaning up
Eliminate sources of ignition.
Evacuate unnecessary personnel.

DANGER: Forms explosive mixture with air (see section 5). Immediately evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Remove all sources of ignition if without risk. Reduce vapors with fog or fine water spray. Shut off leak if without risk. Ventilate area of leak or move leaking container to well-ventilated area.
Absorb on inert material such as sand, earth, vermiculite.
Sweep up using non-sparking equipment.
Product is soluble in water.
Contain or minimize dispersion and collect if possible.
If not possible disperse residue to reduce aquatic harm.
Report per regulatory requirements.

7. HANDLING AND STORAGE

HANDLING

Handling precautions
Do not get in eyes, on skin, on clothing. Eliminate all sources of ignition. Electrically bond and ground all containers, equipment and personnel before transfer or use of material. Use with adequate ventilation. Keep drums tightly closed to prevent contamination. Wear recommended personal protection equipment. Never use pressure to empty drums.

STORAGE

Storage requirements
Flammable liquid. Keep away from heat, sparks and flame. Store and use with adequate ventilation. Store at ambient temperature.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

Respiratory protection
If personnel exposure exceeds the exposure limits, select appropriate protective equipment in accordance with NIOSH recommendations.

Hand protection / protective gloves
Neoprene

Eye protection
Splash-proof goggles

Skin protection
Rubber or plastic apron

Industrial hygiene measures
Remove contaminated clothing and clean it.

ENGINEERING CONTROLS

Ventilation
General (mechanical) room ventilation is expected to be satisfactory for normal handling.

EXPOSURE LIMITS

Type	Value	Remark
(skin), OSHA	260.0 mg/m3	

Component	Type	Value	Remark
Methanol	TWA (skin), OSHA	260.0 mg/m3 200.0 ppm	
	STEL, OSHA	310.0 mg/m3 250.0 ppm	
	TWA (skin), ACGIH	200.0 ppm	
	STEL, ACGIH	250.0 ppm	

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Liquid
Color	Almost water-white
Odor	Solvent

OTHER PROPERTIES

Boiling point	No data available.
Melting point	No data available.
Density	0.81 g/cm3 at 25 °C
Vapor pressure	Not determined
Vapor density (air=1)	Not determined
Solubility in water	Soluble
Flash point	13 °C (55 °F)

	Method: Pensky-Martens closed cup ASTM D 93
Percent volatiles	100 %(m)

10. STABILITY AND REACTIVITY

Stability: Stable.

Stability - Conditions to avoid
Stable under normal conditions.

Incompatible materials
Strong oxidizing agents.

Hazardous combustion products
Carbon monoxide.
Carbon dioxide.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Component toxicology **Methanol** Acute toxicity - Swallowing:	LD50 - Rats Result: 5,628 mg/kg

Component toxicology **Methanol** Acute toxicity - Skin absorption:	LD50 - Rabbit Result: 15,800 mg/kg

Component toxicology **Methanol** Acute toxicity - Inhalation:	LC50 - Rats Result: 64000 ppm

Component toxicology **Methanol** Skin irritation - Skin contact:	Species: Rabbit Result: Causes moderate irritation.

Component toxicology **Methanol** Eye irritation - Eye contact:	Species: Rabbit Result: Moderate irritation

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

General: It is our opinion this product is a RCRA hazardous waste due to its' low flash point. It is the generator's responsibility to make their own determination as to the RCRA status of waste they generate. We have not performed a Toxicity Characteristic Leachate Procedure (TCLP on this product. Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

Non-cleaned packages
Dispose of washing solution in the same way as product.

14. TRANSPORT INFORMATION

DOT Classification

Proper shipping name:	METHANOL SOLUTION
Class:	3,(FLAMMABLE LIQUID)
UN ID #:	UN 1230
Packing group:	II
Freight description road:	CLEANING, SCOURING & WASHING COMPOUND, LIQUID OR POWDER

IMDG Classification

Proper shipping name:	METHANOL SOLUTION
Class:	3
UN ID #:	UN 1230
Packing group:	II

ICAO Classification

Proper shipping name:	METHANOL SOLUTION
Class:	3
UN ID #:	UN 1230
Packing group:	II

15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.
Components present in this product at a level which could require reporting under the statute are:

Chemical name		CAS#	Max weight %
Methanol	RQ 5000 pounds for methanol	67-56-1	82.00 - 88.00

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).
Components present in this product at a level which could require reporting under the statute are:
None.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.
Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Methanol	67-56-1	82.00 - 88.00

Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.
Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Methanol	67-56-1	

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Water	7732-18-5	
Methanol	67-56-1	

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard
Fire Hazard

CHEMICAL INVENTORY

United States: The ingredients of this product are on the TSCA inventory.

16. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS
Please consult the product and/or application information bulletins for this product.

HMIS RATING

Health: 3	Flammability: 3	Reactivity: 0	PPI: -

LEGEND

STP	Standard temperature and pressure
W/W	Weight/Weight
0 (HMIS)	Minimal hazard
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

The opinions expressed herein are those of qualified experts within Akzo Nobel. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Akzo Nobel, it is the user's obligation to determine the conditions of safe use of the products.

EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3384
Variant: U.S.A.-EN
Version No: 1.5
Validation Date: 10/10/2005

GLYCOL ETHER EB ACETATE

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER EB ACETATE

Product Number: 000000000000005083

Chemical Family: Glycol Ethers

CAS Number: 112-07-2

Chemical Name: 2-Butoxyethanol acetate

Synonyms: Ethylene Glycol Monobutyl Ether Acetate; Butyl Glycol Acetate; EGBEA

Manufacturer
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%*		Risk	Symbol
Ethylene glycol, monobutyl ether acetate	112-07-2	203-933-3	98.0	<= 100.0	R20/21	Xn
Ethylene glycol monobutyl ether	111-76-2	203-905-0		<= 1.0	R20/21/22, R36/38	Xn

* Concentration of gaseous products or materials is given in Mole %

Compositions given are typical values not specifications.

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview

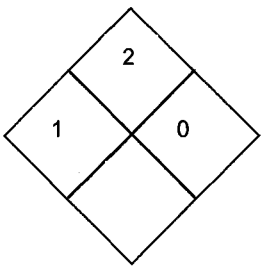
This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
Combustible liquid. Harmful if absorbed through skin. Inhalation hazard. May cause central nervous system effects. Ingestion hazard. May cause kidney damage. Slight eye irritant. Slight skin irritant.

GLYCOL ETHER EB ACETATE

NFPA®



HMIS®

Health	1
Flammability	2
Reactivity	0

Physical State
Liquid.

Color
Colorless.

Odor
Fruity.

Odor Threshold
No Data Available.

Potential Health Effects

Routes of Exposure
Skin. Eye Inhalation

Signs and Symptoms of Acute Exposure
See component summary.

- *Ethylene glycol, monobutyl ether acetate 112-07-2*

Mildly toxic by ingestion and skin contact. A mild skin and eye irritant. May damage the kidneys. May produce symptoms of nervous system depression including headache, dizziness, nausea, loss of sense of balance, drowsiness, and visual disturbances.

- *Ethylene glycol monobutyl ether 111-76-2*

May be irritating to the eyes, skin, and respiratory system. Exposure could cause central nervous system depression and liver and kidney damage. Severe over-exposure may cause red blood cell damage.

Skin
In liquid or solution form, this material may be absorbed through intact skin and produce toxic effects if the exposure is prolonged/extensive.

Inhalation
Vapors may cause irritation of the eyes, nose and throat as well as CNS depression (fatigue, dizziness, loss of concentration, with collapse, coma and death possible in cases of severe overexposure). High vapor concentrations may be irritating to the upper respiratory tract.

Eye
Slight eye irritant upon direct contact. Slight excess redness and possibly swelling of the conjunctiva may develop. Serious corneal injury is not anticipated.

Ingestion
May produce symptoms of CNS depression including headache, dizziness, visual disturbances, unconsciousness and

death. Central nervous system symptoms similar to those by inhalation, followed by rapid breathing, increased heart rate, possible toxicity to the kidneys, decreased urine volume and severe metabolic acidosis.

Chronic Health Effects
See component summary.

- *Ethylene glycol monobutyl ether 111-76-2*

May cause dermatitis by defatting the skin from prolonged or repeated contact. This substance may have effects on the haematopoietic system, resulting in blood disorders. Animal carcinogen.

Conditions Aggravated by Exposure
Any pre-existing diseases or disorders of the CNS, gastrointestinal tract, kidneys and liver.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If swallowed, give lukewarm water or milk (pint/ 1/2 litre) if victim completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency room treatment immediately. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. Get medical attention immediately.

Note to Physician
There is good evidence that ethylene glycol monobutyl ether acetate (EGBEA) is hydrolyzed by esterases to its parent glycol ether, ethylene glycol monobutyl ether (EGBE). In vitro results with human red blood suggest that humans are more resistant to the hemolytic effects of EGBE than laboratory test animals such as mice, rats, and rabbits. These results suggest that hemolysis and secondary effects observed in laboratory animals are unlikely to occur in humans except in extreme cases when exposure is severe and/or prolonged. Indictors for treatment and observation include metabolic acidosis, urinary excretion of 2-butoxy acetic acid (BAA), hemolysis, or hematuria.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
OSHA/NFPA Class IIIA Combustible Liquid.

Flash Point:
> 74 °C (165.2 °F) ASTM D-56 (Tag Closed Cup)

Auto-Ignition Temperature
No Data Available.

Lower Flammable Limit
0.9 vol% (tested at 93.3°C/200°F, 1 atm).

Upper Flammable Limit
8.8 vol% (tested at 93.3°C/200°F, 1 atm).

Extinguishing Media

Suitable: SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance: Fine sprays/mists may be combustible at temperatures below normal flash point. Avoid sparks, heat, and open flame. Vapors can travel to a source of ignition and flash back. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Hazardous Combustion Products: Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not eat, drink or smoke in areas where this material is used.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection
Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin Wear chemical resistant gloves such as: Rubber Appropriate protective clothing should be worn to prevent skin contact.

Eye Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face

devices that comply with ANSI Z87.1-1987.

Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Wash clothing frequently.

Occupational Exposure Limits

Component Name	Source / Date	Value	Type	Notation
Ethylene glycol, monobutyl ether acetate	US (ACGIH) / 2005	20 ppm	8 HRS/TWA	
	US (OSHA) / 2003	N/L		
Ethylene glycol monobutyl ether	US (ACGIH) / 2004	20 ppm	8 HRS/TWA	
	US (OSHA) / 2003	50 ppm	8 HRS/TWA	Skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid. Colorless.

Odor: Fruity.

Odor Threshold: No Data Available.

pH: 3 - 5

Boiling Point/Boiling Range: 190 °C (374 °F) @ 760 mm Hg

Freezing Point/Melting Point: -82.3 °C (-116.14 °F)

Flash Point: > 74 °C (165.2 °F) ASTM D-56 (Tag Closed Cup)

Auto-ignition: No Data Available.

Flammability: OSHA/NFPA Class IIIA Combustible Liquid.

Lower Flammable Limit: 0.9 vol% (tested at 93.3°C/200°F, 1 atm).

Upper Flammable Limit: 8.8 vol% (tested at 93.3°C/200°F, 1 atm).

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.02 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.03 (butyl acetate = 1)

Relative Density: 0.943 @ 20 °C (68 °F) (Water = 1)

Relative Vapor Density: 5.5 (Air = 1.0)

Viscosity: No Data Available.

Solubility (Water): 1.5 % (wt/wt)

Partition Coefficient (Kow): No Data Available.

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Forms explosive peroxides on prolonged storage.

Substances to Avoid
Strong oxidizing agents. Zinc and Zinc alloys

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
Does not react with air, water or other common materials.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
Ethylene glycol monobutyl ether acetate (EGBEA) presents moderate acute toxicity hazard after exposure via ingestion, skin contact, and inhalation exposure. EGBEA is slightly irritating to the eye and skin. Results from acute and repeat exposure studies in animals indicate that EGBEA causes injury to red blood cells with subsequent intravascular hemolysis and anemia, and secondary changes in the kidney. No adverse effect on reproductive organs was observed in male and female rats repeatedly exposed by inhalation to 100 ppm EGBEA vapor. EGBEA has not been tested for developmental toxicity, genotoxicity, or carcinogenicity. Ethylene glycol monobutyl ether (EGBE), a metabolite of EGBEA, is demonstrated not to be teratogenic, is mildly fetotoxic, and is not genotoxic. There is limited evidence that EGBE is an animal carcinogen as indicated by increases in liver and forestomach tumors in mice and a slight increase in adrenal tumors in rats.

COMPONENT INFORMATION

- *Ethylene glycol, monobutyl ether acetate 112-07-2*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	Rat	> 400 PPM	4 HOUR
LD50 (Oral)	Rat	2400 - 3000 MG/KG BWT	
LD50 (Skin)	Rabbit	~ 1500 MG/KG BWT	

Irritation

Skin Repeated or prolonged contact may cause slight skin irritation.

Eye Slight eye irritant.

Sensitization
Specific data not available.

Target Organ Effects
Skin. Eye. Respiratory system. Central nervous system effects. Blood. Kidneys.

Repeated Dose Toxicity
Repeated inhalation exposure of rats and rabbits to 400 ppm EGBEA vapor for 1 month caused injury to red blood cells with subsequent anemia and changes to the kidney. Kidney toxicity but no damage to red blood cells was observed in rats that inhaled 100 ppm EGBEA vapor for 10 months. Repeated oral or dermal administration of EGBEA may cause injury to red blood cells with subsequent anemia and changes to the kidney.

Reproductive Effects
No adverse effect on reproductive organs was observed in male and female rats repeatedly exposed by inhalation to 100 ppm EGBEA. There is good evidence that EGBEA is hydrolyzed EGBE. No adverse effect on reproductive performance was observed in male and female mice exposed to EGBE in drinking water at a 700 mg/kg bwt/day over two generations. A slight reduction in pup body weights and decreased maternal water consumption was observed in mice exposed to 700 mg/kg bwt/day EGBE. EGBE dose levels of 1300 mg/kg/day and higher caused significant parental toxicity and mortality, and a decreased number of litters.

Developmental Effects
Specific data not available. There is good evidence that EGBEA is hydrolyzed EGBE. EGBE is not teratogenic in rats or rabbits exposed by inhalation during organogenesis at concentrations up to 200 ppm. Maternal toxicity and minimal fetotoxicity occurred at 100 ppm or above. No maternal or developmental toxicity was observed in rats that received approximately 2100 mg/kg bwt/day EGBE by the dermal route of exposure during organogenesis.

Genetic Toxicity
No data available for EGBEA. There is good evidence that EGBEA is hydrolyzed EGBE. EGBE, displayed no evidence of mutagenic activity in standard bacterial and mammalian test systems in vitro, and no increase in micronuclei in rodents after in vivo exposure.

Carcinogenicity
Specific data not available. There is good evidence that EGBEA is hydrolyzed EGBE. Long-term exposure to EGBE vapor via inhalation at concentrations up to 125 ppm caused an increase in the incidence of liver tumors in male mice and forestomach tumors in female mice. A slight increase in adrenal tumors was observed in female rats. The NTP has determined that EGBE displays some evidence of carcinogenicity in mice, and equivocal evidence of carcinogenicity in female rats. The IARC classification of EGBE is Group 3: inadequate evidence of carcinogenicity in humans and limited evidence in animals.

- *Ethylene glycol monobutyl ether 111-76-2*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	Rat	~ 450 PPM	4 HOURS
LD50 (Oral)	Rat	530 - 3000 MG/KG BWT	
	Rabbit	320 - 370 MG/KG BWT	
LD50 (Skin)	Rabbit.	612 MG/KG BWT	

Acute Toxicity - Effects
Inhalation Exposure to vapor may cause irritation of the eyes, nose, and respiratory tract. May cause nausea. May cause headaches. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Ingestion Ingestion may cause weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Skin Contact Moderate hazard by skin contact with liquid or vapor. May be absorbed through the skin and produce toxic effects such as CNS depression. High dermal doses (most likely achieved from exposure to undiluted liquid) may cause red blood cell damage with weakness, headache and nausea. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Irritation
Skin Repeated or prolonged contact may cause skin irritation.

Eye Moderate to severe eye irritant.

Sensitization
Not expected to cause sensitization by skin contact.

Target Organ Effects
Skin. Eye. Respiratory system. Central nervous system effects. Blood. May cause liver and/or kidney damage.

Repeated Dose Toxicity
Repeated exposure to EGBE at 125 ppm by inhalation caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Inhalation exposure to EGBE at or above 32 ppm caused degeneration of the nasal epithelium. Repeated oral administration of EGBE at doses of 222 mg/kg bwt, caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Repeated dermal exposure to EGBE at 180 mg/kg bwt caused injury to red blood cells. Moderate risk to health after prolonged exposure.

Reproductive Effects
No adverse effect on reproductive performance was observed in male and female mice exposed to EGBE in drinking water at a 700 mg/kg bwt/day over two generations. A slight reduction in pup body weights and decreased maternal water consumption was observed in mice exposed to 700 mg/kg bwt/day EGBE. Dose levels of 1300 mg/kg/day and higher caused significant parental toxicity (including mortality) and a decreased number of litters.

Developmental Effects
EGBE is not teratogenic in rats or rabbits exposed by inhalation during organogenesis at concentrations up to 200 ppm. Maternal toxicity and minimal fetotoxicity occurred at or above 100 ppm. No maternal or developmental toxicity was observed in rabbits that received approximately 2100 mg/kg bwt/day EGBE by the dermal route of exposure during organogenesis.

Genetic Toxicity
No evidence of mutagenic activity in standard bacterial and mammalian test systems in vitro. No increase in micronuclei in rodents after in vivo exposure.

Carcinogenicity
Long-term exposure via inhalation at concentrations up to 125 ppm caused an increase in the incidence of liver tumors in male mice and forestomach tumors in female mice. A slight increase in adrenal tumors was observed in female rats. The NTP has determined that EGBE displays some evidence of carcinogenicity in mice, and equivocal evidence of carcinogenicity in female rats. The International Agency for Research on Cancer (IARC) has evaluated this material as an IARC Group 3 not classifiable as to carcinogenicity in humans. Limited data in animals and inadequate data in humans.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

See component summary.

Environmental Fate and Pathway

See component summary.

COMPONENT INFORMATION

- *Ethylene glycol, monobutyl ether acetate 112-07-2*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOURS 301 mg/l
Summary: (calculated) This material is not classified as harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
EC50 / 48 HOURS Daphnia magna. 37 mg/l
Summary: This material is classified as harmful to invertebrates.

Toxicity to aquatic plants
EC50 / 72 HOURS Green algae (Scenedesmus subspicatus). > 500 mg/l
Summary: This material is not classified as harmful or toxic to algae or higher aquatic plants.

Toxicity to microorganisms
EC50 / 17 HOURS bacteria. 960 mg/l

Chronic toxicity to fish

Summary: No Data Available.

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Environmental Fate and Pathway

Mobility
Transport between environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistance and Degradability
Stability in Water: In water, the volatilization half-life of EGBEA from a model river and lake is estimated to be 9 days and 70 days, respectively. In air, the estimated photodegradation half-life of EGBEA is approximately 18 hours.

Biodegradation: This material is expected to be inherently biodegradable.

Bioaccumulation: Low potential for bioaccumulation. BCF = 13.5 (estimated).

- *Ethylene glycol monobutyl ether 111-76-2*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOURS bluegill. 1,490 mg/l

LC50 / 96 HOURS fathead minnow 2,137 mg/l

LC50 / 24 HOURS goldfish 1,650 mg/l

Summary: This material is not classified as harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
LC50 / 48 HOURS Brown shrimp 775 mg/l

LC50 / 48 HOURS waterflea. 835 mg/l

Summary: This material is not classified as harmful or toxic to invertebrates.

Toxicity to aquatic plants
EC0 / 192 HOURS blue green algae. 35 mg/l

LOEC / 168 HOURS green algae. 900 mg/l

LOEC / 168 HOURS green algae (Selenastrum). 250 mg/l

Summary: This material is harmful to algae or higher aquatic plants.

Toxicity to microorganisms
EC0 / 16 HOURS bacteria. 700 mg/l

Summary: This material is not classified as toxic or harmful to bacteria.

Chronic toxicity to fish
LC50 / 7 d guppy. 983 mg/l

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Environmental Fate and Pathway

In air, the estimated photodegradation half-life of EGBE ranges from 16 to 27.5 hours. Does not undergo hydrolysis.

Mobility
Transport between environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistance and Degradability
Stability in Water: In water, the volatilization half-life of EGBE from a model river and lake is estimated to be 25 days and 185 days, respectively. The estimated half-life in groundwater ranging from 14 days to 8 weeks.

Stability in Soil: In soil, the estimated half-life of EGBE ranges from 7 days to 4 weeks.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: Low potential for bioaccumulation. BCF = 3.0 (estimated).

SECTION 13: DISPOSAL CONSIDERATIONS

Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with federal, state, or local regulations for disposal.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
Not regulated by U.S. Department of Transportation (USDOT) when shipped in packages of 119 gallons or less. If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name Combustible liquid, n.o.s. (ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE)

ID No. NA1993

Hazard Class Combustible Liquid

PG III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

Country	Inventory		
Australia	AICS	X	**X = All components are included or are otherwise exempt from inclusion on this inventory.**
Canada	DSL	X	
Canada	NDSL		
China	IECS	X	
European Union	EINECS	X	
European Union	ELINCS		
European Union	NLP		**C = Contact Lyondell/Equistar by e-mail at product.safety@lyondell.com or product.safety@equistarchem.com for additional information.**
Japan	ENCS	X	
Korea	ECL	X	
Philippines	PICCS	X	
United States	TSCA	X	

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304
No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

SARA 311/312
Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Fire Hazard.

SARA 313
This material contains the following chemicals with known CAS numbers subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component Reporting Threshold

Ethylene Glycol Monobutyl Ether Acetate	1.0%
Ethylene Glycol Monobutyl Ether / CAS# 111-76-2	1.0%

State Reporting

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 5 9 15 Date of Revision: August 21 2003 Revised Section(s): 3 11 12 May 16 2005
Revised Section(s): 3 11 12 Date of Revision: July 27 2005

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg

Language Translations
The information presented in this document has been translated from English by a vendor Lyondell believes to be reliable. Lyondell and its vendor have made a good-faith effort to verify the accuracy of the translation, but assume no responsibility for any errors that may have occurred. Please refer to our web sites (www.lyondell.com and www.equistarchem.com) for the original document written in English.

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EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3396
Variant: U.S.A.-EN
Version No: 1.5
Validation Date: 02/03/2009

GLYCOL ETHER EB

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER EB

Product Number: 000000000000005042

Chemical Family: Glycol Ethers

CAS Number: 111-76-2

Chemical Name: 2-butoxyethanol

Synonyms: ethylene glycol monobutyl ether; glycol butyl ether

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC USA 800-424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

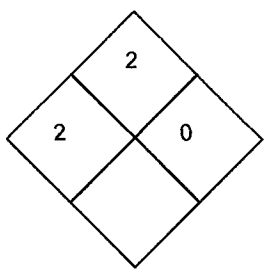
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
Inhalation of vapors may cause central nervous system depression. Eye irritant. Skin irritant.

NFPA®



HMIS®

Health	*	2
Flammability		2
Physical Hazard		0

Physical State
liquid

Color
Colorless.

Odor
Ether-like odor.

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin.

Signs and Symptoms of Acute Exposure
See component summary.

- *2-Butoxyethanol 111-76-2*

May cause irritation of eyes, skin, and respiratory tract. Exposure to high vapor concentrations may cause Central Nervous System (CNS) depression with symptoms such as nausea, dizziness, weakness, headache, loss of coordination, loss of consciousness, coma and death.

- *Ethylene glycol 107-21-1*

Ingestion hazard. Ingestion may cause CNS depression; damage to the gastrointestinal tract, lungs, liver, brain, and kidneys; metabolic acidosis; and hyperkalaemia and hypercalcaemia. Can cause mild eye and skin irritation. High aerosol concentrations may cause respiratory irritation. Not expected to be a sensitizer. May damage the kidneys.

Skin
Repeated or prolonged contact may cause skin irritation.

Inhalation
May produce symptoms of central nervous system depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness and respiratory arrest. Severe over-exposure may cause red blood cell damage.

Eye
Moderate to severe eye irritant.

Ingestion
This material is low to moderately toxic. May cause headache, dizziness and gastrointestinal distress. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Chronic Health Effects
See component summary.

- *2-Butoxyethanol 111-76-2*

May cause dermatitis by defatting the skin from prolonged or repeated contact. This substance may have effects on the haematopoietic system, resulting in blood disorders. Animal carcinogen. Minimal risk to human health after prolonged exposure.

- *Ethylene glycol 107-21-1*

The kidney is the primary target organ for toxicity. This product is a reproductive and developmental toxicant when administered at high doses in experimental animals.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the nervous system, liver, respiratory system, skin, eyes, blood-forming organs, kidneys, and gastrointestinal system

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
2-Butoxyethanol	111-76-2	203-905-0	99.0 <= 99.9

Ethylene glycol	107-21-1	203-473-3	<= 1.0

Compositions given are typical values not specifications.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Get medical attention immediately.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

Note to Physician
In vitro results with human red blood cells suggest than humans are more resistant to the hemolytic effects of EGBE than laboratory test animals such as mice, rats, and rabbits. These results suggest that hemolysis and secondary effects observed in laboratory animals are unlikely to occur in humans except in extreme cases when exposure is severe and/or prolonged. Indictors for treatment and observation include metabolic acidosis, urinary excretion of 2-butoxy acetic acid (BAA), hemolysis, or hematuria.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
OSHA/NFPA Class IIIA Combustible Liquid.

Flash Point
72 °C (161.6 °F) ASTM D-56 (Tag Closed Cup)

Auto-Ignition Temperature
244 °C (471.2 °F)

Lower Flammable Limit
1.1 vol%

Upper Flammable Limit

Upper Flammable Limit
10.6 vol%

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Unsuitable:
Do not use solid water stream.

Protection of Firefighters

Protective Equipment/Clothing:
Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance:
Vapors can travel to a source of ignition and flash back. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

SECTION 7: HANDLING AND STORAGE

Handling
Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not eat, drink or smoke in areas where this material is used. After handling, always wash hands thoroughly with soap and water. Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Wear chemical resistant gloves such as: Rubber Use PPE that is chemical resistant to the product and prevents skin contact.

Eye
Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
2-Butoxyethanol	US (ACGIH)	TWA	20 ppm	None.
	US (OSHA)	TWA	50 ppm 240 mg/m3	None.
Ethylene glycol	US (ACGIH)	CEILING	100 mg/m3 aerosol only,	None.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Colorless.

Odor: Ether-like odor.

Odor Threshold: No value available.

pH: No Data Available.

Boiling Point/Boiling Range: 169 °C (336.2 °F) @ 760 mm Hg

Freezing Point/Melting Point: -70 °C (-94 °F)

Flash Point: 72 °C (161.6 °F) ASTM D-56 (Tag Closed Cup)

Auto-ignition: 244 °C (471.2 °F)

Flammability: OSHA/NFPA Class IIIA Combustible Liquid.

Lower Flammable Limit: 1.1 vol%

Upper Flammable Limit: 10.6 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.6 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.1 (butyl acetate = 1) (butyl acetate = 1)

Relative Density: 0.901 - 0.904 @ 20 °C (68 °F) (Water = 1)

Relative Vapor Density: 4.1 (Air = 1.0)

Viscosity: 6.4 mPa.s @ 20 °C (68 °F)

Solubility (Water): Miscible

Partition Coefficient (Kow): Log Kow = 0.83 Estimated

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
All sources of ignition.

Substances to Avoid
Oxidizers, Acids, Alkalis Lime, ammonia, organic amines, chlorates, chlorine, sodium hydroxide.

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

GLYCOL ETHER EB

Product Summary
Ethylene glycol monobutyl ether (EGBE) presents a minimal acute toxicity hazard to humans after exposure via ingestion, skin contact, and inhalation. EGBE is irritating to the eye and skin. It is not a skin sensitizer. Results from acute and repeat exposure studies in rats, mice and rabbits indicate that EGBE causes injury to red blood cells with subsequent intravascular hemolysis and anemia, and secondary changes in the liver and kidney. Human and guinea pig red blood cells are resistant to EGBE injury and therefore the effects noted in sensitive species are not relevant to humans. Reproductive toxicity, as a decrease in the number of litters and a decrease in fertility index, and developmental toxicity, as a decrease in pup weights, were observed in mice after exposure to EGBE in drinking water, but only at doses which produced significant parental toxicity. There were no fetal malformations in offspring of female rats or rabbits exposed to EGBE during pregnancy, even at doses that produced maternal toxicity. EGBE is inactive in standardized mutagenicity tests in vitro and in vivo. Exposure to EGBE by inhalation for 2 years caused an increase in forestomach tumors in female mice and liver tumors in male mice. No significant increase in tumors was observed in male and female rats exposed to EGBE for 2 years by inhalation; a slight increase in adrenal tumors in female rats was considered an equivocal result.

COMPONENT INFORMATION

- *2-Butoxyethanol 111-76-2*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	guinea pig	~ 932 PPM	4 HOURS
LD50 (Oral)	guinea pig	1414 MG/MK BWT	
LD50 (Skin)	guinea pig	>2000 MG/KG BWT	

Acute Toxicity - Effects
Inhalation

Exposure to vapor may cause irritation of the eyes, nose, and respiratory tract. May cause nausea. May cause headaches. Extensive and prolonged contact with skin may cause confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma.

Ingestion

Ingestion may cause weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma.

Skin Contact

Minimal hazard by skin contact with liquid or vapor. This material may be absorbed through the skin. High dermal doses (most likely achieved from exposure to undiluted liquid) may cause weakness, headache and nausea. Extensive and prolonged contact with skin may cause confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma.

Irritation
Skin

Repeated or prolonged contact may cause skin irritation.

Eye

Moderate to severe eye irritant.

Sensitization
Did not cause sensitization on laboratory animals.

Target Organ Effects
Skin irritant. Eye irritant. Respiratory system. Nervous system.

Repeated Dose Toxicity

Repeated Dose Toxicity
The common laboratory species of rat, mice and rabbits are not good surrogates for predicting human toxicity for EGBE due to the fact that while human red blood cells are resistant to hemolysis from EGBE exposure, the erythrocytes of rats, mice and rabbits are very sensitive to EGBE exposure. Repeated exposure to EGBE at 125 ppm by inhalation caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Inhalation exposure to EGBE at or above 32 ppm caused degeneration of the nasal epithelium. Repeated oral administration of EGBE at doses of 222 mg/kg bwt, caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Repeated dermal exposure to EGBE at 180 mg/kg bwt caused injury to red blood cells. Minimal risk to human health after prolonged exposure.

Reproductive Effects
No adverse effect on reproductive performance was observed in male and female mice exposed to EGBE in drinking water at a 700 mg/kg bwt/day over two generations. A slight reduction in pup body weights and decreased maternal water consumption was observed in mice exposed to 700 mg/kg bwt/day EGBE. Dose levels of 1300 mg/kg/day and higher caused significant parental toxicity (including mortality) and a decreased number of litters.

Developmental Effects
EGBE is not teratogenic in rats or rabbits exposed by inhalation during organogenesis at concentrations up to 200 ppm. Maternal toxicity and minimal fetotoxicity occurred at or above 100 ppm. No maternal or developmental toxicity was observed in rabbits that received approximately 2100 mg/kg bwt/day EGBE by the dermal route of exposure during organogenesis.

Genetic Toxicity
Animal testing did not show any mutagenic effects. No evidence of mutagenic activity in standard bacterial and mammalian test systems in vitro. No increase in micronuclei in rodents after in vivo exposure.

Carcinogenicity
Long-term exposure via inhalation at concentrations up to 125 ppm caused an increase in the incidence of liver tumors in male mice and forestomach tumors in female mice. A slight increase in adrenal tumors was observed in female rats. The NTP has determined that EGBE displays some evidence of carcinogenicity in mice, and equivocal evidence of carcinogenicity in female rats. The International Agency for Research on Cancer (IARC) has evaluated this material as an IARC Group 3 not classifiable as to carcinogenicity in humans, based on limited data in animals and inadequate data in humans.

- *Ethylene glycol 107-21-1*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	rat	>183 PPM	8 HOURS
LD50 (Oral)	rat	>5000 MG/KG BWT	
LD50 (Skin)	rabbit	>5000 MG/KG BWT	

Acute Toxicity - Effects
Inhalation

This substance has a low order of acute toxicity by the inhalation route. High aerosol concentrations may cause respiratory irritation.

Ingestion

This substance is of low acute toxicity when administered orally. However, accidental or intentional acute ingestions in humans have caused poisoning and death. Ingestion may cause CNS depression; damage to the gastrointestinal tract, lungs, liver, brain, and kidneys; metabolic acidosis; and hyperkalaemia and hypercalcaemia. Persistent neurological effects include facial paralysis, slurred speech, loss of motor skills, and impaired vision. Death generally occurs from renal insufficiency.

Skin Contact

The substance is poorly absorbed through skin.

Irritation
Skin

Contact may cause mild skin irritation.

Eye

This material is expected to be a mild eye irritant.

Sensitization
Not expected to be a sensitizer.

Target Organ Effects
Kidneys. Gastrointestinal tract. Liver. Lung. Respiratory system. central nervous system (CNS)

Repeated Dose Toxicity
This substance is of low to moderate toxicity following repeated exposures. The kidney is the primary target organ for toxicity. Renal toxicity is generally accompanied by oxaluria and accumulation of calcium and oxylate crystals. Effects are more pronounced in male rodents.

Reproductive Effects
May cause toxicity to reproduction following repeated doses at generally high exposure concentrations based on animal test data. Selective reproductive toxicant to mice, but not rats. In mice reproductive effects were observed at dose levels higher than those causing developmental toxicity in mice or renal toxicity in rats.

Developmental Effects
May be toxic to embryo/fetal development and teratogenic at high exposure levels based on animal test data.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Ethylene glycol was not carcinogenic in two year studies in rats and mice. This material is not classified as a carcinogen. Not listed by IARC, NTP, OSHA or EPA.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

See component summary.

Environmental Fate and Pathway

See component summary.

COMPONENT INFORMATION

- *2-Butoxyethanol 111-76-2*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOURS Lepomis macrochirus 1,490 mg/l

LC50 / 96 HOURS Pimephales promelas 2,137 mg/l

LC50 / 24 HOURS Carassius auratus 1,650 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
LC50 / 48 HOURS Crangon crangon (shrimp) 775 mg/l

LC50 / 48 HOURS Daphnia magna. 835 mg/l

Summary: This material is not harmful or toxic to aquatic invertebrates.

Toxicity to aquatic plants
EC0 / 192 HOURS Microcystis auruginosa 35 mg/l

LOEC / 168 HOURS Scenedesmus quadricauda (Green algae) 900 mg/l

LOEC / 168 HOURS Selenastrum capricornutum 250 mg/l

Summary: This material is harmful to algae or higher aquatic plants.

Toxicity to microorganisms
EC0 / 16 HOURS Pseudomonas putida 700 mg/l

Summary: This material is not toxic or harmful to bacteria.

Chronic toxicity to fish
LC50 / 7 d Poecilia retiaculata (guppy) 983 mg/l

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Environmental Fate and Pathway

In air, the estimated photodegradation half-life of EGBE ranges from 16 to 27.5 hours. Does not undergo hydrolysis.

Mobility
Transport between environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistance and Degradability
Stability in Water: In water, the volatilization half-life of EGBE from a model river and lake is estimated to be 25 days and 185 days, respectively. The estimated half-life in groundwater ranging from 14 days to 8 weeks.

Stability in Soil: In soil, the estimated half-life of EGBE ranges from 7 days to 4 weeks.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: Low potential for bioaccumulation. BCF = 3.0 (estimated).

- *Ethylene glycol 107-21-1*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOUR Oncorhynchus mykiss 22,810 mg/l

LC50 / 96 HOUR Pimephales promelas 49,000 mg/l

Summary: Acute toxicity to fish is very low.

Acute toxicity to aquatic invertebrates
EC50 / 48 HOUR Daphnia magna. 41,000 mg/l

Summary: Low acute toxicity to aquatic invertebrates.

Toxicity to aquatic plants
IC50 / 96 HOURS Selenastrum capricornutum 10,940 mg/l

Summary: Acute toxicity to aquatic plants very low.

Toxicity to microorganisms
Toxicity Threshold / 16 HOURS Pseudomonas putida > 10,000 mg/l

Chronic toxicity to fish
NOEC / 12 DAY Oncorhynchus mykiss 14,692 mg/l
Summary: Low chronic toxicity to fish.

Chronic toxicity to aquatic invertebrates
NOEC / 7 DAY Ceriodaphnia dubia 3,469 mg/l
Summary: Low chronic toxicity to aquatic invertebrates.

Other Adverse Effects
Low toxicity to terrestrial plants

Environmental Fate and Pathway

Mobility
Transport between environmental compartments: Partitioning mainly to water. High mobility in soil pore waters and little volatilization to air.

Persistance and Degradability
Stability in Water: Ethylene glycol is highly soluble in water.

Stability in Soil: Models estimate that Ethylene Glycol will preferentially partition to water versus air or soil. Ethylene glycol biodegrades rapidly in soil, and will not persist in the environment.

Biodegradation: Biodegradable under aerobic conditions. (97% degraded in 28 days); Expected to be hydrolytically stable.

Bioaccumulation: Bioaccumulation potential is expected to be low Leuciscus idus melanotus (golden ide) BCF value=10

Other Adverse Effects
Photodegradation following atmospheric release is not expected to be a significant route of degradation in the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations. Use only licensed transporters and permitted facilities for waste disposal.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
Not regulated by U.S. Department of Transportation (USDOT) when shipped in packages of 119 gallons or less. If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name Combustible liquid, n.o.s. (ETHYLENE GLYCOL MONOBUTYL ETHER)

ID No. NA1993
Hazard Class Combustible Liquid
PG III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact product.safety@lyondellbasell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

Component	TPQ	RQ
Ethylene glycol		5000 lbs

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.
Fire Hazard.

SARA 313

This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component	Reporting Threshold
2-Butoxyethanol	1.0%
Ethylene glycol	1.0%

State Reporting

This product contains no known chemicals regulated by California's Proposition 65.

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

2-Butoxyethanol	111-76-2
Ethylene glycol	107-21-1

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

2-Butoxyethanol	111-76-2
Ethylene glycol	107-21-1

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

2-Butoxyethanol	111-76-2
Ethylene glycol	107-21-1

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 15 Date of Revision: February 2 2009

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

< end of document >

EQUISTAR

Material Safety Data Sheet

MSDS No.: 3378
Variant: U.S.A.-EN
Version No: 1.0
Validation Date: 12/23/2004

(3)

GLYCOL ETHER DB ACETATE

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DB ACETATE

Product Number: 000000000000005021

Chemical Family: Glycol Ethers

CAS Number: 124-17-4

Chemical Name: 2-(2-butoxyethoxy)ethanol acetate

Synonyms: Diethylene Glycol Monobutyl Ether Acetate; Butoxyethoxy Ether Acetate; Diglycolmonobutyl ether acetate

Manufacturer
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%*		Risk	Symbol
2-(2-butoxyethoxy)ethanol acetate	124-17-4		98.0	<= 99.5	None	None
Diethylene glycol monobutyl ether	112-34-5	203-961-6		<= 1.5	R36	Xi

* Concentration of gaseous products or materials is given in Mole %

Compositions given are typical values not specifications.

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

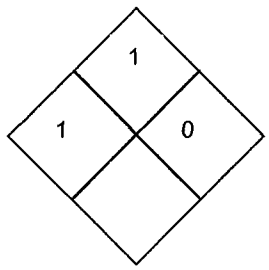
Signal Word
WARNING!

Hazards
May cause irritation by all routes of exposure.

LYONDELL

GLYCOL ETHER DB ACETATE

NFPA®



HMIS®

Health	1
Flammability	1
Reactivity	0

Physical State
Liquid.

Color
Clear

Odor
Mild aromatic.

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Skin. Eye Inhalation

Signs and Symptoms of Acute Exposure
See component summary.

- *2-(2-butoxyethoxy)ethanol acetate 124-17-4*

Eye contact causes slight to moderate irritation/injury. Skin contact may cause slight irritation. In a severe overexposure toxic amounts may be absorbed causing CNS depression. Mist or vapors may cause irritation of the upper respiratory tract. Ingestion may cause CNS depression, gastrointestinal disturbances.

- *Diethylene glycol monobutyl ether 112-34-5*

Moderate eye irritant. Effects of eye irritation are reversible. Contact may cause mild skin irritation. Not expected to be a sensitizer. Not a skin absorption hazard.

Skin
Non-irritating to the skin. May be absorbed through skin, although not expected to produce toxicity by this route.

Inhalation
The low volatility of this product suggests that exposure due to inhalation is unlikely.

Eye
Mild eye irritant, can cause conjunctivitis, and/or corneal opacity.

Ingestion
May cause irritation of the gastrointestinal tract.

Chronic Health Effects
See component summary.

- *2-(2-butoxyethoxy)ethanol acetate 124-17-4*

Repeated ingestion may lead to gastrointestinal disturbance.

- *Diethylene glycol monobutyl ether 112-34-5*

May cause dermatitis by defatting the skin from prolonged or repeated contact.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: central nervous system (CNS) lungs kidney

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Get medical attention immediately.

Eye
Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Ingestion
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Have patient drink several glasses of water then induce vomiting by having patient tickle back of throat with finger.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
OSHA/NFPA Class IIIB combustible liquid.

Flash Point:
116 °C (240.8 °F) Pensky-Martens

Auto-Ignition Temperature
200 °C (392 °F)

Lower Flammable Limit
0.8 vol%

Upper Flammable Limit
5.0 vol%

Extinguishing Media

Suitable: SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or foam. DO NOT use straight streams Water may be ineffective, but should be used to keep fire-exposed containers cool

Protection of Firefighters

Protective Equipment/Clothing: Wear a NIOSH approved respirator following manufacturer's recommendations, where airborne contaminants may occur.

Fire Fighting Guidance: Avoid sparks, heat, and open flame. Individuals should perform only those fire-fighting procedures for which they have been trained. Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products. Cool tanks and containers exposed to fire with water.

Hazardous Combustion Products: Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not eat, drink or smoke in areas where this material is used. After handling, always wash hands thoroughly with soap and water. Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection
Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact.

Occupational Exposure Limits

Component Name	Source / Date	Value	Type	Notation
Diethylene glycol monobutyl ether	US (ACGIH) / 2003	N/L		
	US (OSHA) / 2003	N/L		

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid. Clear

Odor: Mild aromatic.

Odor Threshold: No value available.

pH: 5 - 6

Boiling Point/Boiling Range: 242 °C (467.6 °F)

Freezing Point/Melting Point: -36 °C (-32.8 °F)

Flash Point: 116 °C (240.8 °F) Pensky-Martens

Auto-ignition: 200 °C (392 °F)

Flammability: OSHA/NFPA Class IIIB combustible liquid.

Lower Flammable Limit: 0.8 vol%

Upper Flammable Limit: 5.0 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.01 mm Hg @ 20 °C (68 °F)

Evaporation Rate: <0.0.1 (butyl acetate = 1)

Relative Density: 0.985 @ 20 °C (68 °F) (Air = 1.0)

Relative Vapor Density: 7.05

Viscosity: No Data Available.

Solubility (Water): 6.5 % (by wt.)

Partition Coefficient (Kow): Specific data not available.

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon oxides (CO, CO2)

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
Does not react with water or common materials. May form peroxides in the presence of air.

GLYCOL ETHER DB ACETATE

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
This substance appears to be of low toxicity, except for possible mild irritant effects in humans. A high dose may produce central nervous system depression, but there are no reports of adverse health effects from occupational exposure. At the time of this review, no studies were found on the possible carcinogenic activity of this material in humans or experimental animals.

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	6.9 - 11.9 G/KG
LD50 (Skin)	Rabbit	5.4 - 14.9

COMPONENT INFORMATION

- *2-(2-butoxyethoxy)ethanol acetate 124-17-4*

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	6.9 - 11.9 G/KG
LD50 (Skin)	Rabbit	5.4 - 14.9

- *Diethylene glycol monobutyl ether 112-34-5*

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	5080 MG/KG
	Mouse	2406 MG/KG
LD50 (Skin)	Rabbit	2764 MG/KG

Irritation
Skin This substance is a mild skin irritant.

Eye Moderate eye irritant.

Target Organ Effects
Eye.

Reproductive Effects
In vivo animal studies show no adverse reproductive efects.

Developmental Effects
Results from animal studies demonstrate that this material is not a teratogen or toxic to the developing embyro or fetus.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Not listed by IARC, NTP, or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

GLYCOL ETHER DB ACETATE

PRODUCT INFORMATION

Ecotoxicity

This material is expected to have low toxicity to aquatic species. However, due caution should be exercised to prevent the accidental release of this material to the environment.

Environmental Fate and Pathway

This material will biodegrade relatively rapidly in both soil and water, and will not persist in the environment. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems.

Persistance and Degradability
Bioaccumulation: This material is highly soluble in water and should not bioaccumulate in aquatic or terrestrial organisms.

COMPONENT INFORMATION

- *2-(2-butoxyethoxy)ethanol acetate 124-17-4*

Ecotoxicity

Environmental Fate and Pathway

- *Diethylene glycol monobutyl ether 112-34-5*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOUR silverside minnow. 2,000 mg/l

LC50 / 96 HOUR bluegill. 1,300 mg/l

Summary: This material is not classified as harmful or toxic to fish.

Acute toxicity to aquatic invertebrates

Summary: No Data Available.

Toxicity to aquatic plants

Summary: No Data Available.

Environmental Fate and Pathway

Expected to have high mobility in soils. It is water soluble and is expected to have low volatility. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability

GLYCOL ETHER DB ACETATE

Stability in Soil: The Koc value suggests that this compound would be highly mobile if released onto soil and would not adsorb to suspended solids or sediments.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: BCF < 5 This material is not expected to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name GLYCOL ETHERS, NOT ELSEWHERE CLASSIFIED

SECTION 15: REGULATORY INFORMATION

Regulatory Status

Country	Inventory		
Australia	AICS	X	**X = All components are included or are otherwise exempt from inclusion on this inventory.**
Canada	DSL	X	
Canada	NDSL		
China	IECS	X	
European Union	EINECS	X	
European Union	ELINCS		
European Union	NLP		**C = Contact Lyondell/Equistar by e-mail at product.safety@lyondell.com or product.safety@equistarchem.com for additional information.**
Japan	ENCS	X	
Korea	ECL	X	
Philippines	PICCS	X	
United States	TSCA	X	

All components of this product are listed or are exempt from listing on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate/Health

GLYCOL ETHER DB ACETATE

SARA 313

This material contains the following chemicals with known CAS numbers subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component	Reporting Threshold

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 4 14 15

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg

Language Translations
The information presented in this document has been translated from English by a vendor Lyondell believes to be reliable. Lyondell and its vendor have made a good-faith effort to verify the accuracy of the translation, but assume no responsibility for any errors that may have occurred. Please refer to our web sites (www.lyondell.com and www.equistarchem.com) for the original document written in English.

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EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3370
Variant: U.S.A.-EN
Version No: 1.5
Validation Date: 08/01/2008

GLYCOL ETHER DB

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DB

Product Number: 000000000000005047

Chemical Family: Glycol Ethers

CAS Number: 112-34-5

Chemical Name: 2-(2-Butoxyethoxy) ethanol

Synonyms: diethylene glycol monobutyl ether; butoxyethoxy ethanol; butyl carbitol

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

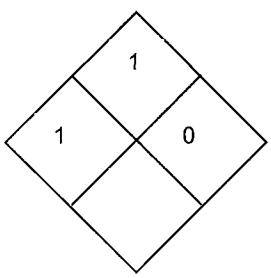
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
May cause irritation to skin, eyes, and respiratory tract. May cause liver and/or kidney damage. Inhalation of vapors may cause central nervous system depression. May cause blood abnormalities.

NFPA®



HMIS®

Health	1
Flammability	1
Physical Hazard	0

Physical State
liquid

Color
Clear

Odor
Faint butyl odor

LYONDELL

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin. Ingestion.

Signs and Symptoms of Acute Exposure
See component summary.

- *Diethylene glycol monobutyl ether 112-34-5*

Moderate eye irritant. Effects of eye irritation are reversible. Contact may cause mild skin irritation. Not expected to be a sensitizer. Not a skin absorption hazard.

- *2-Butoxyethanol 111-76-2*

May be irritating to the eyes, skin, and respiratory system. Exposure could cause central nervous system depression and liver and kidney damage. Severe over-exposure may cause red blood cell damage.

Skin
May cause slight irritation if left in contact with skin.

Inhalation
Vapors or mists from this material can irritate the nose, throat and lungs, and cause signs and symptoms of central nervous system (CNS) depression, depending on the concentration and duration of exposure.

Eye
Causes noticeable pain, severe irriation and transient corneal injury.

Ingestion
May cause CNS depression, gastrointestinal tract, liver and kidney damage.

Chronic Health Effects
See component summary.

- *Diethylene glycol monobutyl ether 112-34-5*

May cause dermatitis by defatting the skin from prolonged or repeated contact.

- *2-Butoxyethanol 111-76-2*

May cause dermatitis by defatting the skin from prolonged or repeated contact. This substance may have effects on the haematopoietic system, resulting in blood disorders. Animal carcinogen.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: central nervous system (CNS) skin eyes liver kidney and/or blood

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
Diethylene glycol monobutyl ether	112-34-5	203-961-6	>= 99.0
2-Butoxyethanol	111-76-2	203-905-0	<= 0.5

Compositions given are typical values not specifications.

See section 16 for full text of risk phrases.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
OSHA/NFPA Class IIIB combustible liquid.

Flash Point
106 °C (222.8 °F) closed cup

Auto-Ignition Temperature
228 °C (442.4 °F)

Lower Flammable Limit
0.85 vol%

Upper Flammable Limit
24.6 vol%

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing:
Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Fire Fighting Guidance:

Fire Fighting Guidance:
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present. Alternately, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Use chemical resistant gloves appropriate to conditions of use. Appropriate protective clothing should be worn to prevent skin contact.

Eye
Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and

Additional Remarks
the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
2-Butoxyethanol	US (ACGIH)	TWA	20 ppm	None.
	US (OSHA)	TWA	50 ppm 240 mg/m3	Skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Clear

Odor: Faint butyl odor

Odor Threshold: No value available.

pH: 6 - 7.5

Boiling Point/Boiling Range: 230 °C (446 °F) @ 760 mm Hg

Freezing Point/Melting Point: -68 °C (-90.4 °F)

Flash Point: 106 °C (222.8 °F) closed cup

Auto-ignition: 228 °C (442.4 °F)

Flammability: OSHA/NFPA Class IIIB combustible liquid.

Lower Flammable Limit: 0.85 vol%

Upper Flammable Limit: 24.6 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.06 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.01 (butyl acetate = 1)

Relative Density: 0.95 @ 20 °C (68 °F)

Relative Vapor Density: 5.6 (Air = 1.0)

Viscosity: 6.5 mPa.s

Solubility (Water): Complete

Partition Coefficient (Kow): Log Kow = 0.5 Estimated

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
Does not react with water or common materials. May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
See component summary.

COMPONENT INFORMATION

- *Diethylene glycol monobutyl ether 112-34-5*

Acute Toxicity - Lethal Doses

LD50 (Oral)	rat	5080 MG/KG
	Mouse	2406 MG/KG
LD50 (Skin)	Rabbit	2764 MG/KG

Irritation
Skin

This substance is a mild skin irritant.

Eye

Moderate eye irritant.

Target Organ Effects
Eye.

Reproductive Effects

Reproductive Effects
In vivo animal studies show no adverse reproductive efects.

Developmental Effects
Results from animal studies demonstrate that this material is not a teratogen or toxic to the developing embyro or fetus.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Not listed by IARC, NTP, OSHA or EPA.

- *2-Butoxyethanol 111-76-2*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	rat	~ 450 PPM	4 HOURS
LD50 (Oral)	rat	530 - 3000 MG/KG BWT	
	Rabbit.	320 - 370 MG/KG BWT	
LD50 (Skin)	Rabbit.	612 MG/KG BWT	

Acute Toxicity - Effects
Inhalation

Exposure to vapor may cause irritation of the eyes, nose, and respiratory tract. May cause nausea. May cause headaches. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Ingestion

Ingestion may cause weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Skin Contact

Moderate hazard by skin contact with liquid or vapor. May be absorbed through the skin and produce toxic effects such as CNS depression. High dermal doses (most likely achieved from exposure to undiluted liquid) may cause red blood cell damage with weakness, headache and nausea. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Irritation
Skin

Repeated or prolonged contact may cause skin irritation.

Eye

Moderate to severe eye irritant.

Sensitization
Not expected to cause sensitization by skin contact.

Target Organ Effects
Damages blood. Damages the lung. Damages the liver. Damages the kidney. Skin irritant. Eye irritant.

Repeated Dose Toxicity
Repeated exposure to EGBE at 125 ppm by inhalation caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Inhalation exposure to EGBE at or above 32 ppm caused degeneration of the nasal epithelium. Repeated oral administration of EGBE at doses of 222 mg/kg bwt, caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Repeated dermal exposure to EGBE at 180 mg/kg bwt caused injury to red blood cells. Moderate risk to health after prolonged exposure.

Reproductive Effects
No adverse effect on reproductive performance was observed in male and female mice exposed to EGBE in drinking

Reproductive Effects
water at a 700 mg/kg bwt/day over two generations. A slight reduction in pup body weights and decreased maternal water consumption was observed in mice exposed to 700 mg/kg bwt/day EGBE. Dose levels of 1300 mg/kg/day and higher caused significant parental toxicity (including mortality) and a decreased number of litters.

Developmental Effects
EGBE is not teratogenic in rats or rabbits exposed by inhalation during organogenesis at concentrations up to 200 ppm. Maternal toxicity and minimal fetotoxicity occurred at or above 100 ppm. No maternal or developmental toxicity was observed in rabbits that received approximately 2100 mg/kg bwt/day EGBE by the dermal route of exposure during organogenesis.

Genetic Toxicity
No evidence of mutagenic activity in standard bacterial and mammalian test systems in vitro. No increase in micronuclei in rodents after in vivo exposure.

Carcinogenicity
Long-term exposure via inhalation at concentrations up to 125 ppm caused an increase in the incidence of liver tumors in male mice and forestomach tumors in female mice. A slight increase in adrenal tumors was observed in female rats. The NTP has determined that EGBE displays some evidence of carcinogenicity in mice, and equivocal evidence of carcinogenicity in female rats. The International Agency for Research on Cancer (IARC) has evaluated this material as an IARC Group 3 not classifiable as to carcinogenicity in humans, based on limited data in animals and inadequate data in humans.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

There is very limited information available on this material. This material, and structurally similar materials, have exhibited low toxicity in aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

This material should biodegrade after an acclimation period, and it is is not expected to be environmentally persistant. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems.

Persistance and Degradability
Bioaccumulation: This material is highly soluble in water and should not bioaccumulate in aquatic or terrestrial organisms.

COMPONENT INFORMATION

- *Diethylene glycol monobutyl ether 112-34-5*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOUR silverside minnow. 2,000 mg/l

LC50 / 96 HOUR bluegill. 1,300 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates

Summary: No Data Available.

Toxicity to aquatic plants

Summary: No Data Available.

Environmental Fate and Pathway

Expected to have high mobility in soils. It is water soluble and is expected to have low volatility. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability
Stability in Soil: The Koc value suggests that this compound would be highly mobile if released onto soil and would not adsorb to suspended solids or sediments.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: 2.0 BCF < 5 This material is not expected to bioaccumulate.

- *2-Butoxyethanol 111-76-2*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOURS bluegill. 1,490 mg/l

LC50 / 96 HOURS fathead minnow 2,137 mg/l

LC50 / 24 HOURS goldfish 1,650 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
LC50 / 48 HOURS Brown shrimp 775 mg/l

LC50 / 48 HOURS waterflea. 835 mg/l

Summary: This material is not harmful or toxic to aquatic invertebrates.

Toxicity to aquatic plants
EC0 / 192 HOURS blue green algae. 35 mg/l

LOEC / 168 HOURS green algae. 900 mg/l

LOEC / 168 HOURS green algae (Selenastrum). 250 mg/l

Summary: This material is harmful to algae or higher aquatic plants.

Toxicity to microorganisms
EC0 / 16 HOURS bacteria. 700 mg/l

Summary: This material is not toxic or harmful to bacteria.

Chronic toxicity to fish
LC50 / 7 d guppy. 983 mg/l

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Environmental Fate and Pathway

In air, the estimated photodegradation half-life of EGBE ranges from 16 to 27.5 hours. Does not undergo hydrolysis.

Mobility
Transport between environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistance and Degradability
Stability in Water: In water, the volatilization half-life of EGBE from a model river and lake is estimated to be 25 days and 185 days, respectively. The estimated half-life in groundwater ranging from 14 days to 8 weeks.

Stability in Soil: In soil, the estimated half-life of EGBE ranges from 7 days to 4 weeks.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: Low potential for bioaccumulation. BCF = 3.0 (estimated).

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name GLYCOL ETHERS, NOT ELSEWHERE CLASSIFIED, NOT REGULATED (DIETHYLENE GLYCOL MONOBUTYL ETHER)

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL

China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact Product.Safety@Lyondell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

This product contains no known chemicals regulated under SARA 302/304.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.

SARA 313

This product contains no known chemicals regulated under SARA 313.

State Reporting

This product contains no known chemicals regulated by California's Proposition 65.

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

2-Butoxyethanol 111-76-2

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

2-Butoxyethanol 111-76-2

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

2-Butoxyethanol 111-76-2

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 15 July 8 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

GLYCOL ETHER DB

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

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EQUISTAR
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Material Safety Data Sheet

MSDS No.: 3382
Variant: U.S.A.-EN
Version No: 1.5
Validation Date: 07/18/2008

GLYCOL ETHER DE

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DE

Product Number: 000000000000005051

Chemical Family: Glycol Ethers

CAS Number: 111-90-0

Chemical Name: 2-(2-ethoxyethoxy) ethanol

Synonyms: Diethylene Glycol Monoethyl Ether; DGEE

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

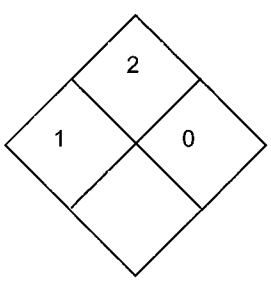
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
Can cause eye and skin irritation. Vapor and mist may cause respiratory tract irritation. Toxic amounts may be inhaled or absorbed through skin and gastrointestinal tract which may cause central nervous system depression, respiratory and gastrointestinal tract and liver injury. May cause liver and/or kidney damage.

NFPA®



HMIS®

Health	*	1
Flammability		2
Physical Hazard		0

Physical State
Viscous liquid.

Color
Colorless.

Odor

Odor
Sweet odor.

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin.

Signs and Symptoms of Acute Exposure
See component summary.

- *Diethylene Glycol Monoethyl Ether 111-90-0*

Moderate eye irritant. Slight skin irritant. May produce symptoms of CNS depression including headache, dizziness, nausea, loss of sense of balance, drowsiness, and visual disturbances.

- *2-Ethoxyethanol 110-80-5*

Slight eye irritant. Inhalation hazard. Exposure to this material may cause respiratory irritation. This substance may cause effects on the central nervous system, liver and kidneys. This material may be absorbed through the skin. Not a skin irritant. Not expected to be a sensitizer. Overexposure may cause Central Nervous System Depression, reproductive toxicity, and developmental effects.

- *Ethylene glycol 107-21-1*

Ingestion hazard. Ingestion may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Cardiopulmonary effects including tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome, as well as, renal failure are also possible. May also produce a local irritation effect on the digestive system, and cause pain and bleeding. Irritation of the eyes and respiratory system. Effects of eye irritation are reversible. High aerosol concentrations may cause respiratory irritation. Mildly irritating to the skin but not a skin sensitizer. Not a skin absorption hazard.

Skin
Brief skin contact may cause slight irritation. Prolonged contact may cause redness and swelling. This material may be absorbed through the skin.

Inhalation
Due to low vapor pressure, significant exposure by inhalation appears unlikely. However, exposure to high concentrations of mist, aerosol, or vapors at elevated temperatures may cause irritation, coughing and discomfort in the nose, throat, and chest.

Eye
Eye contact may cause conjunctival irritation and slight transitory irritation of the cornea.

Ingestion
May cause CNS depression, gastrointestinal tract, liver and kidney damage.

Chronic Health Effects
See component summary.

- *Diethylene Glycol Monoethyl Ether 111-90-0*

Repeated or prolonged skin contact may cause slight transient irritation. Skin absorption may add significantly to the overall toxic effect. Prolonged or high exposures may cause CNS effects and liver and kidney changes.

- *2-Ethoxyethanol 110-80-5*

Repeated, prolonged, or excessive exposure may result in reproductive and developmental effects, immune system depression, effects in the liver, thymus, kidney, liver, testes, and hematopoietic tissues. Prolonged exposure may affect central nervous system and respiration.

- *Ethylene glycol 107-21-1*

Prolonged or repeated inhalation or ingestion may result in kidney and liver changes. Avoid repeated contact with this material. EGME, related compounds, and metabolites, have been shown to cause birth defects, delayed pregnancy rates, sperm changes, and other reproductive effects. Observe the American Conference of Governmental Industrial Hygiene

(ACGIH) Threshold Limit Value (TLV) for ethylene glycol.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: eyes skin kidney central nervous system (CNS) and/or reproductive system

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
Diethylene Glycol Monoethyl Ether	111-90-0	203-919-7	>= 99.0
2-Ethoxyethanol	110-80-5	203-804-1	< 0.4
Ethylene glycol	107-21-1	203-473-3	< 0.2

Compositions given are typical values not specifications.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

Note to Physician
Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Treatment of metabolic acidosis, administration of ethanol, and hemodialysis may be indicated.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification

Classification
OSHA/NFPA Class IIIA Combustible Liquid.

Flash Point
91 °C (195.8 °F) (TCC)

Auto-Ignition Temperature
204 °C (399.2 °F)

Lower Flammable Limit
No Data Available.

Upper Flammable Limit
No Data Available.

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing:
Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Fire Fighting Guidance:
Airborne mists from this substance are a moderate fire and explosion hazard. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present. Alternately, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials.

Storage
Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Wear chemical resistant gloves such as rubber, neoprene or vinyl. Additional protective clothing may include disposable coveralls such as TYVEK if conditions warrant.

Eye
Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
2-Ethoxyethanol	US (ACGIH)	TWA	5 ppm	Skin.
	US (OSHA)	TWA	200 ppm 740 mg/m3	Skin.
Ethylene glycol	US (ACGIH)	CEILING	100 mg/m3 aerosol only,	None.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous liquid. Colorless.

Odor: Sweet odor.

Odor Threshold: No value available.

pH: Not applicable.

Boiling Point/Boiling Range: 198 °C (388.4 °F)

Freezing Point/Melting Point: -76 °C (-104.8 °F)

Flash Point: 91 °C (195.8 °F) (TCC)

Auto-ignition: 204 °C (399.2 °F)

Flammability: OSHA/NFPA Class IIIA Combustible Liquid.

Lower Flammable Limit: No Data Available.

Upper Flammable Limit: No Data Available.

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.1 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.013 (butyl acetate = 1)

Relative Density: 0.991 @ 20 °C (68 °F) (Water = 1)

Relative Vapor Density: 4.62 (Air = 1.0)

Viscosity: 3.85 mPa.s

Solubility (Water): 100%

Partition Coefficient (Kow): Log Kow = -0.54

Additional Physical and Chemical Properties: Hygroscopic. Additional properties may be listed in Sections 2 and 5.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
No additional toxicology information is available for this material. (See Component Toxicity Information).

COMPONENT INFORMATION

- *Diethylene Glycol Monoethyl Ether 111-90-0*

Acute Toxicity - Lethal Doses

LD50 (Oral)	Rat	5400 MG/KG
LD50 (Skin)	Rabbit	9.0 G/KG

Irritation
Skin

Slight skin irritant.

Eye

Moderate eye irritant.

Repeated Dose Toxicity
In a two year drinking water study with rats and mice, no adverse effects were observed at 1% and 5%, respectively.

Carcinogenicity
Not listed by IARC, NTP, OSHA or EPA.

- *2-Ethoxyethanol 110-80-5*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	Guinea Pig	3000 PPM	4 HOURS
LD50 (Oral)	Rat	2800 MG/KG	
LD50 (Skin)	Rabbit	3.35 G/KG	

Irritation
Eye

Slight eye irritant.

Repeated Dose Toxicity
Repeated oral or inhalation exposures can cause effects in the testes, thymus, kidneys, brain, and hematopoietic tissues.

Reproductive Effects
Acute or repeated oral, dermal, or inhalation exposures can cause reproductive toxicity and developmental effects.

- *Ethylene glycol 107-21-1*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	Rat	10,876 MG/KG
LD50 (Oral)	Rat	5890 - 13,400 MG/KG BWT

	Mouse	5500 MG/KG
NOAEL	Rabbit	> 3549 MG/KG BWT (SKIN)

Irritation
Skin

May be irritating to the skin. Not expected to be a sensitizer. No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin absorption exposure.

Eye

May cause minor eye irritation. Effects of eye irritation are reversible.

Sensitization
Not expected to be a sensitizer.

Target Organ Effects
Liver. Kidneys.

Repeated Dose Toxicity
If exposures are sufficiently high to cause accumulation of calcium oxalate crystals, kidney pathology may occur. In male rats, crystal nephropathy has been seen after dietary administration of 500 mg/kg/day bwt for 16 weeks, whereas no effects were seen in rats that ingested 200 mg/kg/day bwt for 2 years or in several animal species that inhaled 12 mg/m3 for 3 months . Human exposures at occupational relevant concentrations are unlikely to cause crystal nephropathy.

Reproductive Effects
No evidence of adverse effects on reproductive organs or fertility in rats and rabbits have occurred from ethylene glycol exposure. Mice exposed to doses considerably higher than those associated with developmental effects or kidney effects in rats exhibited reduced number of litters and smaller litters. No reproductive effects expected from human exposures.

Developmental Effects
Doses of ethylene glycol that result in high levels of the metabolite glycolic acid induce developmental/teratogenic effects in rats and mice, although at doses greater than those associated with kidney effects in rats. Human exposure is not expected to generate sufficient levels of glycolic acid; therefore, no developmental effects are expected in humans.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Ethylene glycol was not carcinogenic in two year studies in rats and mice. This material is not classified as a carcinogen. Not listed by IARC, NTP, OSHA or EPA.

Other Information
Human acute toxicity has three recognized stages: Stage 1. (0.5 to 12 hours post ingestion) may include inebriation, nausea and vomiting, metabolic acidosis, and CNS depression. Stage 2. (12-24 hours) cardiopulmonary effects include tachycardia, hypertension, severe metabolic acidosis with hyperventilation, hypoxia, congestive heart failure and adult respiratory distress syndrome. Stage 3. (24-72 hours) renal failure. Ethylene glycol may also produce a local irritation effect on the digestive system, and cause pain and bleeding.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

This material is highly soluble in water. Limited toxicity tests and models indicate this material should exhibit low toxicity to aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material. See component summary.

Environmental Fate and Pathway

This material will biodegrade relatively rapidly in both soil and water, and will not persist in the environment. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems. See component summary.

COMPONENT INFORMATION

- *Diethylene Glycol Monoethyl Ether 111-90-0*

Ecotoxicity

This material is expected to have low toxicity to aquatic species. However, due caution should be exercised to prevent the accidental release of this material to the environment.

Acute toxicity to fish
LC50 / 24 HOUR goldfish > 5,000 mg/l

LC50 / 96 HOUR fathead minnow 26,500 mg/l

Environmental Fate and Pathway

Expected to have high mobility in soils. Volatilization from dry soil surfaces is expected. While this material may evaporate into the air from dry soil, it is unlikely to evaporate from moist soil or water. This material is expected to exist solely as a vapor in the ambient atmosphere. The vapor-phase of this material is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals and ozone.

Persistance and Degradability
Biodegradation: Incubation of diethylene glycol monoethyl ether for 5, 10, and 20 days without an acclimation period resulted in theorectical BOD values or 5, 31, and 48%, respecitively. This material is expected to be readily biodegradable.
Bioaccumulation: BCF = 0.2 This material is not expected to bioaccumulate.

- *2-Ethoxyethanol 110-80-5*

Ecotoxicity

This material is not harmful or toxic to fish.

Acute toxicity to fish
LC50 / 24 HOUR goldfish > 5,000 mg/l

LC50 / 96 HOUR bluegill. > 10,000 mg/l

Environmental Fate and Pathway

Expected to have high mobility in soils. Volatilization from dry soil surfaces is expected. Not likely to adsorb to suspended solids and sediment in water. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals.

Persistance and Degradability
Biodegradation: This material is expected to be readily biodegradable.
Bioaccumulation: 0.34 This material is not expected to bioaccumulate.

- *Ethylene glycol 107-21-1*

Ecotoxicity

Laboratory toxicity tests have indicated that EG is not significantly toxic to fish and aquatic invertebrates, although amphibians such as toads and frogs may be more sensitive. Wildlife species are more susceptible to ethylene glycol since mammals and birds do not readily metabolize this material. The odor and flavor of EG may attract some wildlife and cause them to consume spilled material.

Acute toxicity to fish
LC50 / 96 HOUR rainbow trout. 22,810 mg/l

LC50 / 96 HOUR fathead minnow 49,000 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
EC50 / 48 HOUR Daphnia magna. 41,000 mg/l

EC50 / 48 HOUR daphnia 10,000 mg/l

Summary: This material is not harmful or toxic to aquatic invertebrates.

Toxicity to aquatic plants
Toxicity Threshold / 7 DAY blue green algae. 2,000 mg/l

Summary: This material is not harmful or toxic to algae or higher aquatic plants.

Toxicity to microorganisms
Toxicity Threshold / 16 HOUR bacteria. > 10,000 mg/l

Chronic toxicity to fish
LC50 / 12 DAY rainbow trout. 20,403 mg/l

Chronic toxicity to aquatic invertebrates
LC50 / 7 DAY daphnia 30,461 mg/l

Environmental Fate and Pathway

Mobile in soil. Not expected to volatilize from surface waters or soils. Not likely to adsorb to suspended solids and sediment in water. Environmental half-life of 0.35 to 24 days in soil, air, surface and ground water. Not expected to undergo hydrolysis. Undergoes photooxidation with hydroxyl radicals in air with a half-life of 8.3 to 83 hours.

Persistance and Degradability
Stability in Water: Ethylene glycol is highly soluble in water.

Stability in Soil: Models estimate that EG will preferentially partition to water versus air or soil. Ethylene glycol biodegrades rapidly in soil and water, and will not persist in the environment.

Biodegradation: Reported biodegradation studies show ethylene glycol with 97% biodegradation after 20 days, and 96% biodegradation after 28 days. Biodegradable under aerobic conditions.

Bioaccumulation: BCF = 0.21 - 0.61 (crawfish) BCF = 10.0 (fish) This material is not expected to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name Combustible liquid, n.o.s. (Diethylene Glycol Monoethyl Ether)

ID No. NA1993
Hazard Class Combustible Liquid
PG III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact Product.Safety@Lyondell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

Component	TPQ	RQ
2-Ethoxyethanol		1000 lbs.
Ethylene glycol		5000 lbs.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.
Fire Hazard.

SARA 313

This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component	Reporting Threshold
2-Ethoxyethanol	1.0%
Ethylene glycol	1.0%

State Reporting

Known to the State of California to cause birth defects.

2-Ethoxyethanol	110-80-5

Known to the State of California to cause reproductive toxicity in males.

2-Ethoxyethanol	110-80-5

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

2-Ethoxyethanol	110-80-5
Ethylene glycol	107-21-1

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

2-Ethoxyethanol	110-80-5
Ethylene glycol	107-21-1

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

2-Ethoxyethanol	110-80-5
Ethylene glycol	107-21-1

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 4 15 July 8 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

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EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3379
Variant: U.S.A.-EN
Version No: 2.1
Validation Date: 08/01/2008

GLYCOL ETHER DM INDUSTRIAL GRADE

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DM INDUSTRIAL GRADE

Product Number: 000000000000005122

Chemical Family: Glycol Ethers

CAS Number: 111-77-3

Chemical Name: 2-(2-methoxyethoxy) ethanol

Synonyms: All Grades includes: Industrial and Jet Fuel Grades

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

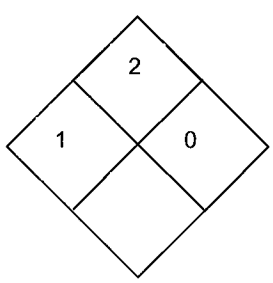
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
Combustible liquid. Eye irritant. Skin irritant. Respiratory tract irritant. CNS depressant.

NFPA®



HMIS®

Health	*	1
Flammability		2
Physical Hazard		0

Physical State
liquid

Color
Clear

Odor

GLYCOL ETHER DM INDUSTRIAL GRADE

Odor
Pleasant. Mild aromatic.

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin. Ingestion.

Signs and Symptoms of Acute Exposure
See component summary.

- *Diethylene glycol monomethyl ether 111-77-3*

May be irritating to the eyes.

- *Ethanol, 2-methoxy 109-86-4*

Overexposure may cause Central Nervous System Depression, reproductive toxicity, and developmental effects. May be irritating to the eyes, skin, and respiratory system. Harmful by inhalation and if swallowed. Skin absorption hazard.

Skin
May be irritating to the skin. Possible systemic toxicity by skin absorption.

Inhalation
Due to low vapor pressure, this mixture is not expected to present an inhalation hazard at ambient temperatures.

Eye
May be irritating to the eyes.

Ingestion
Ingestion would likely cause gastrointestinal tract irritation.

Chronic Health Effects
See component summary.

- *Diethylene glycol monomethyl ether 111-77-3*

Extensive/prolonged or repeated exposure to this material can result in significant absorption. Repeated or prolonged exposure to mists of this material may cause long-term adverse health effects.

- *Ethanol, 2-methoxy 109-86-4*

Repeated, prolonged, or excessive exposure may result in reproductive and developmental effects, immune system depression, effects in the liver, thymus, kidney, liver, testes, and hematopoietic tissues.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: skin and/or eyes Special precautions are nessesary for pregnant women and nursing mothers.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
Diethylene glycol monomethyl ether	111-77-3	203-906-6	99.0 <= 100.0
Ethanol, 2-methoxy	109-86-4	203-713-7	<= 0.1

Compositions given are typical values not specifications.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately flush affected area with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, get medical attention.

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
Combustible liquid.

Flash Point
83.9 °C (183.02 °F) closed cup

Auto-Ignition Temperature
192.85 °C (379.13 °F)

Lower Flammable Limit
1.38 vol%

Upper Flammable Limit
22.7 vol%

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing:
Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Fire Fighting Guidance:
Avoid sparks, heat, and open flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact.

Eye

Eye
Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
Ethanol, 2-methoxy	US (ACGIH)	TWA	0.1 ppm	Skin.
	US (OSHA)	TWA	25 ppm 80 mg/m3	Skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Clear

Odor: Pleasant. Mild aromatic.

Odor Threshold: No value available.

pH: Not applicable.

Boiling Point/Boiling Range: 193.6 °C (380.48 °F)

Freezing Point/Melting Point: -65 °C (-85 °F) Melting point.

Flash Point: 83.9 °C (183.02 °F) closed cup

Auto-ignition: 192.85 °C (379.13 °F)

Flammability: Combustible liquid.

Lower Flammable Limit: 1.38 vol%

Upper Flammable Limit: 22.7 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.2 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.015 (butyl acetate = 1)

Relative Density: 1.025 @ 20 °C (68 °F)

Relative Vapor Density: 4.1 (Air = 1.0)

GLYCOL ETHER DM INDUSTRIAL GRADE

Viscosity: ~ 3.89 mPa.s @ 20 °C (68 °F)

Solubility (Water): 100%

Partition Coefficient (Kow): -1.18 (estimated)

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions. May form peroxides if in contact with air for long periods of time.

Conditions to Avoid
Heat, sparks, open flames and strong oxidizing conditions.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon oxides (CO, CO2)

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
No additional toxicology information is available for this material. (See Component Toxicity Information).

COMPONENT INFORMATION

- *Diethylene glycol monomethyl ether 111-77-3*

Acute Toxicity - Lethal Doses

	rat	> 2 GM/M3	1 HOURS
LD50 (Oral)	rat	5,500 MG/KG	
	Rabbit	7,190 MG/KG	
	Guinea Pig	4,160 MG/KG	
LD50 (Skin)	Rabbit	650 MG/KG	

Irritation

Skin

May be irritating to the skin.

Eye

This product is expected to be an eye irritant.

Target Organ Effects
Damages internal organs.

Reproductive Effects
Laboratory test indicate high doses may cause adverse reproductive effects in rats and mice.

- *Ethanol, 2-methoxy 109-86-4*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	rat	1480 PPM	7 HOURS
LD50 (Oral)	rat	2460 MG/KG	
LD50 (Skin)	Rabbit	1290 MG/KG	

Irritation
Skin

Slight skin irritant.

Eye

Slight eye irritant.

Repeated Dose Toxicity
Repeated oral or inhalation exposures can cause effects in the testes, thymus, kidneys, brain, and hematopoietic tissues. The lowest NOEL and LOEL's are in rabbits and are 30 and 100 ppm, respectively.

Reproductive Effects
Animal studies indicate the potential for reproductive effects in males. Acute or repeated oral, dermal, or inhalation exposures can cause reproductive toxicity and developmental effects.

Carcinogenicity
Not listed by IARC, NTP, OSHA or EPA.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

This material is highly soluble in water. Limited toxicity tests and models indicate this material should exhibit low toxicity to aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

This material should biodegrade after an acclimation period, and it is is not expected to be environmentally persistant. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems. See component summary.

Persistance and Degradability

Bioaccumulation: This material is highly soluble in water and should not bioaccumulate in aquatic or terrestrial organisms.

COMPONENT INFORMATION

- *Diethylene glycol monomethyl ether 111-77-3*

Ecotoxicity

No data available.

Environmental Fate and Pathway

Expected to have high mobility in soils. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Volatilization from dry soil surfaces is expected. While this material may evaporate into the air from dry soil, it is unlikely to evaporate from moist soil or water.

Persistance and Degradability
Biodegradation: Biodegradable under aerobic conditions.
Bioaccumulation: BCF < 1.0 This material is not expected to bioaccumulate.

- *Ethanol, 2-methoxy 109-86-4*

Ecotoxicity

This material is highly soluble in water. Limited toxicity tests and models indicate this material should exhibit low toxicity to aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

Expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. It is expected to be poorly adsorbed onto soils or sediments. Volatilization from dry soil surfaces is expected. It will leach into soil. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability
Biodegradation: This material is expected to be biodegradable.
Bioaccumulation: Because of this material's high solubility and rapid biodegradability, it is unlikely that bioaccumulation will occur in aquatic or terrestrial systems. Models estimate that this material will preferentially partition to water versus air or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

GLYCOL ETHER DM INDUSTRIAL GRADE

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name Combustible liquid, n.o.s. (Diethylene glycol monomethyl ether)

ID No. NA1993
Hazard Class Combustible Liquid
PG III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact Product.Safety@Lyondell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

This product contains no known chemicals regulated under SARA 302/304.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.

SARA 313

This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component	Reporting Threshold
Ethanol, 2-methoxy	1.0%

State Reporting

Known to the State of California to cause birth defects.

Ethanol, 2-methoxy 109-86-4

GLYCOL ETHER DM INDUSTRIAL GRADE

Known to the State of California to cause reproductive toxicity in males.

Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

Diethylene glycol monomethyl ether	111-77-3
Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

Diethylene glycol monomethyl ether	111-77-3
Ethanol, 2-methoxy	109-86-4

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 15 July 14 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

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EQUISTAR
A Lyondell Company

Material Safety Data Sheet

MSDS No.: 3379
Variant: U.S.A.-EN
Version No: 2.1
Validation Date: 08/01/2008

GLYCOL ETHER DM JET FUEL GRADE

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DM JET FUEL GRADE

Product Number: 000000000000005114

Chemical Family: Glycol Ethers

CAS Number: 111-77-3

Chemical Name: 2-(2-methoxyethoxy) ethanol

Synonyms: All Grades includes: Industrial and Jet Fuel Grades

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

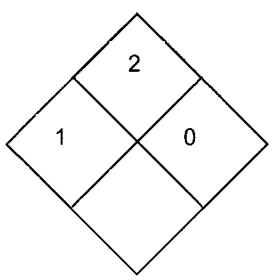
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
Combustible liquid. Eye irritant. Skin irritant. Respiratory tract irritant. CNS depressant.

NFPA®



HMIS®

Health	*	1
Flammability		2
Physical Hazard		0

Physical State
liquid

Color
Clear

Odor

LYONDELL

GLYCOL ETHER DM JET FUEL GRADE

Odor
Pleasant. Mild aromatic.

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin. Ingestion.

Signs and Symptoms of Acute Exposure
See component summary.

- *Diethylene glycol monomethyl ether 111-77-3*

May be irritating to the eyes.

- *Ethanol, 2-methoxy 109-86-4*

Overexposure may cause Central Nervous System Depression, reproductive toxicity, and developmental effects. May be irritating to the eyes, skin, and respiratory system. Harmful by inhalation and if swallowed. Skin absorption hazard.

Skin
May be irritating to the skin. Possible systemic toxicity by skin absorption.

Inhalation
Due to low vapor pressure, this mixture is not expected to present an inhalation hazard at ambient temperatures.

Eye
May be irritating to the eyes.

Ingestion
Ingestion would likely cause gastrointestinal tract irritation.

Chronic Health Effects
See component summary.

- *Diethylene glycol monomethyl ether 111-77-3*

Extensive/prolonged or repeated exposure to this material can result in significant absorption. Repeated or prolonged exposure to mists of this material may cause long-term adverse health effects.

- *Ethanol, 2-methoxy 109-86-4*

Repeated, prolonged, or excessive exposure may result in reproductive and developmental effects, immune system depression, effects in the liver, thymus, kidney, liver, testes, and hematopoietic tissues.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: skin and/or eyes Special precautions are nessesary for pregnant women and nursing mothers.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
Diethylene glycol monomethyl ether	111-77-3	203-906-6	99.0 <= 100.0
Ethanol, 2-methoxy	109-86-4	203-713-7	<= 0.1

Compositions given are typical values not specifications.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately flush affected area with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, get medical attention.

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
Combustible liquid.

Flash Point
83.9 °C (183.02 °F) closed cup

Auto-Ignition Temperature
192.85 °C (379.13 °F)

Lower Flammable Limit
1.38 vol%

Upper Flammable Limit
22.7 vol%

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing:
Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Fire Fighting Guidance:
Avoid sparks, heat, and open flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact.

Eye

Eye
Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
Ethanol, 2-methoxy	US (ACGIH)	TWA	0.1 ppm	Skin.
	US (OSHA)	TWA	25 ppm 80 mg/m3	Skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Clear

Odor: Pleasant. Mild aromatic.

Odor Threshold: No value available.

pH: Not applicable.

Boiling Point/Boiling Range: 193.6 °C (380.48 °F)

Freezing Point/Melting Point: -65 °C (-85 °F) Melting point.

Flash Point: 83.9 °C (183.02 °F) closed cup

Auto-ignition: 192.85 °C (379.13 °F)

Flammability: Combustible liquid.

Lower Flammable Limit: 1.38 vol%

Upper Flammable Limit: 22.7 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.2 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.015 (butyl acetate = 1)

Relative Density: 1.025 @ 20 °C (68 °F)

Relative Vapor Density: 4.1 (Air = 1.0)

GLYCOL ETHER DM JET FUEL GRADE

Viscosity: ~ 3.89 mPa.s @ 20 °C (68 °F)

Solubility (Water): 100%

Partition Coefficient (Kow): -1.18 (estimated)

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions. May form peroxides if in contact with air for long periods of time.

Conditions to Avoid
Heat, sparks, open flames and strong oxidizing conditions.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon oxides (CO, CO2)

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
No additional toxicology information is available for this material. (See Component Toxicity Information).

COMPONENT INFORMATION

- *Diethylene glycol monomethyl ether 111-77-3*

Acute Toxicity - Lethal Doses

	rat	> 2 GM/M3	1 HOURS
LD50 (Oral)	rat	5,500 MG/KG	
	Rabbit	7,190 MG/KG	
	Guinea Pig	4,160 MG/KG	
LD50 (Skin)	Rabbit	650 MG/KG	

Irritation

Skin

May be irritating to the skin.

Eye

This product is expected to be an eye irritant.

Target Organ Effects
Damages internal organs.

Reproductive Effects
Laboratory test indicate high doses may cause adverse reproductive effects in rats and mice.

- *Ethanol, 2-methoxy 109-86-4*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	rat	1480 PPM	7 HOURS
LD50 (Oral)	rat	2460 MG/KG	
LD50 (Skin)	Rabbit	1290 MG/KG	

Irritation
Skin

Slight skin irritant.

Eye

Slight eye irritant.

Repeated Dose Toxicity
Repeated oral or inhalation exposures can cause effects in the testes, thymus, kidneys, brain, and hematopoietic tissues. The lowest NOEL and LOEL's are in rabbits and are 30 and 100 ppm, respectively.

Reproductive Effects
Animal studies indicate the potential for reproductive effects in males. Acute or repeated oral, dermal, or inhalation exposures can cause reproductive toxicity and developmental effects.

Carcinogenicity
Not listed by IARC, NTP, OSHA or EPA.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

This material is highly soluble in water. Limited toxicity tests and models indicate this material should exhibit low toxicity to aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

This material should biodegrade after an acclimation period, and it is is not expected to be environmentally persistant. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems. See component summary.

Persistance and Degradability

Bioaccumulation: This material is highly soluble in water and should not bioaccumulate in aquatic or terrestrial organisms.

COMPONENT INFORMATION

- *Diethylene glycol monomethyl ether 111-77-3*

Ecotoxicity

No data available.

Environmental Fate and Pathway

Expected to have high mobility in soils. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Volatilization from dry soil surfaces is expected. While this material may evaporate into the air from dry soil, it is unlikely to evaporate from moist soil or water.

Persistance and Degradability
Biodegradation: Biodegradable under aerobic conditions.
Bioaccumulation: BCF < 1.0 This material is not expected to bioaccumulate.

- *Ethanol, 2-methoxy 109-86-4*

Ecotoxicity

This material is highly soluble in water. Limited toxicity tests and models indicate this material should exhibit low toxicity to aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

Expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. It is expected to be poorly adsorbed onto soils or sediments. Volatilization from dry soil surfaces is expected. It will leach into soil. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability
Biodegradation: This material is expected to be biodegradable.
Bioaccumulation: Because of this material's high solubility and rapid biodegradability, it is unlikely that bioaccumulation will occur in aquatic or terrestrial systems. Models estimate that this material will preferentially partition to water versus air or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

GLYCOL ETHER DM JET FUEL GRADE

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name Combustible liquid, n.o.s. (Diethylene glycol monomethyl ether)

ID No. NA1993
Hazard Class Combustible Liquid
PG III

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact Product.Safety@Lyondell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

This product contains no known chemicals regulated under SARA 302/304.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.

SARA 313

This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Component	Reporting Threshold
Ethanol, 2-methoxy	1.0%

State Reporting

Known to the State of California to cause birth defects.

Ethanol, 2-methoxy 109-86-4

GLYCOL ETHER DM JET FUEL GRADE

Known to the State of California to cause reproductive toxicity in males.

Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

Diethylene glycol monomethyl ether	111-77-3
Ethanol, 2-methoxy	109-86-4

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

Diethylene glycol monomethyl ether	111-77-3
Ethanol, 2-methoxy	109-86-4

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 15 July 14 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

< end of document >

SULFUR ORGANIC LIQUID

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Thio and Fine Chemicals
Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	1-800-628-4453	8:30 to 5:30 EST

Product Name	SULFUR ORGANIC LIQUID
Product Synonym(s)	
Chemical Family	Mixture
Chemical Formula	
Chemical Name	
EPA Reg Num	
Product Use	Fuel Oil Cutter Stock

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical Wt. %	OSHA
Didodecyl sulfide	2469-45-6	40 - 55%	N
sec-Dodecyl mercaptan	14402-50-7	25 - 40%	N
Paraffin	8002-74-2	2 - 5%	Y
n-Dodecyl mercaptan	112-55-0	2 - 5%	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

COMPONENTS OF THIS BYPRODUCT ARE NOT ON THE TSCA INVENTORY. THIS BYPRODUCT IS PROVIDED UNDER THE TSCA PREMANUFACTURE NOTICE EXEMPTION AT 40 CFR 720.30(G) ONLY FOR BURNING AS FUEL OR MIXING (NOT REACTING) WITH OTHER MATERIALS FOR BURNING AS FUEL.

3 HAZARDS IDENTIFICATION

Emergency Overview
Brown liquid with strong odor
WARNING!
COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE IRRITATION.
CAUSES RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE NAUSEA, HEADACHE OR DIZZINESS.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be severely irritating to the eyes and respiratory tract. This material has a strong

EPAHO003001295

objectionable odor that may cause nausea, headache, or dizziness. Repeated exposure may cause an allergic skin reaction. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	
Flash Point	>170F	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

None known.

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Clean up spill immediately, observing precautions in the Personal Protection section of MSDS. Avoid runoff into storm sewers and ditches which lead to waterways.

7 HANDLING AND STORAGE

Handling

Avoid contact with eyes. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation.

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7 HANDLING AND STORAGE

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
Paraffin		
ACGIH TWA	-	2 mg/m3
n-Dodecyl mercaptan		
ACGIH Sensitizer Designator	-	Y
ACGIH TWA	-	0.1 ppm

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Brown liquid with strong odor
pH	5 - 7
Specific Gravity	0.84
Vapor Pressure	NE
Vapor Density	NE
Melting Point	85 F
Freezing Point	NE
Boiling Point	NE
Solubility In Water	Insoluble

10 STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Hazardous Polymerization

Does not occur.

Incompatibility

There are no known incompatibilities to this product.

Hazardous Decomposition Products

None known.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Data on this material and/or its components are summarized below.

n-Dodecyl Mercaptan

Single exposure (acute) studies indicate that this material is slightly toxic to practically non-toxic if swallowed (rat LD50 1,960 - >5,000 mg/kg) or inhaled (rat 4-hr LC50 >8-9 ppm; no deaths following exposure to saturated vapor), no more than slightly toxic if absorbed through skin (rat LD50 >2,000 mg/kg), corrosive to rabbit eyes and non-irritating to rabbit skin (24-hr exposure).

Skin allergy was observed in guinea pigs following repeated exposure in some tests, but not others. A potential for irritation and allergic reactions in humans has been reported. Following repeated inhalation exposures, rats and mice exhibited eye, nasal and respiratory tract irritation and breathing difficulties, followed by death which was associated with lung damage. A repeated inhalation exposure study in mice produced microscopic liver changes. Following a longer-term inhalation exposure study, rats showed reduced growth, reduced liver and adrenal function, general congestion of the internal organs and microscopic changes in lungs, liver, kidney, heart and brain. No birth defects were observed in the offspring of rats exposed by inhalation during pregnancy, even at amounts which produced significant adverse effects on the mothers. No genetic changes were observed in tests using bacteria or animal cells.

Paraffin

This material is neither digested nor absorbed and is considered non-toxic. When ingested, it has been

EPAHO003001298

11 TOXICOLOGICAL INFORMATION

reported to have a mild laxative effect.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

No data are available.

Chemical Fate Information

Data on this material and/or its components are summarized below.

Paraffin
This material is reported to be biodegradable.

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations.

14 TRANSPORT INFORMATION

DOT Name	Combustible liquid, n.o.s.
DOT Technical Name	(Didodecyl sulfide)
DOT Hazard Class	3
UN Number	NA1993
DOT Packing Group	PG III
RQ	NO
DOT Special Information	Primary Hazard: COMBUSTIBLE LIQUID Primary hazrd label used only when shipped domestically in bulk, all other modes of transportation are Non Regulated

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

COMPONENTS OF THIS BYPRODUCT ARE NOT ON THE TSCA INVENTORY. THIS BYPRODUCT IS PROVIDED UNDER THE TSCA PREMANUFACTURE NOTICE EXEMPTION AT 40 CFR 720.30(G) ONLY FOR BURNING AS FUEL OR MIXING (NOT REACTING) WITH OTHER MATERIALS FOR BURNING AS FUEL.

Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
Paraffin	NE	

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
n-Dodecyl mercaptan	NE	
Didodecyl sulfide	NE	
sec-Dodecyl mercaptan	NE	

Massachusetts Right to Know
This product does contain the following chemicals(s), as indicated below, currently on the Massachusetts Right to Know Substance List.
Paraffin

Pennsylvania Right to Know
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.
Paraffin
n-Dodecyl mercaptan

16 OTHER INFORMATION

Revision Information

Revision Date	11 OCT 2004	Revision Number 5
Supercedes Revision Dated	02-MAR-2004	

Revision Summary
ATOFINA Chemicals, Inc. has changed its name to Arkema Inc.

Key
NE= Not Established NA= Not Applicable (R) = Registered Trademark

Arkema Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Arkema Inc., Arkema Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

1 PRODUCT AND COMPANY IDENTIFICATION

CES Environmental Services, Inc
4904 Griggs Road
Houston TX 77021

Information: (713) 676-1460

Emergency Contact: (713) 676-1460

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Product Name	SULFUR ORGANIC LIQUID
Product Synonym(s)	
Chemical Family	Mixture
Chemical Formula	
Chemical Name	
EPA Reg Num	
Product Use	Fuel Oil Cutter Stock

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Didodecyl sulfide	2469-45-6	40-55% By Wt.	Y
sec-Dodecyl mercaptan	14402-50-7	25-40% By Wt.	Y
n-Dodecyl mercaptan	112-55-0	< 10% By Wt.	Y
Propylene tetramer	6842-15-5	< 10% By Wt.	Y
tert-Dodecanethiol	25103-58-6	< 10% By Wt.	Y
Alkenes, C8-10-branched, C9-rich	97593-01-6	< 10% By Wt.	Y
C7-14 sulfides and disulfides	NE	< 10% By Wt.	Y
Dodecene	112-41-4	< 5% By Wt.	Y
Hydrogen sulfide	7783-06-4	< 50PPM By Wt.	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

COMPONENTS OF THIS BYPRODUCT ARE NOT ON THE TSCA INVENTORY. THIS BYPRODUCT IS PROVIDED UNDER THE TSCA PREMANUFACTURE NOTICE EXEMPTION AT 40 CFR 720.30(G) ONLY FOR BURNING AS FUEL OR MIXING (NOT REACTING) WITH OTHER MATERIALS FOR BURNING AS FUEL.

3 HAZARDS IDENTIFICATION

Emergency Overview
Brown liquid with strong odor
WARNING!
COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE IRRITATION.
CAUSES RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE NAUSEA, HEADACHE OR DIZZINESS.

EPAHO003001301

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be severely irritating to the eyes and respiratory tract. This material has a strong objectionable odor that may cause nausea, headache, or dizziness. Repeated exposure may cause an allergic skin reaction. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	
Flash Point	>170F	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

None known.

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Clean up spill immediately, observing precautions in the Personal Protection section of MSDS. Avoid runoff into storm sewers and ditches which lead to waterways.

7 HANDLING AND STORAGE

Handling

Avoid contact with eyes. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
n-Dodecyl mercaptan		
ACGIH Sensitizer Designator	-	Y
ACGIH TWA	-	0.1 ppm
Hydrogen sulfide		
ACGIH STEL	-	15 ppm (21 mg/m3)
ACGIH TWA	-	10 ppm (14 mg/m3)
OSHA Ceiling PEL	-	20 ppm

EPAHO003001303

tert-Dodecanethiol

Arkema 8-hour TWA - 5 ppm

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Brown liquid with strong odor
pH	5 - 7
Specific Gravity	0.84
Vapor Pressure	NE
Vapor Density	NE
Melting Point	85 F
Freezing Point	NE
Boiling Point	NE
Solubility In Water	Insoluble

10 STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility

There are no known incompatibilities to this product.

Hazardous Decomposition Products

None known.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Data on this material and/or its components are summarized below.

n-Dodecyl Mercaptan

Single exposure (acute) studies indicate that this material is slightly toxic to practically non-toxic if swallowed (rat LD50 1,960 - >5,000 mg/kg) or inhaled (rat 4-hr LC50 >8-9 ppm; no deaths following exposure to saturated vapor), no more than slightly toxic if absorbed through skin (rat LD0 >2,000 mg/kg), corrosive to rabbit eyes and severely irritating to rabbit skin (24-hr exposure, PII 8.0/8.0)

Skin allergy was observed in guinea pigs following repeated exposure in some tests, but not others. A potential for irritation and allergic reactions in humans has been reported. Following repeated inhalation exposures, rats and mice exhibited eye, nasal and respiratory tract irritation and breathing difficulties, followed by death which was associated with lung damage. A repeated inhalation exposure study in mice produced microscopic liver changes. Following a longer-term inhalation exposure study, rats showed reduced growth, reduced liver and adrenal function, general congestion of the internal organs and microscopic changes in lungs, liver, kidney,

EPAHO003001304

11 TOXICOLOGICAL INFORMATION

heart and brain. No birth defects were observed in the offspring of rats exposed by inhalation during pregnancy, even at amounts which produced significant adverse effects on the mothers. No genetic changes were observed in tests using bacteria or animal cells.

Paraffin
This material is neither digested nor absorbed and is considered non-toxic. When ingested, it has been reported to have a mild laxative effect.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

Data on this material and/or its components are summarized below.

n-Dodecyl mercaptan
This material is practically non-toxic to Daphnia magna, rainbow trout and algae (no effect up to the limit of solubility).

Chemical Fate Information

Data on this material and/or its components are summarized below.

Paraffin
This material is reported to be biodegradable.

n-Dodecyl mercaptan
This material is not readily biodegradable (39.2% after 28-days). The log Pow is 6.18

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Non Bulk Domestic/ Bulk and Non bulk international: Not Regulated
DOT Technical Name	
DOT Hazard Class	
UN Number	
DOT Packing Group	PG
RQ	
DOT Special Information	Domestic Bulk shipments Combustible liquid, n.o.s. (Didodecyl sulfide) 3; NA 1993; PGIII

Revision Information

Revision Date	31 OCT 2006	Revision Number 7
Supercedes Revision Dated	08-MAR-2006	

Revision Summary

Revised section 2.

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

EPAHO003001306

Caustic Soda, Shipment Grade

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Thio and Fine Chemicals
Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	1-800-628-4453	8:30 to 5:30 EST

Product Name	Caustic Soda, Shipment Grade
Product Synonym(s)	
Chemical Family	Alkali
Chemical Formula	NAOH
Chemical Name	Sodium Hydroxide
EPA Reg Num	
Product Use	

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Carbon disulfide	75-15-0	<0.1%	Y
Sodium hydroxide	1310-73-2	10-15%	Y
Water	7732-18-5	85-90%	N

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview
Orange slightly turbid liquid with foul odor.
DANGER!
FLAMMABLE LIQUID AND VAPOR.
CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. MAY CAUSE BLINDNESS.
CAUSES SEVERE DIGESTIVE TRACT BURNS.
EVEN DILUTE SOLUTIONS MAY CAUSE BURNS.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. This material is a strong alkali that can be destructive to tissue producing severe burns which are not immediately painful or visible. Contact with body tissues may produce deep ulceration, scarring or loss of sight. Concentrations as low as 2-3% can cause injury. Dermatitis (inflammation of the skin) and superficial skin damage can result from repeated or prolonged contact with very dilute solutions. High levels of dust or mist may be corrosive to mucous membranes producing eye or lung injury and chemical pneumonia. Lower concentrations may produce irritation of eyes, nose or upper respiratory tract with coughing, sore throat and shortness of breath. Prolonged exposure may result in ulceration of the nasal passages. If swallowed, this material may cause severe internal injury, characterized by pain in the mouth

EPAHO003001307

and stomach, vomiting, and breathing difficulties. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

IF ON SKIN, immediately flush with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Destroy contaminated shoes.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	
Flash Point	70 F - >150 F	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

Contact with metal can form hydrogen gas. Hydrogen is extremely flammable and can form explosive mixtures with air. Closed containers may explode when heated or contents contaminated with water.

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Stop the leak, if possible. Ventilate the space involved. Contain, vacuum up, place in non-sparking container for disposal. Prevent waterway contamination. Construct a dike to prevent spreading. Collect run-off and transfer to drums or tanks for later disposal. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7 HANDLING AND STORAGE

Handling

Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. To avoid rapid temperature rise, violent spattering, or explosive eruptions: always add caustic to water when mixing. Never add water to a caustic when mixing. Heat water to 80-100 F before adding product. Add small amounts of product slowly and evenly over surface of water with constant stirring. Never increase concentration of product by more than 5% with any single

EPAHO003001308

7 HANDLING AND STORAGE

addition. Water should not exceed 160 F during addition.

Storage

Do NOT store near strong acids.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. Monitor carbon monoxide and oxygen levels in tanks and enclosed spaces.

Eye / Face Protection

Where there is potential for eye contact, wear a face shield, chemical goggles, and have eye flushing equipment immediately available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
Sodium hydroxide		
ACGIH CEILING	-	2 mg/m3
OSHA TWA PEL	-	2 mg/m3
Carbon disulfide		
ACGIH Skin designator	-	Y
ACGIH TWA	-	1 ppm
OSHA Ceiling PEL	-	30 ppm
OSHA TWA PEL	-	20 ppm

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Orange slightly turbid liquid with foul odor.
pH	NE
Specific Gravity	1.073 @ 15 C
Vapor Pressure	30 @ 100 F
Vapor Density	NA
Melting Point	NA
Freezing Point	NE
Boiling Point	NE
Solubility In Water	99.98%

10 STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility

Reacts violently or explosively with water, acids and organic materials such as chlorinated hydrocarbons. Toxic carbon monoxide gas can form upon contact with food or beverage products.

Hazardous Decomposition Products

Will react with some metals such as aluminum, tin or zinc to generate hydrogen gas. Hydrogen gas can result in explosive hazards in confined spaces.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Data on this material and/or its components are summarized below.

Sodium Hydroxide

Single exposure (acute) studies indicate that this material is slightly toxic if absorbed through the skin (rat LD50 1,350 mg/kg; dry sodium hydroxide) and corrosive to rabbit eyes and skin. Many publications in the scientific literature confirm that this material is corrosive to all tissues. Repeated inhalation resulted in lung damage in rats. No tumors were seen in long-term animal studies. No genetic changes were observed in tests using bacteria.

No significant increases in mortality in relation to duration or intensity of exposures were reported in an epidemiologic study of a small group of workers exposed to caustic dust for 30 years or more. Massive ingestion of this material has been implicated as causing esophageal cancer. Squamous cell carcinomas of the esophagus occurred approximately 12-42 years later in individuals who survived accidental childhood ingestion and are likely due to the tissue destruction and possible scarring of the esophagus rather than a direct effect of this material.

Carbon Disulfide

Single exposure (acute) studies indicate that this material is slightly toxic to rats if swallowed (LD50 3,188 mg/kg) or rabbits if absorbed through skin (LD50 2,025 mg/kg), practically non-toxic to rats if inhaled (1-hr LC50 40 mg/l), and severely irritating to rabbit skin and eyes. The neurological effects of long-term exposure have been documented in occupational populations who were generally exposed to levels of 20 ppm or more in viscose rayon production. Exposed workers have experienced headaches, nausea, dizziness, tiredness, memory loss, sleep disturbances, irritability and other psychological symptoms in the early stages of intoxication. Long- term exposure has resulted in decreased nerve conduction velocities, memory loss,

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11 TOXICOLOGICAL INFORMATION

peripheral neuropathy (numbness) in the lower legs and forearms, tremors, poor coordination and personality disorders. In addition, several studies have shown adverse effects on the heart including increases in atherosclerosis, death from coronary or ischemic heart disease and blood pressure. Other studies have indicated that long-term overexposure can cause adverse effects on the eyes including increased hemorrhages or microaneurysms of the retina. Studies of occupationally exposed workers have suggested that long-term exposure to higher levels may cause reproductive effects. Male workers had decreased libido, reduced sperm count and altered endocrine function and female workers reported menstrual irregularities. Sperm from exposed workers have shown alterations indicative of spermatogenic damage. There is conflicting evidence whether increased pregnancy complications and a higher frequency of spontaneous abortions are related to exposures in female workers.

Animal studies have confirmed neurological effects. Rats exposed for long periods to high levels showed decreased motor conduction velocity, hindlimb motor defects, peripheral nerve swelling and degeneration. Repeated exposure of monkeys has resulted in reduced visual acuity. Following inhalation exposure in male rats, minor reproductive effects such as decreased sperm counts and abnormal mating behavior, but no pathological changes were noted in testes. A two-generation reproduction study in exposed female rats showed no reduction in fertility, but mothers exposed to high dose levels had reduced pup viability. Multiple developmental toxicity studies in rats and rabbits have presented evidence of increased birth defects and embryotoxicity at high dose levels; however, exposures at levels that are not maternally toxic generally do not cause birth defects, although developmental effects have been observed. No genetic changes were observed in tests using bacteria, but have been observed in animal cells.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

Data on this material and/or its components are summarized below.

Sodium Hydroxide
Data from several species of fish showed a range of tolerance (brook trout > spotfin and Lake Emerald shiners > minnows > mosquitofish > goldfish) that was most likely related to changes in the pH produced by addition of sodium hydroxide to the water. The minimum lethal concentration for minnows, Mayfly larvae and Daphnia was 100 ppm and for Chironomus larvae, 700 ppm.

Carbon Disulfide
This material is moderately toxic to Daphnia magna (LC50 2.1 mg/l). It is moderately toxic to guppies (LC50 4 mg/l) and slightly toxic to green algae (LC50 21 mg/l). It is practically non-toxic to mosquitofish (LC50 135 mg/l) and bacteria (LC50 341 mg/l).

Chemical Fate Information

Data on this material and/or its components are summarized below.

Sodium Hydroxide
No data were available, but this material is a strong alkali that easily dissolves in water with resulting acid/base chemistry.

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13 DISPOSAL CONSIDERATIONS

Waste Disposal

Consult with environmental engineer or professional to determine if neutralization is appropriate and for handling procedures for residual materials. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Flammable Liquid, Corrosive, NOS
DOT Technical Name	(Sodium Hydroxide; Carbon Disulfide)
DOT Hazard Class	3, 8
UN Number	UN 2924
DOT Packing Group	PG II
RQ	Sodium Hydroxide 1000# (dry basis); Carbon Disulfide 100#
DOT Special Information	Subsidiary hazard: 8 Corrosive On a waste manifest, add the word "Waste"

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	Y
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
Sodium hydroxide	1000 LBS	
Water	NE	
Carbon disulfide	100 LBS	10000 LBS

SARA Title III, Section 313

This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2

Carbon disulfide

SARA Title III, Section 302

This product does contain chemical(s), as indicated below, currently on the Extremly Hazardous Substance List, Section 302, SARA Title III. See Section 2 for further details regarding concentrations and registry numbers.

Carbon disulfide

California Prop 65 - Developmental Toxin

This product does contain the following chemical(s), as indicated below, currently on the California List of Developmental Toxins.

Carbon disulfide

Massachusetts Right to Know

This product does contain the following chemicals(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Massachusetts Right to Know
This product does contain the following chemicals(s), as indicated below, currently on the Massachusetts Right to Know Substance List.
Carbon disulfide
Sodium hydroxide

New Jersey Right to Know
This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.
Carbon disulfide
Sodium hydroxide

Pennsylvania Environmental Hazard
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Environmental Hazard List.
Carbon disulfide
Sodium hydroxide

Pennsylvania Right to Know
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.
Carbon disulfide
Sodium hydroxide

16 OTHER INFORMATION

Revision Information

Revision Date	23 FEB 2007	Revision Number 6
Supercedes Revision Dated	07-NOV-2006	

Revision Summary
Moved from Retired to Active 03.

Key
NE= Not Established NA= Not Applicable (R) = Registered Trademark

Miscellaneous
NOTE: Toxic carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and cause death.

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MATERIAL SAFETY DATA SHEET

Port Arthur Chemical and Environmental Services, L.L.C.
2450 South Gulfway Drive
Port Arthur, TX
713-676-1460
Chemtrec–Product Emergency Hotline
1-800-424-9300

May be used to comply with OSHA'S Hazard Communication Standard 29CFR 1910.1200. Standard must be consulted for specific requirements

SECTION I — PRODUCT IDENTIFICATION

TRADE NAME:	PACES Organo-Sulfur Feedstock
U.S.D.O.T. SHIPPING NAME:	FLAMMABLE LIQUID, n.o.s.
U.S.D.O.T. PRIMARY HAZARD CLASS:	3, (Contains Petroleum Distillates
IDENTIFICATION NUMBER:	UN1993

SECTION II — HAZARDOUS INGREDIENTS-IDENTIY INFORMATION

HAZARDOUS COMPONENTS

	CAS No.	ACGIH TLV	VOL %
XYLENE	106-42-3	100 ppm	5 – 30
HEPTANE	142-82-5	400 ppm	5 - 30
HEXANE	110-54-3	50 ppm	5 - 30
ETHYL BENZENE	100-41-4	100 ppm	5 - 30
TOLUENE	108-88-3	50 ppm	5 - 30
METHANOL	67-56-1	200 ppm	5 - 30
BUTANOL	71-36-3	20 ppm	5 - 30
PROPONOL	71-23-8	200 ppm	5 - 30
ETHANOL	64-17-5	1,000 ppm	5 - 30
DIMETHYL DISULFIDE	624-92-0		5 - 30
DIETHYL DISULFIDE	110-81-6		5 - 30
GASOLINE	86290-81-5	300 ppm	5 - 30
ACETIC ACID	64-19-7	10 ppm	5 - 30
ISOPROPYL ETHER	108 20 3	250 ppm	5 - 30
PROPIONIC ACID	64-19-7	10 ppm	5 - 30
NAPHTHALENE	91-20-3	10 ppm	5 - 30
PROPYLAMINE	107-10-8		5 - 30
KEROSENE	8008-20-6	200 ppm	5 30
DIESEL	68334-30-5	100 ppm	5 - 30
ETHYLENE GLYCOL	107-21-1		5 - 30
PROPYLENE GLYCOL	57-55-6		5 - 30

Other components, if any, are considered to be non-hazardous as per OSHA 29 CFR 1910.1200.

SECTION III — PHYSICAL and CHEMICAL CHARACTERISTICS

FLASH POINT	80F USING TAG CLOSED CUP ASTM D-56
SPECIFIC GRAVITY (H2O=1)	0.82 @ 20C
VAPOR DENSITY (AIR =1)	GREATER THAN 1
% SOLIDS:	0
WEIGHT (LB/GAL):	6.85
SOLUBILITY IN WATER:	INSOLUBLE TO LOW SOLUBILITY
APPEARANCE and ODOR	CLEAR to YELLOW/BROWN/BLACK LIQUID; ALCOHOL and SOLVENT ODOR
EVAPORATION RATE (BA =1)	<1

SECTION IV — FIRE and EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA:	CARBON DIOXIDE, DRY CHEMICAL, REGULAR FOAM WATER SPRAY.
SPECIAL FIRE FIGHTING PROCEDURES:	USE SELF-CONTAINED BREATHING APPARATUS.
UNSUAL FIRE and EXPLOSION HAZARDS:	HEATING OF NON-VENTED CONTAINER MAY CAUSE EXPLOSION. KEEP SURROUNDING CONTAINERS; COOL WITH WATER SPRAY.

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SECTION V	REACTIVITY DATA
STABILITY:	STABLE
MATERIALS TO AVOID:	OXIDIZING AGENTS
CONDITIONS TO AVOID:	CONTACT WITH OPEN FLAME
HAZARDOUS DECOMPOSITION PRODUCTS:	CARBON MONOXIDE and ASPHYXLANTS MAY BE FORMED DURING COMBUSTION
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR

SECTION VI	HEALTH HAZARD DATA
SIGNS and SYMPTOMS OF EXPOSURE:	
EYES:	IRRITATION, REDNESS
DERMAL	DRYNESS, IRRITATION and REDNESS
INHALATION:	VAPORS MAY IRRITATE NOSE, THROAT and RESPIRATORY TRACT
INGESTION:	NAUSEA, VOMITING, DIZZINESS, HEADACHE and VISION
EMERGENCY and FIRST AID PROCEDURES:	
EYES:	FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
DERMAL:	WASH WITH SOAP and WATER UNTIL NO ODOR REMAINS. IF REDNESS OR SWELLING DEVELOPS, GET MEDICAL ATTENTION. IMMEDIATELY REMOVE SOAKED CLOTHING, and WASH BEFORE REUSE.
INHALATION:	REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION PROVIDED A QUALIFIEDINDIVIDUAL IS AVAILABLE. GET MEDICAL ATTENTION PROMPTLY.
INGESTION:	**DO NOT INDUCE VOMITING. DO NOT GIVE LIQUIDS.** OBTAIN EMERGENCY MEDICAL ATTENTION. SMALL AMOUNTS, WHICH ACCIDENTALLY ENTER MOUTH SHOULD BE RINSED OUT UNTIL TASTE IS GONE.
ACUTE HEALTH HAZARDS:	MILD IRRITATION TO THE EYES and SKIN.
CHRONIC HEALTH HAZARDS:	NONE EXPECTED AT THE INDUSTRIAL LEVEL.
CARCINOGENICITY:	THIS PRODUCT IS **NOT** LISTED AS A KNOWN CARCINOGEN **NOR** DOES IT CONTAIN COMPONENTS WHICH ARE CONSIDERED CARCINOGENIC BY OSHA, NTP, OR IARC

SECTION VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

DIKE OR PILL AREA. REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA IF NECESSARY. ABSORB FREE LIQUID WITH EARTH, SAND, CLAY, OR ABSORBENT PADS AND PLACE IN NON-LEAK CONTAINERS FOR DISPOSAL. FLUSH ATEA FOR TRACE RESIDUE AND DISPOSE OF AS BELOW.

WASTE DISPOSAL METHOD:

IN ACCORDANCE WITH LOCAL, STATE and FEDERAL LAWS.

SECTION VIII	SPECIAL PROTECITON INFORMATION
RESPIRATORY PROTECITON:	NORMALLY NOT NEEDED IN A WELL-VENTED AREA
VENTILATION:	MECHANICAL TO MAINTAIN GOOD AIR FLOW
PROTECTIVE GLOVES:	RUBBER
EYE PROTECTION:	GOGGLES OR SAFETY GLASSES
OTHER:	AS NEEDED TO MINIMIZE EXPOSURE
HYGIENIC PRACTICE:	ALWAYS WASH FACE and HANDS AFTER CONTACT

SECTION IX

NOTES

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. Vendor assumes no responsibility for injury to vendee or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility or injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in the use of this material.

Effective Date: July 29, 2006
Revision Date: September 20, 2006

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CXI

P.O. Box 67
900 CLINTON
GALENA PARK,TX 77547
(713) 455-1206

MSDS

Material Safety Data Sheet

HAZARD INDEX

FLAMMABILITY	1
HEALTH	1
REACTIVITY	1

FUEL OIL A

SECTION 1: IDENTIFICATION

CHEMICAL NAME:	Fatty Acid Methyl Ester and Non-esterified alkyl fatty acids
CHEMICAL FAMILY:	Fatty Acid Methyl Ester and Non-esterified alkyl fatty acids
TRADE NAME:	FUEL OIL A
SYNONYMS:	Biodiesel and Non-esterified alkyl fatty acids
FORMULA:	Mixture
CAS NUMBER:	Mixture, see Section 2
MANUFACTURER:	Chemical Exchange Industries, Inc. 900 Clinton Drive Galena Park, TX 77547

TELEPHONE NUMBERS

EMERGENCY:	CXI	(713) 455-1206
	CHEMTREC	(800) 424-9300
PRODUCT SAFETY:		(713) 455-1206

SECTION 2: COMPOSITION

COMPONENT NAME	CAS No.	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	WT%
Biodiesel as a mixture of the following:		None Known	None Known	None Known	None Known	60-95
Fatty acid vegetable oil methyl ester	68990-52-3	None Known	None Known	None Known	None Known	
Fatty acid tallow methyl ester	61788-61-2	None Known	None Known	None Known	None Known	
Soybean oil methyl ester	67784-80-9	None Known	None Known	None Known	None Known	
Palm oil methyl ester	91051-32-0	None Known	None Known	None Known	None Known	
Non-esterified alkyl fatty acids as a mixture of the following:	67254-79-9	None Known	None Known	None Known	None Known	5-40
Palmitic Acid	57-10-3	None Known	None Known	None Known	None Known	
Stearic Acid	57-11-4	as stearates: 10 mg/m3	None Known	None Known	None Known	
Oleic Acid	112-80-1	None Known	None Known	None Known	None Known	
Linoleic Acid	60-33-3	None Known	None Known	None Known	None Known	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Combustible. Keep away from electric motors, heaters, open flames, high intensity heat sources or other ignition sources. Do not grind, weld, cut, or drill on or near containers or pipes. Causes eye, skin, and respiratory tract irritation.**

SIGNAL WORD: WARNING!

PHYSICAL & HEALTH HAZARDS: COMBUSTIBLE LIQUID. Vapors can travel to a source of ignition and flash back. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, or inhalation. Prolonged and repeated exposure to vapors may cause damage to the CNS (central nervous system), lungs and kidneys. Aspiration into the lungs may cause chemical pneumonia.

PHYSICAL STATE:	Liquid
COLOR:	Dark brown, Amber
ODOR:	Negligible
ODOR THRESHOLD:	20 ppm (stearic acid)
ROUTES OF EXPOSURE:	Inhalation, Skin contact, Eye contact, Ingestion
SIGNS & SYMPTOMS OF ACUTE EXPOSURE:	Headache, sneezing and cough may occur. FUEL OIL A is an eye, skin, and respiratory tract irritant. High concentrations may cause CNS depression. Ingestion of FUEL OIL A would likely cause gastrointestinal tract irritation. Can be fatal if large amounts are inhaled or ingested.
SKIN CONTACT:	Causes skin irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may dry/defat the skin and cause irritation.
INHALATION:	Coughing and upper respiratory tract irritation may occur.
EYE CONTACT:	Irritating to the eyes.
INGESTION:	Ingestion would likely cause gastrointestinal tract irritation. Aspiration into the lungs may cause chemical pneumonia.
CHRONIC HEALTH EFFECTS:	Prolonged and repeated exposure to vapors may cause damage to the CNS, lungs and kidneys. Prolonged or repeated skin contact may cause defatting and dermatitis.
CONDITIONS AGGRAVATED BY EXPOSURE:	None Known.
CARCINOGENICITY:	FUEL OIL A is not listed as a human carcinogen by NTP, IARC, or OSHA.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.
For specific information refer to the EMERGENCY OVERVIEW in Section 3 of this MSDS.

EYE CONTACT:	Check for and remove any contact lenses. Irrigate with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.
SKIN CONTACT:	Remove contaminated clothing. Flush skin for at least 15 minutes. Cover irritated skin with emollient. For serious skin exposure wash with disinfectant soap and cover contaminated skin with an antibacterial cream. Seek immediate medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, wallets, belts, etc.).
INHALATION:	Remove subject to fresh air. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Seek medical attention immediately.
INGESTION:	DO NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to an unconscious person. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical attention immediately.

SECTION 5: FIRE FIGHTING

FLAMMABILITY CLASSIFICATION:	IIIB Combustible Liquid
FLASH POINT:	>200°F (93°C) (PMCC)
AUTO-IGNITION TEMPERATURE:	685°F (363°C) (oleic acid); 743°F (395°C) (stearic acid)
FLAMMABLE LIMITS:	None Known
NFPA RATING:	HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1 SPECIAL: NA
HAZARDOUS COMBUSTION PRODUCTS:	Carbon oxides (CO, CO2)
SPECIAL CONDITIONS TO AVOID:	High temperatures, incompatible materials, light, exposure to air, excess heat. Oil soaked rags can cause spontaneous combustion if not handled properly. Before disposal, wash rags with soap and water and dry in well ventilated area.
NORMAL EXTINGUISHING MEDIA:	Alcohol-resistant foam, carbon dioxide, dry chemical.
FIRE FIGHTING INSTRUCTIONS:	PPE: Wear a NIOSH-approved positive pressure self-contained breathing apparatus and firefighter's turnout gear. Containers exposed to intense heat should be cooled with water to prevent pressure build up; clear area of unprotected personnel. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel. ALWAYS stay away from the ends of 'bullet' tanks.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE:	Eliminate all sources of ignition. Stop leak if without risk. Use water spray curtain to divert vapor drift. Prevent entry into waterways, sewers, basements, or confined areas; dike if needed. Pick up small spills with inert absorbent materials. Recover large spills for salvage or disposal. Wash hard surfaces with safety solvent or detergent to remove remaining oil film. Greasy nature will result in a slippery surface. Depending on the size and nature of the release, all responders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Do not handle near heat, sparks, or open flame. Avoid contact with incompatible agents. Use only with adequate ventilation or personal protection. Avoid breathing vapors and contact with eyes, skin and clothing. Metal containers involved in the transfer of this material should be grounded and bonded. Do not puncture, drag, or slide container. Drum is not a pressure vessel; never use pressure to empty.
STORAGE:	Keep containers tightly closed in a cool, well-ventilated place, at temperatures between 50°F and 120°F, and keep away from excessive heat, and ignition sources. Store out of the sun and away from oxidizers and other combustible material by a distance of at least 20 feet. Ground all equipment containing this material.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

PERSONAL PROTECTION

INHALATION:	A respiratory protection program that meets OSHA's 29CFR1910.134 or ANSI Z88.2 requirements must be followed, whenever workplace conditions warrant respirator use.
SKIN:	Appropriate protective clothing should be worn to prevent skin contact. Avoid using rubber compounds such as buna-N, nitrile, and natural rubber which will degrade and leak. PVC-coated gloves recommended to prevent skin contact (biodiesel).
EYES:	Safety glasses for normal use. Goggles and face shield should be used if there is the chance of liquid splash or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H20 = 1) :	0.8871 - 0.8762	BOILING POINT:	>380°F (193°C)
VAPOR DENSITY (AIR = 1) :	>1 (biodiesel)	VAPOR PRESSURE, mmHg:	<2 (biodiesel)
MELTING PT:	NA	WATER SOLUBILITY:	Insoluble in cold water
pH:	5.0-7.0	VISCOSITY:	4.815 cSt at 50°C (D445)
EVAPORATION RATE (butyl acetate=1):	<1 (biodiesel)	CLOUD POINT:	63°F (17°C)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	The product is stable when handled as prescribed.
CONDITIONS TO AVOID:	High temperature. All sources of ignition. Incompatible materials, light, exposure to air.
INCOMPATIBILITY WITH:	Strong oxidizing agents, alkalis, reducing agents, bases. {Palmitic Acid: Reactive with oxidizing agents, reducing agents, alkalis.} {Oleic Acid: Strong oxidizing agents, perchloric acid, powdered aluminum.} {Biodiesel: May soften and degrade certain types of rubber compounds used for hoses and gaskets (buna-N, nitrile, natural rubber) and may cause them to leak and degrade to the point where they crumble and become useless. Will degrade and form high sediment levels if contacted for long periods by copper or copper containing metals (brass, bronze) or with lead, tin, or zinc (galvanized surfaces).}
HAZARDOUS PRODUCTS OF DECOMPOSITION:	When heated to decomposition it emits acrid smoke and irritating fumes.
HAZARDOUS POLYMERIZATION:	Is not expected to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

PALMITIC ACID	Toxicity to Animals: Acute oral toxicity (LD50): >10000 mg/kg [Rat]
STEARIC ACID	Toxicity to Animals: Acute oral toxicity (LD50): 4640 mg/kg [Rat]. Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit]. Special Remarks on Chronic Effects on Humans: May cause cancer based on animal test data
OLEIC ACID	LD50/LC50: Draize test, rabbit, eye: 100 mg Mild; Oral, mouse: LD50 = 28 gm/kg; Oral, rat: LD50 = 25 gm/kg; Human Skin Draize 15 mg/3D intermittent; REACTION: Moderate.
LINOLEIC ACID	Oral, mouse: LD50 = >50 gm/kg; Teratogenicity: Teratogenic effects have been observed in experimental animals.

SECTION 12: ECOLOGICAL INFORMATION

PALMITIC & STEARIC ACIDS	Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
OLEIC ACID	Ecotoxicity: Fish: Fathead Minnow: LC50 = 205 mg/L; 96 Hr.; Static condition
LINOLEIC ACID	Ecotoxicity: No data available. Invertebrate toxicity:EC50 (duration unspecified) purple sea urchin 0.28-1.07 mg/kg inhibited fertilisation (Cherr,G.N. et al Environ.Toxicol.Chem. 1987, 6(7), 561-569). Environmental: Anaerobic effects: Readily biodegradable in batch bioassay inoculated with anaerobic granular sludge at 30°C and 35-200 mg/l linoleic acid (Sierra-Alvarrez,R. et al Environ.Technol.1990, 11(10), 891-898).Degradation studies: The correlation between BOD and COD for fatty acids was studied. COD values were 1.2-29.6% ThOD averaging 8.38%. BOD values were 12.7-98.8% ThOD averaging 71% BOD/COD ratio 2.76-52.9% (Matsuoka,C. et al Kenkyu =kiyo-Tokushima Bunri Daigaku 1987, 34, 193-199 (Japan.)).

SECTION 13: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Fatty Acid Ester		
DOT HAZARD CLASS:	Not Applicable		
UN ID:	Not Applicable		
PACKING GROUP:	Not Applicable	MARINE POLLUTANT:	Not Applicable
REPORTABLE QUANTITY:	Not Applicable	NAER GUIDEBOOK:	Not Applicable
LABEL/PLACARD:	Not Applicable	DOT STATUS:	Not a Regulated Material

SECTION 14: REGULATORY INFORMATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 SARA TITLE III AND 40 CFR 372: NONE

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS's THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, CXI MAKES NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE COMPLETENESS OR ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. CXI ASSUMES NO RESPONSIBILITY FOR, AND EXPRESSLY DISCLAIMS LIABILITY FOR, LOSS OR INJURY ARISING OUT OF CONTACT WITH OR USE OF THE PRODUCT DESCRIBED HEREIN.

REVISED: February 16, 2009, # 0

RC 66231

Afton CHEMICAL

Material Safety Data Sheet

HiTEC 1194P Performance Additive

MSDS No. H1194P

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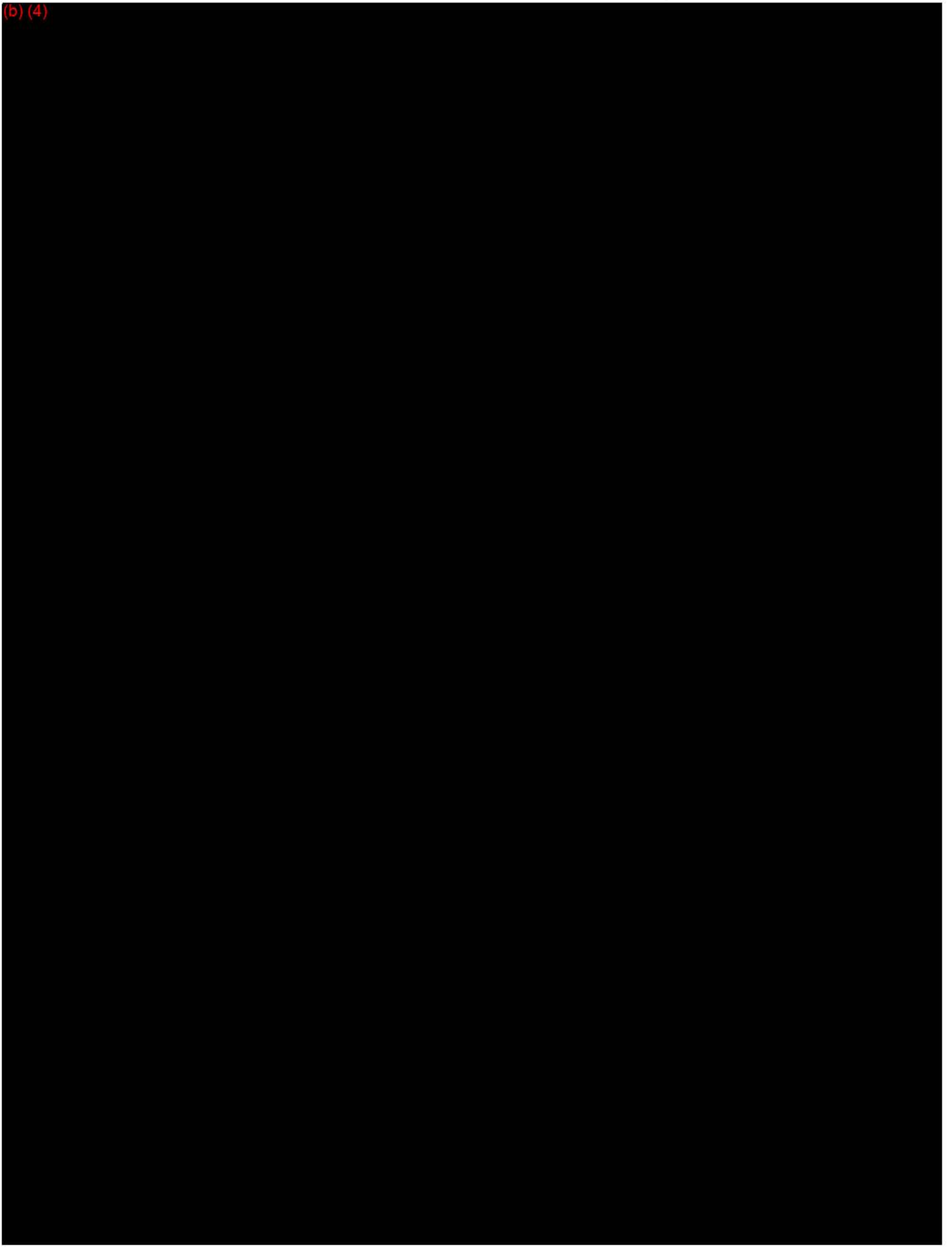
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Texmark

CXI

P.O. Box 67
900 CLINTON
GALENA PARK,TX 77547
(713) 455-1206

MSDS

Material Safety Data Sheet

HAZARD INDEX

FLAMMABILITY	1
HEALTH	1
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FUEL OIL A

SECTION 1: IDENTIFICATION

CHEMICAL NAME:	Fatty Acid Methyl Ester and Non-esterified alkyl fatty acids
CHEMICAL FAMILY:	Fatty Acid Methyl Ester and Non-esterified alkyl fatty acids
TRADE NAME:	FUEL OIL A
SYNONYMS:	Biodiesel and Non-esterified alkyl fatty acids
FORMULA:	Mixture
CAS NUMBER:	Mixture, see Section 2
MANUFACTURER:	Chemical Exchange Industries, Inc. 900 Clinton Drive Galena Park, TX 77547

TELEPHONE NUMBERS

EMERGENCY:	CXI	(713) 455-1206
	CHEMTREC	(800) 424-9300
PRODUCT SAFETY:		(713) 455-1206

SECTION 2: COMPOSITION

COMPONENT NAME	CAS No.	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	WT%
Biodiesel as a mixture of the following:		None Known	None Known	None Known	None Known	60-95
Fatty acid vegetable oil methyl ester	68990-52-3	None Known	None Known	None Known	None Known	
Fatty acid tallow methyl ester	61788-61-2	None Known	None Known	None Known	None Known	
Soybean oil methyl ester	67784-80-9	None Known	None Known	None Known	None Known	
Palm oil methyl ester	91051-32-0	None Known	None Known	None Known	None Known	
Non-esterified alkyl fatty acids as a mixture of the following:	67254-79-9	None Known	None Known	None Known	None Known	5-40
Palmitic Acid	57-10-3	None Known	None Known	None Known	None Known	
Stearic Acid	57-11-4	as stearates: 10 mg/m3	None Known	None Known	None Known	
Oleic Acid	112-80-1	None Known	None Known	None Known	None Known	
Linoleic Acid	60-33-3	None Known	None Known	None Known	None Known	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Combustible. Keep away from electric motors, heaters, open flames, high intensity heat sources or other ignition sources. Do not grind, weld, cut, or drill on or near containers or pipes. Causes eye, skin, and respiratory tract irritation.**

SIGNAL WORD: WARNING!

PHYSICAL & HEALTH HAZARDS: COMBUSTIBLE LIQUID. Vapors can travel to a source of ignition and flash back. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, or inhalation. Prolonged and repeated exposure to vapors may cause damage to the CNS (central nervous system), lungs and kidneys. Aspiration into the lungs may cause chemical pneumonia.

PHYSICAL STATE:	Liquid
COLOR:	Dark brown, Amber
ODOR:	Negligible
ODOR THRESHOLD:	20 ppm (stearic acid)
ROUTES OF EXPOSURE:	Inhalation, Skin contact, Eye contact, Ingestion
SIGNS & SYMPTOMS OF ACUTE EXPOSURE:	Headache, sneezing and cough may occur. FUEL OIL A is an eye, skin, and respiratory tract irritant. High concentrations may cause CNS depression. Ingestion of FUEL OIL A would likely cause gastrointestinal tract irritation. Can be fatal if large amounts are inhaled or ingested.
SKIN CONTACT:	Causes skin irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may dry/defat the skin and cause irritation.
INHALATION:	Coughing and upper respiratory tract irritation may occur.
EYE CONTACT:	Irritating to the eyes.
INGESTION:	Ingestion would likely cause gastrointestinal tract irritation. Aspiration into the lungs may cause chemical pneumonia.
CHRONIC HEALTH EFFECTS:	Prolonged and repeated exposure to vapors may cause damage to the CNS, lungs and kidneys. Prolonged or repeated skin contact may cause defatting and dermatitis.
CONDITIONS AGGRAVATED BY EXPOSURE:	None Known.
CARCINOGENICITY:	FUEL OIL A is not listed as a human carcinogen by NTP, IARC, or OSHA.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.
For specific information refer to the EMERGENCY OVERVIEW in Section 3 of this MSDS.

EYE CONTACT:	Check for and remove any contact lenses. Irrigate with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.
SKIN CONTACT:	Remove contaminated clothing. Flush skin for at least 15 minutes. Cover irritated skin with emollient. For serious skin exposure wash with disinfectant soap and cover contaminated skin with an antibacterial cream. Seek immediate medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, wallets, belts, etc.).
INHALATION:	Remove subject to fresh air. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Seek medical attention immediately.
INGESTION:	DO NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to an unconscious person. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical attention immediately.

SECTION 5: FIRE FIGHTING

FLAMMABILITY CLASSIFICATION:	IIIB Combustible Liquid
FLASH POINT:	>200°F (93°C) (PMCC)
AUTO-IGNITION TEMPERATURE:	685°F (363°C) (oleic acid); 743°F (395°C) (stearic acid)
FLAMMABLE LIMITS:	None Known
NFPA RATING:	HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1 SPECIAL: NA
HAZARDOUS COMBUSTION PRODUCTS:	Carbon oxides (CO, CO2)
SPECIAL CONDITIONS TO AVOID:	High temperatures, incompatible materials, light, exposure to air, excess heat. Oil soaked rags can cause spontaneous combustion if not handled properly. Before disposal, wash rags with soap and water and dry in well ventilated area.
NORMAL EXTINGUISHING MEDIA:	Alcohol-resistant foam, carbon dioxide, dry chemical.
FIRE FIGHTING INSTRUCTIONS:	PPE: Wear a NIOSH-approved positive pressure self-contained breathing apparatus and firefighter's turnout gear. Containers exposed to intense heat should be cooled with water to prevent pressure build up; clear area of unprotected personnel. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound – from venting safety devices or discoloration of vessel. ALWAYS stay away from the ends of 'bullet' tanks.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE:	Eliminate all sources of ignition. Stop leak if without risk. Use water spray curtain to divert vapor drift. Prevent entry into waterways, sewers, basements, or confined areas; dike if needed. Pick up small spills with inert absorbent materials. Recover large spills for salvage or disposal. Wash hard surfaces with safety solvent or detergent to remove remaining oil film. Greasy nature will result in a slippery surface. Depending on the size and nature of the release, all responders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Do not handle near heat, sparks, or open flame. Avoid contact with incompatible agents. Use only with adequate ventilation or personal protection. Avoid breathing vapors and contact with eyes, skin and clothing. Metal containers involved in the transfer of this material should be grounded and bonded. Do not puncture, drag, or slide container. Drum is not a pressure vessel; never use pressure to empty.
STORAGE:	Keep containers tightly closed in a cool, well-ventilated place, at temperatures between 50°F and 120°F, and keep away from excessive heat, and ignition sources. Store out of the sun and away from oxidizers and other combustible material by a distance of at least 20 feet. Ground all equipment containing this material.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

PERSONAL PROTECTION

INHALATION:	A respiratory protection program that meets OSHA's 29CFR1910.134 or ANSI Z88.2 requirements must be followed, whenever workplace conditions warrant respirator use.
SKIN:	Appropriate protective clothing should be worn to prevent skin contact. Avoid using rubber compounds such as buna-N, nitrile, and natural rubber which will degrade and leak. PVC-coated gloves recommended to prevent skin contact (biodiesel).
EYES:	Safety glasses for normal use. Goggles and face shield should be used if there is the chance of liquid splash or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H20 = 1) :	0.8871 - 0.8762	BOILING POINT:	>380°F (193°C)
VAPOR DENSITY (AIR = 1) :	>1 (biodiesel)	VAPOR PRESSURE, mmHg:	<2 (biodiesel)
MELTING PT:	NA	WATER SOLUBILITY:	Insoluble in cold water
pH:	5.0-7.0	VISCOSITY:	4.815 cSt at 50°C (D445)
EVAPORATION RATE (butyl acetate=1):	<1 (biodiesel)	CLOUD POINT:	63°F (17°C)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	The product is stable when handled as prescribed.
CONDITIONS TO AVOID:	High temperature. All sources of ignition. Incompatible materials, light, exposure to air.
INCOMPATIBILITY WITH:	Strong oxidizing agents, alkalis, reducing agents, bases. {Palmitic Acid: Reactive with oxidizing agents, reducing agents, alkalis.} {Oleic Acid: Strong oxidizing agents, perchloric acid, powdered aluminum.} {Biodiesel: May soften and degrade certain types of rubber compounds used for hoses and gaskets (buna-N, nitrile, natural rubber) and may cause them to leak and degrade to the point where they crumble and become useless. Will degrade and form high sediment levels if contacted for long periods by copper or copper containing metals (brass, bronze) or with lead, tin, or zinc (galvanized surfaces).}
HAZARDOUS PRODUCTS OF DECOMPOSITION:	When heated to decomposition it emits acrid smoke and irritating fumes.
HAZARDOUS POLYMERIZATION:	Is not expected to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

PALMITIC ACID	Toxicity to Animals: Acute oral toxicity (LD50): >10000 mg/kg [Rat]
STEARIC ACID	Toxicity to Animals: Acute oral toxicity (LD50): 4640 mg/kg [Rat]. Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit]. Special Remarks on Chronic Effects on Humans: May cause cancer based on animal test data
OLEIC ACID	LD50/LC50: Draize test, rabbit, eye: 100 mg Mild; Oral, mouse: LD50 = 28 gm/kg; Oral, rat: LD50 = 25 gm/kg; Human Skin Draize 15 mg/3D intermittent; REACTION: Moderate.
LINOLEIC ACID	Oral, mouse: LD50 = >50 gm/kg; Teratogenicity: Teratogenic effects have been observed in experimental animals.

SECTION 12: ECOLOGICAL INFORMATION

PALMITIC & STEARIC ACIDS	Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
OLEIC ACID	Ecotoxicity: Fish: Fathead Minnow: LC50 = 205 mg/L; 96 Hr.; Static condition
LINOLEIC ACID	Ecotoxicity: No data available. Invertebrate toxicity:EC50 (duration unspecified) purple sea urchin 0.28-1.07 mg/kg inhibited fertilisation (Cherr,G.N. et al Environ.Toxicol.Chem. 1987, 6(7), 561-569). Environmental: Anaerobic effects: Readily biodegradable in batch bioassay inoculated with anaerobic granular sludge at 30°C and 35-200 mg/l linoleic acid (Sierra-Alvarrez,R. et al Environ.Technol.1990, 11(10), 891-898).Degradation studies: The correlation between BOD and COD for fatty acids was studied. COD values were 1.2-29.6% ThOD averaging 8.38%. BOD values were 12.7-98.8% ThOD averaging 71% BOD/COD ratio 2.76-52.9% (Matsuoka,C. et al Kenkyu =kiyo-Tokushima Bunri Daigaku 1987, 34, 193-199 (Japan.)).

SECTION 13: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Fatty Acid Ester		
DOT HAZARD CLASS:	Not Applicable		
UN ID:	Not Applicable		
PACKING GROUP:	Not Applicable	MARINE POLLUTANT:	Not Applicable
REPORTABLE QUANTITY:	Not Applicable	NAER GUIDEBOOK:	Not Applicable
LABEL/PLACARD:	Not Applicable	DOT STATUS:	Not a Regulated Material

SECTION 14: REGULATORY INFORMATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 SARA TITLE III AND 40 CFR 372: NONE

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REVISED: February 16, 2009, # 0

CES Environmental Services, Inc.

4904 GRIGGS

HOUSTON, TX 77021

Facsimile Transmittal Sheet

TO:	FROM:
Margaret Garza	Jenny Rust
COMPANY:	DATE:
Mitsui Plastics	3/16/2009
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
713-759-1517	5
PHONE NUMBER:	RE:
	Update Profile

Good Afternoon

Please sign, date & return the updated profile at your earliest convenience.

Thank You,

Jenny

Jennifer Rust – CSR / Inside Sales

Office: 713-676-1460
Direct: 713-800-7913
Cell: 713-367-8581
Fax: 713-676-1676

MSDS

Material Safety Data Sheet

HAZARD INDEX

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REACTIVITY	1

OXO LIGHTS

SECTION 1: IDENTIFICATION

CHEMICAL NAME:	NA, Mixed alcohols in C3-C6 range, mostly C4
CHEMICAL FAMILY:	Alcohols
TRADE NAME:	OXO Lights
SYNONYMS:	C4 Alcohol Blendstock
FORMULA:	NA
CAS NUMBER:	See composition
MANUFACTURER:	

TELEPHONE NUMBERS

EMERGENCY:	TEXMARK	(713) 455-1206
	CHEMTREC	(800) 424-9300
PRODUCT SAFETY:		(713) 455-1206

SECTION 2: COMPOSITION

COMPONENT NAME	CAS No.	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	WT%
n-Butyl Alcohol	71-36-3	50 ppm	NA	NA	NA	9-20
i-Butyl Alcohol	78-83-1	NA	NA	NA	NA	4-20
butyraldehyde	123-72-8	NA	NA	NA	NA	2-12

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Material is extremely flammable. Keep away from electric motors, heaters, open flames, high intensity heat sources or other ignition sources. Do not grind, weld, cut, or drill on or near containers or pipes. Vapors can ignite explosively.**

SIGNAL WORD: DANGER!

PHYSICAL & HEALTH HAZARDS: FLAMMABLE LIQUID. Vapors can travel to a source of ignition and flash back. Prolonged and repeated exposure to vapors may cause damage to the CNS. Aspiration into the lungs may cause chemical pneumonia.

PHYSICAL STATE: Liquid

COLOR: Colorless

ODOR: Strong characteristic butanol odor. Harsh fuel oil and banana smell.

ODOR THRESHOLD: NA

ROUTES OF EXPOSURE: Inhalation, Skin contact, Eye contact, Ingestion

FIRE FIGHTING INSTRUCTIONS:	PPE: Wear a NIOSH-approved positive pressure self-contained breathing apparatus and firefighter's turnout gear. Containers exposed to intense heat should be cooled with water to prevent pressure build up; clear area of unprotected personnel. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel. ALWAYS stay away from the ends of 'bullet' tanks.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE:	Eliminate all sources of ignition. Stop leak if without risk. Use water spray curtain to divert vapor drift. Prevent entry into waterways, sewers, basements, or confined areas; dike if needed. Depending on the size and nature of the release, all responders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Do not handle near heat, sparks, or open flame. Avoid contact with incompatible agents. Use only with adequate ventilation or personal protection. Avoid breathing vapors and contact with eyes, skin and clothing. Metal containers involved in the transfer of this material should be grounded and bonded.
STORAGE:	Keep containers tightly closed in a cool, well-ventilated place. Store away from oxidizers and other combustible material by a distance of at least 20 feet. Ground all equipment containing this material.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
PERSONAL PROTECTION	
INHALATION:	A respiratory protection program that meets OSHA's 29CFR1910.134 or ANSI Z88.2 requirements must be followed, whenever workplace conditions warrant respirator use.
SKIN:	Appropriate protective clothing should be worn to prevent skin contact.
EYES:	Safety glasses for normal use. Goggles and face shield should be used if there is the chance of liquid splash or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H20 = 1) :	0.8314	BOILING POINT:	167-331°F (75-166°C)
VAPOR DENSITY (AIR = 1) :	NA	VAPOR PRESSURE:	6-10psi (100 mmHg)@68°F (20°C)
MELTING PT:	NA	WATER SOLUBILITY:	Soluble
pH:	NA	VISCOSITY:	NA
EVAPORATION RATE(Butyl Acetate=1):	NA		

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TO AVOID:	High temperature. All sources of ignition.
INCOMPATIBILITY WITH:	Strong oxidizers.

Oxo Lights

(N-butanol light ends)

Heat of combustion, BTU/lb, ASTM D-240	13,708
Color	Yellow
Gravity, API	38.7
Metals	0
Sulfur	0
Flash	20 degrees F
Water	6%

TEXMARK

MSDS

Material Safety Data Sheet

P.O. Box 67
900 CLINTON
GALENA PARK,TX 77547
(713) 455-1206

HAZARD INDEX

FLAMMABILITY	3
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REACTIVITY	1

OXO LIGHTS

SECTION 1: IDENTIFICATION

CHEMICAL NAME:	NA, Mixed alcohols in C3-C6 range, mostly C4
CHEMICAL FAMILY:	Alcohols
TRADE NAME:	OXO Lights
SYNONYMS:	C4 Alcohol Blendstock
FORMULA:	NA
CAS NUMBER:	See composition
MANUFACTURER:	Texmark Chemicals, Inc. 900 Clinton Drive Galena Park, TX 77547

TELEPHONE NUMBERS

EMERGENCY:	TEXMARK	(713) 455-1206
	CHEMTREC	(800) 424-9300
PRODUCT SAFETY:		(713) 455-1206

SECTION 2: COMPOSITION

COMPONENT NAME	CAS No.	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	WT%
n-Butyl Alcohol	71-36-3	50 ppm	NA	NA	NA	9-20
i-Butyl Alcohol	78-83-1	NA	NA	NA	NA	4-20
butyraldehyde	123-72-8	NA	NA	NA	NA	2-12

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Material is extremely flammable. Keep away from electric motors, heaters, open flames, high intensity heat sources or other ignition sources. Do not grind, weld, cut, or drill on or near containers or pipes. Vapors can ignite explosively.**

SIGNAL WORD: DANGER!

PHYSICAL & HEALTH HAZARDS: FLAMMABLE LIQUID. Vapors can travel to a source of ignition and flash back. Prolonged and repeated exposure to vapors may cause damage to the CNS. Aspiration into the lungs may cause chemical pneumonia.

PHYSICAL STATE: Liquid

COLOR: Colorless

ODOR: Strong characteristic butanol odor. Harsh fuel oil and banana smell.

ODOR THRESHOLD: NA

ROUTES OF EXPOSURE: Inhalation, Skin contact, Eye contact, Ingestion

SIGNS & SYMPTOMS OF ACUTE EXPOSURE:	Headache, sneezing and cough may occur. N-butyl alcohol is an eye, skin, and respiratory tract irritant. High concentrations may cause CNS depression. Exposure to high concentration could cause lowering of consciousness.
SKIN CONTACT:	May be mildly irritating to the skin. Dry skin, roughness. Repeated or prolonged contact with skin may cause dermatitis.
INHALATION:	Coughing, dizziness, drowsiness, and headache may occur. Respiratory tract irritant
EYE CONTACT:	May be mildly irritating to the eyes. May cause blurred vision and burning sensation. Lachrymation and photophobia, possible corneal damage.
INGESTION:	Ingestion would likely cause abdominal pain, drowsiness, and vomiting.
CHRONIC HEALTH EFFECTS:	Prolonged and repeated exposure to vapors may cause damage to the CNS and may cause dermatitis.
CONDITIONS AGGRAVATED BY EXPOSURE:	Persons with pre-existing CNS disease, skin disorders, or chronic respiratory disease should avoid exposure.
CARCINOGENICITY:	OXO Lights is not listed as a human carcinogen by NTP, IARC, or OSHA.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.
For specific information refer to the EMERGENCY OVERVIEW in Section 3 of this MSDS.

EYE CONTACT:	Flush eyes with water. If irritation persists, seek medical attention.
SKIN CONTACT:	Remove contaminated clothing; wash skin with soap and water. If irritation persists, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, wallets, belts, etc.).
INHALATION:	Remove subject to fresh air. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Seek medical attention immediately.
INGESTION:	Rinse mouth. Give plenty of water to drink. DO NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Get medical attention immediately.

SECTION 5: FIRE FIGHTING

FLAMMABILITY CLASSIFICATION:	IB Flammable Liquid.
FLASH POINT:	< 10°F (-12°C), TCC
AUTO-IGNITION TEMPERATURE:	NA
FLAMMABLE LIMITS:	LEL: 1.4%, UEL: 11.3% (n-butyl alcohol)
NFPA RATING:	HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 1 SPECIAL: NA
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide (CO), and unidentified organic compounds may be formed.
SPECIAL CONDITIONS TO AVOID:	Exposure to extreme heat and ignition sources.
NORMAL EXTINGUISHING MEDIA:	Alcohol-resistant foam, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS:	PPE: Wear a NIOSH-approved positive pressure self-contained breathing apparatus and firefighter's turnout gear. Containers exposed to intense heat should be cooled with water to prevent pressure build up; clear area of unprotected personnel. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel. ALWAYS stay away from the ends of 'bullet' tanks.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE:	Eliminate all sources of ignition. Stop leak if without risk. Use water spray curtain to divert vapor drift. Prevent entry into waterways, sewers, basements, or confined areas; dike if needed. Depending on the size and nature of the release, all responders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Do not handle near heat, sparks, or open flame. Avoid contact with incompatible agents. Use only with adequate ventilation or personal protection. Avoid breathing vapors and contact with eyes, skin and clothing. Metal containers involved in the transfer of this material should be grounded and bonded.
STORAGE:	Keep containers tightly closed in a cool, well-ventilated place. Store away from oxidizers and other combustible material by a distance of at least 20 feet. Ground all equipment containing this material.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
PERSONAL PROTECTION INHALATION:	A respiratory protection program that meets OSHA's 29CFR1910.134 or ANSI Z88.2 requirements must be followed, whenever workplace conditions warrant respirator use.
SKIN:	Appropriate protective clothing should be worn to prevent skin contact.
EYES:	Safety glasses for normal use. Goggles and face shield should be used if there is the chance of liquid splash or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H20 = 1) :	0.8314	BOILING POINT:	167-331°F (75-166°C)
VAPOR DENSITY (AIR = 1) :	NA	VAPOR PRESSURE:	6-10psi (100 mmHg)@68°F (20°C)
MELTING PT:	NA	WATER SOLUBILITY:	Soluble
pH:	NA	VISCOSITY:	NA
EVAPORATION RATE(Butyl Acetate=1):	NA		

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TO AVOID:	High temperature. All sources of ignition.
INCOMPATIBILITY WITH:	Strong oxidizers.

HAZARDOUS PRODUCTS OF DECOMPOSITION:	NA
HAZARDOUS POLYMERIZATION:	NA

SECTION 11: TOXICOLOGICAL INFORMATION

NONE AVAILABLE.

SECTION 12: ECOLOGICAL INFORMATION

NONE AVAILABLE.

SECTION 13: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Flammable Liquid N.O.S. (n-butyl alcohol, i-butyl alcohol)		
DOT HAZARD CLASS:	3		
UN ID:	UN 1993		
PACKING GROUP:	II	MARINE POLLUTANT:	No
REPORTABLE QUANTITY:	22, 000 lb due to n-butyl alcohol content 71, 000 lb due to i-butyl alcohol content	NAER GUIDEBOOK:	129
LABEL/PLACARD:	FLAMMABLE LIQUID	DOT STATUS:	Regulated

SECTION 14: REGULATORY INFORMATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 SARA TITLE III AND 40 CFR 372:
n-Butyl Alcohol, CAS: 71-36-3, 9-20% WT.

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS's THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, TEXMARK MAKES NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE COMPLETENESS OR ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. TEXMARK ASSUMES NO RESPONSIBILITY FOR, AND EXPRESSLY DISCLAIMS LIABILITY FOR, LOSS OR INJURY ARISING OUT OF CONTACT WITH OR USE OF THE PRODUCT DESCRIBED HEREIN.

REVISED: December 6, 2001, #2

Salinas, Linda

From: Wall, Dick
Sent: Friday, March 06, 2009 2:48 PM
To: Linda Salinas
Subject: FW: recent tank analysis of oxo lights

From: Rosas, Rebecca
Sent: Friday, March 06, 2009 1:38 PM
To: Wall, Dick
Subject: recent tank analysis of oxo lights

	TKCK
RC# / P.O.#	
Material	OXO LTS
Tank #	405
Time	11:00 AM
Date	2/26/2009
API	35.8
LE	0.47
P ALD.	19.81
PROP-IB. ALD	13.02
B. ALD	21.62
IBA	2.83
NBA	9.95
HEPT.	15.44
2ME 1 B	0.04
2ME 2PE	0.05
HEAV.	11.84
FLASH	
COLOR	
WATER%	4.93
n-Pentanol	

Rebecca L. Rosas, Ph.D., ASQ CSSGB
R&D Director/Technical Center Manager
CXI Texmark Chemicals, Inc.
Galena Park, Texas
Ph: 713-495-1233
Fax: 713-455-1688
email: rrosas@texmark.com

3/6/2009

Oxo Lights

(N-butanol light ends)

Heat of combustion, BTU/lb, ASTM D-240	13,708
Color	Yellow
Gravity, API	38.7
Metals	0
Sulfur	0
Flash	20 degrees F
Water	6%

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Infineum C9403
Product Description: Petroleum Product Additive
Product Code: 32433100
Intended Use: Lube oil additive

COMPANY IDENTIFICATION

Supplier: **INFINEUM USA L.P.**
P.O. Box CN 135
Linden, NJ. 07036 USA

24 Hour Health Emergency	800-726-2015
Transportation Emergency Phone	800-424-9300
Product Technical Information	800-654-1233
Supplier General Contact	800-654-1233

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

SECTION 3 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

POTENTIAL PHYSICAL / CHEMICAL EFFECTS

Contact with hot material can cause thermal burns which may result in permanent damage. Thermal burn hazard - contact with hot material may cause thermal burns.

POTENTIAL HEALTH EFFECTS

May be irritating to the eyes, nose, throat, and lungs. Excessive exposure may result in eye, skin, or respiratory irritation.

NFPA Hazard ID:	Health:	1	Flammability:	1	Reactivity: 0
HMIS Hazard ID:	Health:	1	Flammability:	1	Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4 FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek

immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Give one or two glasses of water if patient is alert and able to swallow. Seek immediate medical attention. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Smoke, Fume, Nitrogen oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: >150C (302F)
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. If liquid is too viscous for pumping, scrape it up with shovels into a suitable container for recycle or disposal.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid all personal contact. Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Products may load from Infineum manufacturing site above the standard loading/unloading range.

Loading/Unloading Temperature: 45°C (113°F) - 55°C (131°F)

Transport Temperature: N/D
Transport Pressure: [Ambient]

Static Accumulator: This material is not a static accumulator.

STORAGE

Do not store in open or unlabelled containers.
Storage Temperature: 45°C (113°F) - 55°C (131°F)
Storage Pressure: [Ambient]

Suitable Containers/Packing: Drums; Tank Cars; Tank Trucks; Bulk Containers
Suitable Materials and Coatings: Carbon Steel; Stainless Steel; Zinc; Epoxies
Unsuitable Containers/Packing: Butadiene and styrene rubbers; Natural and butyl rubbers
Unsuitable Materials and Coatings: Rubber; Polyethylene; Butyl Rubber; Butadiene Rubber; Styrene Rubber

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product: When mists / aerosols can occur, the following are recommended: 5 mg/m³ - ACGIH TLV, 10 mg/m³ - ACGIH STEL, 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended. If contact with material may occur, safety glasses and face shield are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended. If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid
Color:
Odor: Mild Petroleum/Solvent
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.6 C): 0.93 15.6°/15.6C
Density (at 15 °C): 930 kg/m³ (7.76 lbs/gal, 0.93 kg/dm³)
Flash Point [Method]: >150C (302F)
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D
Boiling Point / Range: >= 260C (500F)
Vapor Density (Air = 1): N/D
Vapor Pressure:
Evaporation Rate (n-butyl acetate = 1): [Negligible]
pH: N/D
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Negligible
Viscosity: 10000 cSt (10000 mm2/sec) at 40 C | 200 cSt (200 mm2/sec) at 100C
Oxidizing Properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/D
Hygroscopic: No
Coefficient of Thermal Expansion: 0.00069 %

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: LC50 > 5 mg/l	Minimally Toxic.
Irritation: No end point data.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic.
Skin	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic.
Irritation: No end point data.	Mildly irritating to skin with prolonged exposure.
Eye	
Irritation: No end point data.	May cause mild, short-lasting discomfort to eyes.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: CORROSIVITY.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT) : Not Regulated for Land Transport

LAND (TDG) : Not Regulated for Land Transport

SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA) : Not Regulated for Air Transport

SECTION 15 REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

EPCRA: This material contains no extremely hazardous substances.

CERCLA: This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The Following Ingredients are Cited on the Lists Below: None.

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:
Section 04: First Aid Skin was modified.
Section 04: First Aid Ingestion was modified.
Section 04: First Aid Inhalation was modified.
Section 06: Notification Procedures - Header was modified.
Section 11: Skin Irritation Conclusion was modified.
Section 13: Empty Container Warning was modified.
Section 09: Boiling Point C(F) was modified.
Section 08: Hand Protection was modified.
Section 07: Handling and Storage - Handling was modified.
Hazard Identification: Health Hazards was modified.
Hazard Identification: Physical/Chemical Hazard was modified.
Section 07: Loading/Unloading Temperature C(F) was modified.
Section 07: Transport Temperature C(F) was modified.
Section 07: Storage Temperature C(F) was modified.
Section 11: Dermal Lethality Test Data was modified.
Section 06: Accidental Release - Spill Management - Water was modified.
Section 09: Relative Density - Header was modified.
Section 09: Flash Point C(F) was modified.
Section 09: Viscosity was modified.
Section 09: Viscosity was modified.
Section 08: Hand Protection was modified.
Section 08: Skin and Body Protection was modified.
Section 11: Skin Irritation Conclusion was modified.
Section 06: Accidental Release Measures - Environmental Precautions was modified.
Section 16: Code to MHCs was modified.
Section 09: Relative Density was modified.
Section 06: Notification Procedures was modified.
Section 14: LAND (TDG) - Header was added.
Section 14: LAND (TDG) Default was added.
Section 15: CERCLA - Header was added.
Section 15: CERCLA was added.
Section 11: Chronic Tox - Component - U.S. Infineum - Header was added.
Section 12: Mobility - Header was deleted.
Section 12: Persistence and Degradability- Header was deleted.

Section 12: Biodegradation - Header was deleted.
Section 11: Chronic Tox - Component - Header was deleted.
Section 12: Ecological Information - Mobility was deleted.
Section 12: Ecological Information - Mobility was deleted.
Section 12: Ecological Information - Biodegradation was deleted.
Section 12: Ecological Information - Biodegradation was deleted.

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Internal Use Only
MHC: 0, 0, 0, 0, 2, 1

DGN: 6034191 (1003771) (NA Core)

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Edigen - Fuel material 3002

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/08/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2008
Updated:

Product Name: Power Additive

(b) (4)

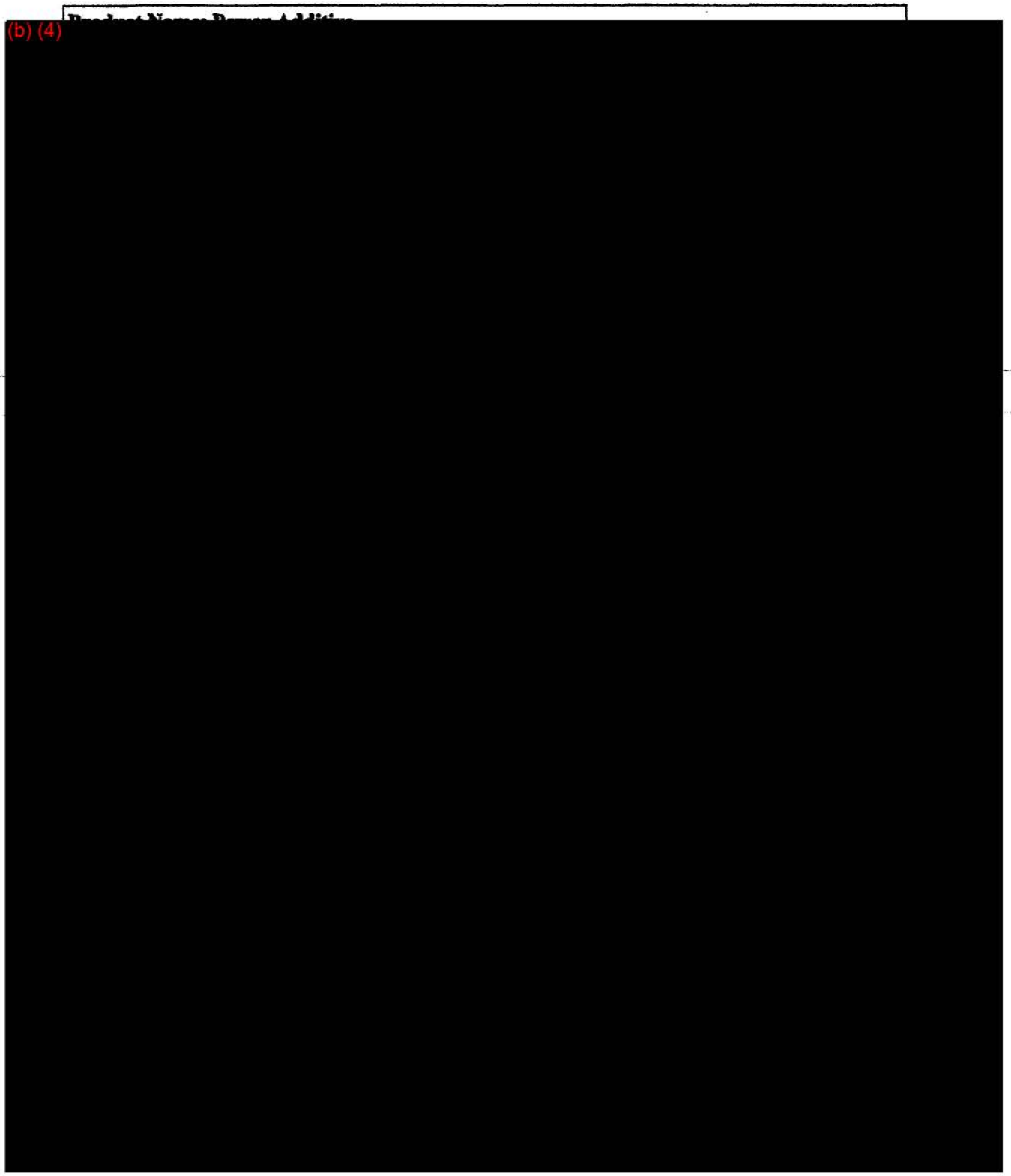
[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

(b) (4)



Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6644
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6644
Prepared: 17/08/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

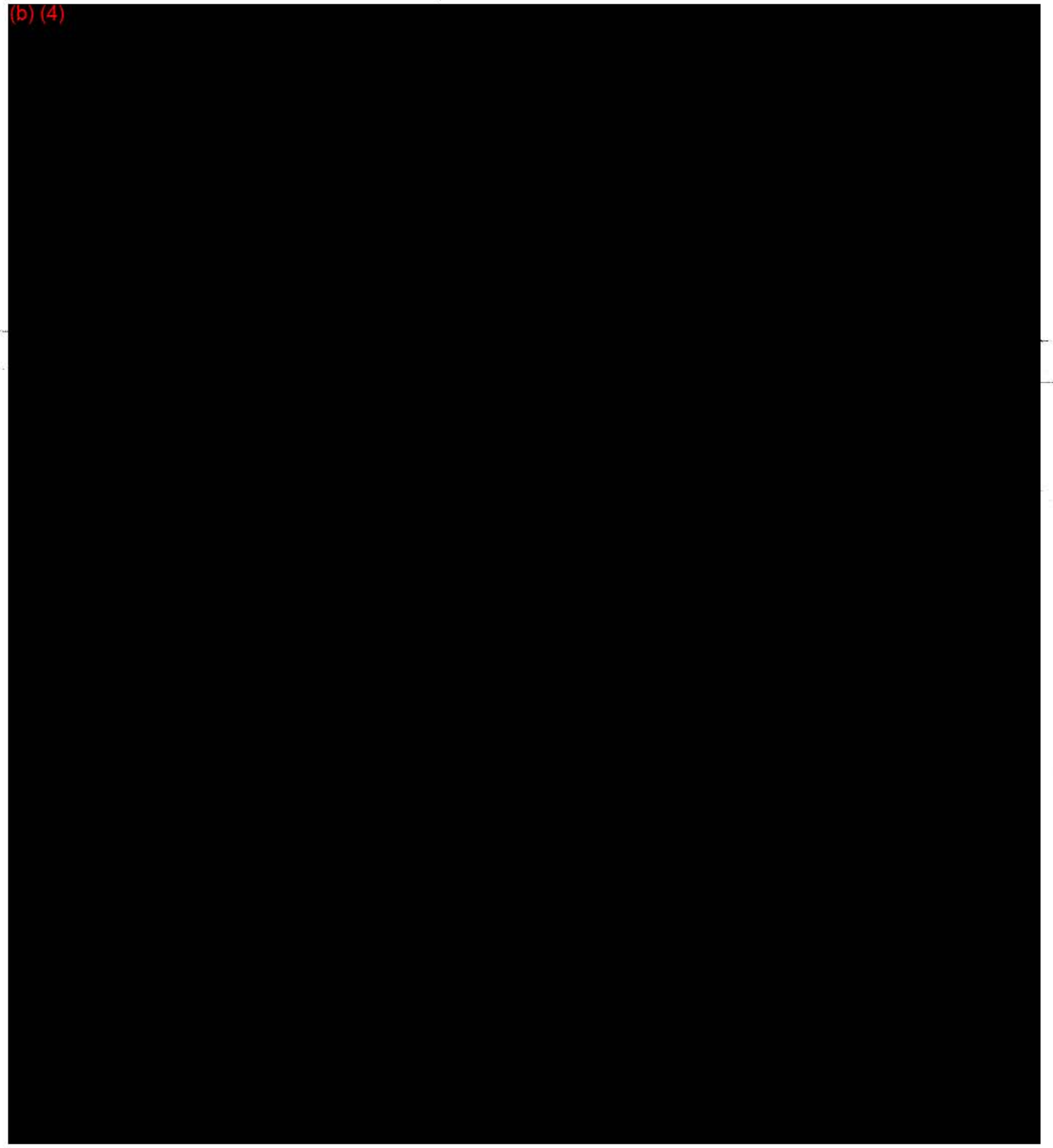
Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)



Material Safety Data Sheet

C.L.E.A.N. Power Additives Inc.
27 Nixon Road, Unit # 13
Bolton, Ontario, Canada L7E 1J7

Phone: (905) 951-3244
Fax: (905) 951-6844
Prepared: 17/06/2006
Updated:

Product Name: Power Additive

(b) (4)

[redacted]

Lubrizol

Material Safety Data Sheet
SM-100

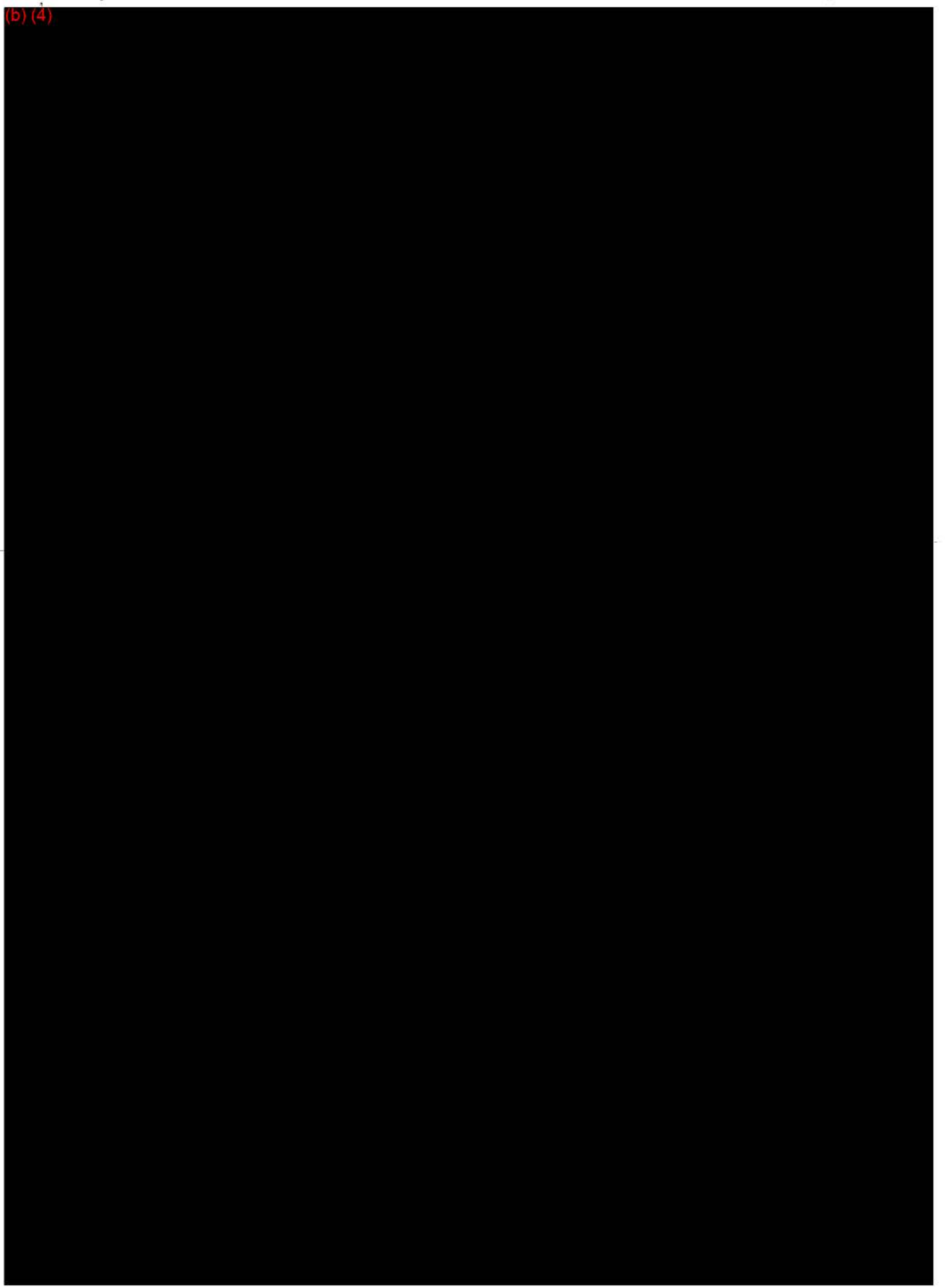
Prepared according to 29CFR 1910.1200.

1	**Chemical Product and Company Identification**

The Lubrizol Corporation
29400 Lakeland Boulevard
Wickliffe, Ohio 44092
Tel: (440) 943-4200

(b) (4)

(b) (4)



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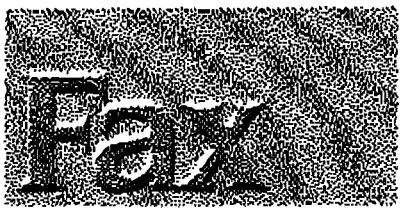

Date: Monday, January 19, 2009

To: CES ENVIRONMENTAL
KIM HARMON
Phone: 713-676-1460
Fax: 713-676-1676

708 8664

From: RECYCLE & REUSE INDUSTRIES, INC.
JOHN METZ
Phone: 817-477-5207
Fax: 817-477-5210

RECYCLE & REUSE SERVICES:
ENVIRONMENTALLY SAFE WASH SOLVENTS AND CHEMICALS - LAB CHEMICALS - INDUSTRIAL CLEANING EQUIPMENT - WASTE RECYCLING - BUY BACK CHEMICAL SALES

Subject: sulfur msds - can get samples

P-30 Sulfur

1. Chemical and Manufacturer Identification

Product Name: P-30 Sulfur

Chemical Family: Sulfur

Chemical Synonym(s):

Rating Scale:
0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe 5=N/A

Hazard Type	NFPA	CERCLA	Other
Health	1		
Flammability	1		
Reactivity	0		
Specific Hazard			

Specific Hazard	
	Radiation
OXY	Oxidizer
W	Use No Water
COR	Corrosive
	Special Disposal
ALK	Alkali
ACID	Acid

Manufacturer: [redacted]
Address1:
Address2:
City:
Phone:
Emergency Phone:
CHEMTREC Emergency Phone:
Mixture: No
Chemical Type: Hazardous
MSDS Number: P-30
MSDS Date: 01/24/2001
Tracking #: 01046ET

Precautionary Labeling: Warning! Molten product can cause thermal burns. Contains or may release hydrogen sulfide gas (H2S). H2S gas is harmful or fatal if inhaled. H2S gas is irritating to eyes and respiratory tract. H2S gas may accumulate in confined spaces. *May cause eye irritation.*

Appearance: Amber viscous liquid

Odor: Not determined

II. Chemical Components

Component Chemical	Synonym	Concentration	CAS Number	Formula	Molecular Weight
Sulfur		100.00%	7704-34-9		

IIA. Chemical Component Properties

Component Chemical	Property	OSHA PEL 1	OSHA PEL 2	ACGIH TLV	Niosh	Other Limits 1	Other Limits 2
Sulfur	N/A						

Composition Notes: The criteria for listing components in the composition section is as follows: carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater; non-hazardous components are listed at 3.0% or greater. This is not intended to be a complete compositional disclosure. Refer to Section XV for applicable States' Right To Know and other regulatory information.

III. Health Hazard Data

Potential

Health Effects

Eye: May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye. Eye contact with hot or molten product can cause eye burns.

Skin: May cause irritation with discomfort, and seen as local redness and possible swelling. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects. Skin contact with hot or molten product can cause skin burns.

Inhalation: Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness. Contains or may release hydrogen sulfide (H2S) gas. H2S concentrations above permissible concentrations can cause irritation of the eyes and respiratory tract, headache, dizziness, nausea, vomiting, diarrhea, and pulmonary edema. At concentrations above 300 ppm, respiratory paralysis, causing unconsciousness and death, can occur

Ingestion: May cause abdominal discomfort, nausea, and diarrhea.

Symptoms of Over-Exposure: Eye irritation as seen as slight excess redness of the eye. Skin irritation with discomfort, and seen as local redness and possible swelling. H2S exposure can cause irritation of the eyes and respiratory tract, headache, dizziness, nausea, vomiting, diarrhea, and pulmonary edema. At concentrations above 300 ppm, respiratory paralysis, causing unconsciousness and death, can occur.

Aggravated Medical Condition: Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease. Because of its irritating properties, repeated skin contact with dust or slurry may aggravate an existing dermatitis (skin condition).

Emergency Overview: Heated product may cause thermal burns. May cause minimal eye irritation. Skin contact may be slightly irritating. H2S exposure can cause respiratory system problems, unconsciousness and death.

Listed as a Carcinogen By: **NTP:** No **IARC:** No **OSHA:** No **Z-LIST:** No

IV. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire eye and lids with water. Get medical attention.

Skin: Flush with water for at least 15 minutes. Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing and shoes. Get medical attention if skin irritation persists or skin contact has been prolonged.

Inhalation: If inhaled, remove to fresh air. If not breathing, clear person's airway and give artificial respiration. If breathing is difficult, qualified medical personnel may administer oxygen. Get medical attention immediately.

Ingestion: If patient is conscious and can swallow, give two glasses of water (16 oz.) Induce vomiting as directed by medical personnel. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

Other Notes: Inhalation exposure may result in respiratory tract injury, the delayed onset of pulmonary edema, and may predispose patient to secondary respiratory infection. Persons exposed to high concentrations should be hospitalized for observation. Contact a Poison Center for additional treatment information.

V. Fire Fighting Measures

Flammable Classification Under 29 CFR:

Flammable Limits: **LEL:**3.3 **UEL:**46

Flash Point: = 355 Deg F

Method: COC

Auto Ignition Temperature: Not determined

Extinguishing Media: Use water spray. Water or foam may cause frothing.

Fire Fighting Procedures: Wear full protective clothing and positive pressure self-contained breathing apparatus. Approach fire upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Use fine spray or fog to control fire by preventing its spread and absorbing some of its heat. Use water spray to cool fire-exposed surfaces, protect personnel, and knock down toxic fumes. Water or foam may cause frothing of molten sulfur. Extinguish fire using agent suitable for surrounding fire. (Fire in liquid sulfur can be extinguished readily by closing container to exclude oxygen).

Unusual Hazards: Vapor space in closed container can contain hydrogen sulfide (H2S) in

explosive concentrations. Hydrogen sulfide gas may be released when heated. Toxic vapors formed on burning.

VI. Accidental Release Measures

Spill/Leak Clean Up Procedures: Eliminate all sources of ignition. Avoid body contact with molten material. Earthen dams or sideboards can contain large spills. Water spray will help to cool and solidify molten sulfur.

VII. Handling and Storage Measures

Handling Precautions: Minimum feasible handling temperatures should be maintained.

Storage Precautions: Copper and copper alloys not suitable for storage containers. Avoid traces of hydrocarbons in containers. Entry into empty storage vessels prohibited without positive pressure air masks.

Hygiene Practices: Eye wash and safety showers should be available nearby when this product is handled or used.

VIII. Exposures, Controls and PPE

Local Ventilation: Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use NIOSH approved respirator as appropriate.

Respirator: When Hydrogen Sulfide (H2S) concentrations are unknown or are equal to or greater than 10 ppm, (as in such activities as: loading; unloading; gauging; cleaning large spills or upon entry into tanks, vessels, or other confined spaces; and during rescue of individuals suspected to be overexposed to H2S), use supplied-air (airline or self-contained breathing apparatus) respiratory protection (NIOSH Approved). The respirators must be equipped with pressure-demand regulators and operated in the pressure- demand mode only. If airline units are used, a 5-minute egress bottle must also be carried.

Gas masks or other air-purifying respirators must never be used for H2S due to poor warning properties of the gas.

Eye Protection: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Hand Protection: Gloves resistant to chemicals and petroleum distillates required. When handling large quantities gloves must be worn.

Protective Clothing: Protective clothing such as coveralls or lab coats should be worn. Launder or dry clean when soiled. When handling large quantities, impervious suits, and rubber boots must be worn.

Other Notes: Exposure Limit for Total Product: See Section II. None established for product. For hydrogen sulfide: OSHA PEL-TWA 10 ppm; STEL 15ppm. ACGIH TLV-TWA 10 ppm; STEL 15 ppm.

IX. Physical and Chemical Properties

Property	Value	Unit	Condition	Unit	Condition
Viscosity		N/A			
Boiling Point	832	Deg F			
Melting Point	246	Deg F			
Vapor Density		N/A			
Vapor Pressure	0.11	mmHg			

Specific Gravity: 1.8

Bulk Density: NA

% Volatile: Not determined

Evaporation Rate: NA

State: Liquid

Odor: Not determined

pH: Not applicable

Appearance: Amber viscous liquid

User Defined Properties

Solubility in Water: <0.1%

X. Stability and Reactivity

Stable: Stable

Hazard Polymerization: Does not occur

Incompatibility: Strong Oxidizers

Hazardous By-Product: Toxic levels of sulfur dioxide, sulfur trioxide, and sulfuric acid.

Other Notes: This material may also react with reducing agents, copper, and copper alloys.

XI. Toxicological Information

Eye: (Draze) Believed to be >15.00-25.00/110 (rabbit) slightly irritating

Skin: (Draze) Believed to be >3.00-5.00/8.0 (rabbit) moderately irritating. LD50 Believed to be >2.00g/kg (rabbit) practically non-toxic.

Ingestion: LD50 Believed to be >2.00-5.00 g/kg (rat) slightly toxic.

Inhalation: Not determined

XII. Ecological Information

Ecotoxicological Information: Not determined

Chemical Fate Information: Not determined

XIII. Disposal Methods

Disposal Methods: This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may change the classification to non-hazardous, or hazardous.

XIV. Transportation Information

Proper Shipping Name: Sulfur, molten Domestic Transport Only

UN/NA #: NA 2448

D.O.T.

Hazard Class: 9

Label: Class 9

Packaging Group: III

I.M.O.

Hazard Class: Not evaluated

I.C.A.O

Hazard Class: Not evaluated

XV. Regulatory Information

TSCA

Inventory: YES

Exempt:

5(a)(2):

5(e):

5(h)(3):

8(b):

12(b):

Notes: This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

SARA

Acute: YES **Chronic:** NO **Flammability:** NO **Pressure:** NO **Reactivity:** NO

SARA 302	Identity	TPQ	Reportable Quantity
N/A	None		

SARA 302 Notes:

SARA 311 Hazard Class: Yes

SARA 313	Identity	CAS #	% Weight
	None		

SARA 313 Notes:

SARA Notes:

CERCLA

Hazardous Substance: N/A

Reportable Quantity:

Notes:

State and International Regulatory Information:

EINECS: This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemicals Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Canadian WHMIS: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

XVI. Other Information

Hazardous concentrations of hydrogen sulfide (H2S) gas can accumulate in storage and rundown tanks, marine vessel compartments, sump pits or other confined spaces. When opening valves, hatches and dome covers, stand upwind, keep face as far from opening as possible and avoid breathing any gases or vapors.

Naphthenic Acid
Material Safety Data Sheet

Section	Title	Section	Title
1 –	Company and Product Identification	9 –	Physical and Chemical Properties
2 –	Composition, Information on Ingredients	10 –	Stability and Reactivity
3 –	Hazards Identification	11 –	Toxicological Information
4 –	First Aid Measures	12 –	Ecological Information
5 –	Fire Fighting Measures	13 –	Disposal Considerations
6 –	Accidental Release Measures	14 –	Transport Information
7 –	Handling and Storage	15 –	Regulatory Information
8 –	Exposure Controls and Personal Protection	16 –	Other Information

SECTION 1. Company and Product Identification

1.1 MSDS Name: Naphthenic Acid

Chemical Name: Naphthenic Acid

Synonyms: Sunaptic Acid B and Sunaptic Acid C

Chemical Formula: RCOOH

Molecular Weight: 200-350-Mixture

CAS Number: 1338-24-5

EINECS Number: 215-662-8

1.2 Supplier: Port Arthur Chemical & Environmental Services, LLC
2420 South Gulfway Drive
Port Arthur, TX 77640
713-416-4160

1.4 Emergency Contact: **Bo Cumberland 713-416-4160**
CHEMTREC 800-424-9300

SECTION 2. Composition and Information on Ingredients

2.1 Chemical Ingredients (% by wt):

CAS #	Chemical Name	Percent	EINECS / ELINCS
1338-24-5	Napthenic Acid	ca. 100	215-662-8

SECTION 3. Hazards Identification

3.1 Appearance: Clear Light Yellow Viscous Liquid.
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: No data found.

3.2 Eyes: May cause eye irritation.

3.4 Skin: May cause skin irritation.

3.5 Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

3.6 Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

3.7 Chronic: No information found.

SECTION 4. First Aid Measures

4.1 Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

4.2 Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

4.3 Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

4.4 Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

4.5 Notes to Physician: Treat symptomatically and supportively.

SECTION 5. Fire Fighting Measures

5.1 General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protection gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

5.2 Extinguishing Media: Water may be ineffective. Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

5.3 Flash Point: 149 deg C (300.20 deg F)

5.4 Auto-ignition Temperature: Not Applicable

5.5 Exposure Limits, Lower: 1%

5.6 Upper: Not Available

5.7 NFPA Rating: (estimated) Health:0; Flammability:0; Instability: 0

SECTION 6. Accidental Release Measures

6.1 General Information: Use proper personal protective equipment as indicated in Section 8 (below).

6.2 Spills and Leaks: Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do NOT use combustible materials such as sawdust. Provide ventilation.

SECTION 7. Handling and Storage

7.1 Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

7.2 Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8. Exposure Controls and Personal Protection

8.1 Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8.2 Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Napthenic Acid	None Listed	None Listed	None Listed

8.3 OSHA Vacated PELs: Napthenic Acid: No OSHA Vacated PELs are listed for this chemical.

8.4 Personal Protection Equipment:

- **Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- **Skin:** Wear appropriate protective gloves to prevent skin exposure.
- **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- **Respirators:** A respiratory protection program that meets OSHA'S 29 CFR 1910.134 and ANSIZ88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

SECTION 9. Physical and Chemical Properties

9.1 Physical State: Viscous Liquid

9.2 Appearance: Clear Light Yellow

9.3 Odor: None Reported

9.4 pH: Not Available

9.5 Vapor Pressure: Very Low

9.6 Vapor Density: Not Available

9.7 Evaporation Rate: Not Available

SECTION 9. Physical and Chemical Properties CONTINUED

9.8 Viscosity: 25 deg C ST

9.9 Boiling Point: 160.0 – 198.0 deg C @ 6.00mm

9.10 Freezing and Melting Point: Not Available

9.11 Decomposition Temperature: Not Available

9.12 Solubility: Not Available

9.13 Specific Gravity and Density: 0.982 g/cm3

9.14 Molecular Formula: Not Applicable

9.15 Molecular Weight: Not Available

SECTION 10. Stability and Reactivity

10.1 Chemical Stability: Stable under normal temperatures and pressures.

10.2 Conditions to Avoid: Incompatible materials, strong oxidants.

10.3 Incompatibilities with Other Materials: Metals, strong oxidizing agents.

10.4 Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

10.5 Hazardous Polymerization: Has not been reported.

SECTION 11. Toxicological Information

11.1 RTECS #:

11.2 CAS #: 1338-24-5: QK8750000

11.3 LD50 AND LC50:

11.4 Oral: Rat: LD50 = 3gm/kg

11.5 Carcinogenicity: CAS# 1338-24-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

SECTION 11. Toxicological Information CONTINUED

11.6 Epidemiology: No information found

11.7 Teratogenicity: No information found

11.8 Reproductive Effects: No information found

11.9 Mutagenicity: No information found

11.10 Neurotoxicity: No information found

SECTION 12. Ecological Information

No Information Available

SECTION 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None Listed
RCRA U-Series: None Listed

SECTION 14. Transportation Information

	U.S. DOT	Canada TDG
Shipping Name:	Not Regulated as a Hazardous Material	No Information Available
Hazard Class:	9137	
UN Number:		
Packing Group:		

SECTION 15. Regulatory Information

U.S. Federal

15.1 TSCA: CAS# 1338-24-5 is listed on the TSCA inventory.

15.2 Health and Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

SECTION 15. Regulatory Information CONTINUED

15.3 Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.

15.4 Section 12b: None of the chemicals are listed under TSCA Section 12b.

15.5 TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.

15.6 CERCLA Hazardous Substances and Corresponding RQs: CAS# 1338-24-5: 100 lb final RQ; 45.4 kg final RQ.

15.7 SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

15.8 Section 313: No chemicals are reported under Section 313.

15.9 Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depeletors.

15.10 Clean Water Act: CAS# 1338-24-5 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as toxic Pollutants under the CWA.

15.11 OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

15.12 State: CAS# 1338-24-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

15.13 California Prop 65: California No Significant Risk Level: None of the chemical in this product are listed.

15.14 European / International Regulations: European Labeling in Accordance with EC Directives.

15.15 Hazard Symbols: Not Available

15.16 Risk Phrases:

15.17 Safety Phrases: S 24/25 Avoid contact with skin and eyes.

SECTION 15. Regulatory Information CONTINUED

15.18 WGK (Water Danger/Protection): CAS# 1338-24-5: 1

15.19 Canada – DSL/NDSL: CAS# 1338-24-5 is listed on Canada's DSL List.

15.20 Canada – WHMIS: Not Available. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

15.21 Canadian Ingredient Disclosure List: No Information Listed

SECTION 16. Additional Information

MSDS Creation Date: November 7, 2008

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSAREY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE THE MATERIAL SAFETY DATA SHEET PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

EL DORADO CHEMICAL COMPANY
MATERIAL SAFETY DATA SHEET
CONCENTRATED NITRIC ACID

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION.

EL DORADO CHEMICAL COMPANY
4500 North West Ave.
P. O. Box 231
El Dorado, AR 71731
Concentrated Nitric Acid
Acid Reagent

Information Telephone: (870) 863-1498
Emergency Telephone: (870) 863-1400
Hours of Operation: 24 hours
Fax: (870) 863-1499
Chemtrec: (800) 424-9300

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS.

COMPOSITION:
Concentrated Nitric Acid (98% HN03)
(Hydrogen Nitrate, Aqua Fortis, White Fuming Nitric Acid)

HAZARDOUS INGREDIENTS:

Nitric Acid	CAS# 7697-37-2	97.5% to 100%

SECTION 3: HAZARDS IDENTIFICATION.

EMERGENCY OVERVIEW:
Colorless to light brown liquid with acrid odor.
DANGER: STRONG OXIDIZER. Corrosive.
Dangerously reactive.
May be fatal if ingested.
Causes severe burns to eyes and skin.
Vapor extremely irritating to respiratory tract.
Spills may cause fire or liberate dangerous gas.
WARNING: May cause serious delayed lung injury.

POTENTIAL HEALTH HAZARDS:

EYE:
Can cause severe burns. May cause irreversible eye injury.

SKIN:
Can cause severe skin irritation and burns. May cause deep, penetrating ulcers of the skin

INGESTION:
Causes severe burns to mouth, throat and stomach. May cause perforation of the digestive tract. May be fatal.

INHALATION:
Severe irritation or burns of respiratory system, pulmonary edema and lung inflammation. May be fatal if inhaled. May cause coughing, wheezing, and shortness of breath. Serious effects on lung function may be delayed.

EPAHO003001387

SECTION 3: HAZARDS IDENTIFICATION (cont).

CHRONIC:

Repeated inhalation may cause chronic bronchitis. Repeated exposure may cause erosion of teeth.

SECTION 4: FIRST AID MEASURES.

EYE:

Immediately flush with water for at least 15 minutes. Contact a physician immediately.

SKIN:

Immediately flush with large amount of water while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse. Leather or other materials which may retain traces of acid should be decontaminated and properly disposed.

INGESTION:

Give large amounts of water. Do not induce vomiting. Contact a physician immediately.

INHALATION:

Remove to fresh air. Give artificial respiration or oxygen if needed. Contact a physician immediately. Observe for delayed effects.

SECTION 5: FIRE FIGHTING MEASURES.

FLAMMABLE PROPERTIES:

Nonflammable. Nitric acid alone is not flammable but it may cause ignition by contact with combustible materials.

EXTINGUISHING MEDIA:

In case of fire, soak with water. Dry chemical or CO_2 fire extinguisher may also be used. Use water spray to cool containers and reduce and knock down vapors. Apply water from as far away as possible. Neutralize small amounts of spilled acid with crushed limestone, soda ash or lime.

FIRE AND EXPLOSION HAZARDS:

Powerful oxidizing agent. Can react explosively with reducing agents such as metal powders, hydrogen sulfide (H_2S), nitrates and organic materials such as wood or cellulose.

HAZARDOUS DECOMPOSITION PRODUCTS:

Releases highly toxic oxides of nitrogen. Reaction with organic materials results in evolution of heat and acrid fumes.

FIRE FIGHTING EQUIPMENT:

Wear self-contained breathing apparatus and full acid protective clothing including rubber boots. Thoroughly decontaminate equipment after use.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

Evacuate area. Avoid all skin, eye and respiratory exposure. Wear self-contained breathing apparatus and full body acid protection including rubber boots to enter spill area. Flush small leaks or spills with large quantities of water. If possible, contain large spills with diking and neutralize with limestone, soda ash or liquid caustic soda.

CAUTION: Neutralization can produce vigorous reactions, boiling and fumes. Remain upwind, evacuate downwind. Cleaned-up material may be a RCRA Hazardous Waste under 40 CFR 261. Comply with all federal, state and local regulations for disposal of waste.

SECTION 7: HANDLING AND STORAGE.

HANDLING:

-Do not get in eyes, on skin, or on clothing.
-Wear full protective equipment including chemical goggles, or face shield, rubber gloves and boots.
-Do not inhale mist or vapor.
-Handle only in areas with sufficient ventilation to prevent irritation or wear a respirator.
-Do not ingest.
-Wash thoroughly after handling.
-Keep container closed when not in use.
-Contact with water can produce a violent reaction.
-When diluting, slowly add acid to water with stirring and mixing to avoid spattering, boiling or eruption. Water cannot be safely added to acid.
-Emptied container retains vapor and product residue. Observe all safeguards until container is cleaned or reconditioned.

STORAGE:

-Keep container tightly closed.
-Outdoor storage in a cool, dry, corrosion proof area is recommended.
-Keep containers out of sun and away from heat.
-Isolate from incompatible materials.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION.

RESPIRATORY PROTECTION:

Provide general and local exhaust ventilation to control exposure levels below airborne exposure limits. Local exhaust ventilation is the preferred primary control. Refer to the OSHA Respirator Standard 29 CFR 1910.134 for proper selection and use of personal respirators.

SKIN PROTECTION:

Wear impervious protective clothing to prevent skin contact, including an impervious apron rubber boots or full impervious suit when splashing is possible. Provide a safety shower in the immediate vicinity of potential exposure. Refer to OSHA General Requirements for Personal Protective Equipment 29 CFR 1910.132.

EPAHO003001389

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION. (cont.)

EYE PROTECTION:

Wear chemical safety goggles or full face shield to prevent eye contact. Use only in the proximity of an eye wash station. Refer to OSHA Requirements for Eye and Face Protection 29 CFR 1910.133.

EXPOSURE GUIDELINES:

	OSHA-PEL 8hr-TWA	ACGIH-TLV 8hr-TWA	ACGIH-STEL (15min)
Nitric Acid	2 ppm	2 ppm	4 ppm

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

Appearance:.....Colorless to light brown liquid
Odor:.....Acrid
pH:.....<1
Flashpoint:.....Not applicable
%Solids:.....Not applicable
%Volatility:.....100%
Solubility:.....Completely miscible in water
Vapor Density (air=1):.....>1
Vapor Pressure (mm Hg):.....51 @ 25 deg C (77 deg F)
Evaporation Rate (butyl acetate = 1):.....>1
Specific Gravity @ 60 deg F: 1.5088
Freezing Point: ..... -42 deg F
Boiling Point: ..... 183 deg F
Viscosity, cp @ 20 deg C (68 deg F): 1.0

SECTION 10: STABILITY AND REACTIVITY.

STABILITY:

Stable if properly contained and handled.

INCOMPATIBILITY:

All organic materials and reducing agents.
Addition of water to acid must be avoided.

HAZARDOUS DECOMPOSITION PRODUCTS:

-Oxide of nitrogen fumes, at ambient or elevated temperatures, and with agitation.
-Nitric acid will react with most organic materials with the evolution of heat and large quantities of dense acrid fumes.

HAZARDOUS POLYMERIZATION:

Has not been reported.

EPAHO003001390

SECTION 11: TOXICOLOGICAL INFORMATION.

ACUTE:

Nitric acid is highly corrosive, fuming and suffocating. Dilute nitric acid can cause inhalation irritation, eye irritation, harden skin epithelium and cause skin irritation. Concentrated nitric acid severely burns and stains the skin, destroys skin tissue and burns the eyes. Inhalation of nitric acid vapors can destroy lung tissue. Evidence of lung damage may not occur until many hours after initial exposure. Lung damage occurs in the form of edema which may be severe and sometimes fatal. Ingestion of nitric acid causes immediate pain and burning of the mouth, throat and stomach. Symptoms range from nausea, vomiting, circulatory collapse to death. Individuals with pre-existing diseases of the lungs may have increased susceptibility to the toxicity of acid inhalation exposure.

CHRONIC:

Continued exposure to nitric acid fumes can erode the teeth and be severely irritating and corrosive to the mucous membranes of the respiratory tract. Nitric acid is not listed as a carcinogen by IARC, NTP, ACGIH, NIOSH or OSHA.

TARGET ORGANS:

Eyes, mucous membranes, skin, respiratory system.

SECTION 12: ECOLOGICAL INFORMATION.

This product should be considered as potentially hazardous to the environment. Avoid contamination of soil, drains and water during handling. Nitric acid is moderately toxic to aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS.

This material should be treated as a corrosive hazardous waste in accordance with all applicable regulations. Cleaned-up material may also be a hazardous waste due to its corrosivity. This product has a RCRA waste identification of D002-Corrosive as designated in 40 CFR 261.22. The waste of this product is subject to the Land Disposal Restrictions under 40 CFR 268.

CAUTION: Neutralization can produce vigorous reaction, boiling and fumes. Use extreme caution in clean-up procedures.

CONCENTRATED NITRIC ACID

EPAHO003001391

SECTION 14: TRANSPORTATION INFORMATION.

Shipping Name:.....Nitric Acid (*other than red fuming with more than 70% nitric acid*)
UN/DOT ID #:.....UN 2031
DOT/IMO Hazard Class:.....8, (5.1)
Packaging Group: I
DOT Label/Placard:.....Corrosive
Quantity Limits:
Passenger Aircraft or Railcar: .....Forbidden
Cargo Aircraft: .....2.5 L
Vessel Stowage: .....D
Packaging Authorizations:
Exceptions: .....NONE
Non-bulk Packaging: .....49 CFR 173.158
Bulk Packaging: .....49 CFR 173.243
DOT Emergency Response Guide Number: 157

SECTION 15: REGULATORY INFORMATION.

CERCLA SUPERFUND, 40 CFR 117.302:
Under the Comprehensive Environmental Response, Compensation and Liability Act, a release of this product in excess of 1000 pounds requires reporting to the National Response Center.

SARA HAZARD CATEGORY:
Under Sections 311 and 312 of the Superfund Amendment and Reauthorization act of 1986 (SARA Title III) this product is considered to meet the following categories:
Fire Hazard:.....Yes
Sudden Release of Pressure:.....No
Reactivity Hazard:.....Yes
Acute Health Hazard:.....Yes
Chronic Health Hazard:.....No

SARA 313 INFORMATION:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR Part 372): Nitric Acid

CLEAN AIR ACT:
This product does not contain any hazardous air pollutants.
This product does not contain any Class 1 Ozone depletors.
This product does not contain any Class 2 Ozone depletors.

SECTION 15: REGULATORY INFORMATION (cont).

EPAHO003001392

CLEAN WATER ACT:

This product is listed as a Hazardous substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants or Toxic Pollutants under the CWA.

OSHA:

This material is considered highly hazardous by OSHA.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

This product is listed on the TSCA Inventory.

STATE:

CALIFORNIA PROPOSITION 65:

This product contains the following chemicals known to the State of California to cause cancer or reproductive harm: None.

PENNSYLVANIA RIGHT TO KNOW:

Hazardous Substances and Special Hazardous Substances on the List which must be identified are: Nitric Acid.

NEW JERSEY:

Requires reporting the top five components by percent:

Nitric Acid:.....98% to 100%
Water:.....0% to 2%

CANADA:

WHMIS:

Under the requirements of the Workplace Hazardous Materials Information System, this material is a controlled substance classified as:

Class C - Oxidizing Material
Class D - Division 1, Subdivision B: Toxic Material
Class E - Corrosive

All components are on the Domestic Substances List (DSL).

CONCENTRATED NITRIC ACID

SECTION 16: OTHER INFORMATION.

HAZARD RATINGS:

	HMIS	NFPA
Health	3	3
Flammability	0	0
Reactivity	1	0
Special Hazard:	Oxidizer	Oxidizer

0: minimal
1: slight
2: moderate
3: serious
4: severe

This MSDS has been prepared in compliance with the OSHA Hazard communication Standard 29 CFR 1910.1200.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to correct as of the date hereof, El Dorado Chemical Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determinations as to its suitability for their purposes prior to use. In no event will El Dorado Chemical Company be responsible for damages of any nature whatsoever resulting from the use or reliance upon information. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

REVISED 08/05

TOAGOSEI SINGAPORE PTE LTD

MATERIAL SAFETY DATA SHEET

Product: Methyl Acrylate
Date: 1 October 2004 Version: 3 Total pages: 3

1 Product and Company Identification

Product name	:	**Methyl Acrylate (MA)**
Manufacturer	:	**Toagosei Singapore Private Limited**
Plant Address	:	17, Sakra Road, #01-03, Singapore 627886
Telephone number	:	(65)-6867-6754
Facsimile number	:	(65)-6867-6756
Emergency phone number	:	(65)-6867-6757 (24 hour)

2 Composition and Information on Ingredients

Chemical name	:	Methyl Acrylate
Synonyms	:	Acrylic acid methyl ester
Molecular formula	:	CH_2=CH-$COOCH_3$
Molecular weight	:	86.09
CAS number	:	96-33-3
EINECS number	:	202-500-6
UN class	:	class 3.2
UN number	:	1919

3 Hazards Identification

Classification name	:	**Highly flammable liquid**
Hazards	:	Flammable liquid. Dangerous fire hazard when exposed to heat, flame, or oxidizers. Polymerization by radical and heat.
Signs & symptoms of exposure	:	Inhalation causes breathing problems leading to collapse. Eye contact and skin contact cause irritation.

4 First-aid Measures

Inhalation	:	Remove victim to fresh air and provide oxygen or do artificial respiration if breathing is difficult.
Skin contact	:	Wash with water. Remove contaminated clothing. If persistent irritation occurs, then get medical attention.
Eye contact	:	Wash with plenty water for at least 15 minutes and get medical attention immediately.
Ingestion	:	Do not give liquid and induce vomit, and get medical attention.

5 Fire-fighting Measures

Extinguishing media	:	Dry chemical, foams, carbon dioxide.
Special fire fighting procedures	:	Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear to avoid breathing or any physical contact with this product, highly toxic vapours, hazardous decomposition products. Cool fire exposed containers with water.
Unusual fire and explosion hazards	:	Elevated temperatures cause exothermic polymerization with explosive effects.

EPAHO003001395

6	**Accidental Release Measures**		
	Large amount spills	:	Evacuate the people to a safe place. Take proper measure to evacuate the area by stretching a rope or by warning. Block the spilled liquid with earth and direct it to a safe place. Collect the liquid into container and absorb it with absorbents. Attentions should be paid so that no concentrated waste liquid is discharged into rivers. Dispose collected liquid by incineration.
	Small amount spills	:	Collect the spilled liquid or absorb with absorbents.
7	**Handling and Storage**		
	Precautions for handling	:	Use only in well-ventilated areas and in a closed system. Keep away from heat, sparks and flames. Avoid contact with skin, eyes, clothing. Do not inhale vapour. Use chemical goggles, rubber gloves.
	Precautions for storage	:	Store under 35°C, dry and well-ventilated area, away from ignition source and sunlight. Stainless steel is recommended material for storage tank, containers and equipment. Fill the tank with an inert gas containing 5-8 %(v/v) oxygen gas.
8	**Exposure Controls and Personal Protection**		
	Control parameters	:	ACGIH TLV(1996) 10(2)ppm, 35(7)mg/m^3
	Engineering measures	:	Use only with local exhaust ventilation or in closed systems.
	Personal protective equipment		
	Eye and face protection	:	Chemical goggles, full-face shield
	Hand and skin protection	:	Rubber gloves, rubber boots, coveralls
	Respiratory protection	:	Air respirator
9	**Physical and Chemical Properties**		
	Physical Properties		
	Appearance	:	Clear colourless liquid. Strong ester odour.
	Boiling point	:	80.3°C at 101.3kPa
	Vapor pressure	:	9.3kPa at 20°C
	Melting point	:	-76.5 °C
	Specific gravity	:	0.954 (20°C/4°C)
	Vapor density	:	2.97 at air=1
	Solubility in water	:	5.2 wt%
	Viscosity	:	0.507 cp at 25°C
	Physical Hazards		
	Flash point	:	-1.5°C by closed cup
	Autoignition temp	:	420°C
	Explosive limits	:	(LEL) 1.7%(v/v), (UEL) 15.9%(v/v)
10	**Stability and Reactivity**		
	Stability	:	Normally stable.
	Reactivity	:	Polymerization by heat, light and peroxide.
	Incompatibility material	:	Strong oxidizing agents, peroxides. Strong acids.

EPAHO003001396

11	**Toxicological Information**		
	Acute toxicity	:	Oral LD_{50} (rat) 277 mg/kg Inhalation LC_{50} (rat) 3,500 mg/m^3/4Hrs Dermal LD_{50} (rabbit) 1,243 mg/kg
	Irritation	:	Contact with eyes and skin cause itch, rash and efflorescence.
	Carcinogenicity	:	IARC : 3 (Not classifiable as a carcinogen) ACGIH : A4 (Not classifiable as a carcinogen) OSHA : Not classifiable as a carcinogen
	Genotoxicity	:	Ames test : negative
12	**Ecological Information**		
	Biodegradability	:	BOD_5 0.74g/g
	Bioaccumulation	:	No information found.
	Fish toxicity	:	LC_{50} (Golden orfe: 48Hrs) 7.5 mg/l, (Gold fish: 72Hrs) 5 mg/l
13	**Disposal Consideration**		
	Materials	:	Material may be incinerated at approved sites.
	Container	:	Remove residual material and wash container internal with water or steam before disposing it.
14	**Transport Information**		
	Regulations	:	UN number: 1919 Import/Export statistics product number: 2916.12-000 IMDG-code: (P3252) Class 3.2, PG2
	Other	:	Follow all regulations in your country
15	**Regulatory Information**		
	Regulations	:	Follow all regulations in your country
16	**Other Information**		
	References	:	Safety Guidebook for Handling of Acrylic Acid and Acrylic Esters (6th edition), Japanese Acrylic Ester Manufacturers (March 2004)

To the best of our knowledge, the information contained here is accurate.
However we do not assume any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user.
All materials may present unknown hazards and should be used in caution.
Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

EPAHO003001397

Material Safety Data Sheet

HiTEC 5708 Performance Additive

MSDS no. H5708

HiTEC is a trademark owned by Afton Chemical Corporation or one of its subsidiaries.

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[redacted]

*** END OF MSDS ***

dutch45@comcast.net

ConocoPhillips

Crude Oil/Diesel Mix

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Crude Oil/Diesel Mix
MSDS Number:	778967
Intended Use:	Fuel
Manufacturer/Supplier:	ConocoPhillips 600 N. Dairy Ashford Houston, Texas 77079-1175
Emergency Health and Safety Number:	Chemtrec: 800-424-9300 (24 Hours)
MSDS Information:	Phone: 800-762-0942 Email: MSDS@conocophillips.com Internet: http://w3.conocophillips.com/NetMSDS/

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING!

Flammable Liquid and Vapor
Skin Irritant
May Contain or Release Poisonous Hydrogen Sulfide Gas
Aspiration Hazard
Possible Cancer Hazard (Component)

NFPA

Appearance: Amber to Black
Physical Form: Liquid
Odor: Petroleum; Rotten egg / sulfurous

Potential Health Effects

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: Mild to moderate skin irritant. Contact may cause redness, itching, a burning sensation, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption are expected.

Inhalation (Breathing): Low to moderate degree of toxicity by inhalation.May contain or release poisonous hydrogen sulfide gas - see Other Comments.

Ingestion (Swallowing): Low degree of toxicity by ingestion. ASPIRATION HAZARD - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Signs and Symptoms: Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, nausea, vomiting, diarrhea and signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

EPAHO003001404

Other Comments: This material may contain or liberate hydrogen sulfide, a poisonous gas with the smell of rotten eggs. The smell disappears rapidly because of olfactory fatigue so odor may not be a reliable indicator of exposure. Effects of overexposure include irritation of the eyes, nose, throat and respiratory tract, blurred vision, photophobia (sensitivity to light), and pulmonary edema (fluid accumulation in the lungs). Severe exposures can result in nausea, vomiting, muscle weakness or cramps, headache, disorientation and other signs of nervous system depression, irregular heartbeats, convulsions, respiratory failure, and death.

This material may contain varying concentrations of polycyclic aromatic hydrocarbons (PAHs) which have been known to produce a phototoxic reaction when contaminated skin is exposed to sunlight. The effect is similar in appearance to an exaggerated sunburn, and is temporary in duration if exposure is discontinued. Continued exposure to sunlight can result in more serious skin problems including pigmentation (discoloration), skin eruptions (pimples), and possible skin cancers.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders and respiratory (asthma-like) disorders. Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Persons with pre-existing heart disorders may be more susceptible to this effect (see Section 4 - Note to Physicians).

See Section 11 for additional Toxicity Information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CASRN	Concentration*
Crude Oil (Petroleum)	8002-05-9	10-90
Diesel Fuel No. 2	68476-34-6	10-90
Ethyl Benzene	100-41-4	<2
Benzene	71-43-2	<1
Naphthalene	91-20-3	<1
Hydrogen Sulfide	7783-06-4	<0.1

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse.

Inhalation (Breathing): If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion (Swallowing): Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Notes to Physician: At high concentrations hydrogen sulfide may produce pulmonary edema, respiratory depression, and/or respiratory paralysis. The first priority in treatment should be the establishment of adequate ventilation and the administration of 100% oxygen. Animal studies suggest that nitrites are a useful antidote, however, documentation of the efficacy of nitrites in humans is lacking. If the diagnosis of hydrogen sulfide poisoning is confirmed and if the patient does not respond rapidly to supportive care, the use of nitrites may be an effective antidote if delivered within the first few minutes of exposure. For adults the dose is 10 mL of a 3% $NaNO_2$ solution (0.5 gm $NaNO_2$ in 15 mL water) I.V. over 2-4 minutes. The dosage should be adjusted in children or in the presence of anemia, and methemoglobin levels, arterial blood gases, and electrolytes should be monitored closely.

Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (e.g., in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

Federal regulations (29 CFR 1910.1028) specify medical surveillance programs for certain exposures to benzene above the action level or PEL (specified in Section (i)(1)(i) of the Standard). In addition, employees exposed in an emergency situation shall, as described in Section (i)(4)(i), provide a urine sample at the end of the shift for measurement of urine phenol.

5. FIRE-FIGHTING MEASURES

NFPA 704 Hazard Class

Health: 1 **Flammability:** 3 **Instability:** 0 (0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

Unusual Fire & Explosion Hazards: Flammable. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire. Hazardous combustion/decomposition products, including hydrogen sulfide, may be released by this material when exposed to heat or fire. Use caution and wear protective clothing, including respiratory protection.

Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Flammable. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). May contain or release poisonous hydrogen sulfide gas. See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use foam on spills to minimize vapors (see Section 5). Use water sparingly to minimize environmental contamination and reduce disposal requirements. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Methods for Containment and Clean-Up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid breathing gas. Use only outdoors or in well-ventilated area. Wear protective gloves. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment.

Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Conditions for safe storage: Keep container(s) tightly closed. This material may contain or release poisonous hydrogen sulfide gas. In a tank, barge, or other closed container, the vapor space above this material may accumulate hazardous concentrations of hydrogen sulfide. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	US-ACGIH	OSHA	Other
Crude Oil (Petroleum)	---	---	TWA:100 mg/m^3 - 8 hr. ConocoPhillips (ConocoPhillips Guidelines)
Diesel Fuel No. 2	Skin TWA: 100 mg/m^3	---	---
Benzene	STEL: 2.5 ppm Skin TWA: 0.5 ppm	Ceiling: 25 ppm STEL: 5 ppm TWA: 1 ppm TWA: 10 ppm	---
Naphthalene	STEL: 15 ppm Skin TWA: 10 ppm	TWA: 10 ppm TWA: 50 mg/m^3	TWA: 0.2 mg/m^3 (as total of 17 PNA's measured by NIOSH Method 5506) (ConocoPhillips Guidelines)
Hydrogen Sulfide	STEL: 15 ppm TWA: 10 ppm	Ceiling: 20 ppm	---

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

Skin/Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile

Respiratory Protection: Where there is potential for airborne exposure to hydrogen sulfide (H2S) above exposure limits, a NIOSH approved, self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode should be used. Under conditions where hydrogen sulfide (H2S) is NOT detected, a NIOSH certified air purifying respirator equipped with organic vapor cartridges/canisters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

If benzene concentrations equal or exceed applicable exposure limits, OSHA requirements for personal protective equipment, exposure monitoring, and training may apply (29CFR1910.1028 - Benzene).

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance:	Amber to Black
Physical Form:	Liquid
Odor:	Petroleum; Rotten egg / sulfurous
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure:	0.5-10 psia (Reid VP) @ 100°F
Vapor Density (air=1):	>1
Boiling Point/Range:	-128-1000°F / -89-538°C
Melting/Freezing Point:	No data
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.92 @ 60°F (15.6°C)
Bulk Density:	6.75-7.66 lbs/gal
Evaporation Rate (nBuAc=1):	No data
Flash Point:	20°F / -7°C
Test Method:	(estimate)
LEL (vol % in air):	1.0
UEL (vol % in air):	6.0
Autoignition Temperature:	>500°F / >260°C

10. STABILITY AND REACTIVITY

Stability: Stable under normal ambient and anticipated conditions of storage and handling. Flammable liquid and vapor. Vapor can cause flash fire.

Conditions to Avoid: Avoid high temperatures and all sources of ignition. Prevent vapor accumulation.

Materials to Avoid (Incompatible Materials): strong oxidizing agents.

Hazardous Decomposition Products: Not anticipated under normal conditions of use.

Hazardous Polymerization: Not known to occur.

11. TOXICOLOGICAL INFORMATION

Chronic Data:

Diesel Fuel No. 2

Carcinogenicity: Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA. Diesel exhaust has been identified as a probable cancer hazard by IARC.

Diesel Fuel No. 2

Target Organs: Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

Crude Oil (Petroleum)

Carcinogenicity: Chronic application of crude oil to mouse skin resulted in an increased incidence of skin tumors. IARC concluded in its Crude Oil Monograph that there is limited evidence of carcinogenicity in animals, and that crude oil is not classifiable as to its carcinogenicity in humans (Group 3). It has not been listed as a carcinogen by NTP or OSHA.

Reproductive: Dermal exposure to crude oil during pregnancy resulted in limited evidence of developmental toxicity in laboratory animals. Decreased fetal weight and increased resorptions were noted at maternally toxic doses. No significant effects on pup growth or other developmental landmarks were observed postnatally.

Ethyl Benzene

Carcinogenicity: Rats and mice exposed to 0, 75, 250, or 750 ppm ethyl benzene in a two year inhalation study demonstrated limited evidence of kidney, liver, and lung cancer. Ethyl benzene has been listed as a possible human carcinogen by IARC. Ethyl benzene has not been listed as a carcinogen by NTP, or OSHA.

Benzene

Carcinogenicity: Benzene is known to cause cancer of the blood-forming organs in humans, including acute myelogenous leukemia. It has been identified as a human carcinogen by NTP, IARC and OSHA.

Target Organs: Prolonged or repeated exposures to benzene vapors can cause damage to the blood and blood forming organs, including disorders like leukopenia, thrombocytopenia, and aplastic anemia.

Reproductive: Exposure to benzene during pregnancy demonstrated limited evidence of developmental toxicity in laboratory animals. The effects seen include decreased body weight and increased skeletal variations in rodents. Alterations in hematopoeisis have been observed in the fetuses and offspring of pregnant mice.

Mutagenic Effects: Benzene exposure has resulted in chromosomal aberrations in human lymphocytes and animal bone marrow cells, and DNA damage in mammalian cells in vitro.

Naphthalene

Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

Acute Data:

Component	Oral LD50	Dermal LD50	Inhalation LC50
Crude Oil (Petroleum)	> 5 g/kg (estimated)	> 2 g/kg (rabbit)	> 5 mg/L
Diesel Fuel No. 2	> 5 g/kg	>5ml/kg	4.6 - 7.6 mg/L
Hydrogen Sulfide	Not Applicable	Not Applicable	LC50 (rat) = 1500 mg/m^3/15 min

12. ECOLOGICAL INFORMATION

Ecotoxicity: Experimental studies show that acute aquatic toxicity values are in the range 1-100 mg/l. These values are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions. Should be regarded as harmful to aquatic organisms - may cause long term adverse effects in the aquatic environment.

Mobility: Releases to water will result in films of hydrocarbons floating and spreading on the surface, although some components may be heavier than water. Dissolution in water will be limited, but losses through sediment adsorption will be significant. For the lighter components, volatilization is an important loss process and reduces the hazard to aquatic organisms. In air, the hydrocarbon vapors react readily with hydroxyl radicals with half lives of less than one day.

Persistence and degradability: The hydrocarbons in this material are regarded as inherently biodegradable since their hydrocarbon components can be degraded by microorganisms.

Bioaccumulation Potential: Log Kow values measured for the hydrocarbon components of this material are between 2.7 and 6 and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

13. DISPOSAL CONSIDERATIONS

13. DISPOSAL CONSIDERATIONS

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste. However, it would likely be identified as a federally regulated RCRA hazardous waste for the following characteristic(s) shown below. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the MSDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

Container contents should be completely used and containers should be emptied prior to discard. Container residues and rinseates could be considered to be hazardous wastes.

EPA Waste Number(s)

- D001 - Ignitability characteristic
- D018 - Toxicity characteristic (Benzene)

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Shipping Description:	***Shipping description only valid if boiling point is >68° F (20° C). If BP is <=68°F, Call 800-762-0942 for assistance.*** Hydrocarbons, liquid, n.o.s., 3, UN3295, II
Non-Bulk Package Marking:	Hydrocarbons, liquid, n.o.s., UN3295
Non-Bulk Package Labeling:	Flammable liquid
Bulk Package/Placard Marking:	Flammable / 3295
Packaging - References:	49 CFR 173.150; 173.202; 173.242
Hazardous Substance:	See Section 15 for RQ`s
Emergency Response Guide:	128
Note:	***Shipping description may be modified by placing the UN or NA number as the first element. This order becomes mandatory on January 1, 2013.***

International Maritime Dangerous Goods (IMDG)

Shipping Description:	***Shipping description only valid if boiling point is >68° F (20° C). If BP is <=68°F, Call 800-762-0942 for assistance.*** UN3295, Hydrocarbons, liquid, n.o.s., 3, II, (FP° C cc), *[where FP is the material's flash point in degrees Celsius closed cup]*
Non-Bulk Package Marking:	Hydrocarbons, liquid, n.o.s., UN3295
Labels:	Flammable liquid
Placards/Marking (Bulk):	Flammable / 3295
Packaging - Non-Bulk:	P001
EMS:	F-E, S-D

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

UN/ID #:	***Shipping information only valid if boiling point is >68° F (20° C). If BP is <=68°F, Call 800-762-0942 for assistance.*** UN3295
Proper Shipping Name:	Hydrocarbons, liquid, n.o.s.
Hazard Class/Division:	3
Packing Group:	II
Non-Bulk Package Marking:	Hydrocarbons, liquid, n.o.s., UN3295
Labels:	Flammable liquid
ERG Code:	3H

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y305	305	307
Max. Net Qty. Per Package:	1 L	5 L	60 L

15. REGULATORY INFORMATION

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):
This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

Component	TPQ	EPCRA RQ
Hydrogen Sulfide	500 lb	100 lb

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health: Yes
Chronic Health: Yes
Fire Hazard: Yes
Pressure Hazard: No
Reactive Hazard: No

CERCLA/SARA - Section 313 and 40 CFR 372:
This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:

Component	Concentration*	de minimis
Ethyl Benzene	<2	0.1%
Benzene	<1	0.1%
Naphthalene	<1	0.1%

EPA (CERCLA) Reportable Quantity (in pounds):
EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

California Proposition 65:
Warning: This material may contain detectable quantities of the following chemicals, known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Component	Type of Toxicity
Ethyl Benzene	Cancer
Benzene	Cancer Developmental Toxicant Male Reproductive Toxicant
Naphthalene	Cancer
Toluene	Developmental Toxicant
Various Polycyclic Aromatic Hydrocarbons	Skin Cancer

Canadian Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Regulations.

WHMIS Hazard Class
B2 - Flammable Liquids
D2A
D2B

National Chemical Inventories:
All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.
All components are either on the DSL, or are exempt from DSL listing requirements.

U.S. Export Control Classification Number: EAR99

16. OTHER INFORMATION

Issue Date: 29-Jul-2008
Status: Final
Previous Issue Date: 22-Jul-2008
Revised Sections or Basis for Revision: Exposure limits (Section 8)
MSDS Number: 778967

MSDS Legend:
ACGIH = American Conference of Governmental Industrial Hygienists; ADR = Agreement on Dangerous Goods by Road; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); EINECS - European Inventory of Existing Commercial Chemical Substances; EPA = [US] Environmental Protection Agency; Germany-TRGS = Technical Rules for Dangerous Substances; IARC = International Agency for Research on Cancer; ICAO/IATA = International Civil Aviation Organization / International Air Transport Association; IMDG = International Maritime Dangerous Goods; Ireland-HSA = Ireland's National Health and Safety Authority; LEL = Lower Explosive Limit; N/A = Not Applicable; N/D = Not Determined; NIOSH = National Institute for Occupational Safety and Health; NTP = [US] National Toxicology Program; OSHA = [US] Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RID = Regulations Concerning the International Transport of Dangerous Goods by Rail; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value; TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; UK-EH40 = United Kingdom EH40/2005 Workplace Exposure Limits

Disclaimer of Expressed and implied Warranties:
The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: C9403
Product Description: Petroleum Product Additive
Product Code: 32433100
Intended Use: Lube oil additive

COMPANY IDENTIFICATION

Supplier:

24 Hour Health Emergency	800-726-2015
Transportation Emergency Phone	800-424-9300
Product Technical Information	800-654-1233
Supplier General Contact	800-654-1233

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

SECTION 3 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

POTENTIAL PHYSICAL / CHEMICAL EFFECTS

Contact with hot material can cause thermal burns which may result in permanent damage. Thermal burn hazard - contact with hot material may cause thermal burns.

POTENTIAL HEALTH EFFECTS

May be irritating to the eyes, nose, throat, and lungs. Excessive exposure may result in eye, skin, or respiratory irritation.

NFPA Hazard ID:	Health:	1	Flammability:	1	Reactivity: 0
HMIS Hazard ID:	Health:	1	Flammability:	1	Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4 FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek

immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Give one or two glasses of water if patient is alert and able to swallow. Seek immediate medical attention. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Smoke, Fume, Nitrogen oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: >150C (302F)
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. If liquid is too viscous for pumping, scrape it up with shovels into a suitable container for recycle or disposal.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid all personal contact. Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Products may load from Infineum manufacturing site above the standard loading/unloading range.

Loading/Unloading Temperature: 45°C (113°F) - 55°C (131°F)

Transport Temperature: N/D
Transport Pressure: [Ambient]

Static Accumulator: This material is not a static accumulator.

STORAGE

Do not store in open or unlabelled containers.
Storage Temperature: 45°C (113°F) - 55°C (131°F)
Storage Pressure: [Ambient]

Suitable Containers/Packing: Drums; Tank Cars; Tank Trucks; Bulk Containers
Suitable Materials and Coatings: Carbon Steel; Stainless Steel; Zinc; Epoxies
Unsuitable Containers/Packing: Butadiene and styrene rubbers; Natural and butyl rubbers
Unsuitable Materials and Coatings: Rubber; Polyethylene; Butyl Rubber; Butadiene Rubber; Styrene Rubber

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid
Color:
Odor: Mild Petroleum/Solvent
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.6 C): 0.93 15.6°/15.6C
Density (at 15 °C): 930 kg/m³ (7.76 lbs/gal, 0.93 kg/dm³)
Flash Point [Method]: >150C (302F)
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D
Boiling Point / Range: >= 260C (500F)
Vapor Density (Air = 1): N/D
Vapor Pressure:
Evaporation Rate (n-butyl acetate = 1): [Negligible]
pH: N/D
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Negligible
Viscosity: 10000 cSt (10000 mm2/sec) at 40 C | 200 cSt (200 mm2/sec) at 100C
Oxidizing Properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/D
Hygroscopic: No
Coefficient of Thermal Expansion: 0.00069 %

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: LC50 > 5 mg/l	Minimally Toxic.
Irritation: No end point data.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic.
Skin	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic.
Irritation: No end point data.	Mildly irritating to skin with prolonged exposure.
Eye	
Irritation: No end point data.	May cause mild, short-lasting discomfort to eyes.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Material Safety Data Sheet

HiTEC 5708 Performance Additive Material No. H5708

1. Product and company identification

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CSB.pdf (68 KB)

We have available representative samples (MSDS attached in a pdf) of our new CSB hydrocarbon tank (T415) that is fed by our existing reactor wash tanks (T254, T302, T303, T516 and T608) and drum line flush material. Please contact me to make arrangements for you to meet with me and/or pick up your sample. All persons receiving this email request for bid will also receive an identical sample of colleted today (10/13/08).

We anticipate generate 3 to 5 tanker trucks of T415 CSB material a month. There may be some production variation due to scheduled annual plant shutdowns and unanticipated shutdowns due to unforeseen tropical weather. We anticipate increase in production of this material due to plant expansions over the next 1 to 2 years.

I need your bid back to me by noon November 14, 2008 to be considered as our exclusive outlet for our CSB. Please propose:

1. The price per gallon you can pay us net – 30 days with you providing trucking and transportation.
2. If pricing is based on a floating index (i.e. spot price for sweet West Texas Crude) please provide the averaging duration (daily, weekly or month averaging) of the index.
3. Describe the product specification requirements of our T415 CSB based on your clients needs and analytical methods we are to run to determine pricing scheme. Product specifications requirements need to spell out the pricing consequences if a spec range is not met and/or alternative outlets.
4. Describe the outlet (final use)/intended purpose for our product.
5. The time requirements in advance for guaranteed pick up (i.e. request pickup 48 hours in advance).
6. Is weekend pickup available? Same timing for scheduling in advance for weekend as with weekday pickup?
7. A Master Service Agreement (MSA) in the process of review and insurance provided to corporate, Lacy Rosson (281-275-7354 email lacy.rossin@bakerhughes.com) by 11/14/08

A few items touched on above may need more clarification. Item 3 details analytical specifications (and methods) that the product will have to meet such as % water, Non-volatiles at 150 F, color, clarity etc... Propose either a sliding scale pricing if product specifications are not met or propose a secondary market pricing.

For Item 4 please provide us with the intended use (both primary and secondary) for our hydrocarbon material. We do not recommend direct fire burning of the T415 CSB because Baker Petrolite does not believe this material would meet the comparable fuels criteria in RCRA.

We will evaluate and select the exclusive company to handle our Tank 415 CSB based on what price you can pay us for this material on a per gallon basis, the final use and other criteria as described above. Your bid will not be considered if not received by noon 11/14/2008 and any of the 7 items above are not included in the bid. We will reserve the right to terminate this exclusive contract if at any time at our decision.

If you have additional question or comments please provide them to me in writing or in an email and I will respond to all bidders, so that all parties will be bidding on an equal basis.

Jerry Grammas
Baker Petrolite
Environmental Engineer
Bayport Facility
Tel 281-291-3287

BAKER HUGHES

Material Safety Data Sheet

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Material Safety Data Sheet

HiTEC 5708 Performance Additive

MSDS no. H5708

HiTEC is a trademark owned by Afton Chemical Corporation or one of its subsidiaries.

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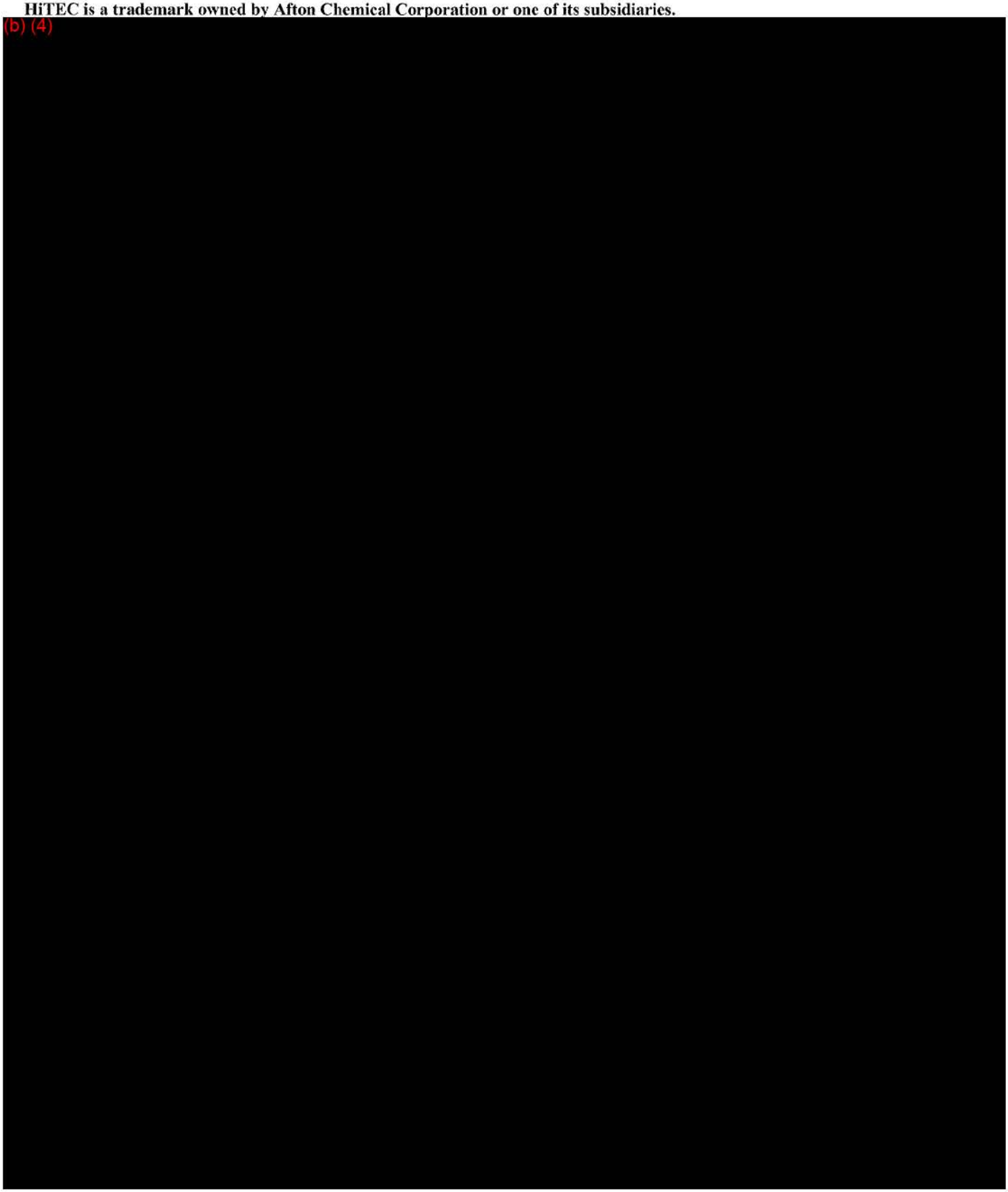

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*** END OF MSDS ***

Naphthenic Acid
Material Safety Data Sheet

Section	Title	Section	Title
1 –	Company and Product Identification	9 –	Physical and Chemical Properties
2 –	Composition, Information on Ingredients	10 –	Stability and Reactivity
3 –	Hazards Identification	11 –	Toxicological Information
4 –	First Aid Measures	12 –	Ecological Information
5 –	Fire Fighting Measures	13 –	Disposal Considerations
6 –	Accidental Release Measures	14 –	Transport Information
7 –	Handling and Storage	15 –	Regulatory Information
8 –	Exposure Controls and Personal Protection	16 –	Other Information

SECTION 1. Company and Product Identification

1.1 MSDS Name: Naphthenic Acid

Chemical Name: Naphthenic Acid

Synonyms: Sunaptic Acid B and Sunaptic Acid C

Chemical Formula: RCOOH

Molecular Weight: 200-350-Mixture

CAS Number: 1338-24-5

EINECS Number: 215-662-8

1.2 Supplier: Port Arthur Chemical & Environmental Services, LLC
2420 South Gulfway Drive
Port Arthur, TX 77640
713-416-4160

1.4 Emergency Contact: **Bo Cumberland 713-416-4160**
CHEMTREC 800-424-9300

SECTION 2. Composition and Information on Ingredients

2.1 Chemical Ingredients (% by wt):

CAS #	Chemical Name	Percent	EINECS / ELINCS
1338-24-5	Napthenic Acid	ca. 100	215-662-8

EPAHO003001440

SECTION 3. Hazards Identification

3.1 Appearance: Clear Light Yellow Viscous Liquid.
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: No data found.

3.2 Eyes: May cause eye irritation.

3.4 Skin: May cause skin irritation.

3.5 Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

3.6 Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

3.7 Chronic: No information found.

SECTION 4. First Aid Measures

4.1 Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

4.2 Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

4.3 Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

4.4 Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

4.5 Notes to Physician: Treat symptomatically and supportively.

SECTION 5. Fire Fighting Measures

5.1 General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protection gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

5.2 Extinguishing Media: Water may be ineffective. Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

5.3 Flash Point: 149 deg C (300.20 deg F)

5.4 Auto-ignition Temperature: Not Applicable

5.5 Exposure Limits, Lower: 1%

5.6 Upper: Not Available

5.7 NFPA Rating: (estimated) Health:0; Flammability:0; Instability: 0

SECTION 6. Accidental Release Measures

6.1 General Information: Use proper personal protective equipment as indicated in Section 8 (below).

6.2 Spills and Leaks: Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do NOT use combustible materials such as sawdust. Provide ventilation.

SECTION 7. Handling and Storage

7.1 Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

7.2 Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

EPAHO003001442

SECTION 8. Exposure Controls and Personal Protection

8.1 Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8.2 Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Napthenic Acid	None Listed	None Listed	None Listed

8.3 OSHA Vacated PELs: Napthenic Acid: No OSHA Vacated PELs are listed for this chemical.

8.4 Personal Protection Equipment:

- **Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- **Skin:** Wear appropriate protective gloves to prevent skin exposure.
- **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- **Respirators:** A respiratory protection program that meets OSHA'S 29 CFR 1910.134 and ANSIZ88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

SECTION 9. Physical and Chemical Properties

9.1 Physical State: Viscous Liquid

9.2 Appearance: Clear Light Yellow

9.3 Odor: None Reported

9.4 pH: Not Available

9.5 Vapor Pressure: Very Low

9.6 Vapor Density: Not Available

9.7 Evaporation Rate: Not Available

SECTION 9. Physical and Chemical Properties CONTINUED

9.8 Viscosity: 25 deg C ST

9.9 Boiling Point: 160.0 – 198.0 deg C @ 6.00mm

9.10 Freezing and Melting Point: Not Available

9.11 Decomposition Temperature: Not Available

9.12 Solubility: Not Available

9.13 Specific Gravity and Density: 0.982 g/cm3

9.14 Molecular Formula: Not Applicable

9.15 Molecular Weight: Not Available

SECTION 10. Stability and Reactivity

10.1 Chemical Stability: Stable under normal temperatures and pressures.

10.2 Conditions to Avoid: Incompatible materials, strong oxidants.

10.3 Incompatibilities with Other Materials: Metals, strong oxidizing agents.

10.4 Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

10.5 Hazardous Polymerization: Has not been reported.

SECTION 11. Toxicological Information

11.1 RTECS #:

11.2 CAS #: 1338-24-5: QK8750000

11.3 LD50 AND LC50:

11.4 Oral: Rat: LD50 = 3gm/kg

11.5 Carcinogenicity: CAS# 1338-24-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

SECTION 11. Toxicological Information CONTINUED

11.6 Epidemiology: No information found

11.7 Teratogenicity: No information found

11.8 Reproductive Effects: No information found

11.9 Mutagenicity: No information found

11.10 Neurotoxicity: No information found

SECTION 12. Ecological Information

No Information Available

SECTION 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None Listed
RCRA U-Series: None Listed

SECTION 14. Transportation Information

	U.S. DOT	Canada TDG
Shipping Name:	Not Regulated as a Hazardous Material	No Information Available
Hazard Class:	9137	
UN Number:		
Packing Group:		

SECTION 15. Regulatory Information

U.S. Federal

15.1 TSCA: CAS# 1338-24-5 is listed on the TSCA inventory.

15.2 Health and Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

SECTION 15. Regulatory Information CONTINUED

15.3 Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.

15.4 Section 12b: None of the chemicals are listed under TSCA Section 12b.

15.5 TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.

15.6 CERCLA Hazardous Substances and Corresponding RQs: CAS# 1338-24-5: 100 lb final RQ; 45.4 kg final RQ.

15.7 SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

15.8 Section 313: No chemicals are reported under Section 313.

15.9 Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depeletors.

15.10 Clean Water Act: CAS# 1338-24-5 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as toxic Pollutants under the CWA.

15.11 OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

15.12 State: CAS# 1338-24-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

15.13 California Prop 65: California No Significant Risk Level: None of the chemical in this product are listed.

15.14 European / International Regulations: European Labeling in Accordance with EC Directives.

15.15 Hazard Symbols: Not Available

15.16 Risk Phrases:

15.17 Safety Phrases: S 24/25 Avoid contact with skin and eyes.

SECTION 15. Regulatory Information CONTINUED

15.18 WGK (Water Danger/Protection): CAS# 1338-24-5: 1

15.19 Canada – DSL/NDSL: CAS# 1338-24-5 is listed on Canada's DSL List.

15.20 Canada – WHMIS: Not Available. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

15.21 Canadian Ingredient Disclosure List: No Information Listed

SECTION 16. Additional Information

MSDS Creation Date: November 7, 2008

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSAREY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE THE MATERIAL SAFETY DATA SHEET PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

J. CAMPBELL
74,000 LBS ~ 9,000 gal

Lubrizol

Material Safety Data Sheet
LUBRIZOL ® 4981XA

Prepared according to 29CFR 1910.1200.

1 Chemical Product and Company Identification

THE LUBRIZOL CORPORATION
Deer Park
41 Tidal Road
Deer Park, TX 77536-0158
Phone: (281)479-2851

Product Trade Name	LUBRIZOL ® 4981XA
CAS Number	Not applicable for mixtures.
Synonyms	None.
Generic Chemical Name	Mixture.
Product Type	Heavy duty diesel engine oil additive.
Preparation/Revision Date	31 October 2007
Transportation Emergency Phone No.	FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No.	95224065-2131830-4111720-811103

2 Hazards Identification

Appearance	Dark liquid.
Odor	Strong
Principal Hazards	Warning. • Causes eye irritation.

See Section 11 for complete health hazard information.

3 Composition/Information on Ingredients

Hazardous Ingredients

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Zinc alkyldithiophosphate	Confidential.	From 5 to 9.9 percent	N/E
p-Dodecylphenol	74499-35-7	From 0.1 to 0.9 percent	N/E

(N/E) - None established

4 First Aid Measures

Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
Skin	Wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops. Launder contaminated clothing before reuse and discard leather articles saturated

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	with the material.
Inhalation	Remove exposed person to fresh air if adverse effects are observed.
Oral	DO NOT INDUCE VOMITING. Get immediate medical attention.
Additional Information	Note to physician: Treat symptomatically.

5	Fire Fighting Measures

Flash Point	166 °C, 330.8 °F PMCC (Typical)
Extinguishing Media	CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.
Firefighting Procedures	Recommend wearing self-contained breathing apparatus. Water may cause splattering.
Unusual Fire & Explosion Hazards	None known.

6	Accidental Release Measures

Spill Procedures	Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

7	Handling and Storage

Pumping Temperature	60 °C, 140 °F
Maximum Handling Temperature	70 °C, 158 °F
Handling Procedures	Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.
Maximum Storage Temperature	45 °C, 113 °F
Storage Procedures	Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 113 deg F (45 deg C) for extended periods of time or if heat sources in excess of 250 deg F (121 deg C) are used.
Loading Temperature	70 °C, 158 °F

8	Exposure Controls/Personal Protection

Exposure Limits	None established
Other Exposure Limits	Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.
Engineering Controls	Use with adequate ventilation.
Gloves Procedures	Nitrile.
Eye Protection	Safety Glasses.
Respiratory Protection	Use NIOSH/MSHA approved full face respirator with a combination organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Clothing Recommendation	Long sleeve shirt is recommended. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

9	Physical and Chemical Properties

Flash Point	166 °C, 330.8 °F PMCC (Typical)
Upper Flammable Limit	Not determined.
Lower Flammable Limit	Not determined.
Autoignition Point	Not determined.
Explosion Data	Material does not have explosive properties.
Vapor Pressure	Not determined.
pH	Not determined.
Specific Gravity	0.98 (15.6 °C)
Bulk Density	Not determined.
Water Solubility	Insoluble.
Percent Solid	Not determined.
Percent Volatile	Unknown.
Volatile Organic Compound	Not determined.
Vapor Density	Not determined.
Evaporation Rate	Not determined.
Odor	Strong
Appearance	Dark liquid.
Viscosity	2400 Centistokes (40 °C) 130 Centistokes (100 °C)
Odor Threshold	Unknown.
Boiling Point	Not determined.
Pour Point Temperature	-18 °C, -0 °F
Melting / Freezing Point	Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10	Stability and Reactivity

Stability	Material is normally stable at room temperature and pressure. See the Handling and Storage Section for further details.
Decomposition Temperature	Not determined.
Incompatibility	Acids. Oxidizing agents. Halogens and halogenated compounds.
Polymerization	Will not occur.
Thermal Decomposition	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: calcium, sulfur.
Conditions to Avoid	Not determined.

11	Toxicological Information

-- ACUTE EXPOSURE --

Eye Irritation	Moderate to strong eye irritation. Based on data from components or similar material.
Skin Irritation	Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

Respiratory Irritation	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
Inhalation Toxicity	Not expected to be a toxic inhalation hazard. Based on data available from components or similar materials.
Oral Toxicity	The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials.
Dermal Sensitization	No data available to indicate product or components may be a skin sensitizer.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.

-- CHRONIC EXPOSURE --

Chronic Toxicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Carcinogenicity	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain.
Teratogenicity	This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain.

-- ADDITIONAL INFORMATION --

Other	No other health hazards known.

12 Ecological Information

-- ENVIRONMENTAL TOXICITY --

Freshwater Fish Toxicity	The acute LC50 is 10 - 100 mg/L based on component data.
Freshwater Invertebrates Toxicity	Not determined.
Algal Inhibition	Not determined.
Saltwater Fish Toxicity	Not determined.
Saltwater Invertebrates Toxicity	Not determined.
Bacteria Toxicity	The acute EC50 is 100 - 1000 ppm based on component data.
Miscellaneous Toxicity	Not determined.

-- ENVIRONMENTAL FATE --

Biodegradation	At least 25% of the components in this product show limited biodegradation based on OECD 302-type test data.
Bioaccumulation	25% or greater of the components display no potential to bioconcentrate.
Soil Mobility	Not determined.

13 Disposal Considerations

Waste Disposal	This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.

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14	Transport Information

ICAO/IATA I	Not regulated.
ICAO/IATA II	Not regulated.
IMDG	Not regulated.
IMDG EMS Fire	Not applicable.
IMDG EMS Spill	Not applicable.
IMDG MFAG	Not applicable.
MARPOL Annex II	Noxious liquid, NF, (5) n.o.s. (LUBRIZOL 4981XA Contains Mineral oil), ST 2, Cat Y
USCG Compatibility	34 - Esters
U.S. DOT Bulk	Not regulated.
U.S. DOT Non-Bulk	Not regulated.
DOT NAERG	Not applicable.
TDG Bulk	Not regulated.
TDG Non-Bulk	Not regulated.
Mexico	Not regulated.
Mexico Non-Bulk	Not regulated.
Bulk Quantity	85000 liters, 22457 gal.
Non-Bulk Quantity	207.8 liters, 55 gal.

Review classification requirements before shipping materials at elevated temperatures.

15	Regulatory Information

-- Global Chemical Inventories --

USA	All components of this material are on the US TSCA Inventory or are exempt.
Other TSCA Reg.	None known.
EU	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
Japan	All components are in compliance with the Chemical Substances Control Law of Japan.
Australia	All components are in compliance with chemical notification requirements in Australia.
New Zealand	May require notification before sale under New Zealand regulations.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea	All components are in compliance in Korea.
Philippines	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst.	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
SARA Section 313	From 5 to 9.9 percent zinc compounds; contains 1% as Zn.
SARA 311 Classifications	

Acute Hazard	Yes
Chronic Hazard	Yes

Fire Hazard	No
Reactivity Hazard	No

CERCLA Hazardous Substances None known.

FDA Approval Not applicable.

-- State Regulations --

Cal. Prop. 65 This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: < 1 ppm Benzene, CAS no. 71-43-2 < 1 ppm arsenic < 1 ppm cadmium < 1 ppm lead

-- Product Registrations --

U.S. Fuel Registration Not applicable.

U.S. Dept of Agriculture This product has not been filed with the USDA to support H2 approvals.

NSF Nonfood Compounds Registration This product has not been filed with the NSF to support H1 or H2 approvals.

Finnish Registration Number Not Registered

Swedish Registration Number Not Registered

Norwegian Registration Number Not Registered

Danish Registration Number Not Registered

Swiss Registration Number Not Registered

Italian Registration Number Not Registered

Korean Registration Number Not Registered

-- Other / International --

TDG Regulated Limit. None known.

16 Other Information

US NFPA Codes

Health	Fire	Reactivity	Special
2	1	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
2*	1	0

Precautionary Labels Warning.

- Causes eye irritation.

Revision Indicators This MSDS has no revisions since 31 October 2007

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.

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CES Environmental Services, Inc.

Sodium Hydrosulfide Solution

Material Safety Data Sheet

Section	Title	Section	Title
1 –	Company and Product Identification	9 –	Physical and Chemical Properties
2 –	Composition, Information on Ingredients	10 –	Stability and Reactivity
3 –	Hazards Identification	11 –	Toxicological Information
4 –	First Aid Measures	12 –	Ecological Information
5 –	Fire Fighting Measures	13 –	Disposal Considerations
6 –	Accidental Release Measures	14 –	Transport Information
7 –	Handling and Storage	15 –	Regulatory Information
8 –	Exposure Controls and Personal Protection	16 –	Other Information

1. Company and Product Identification

1.1 Product Name: CES Sodium Hydrosulfide Solution

Synonyms: Sodium Hydrogen Sulfide Solution, Sodium Bisulfide Solution, Sodium Sulfhydrate Solution

CAS Number: 16721-80-5

1.2 Recommended Uses:

1.3 Supplier:

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021

1.4 Emergency Contact:

Matt Bowman 713-826-1329
Clark Hickman 832-287-3951
Marlin Moser 713-539-6574
CHEMTREC 800-424-9300

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2. Composition and Information on Ingredients

2.1 Chemical Ingredients (% by wt)

COMPONENT	CAS #	EXPOSURE LIMITS	% BY WT
Sodium Hydrosulfide	16721-80-5	No ACGIH TLV or OSHA PEL established for Sodium Hydrosulfide.	5 – 20%
Sodium Sulfide			0 – 10%
Sodium Hydroxide			0 – 10%
Water	7732-18-5		95 – 60%

3. Hazards Identification

Emergency Overview:

DANGER! CAUSES SEVERE BURNS TO EYES, DIGESTIVE TRACT, AND SKIN. THIS IS A HIGHLY ALKALINE LIQUID. HARMFUL IF SWALLOWED. HARMFUL IF MIST IS INHALED. Do not taste or swallow. Avoid Skin Contact. Use only with adequate ventilation. Wash thoroughly after handling. CONTACT WITH ACID RELEASES POISONOUS AND FLAMMABLE HYDROGEN SULFIDE GAS.

POTENTIAL HEALTH EFFECTS: Chemical burns result from contact with liquid or mist. Hydrogen sulfide gas exposure causes eye irritation, headache, and dizziness. Acute exposure to hydrogensulfide gas causes unconsciousness and paralysis of breathing muscles leading to death.

3.1 Route of Entry:
- Inhalation
- Skin Absorption
- Ingestion

3.2 Human Effects:
High alkalinity makes this product corrosive to mucous membranes – chemical burns result from contact. Mists and vapors cause irritation to the conjunctiva and cornea of the eye.

3.3. Acute Inhalation:

Severe respiratory distress because of corrosivity. Hydrogen sulfide gas, produced if this product contacts acid, causes confusion, weakness of the extremities, unconsciousness, pulmonary edema, asphyxiation and central respiratory paralysis leading to death.

Chronic Inhalation:
Extreme irritation to respiratory passages.

3.4 Acute Skin Contact:
Painful chemical burns. Systemic poisoning by sulfide causes headache, nausea, dizziness, confusion, weakness of the extremities, and possible unconsciousness.

Chronic Skin Contact:
Extreme irritation to skin.

3.5 Acute Eye Contact:
Alkali burns to conjunctiva and cornea with possible irreversible destruction of tissue.

Chronic Eye Contact:
Extreme irritation to the eyes caused by vapor or mist; corneal opacity.

3. Hazards Identification (CONTINUED)

3.6 Acute Ingestion:
Destruction of the lining of the esophagus and stomach. Rapid breathing, confusion, unconsciousness, paralysis of respiratory muscles leading to death.

Chronic Ingestion:
Headache, nausea, dizziness, confusion, and painful alkali burns to the esophagus.

3.7 Carcinogenicity:
- NTP – Not Listed
- IARC – Not Listed
- OSHA – Not Regulated

3.8 Medical Conditions Aggravated by Exposure:
- None are known.

4. First Aid Measures

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Have victim drink as much milk or water as possible. Never give anything by mouth to an unconscious person.

If mist is inhaled, remove to fresh air. Get medical attention immediately and contact a poison control center.

For eye contact, flush eyes with large amounts of water for at least 15 minutes and get IMMEDIATE medical attention. For skin contact, wash with soap and water. Wash clothing before reuse.

PHYSICIAN:
Contact causes caustic burns. Treat ingestion as hydrogen sulfide gas poisoning in addition to caustic burns.

5. Fire Fighting Measures

5.1 Flash Point:
- Non-flammable

5.2 Flammability Limits:
Hydrogen sulfide can collect in confined spaces above the liquid. It forms flammable mixtures with air from about 4% vapor up to about 45%.

5.3 Auto-ignition Temperature:
- Not Applicable

5. Fire Fighting Measures (CONTINUED)

5.4 General Hazard:
Poison, flammable hydrogen sulfide gas will be evolved from this product on exposure to acid or excessive heat.

5.5 Fire Fighting Procedures:
Firefighters should wear self-contained breathing apparatus. Do not use carbon dioxide fire extinguishers because toxic hydrogen sulfide gas will be liberated from this product.

5.6 Fire Fighting Equipment:
Use water in flooding quantities. A heavy fog of water may be effective in knocking down vapors.

5.7 Hazardous Combustion Products:
Poisonous sulfur dioxide gas will be generated if the vapors from this product burn.

6. Accidental Release Measures

6.1 General:
Avoid generating mist and keep this product away from acids. Use appropriate Personnel Protective Equipment (PPE). Spilled product is a RCRA hazardous waste.

6.2 Small Spill:
Absorb in dirt, sawdust, fly ash or other inert absorbant. Scoop up and store in sealed containers. Dispose of in accordance with local, state, or federal regulations.

6.3 Large Spill:
Dike to prevent entry into sewers or drains. Recover as much of the solution as possible. Mix solution with dilute excess hydrogen peroxide to oxidize sulfide and eliminate danger of hydrogen sulfide evolution.

7. Handling and Storage

7.1 Storage Temperature: Not Critical

7.2 Storage Pressure: Atmospheric

7.3 General:
Put a vapor trap or scrubber on tank vent.

- Poison hydrogen sulfide gas will be present in the vapor space above sodium hydrosulfide solution. Do not enter tanks or other vessels that have contained this product unless fresh air breathing apparatus is used.
- Do not store in contact with copper, zinc or aluminum.
- Preferred material of construction for storage tanks is stainless steel; however, carbon steel is acceptable.

8. Exposure Controls and Personal Protection

8.1 Engineering Controls:
Adequate ventilation is required to remove the toxic and flammable vapors or mist which may be present. Safety shower sand eyewash fountain should always be available in the work area.

8.2 Respiratory Protection:

Use self-contained breathing apparatus or supplied-air respirator if the PEL for hydrogen sulfide might be exceeded.

8.3 Skin Protection:
Rubber suits and boots as needed for protection from splashing.

8.4 Eye Protection:
Chemical safety goggles and safety shield for protection from splashing.

9. Physical and Chemical Properties

9.1 Physical State:	Liquid
9.2 Vapor Pressure:	Not Applicable
9.3 Specific Gravity:	About 1.18
9.4 Solubility in Water:	Complete
9.5 pH	Highly Alkaline
9.6 Boiling Point:	About 107 Deg. C. (225 Deg. F.)
9.7 Melting Point:	About -18 Deg. C. (0 Deg. F.)
9.8 vapor Density:	Not Applicable
9.9 Evaporation Rate:	Not Applicable
9.10 Odor:	"Rotten Egg" Odor
9.11 Appearance:	Yellow to Amber Liquid

10. Stability and Reactivity

10.1 Chemical Stability:

Mixing with acids liberates poisonous hydrogen sulfide. Mixing with strong oxidizers causes a violent reaction. Mixing with strong alkalies may form solid, hydrated sodium sulfide.

10.2 Incompatibility:
Acids, strong oxidizers, and strong alkalies.

10.3 Hazardous Decomposition Products:
Very high temperatures will decompose this product to form poisonous hydrogen sulfide gas.

10.4 Hazardous Polymerization: Does Not Occur

11. Toxicological Information

11.1 Eye:
Corrosive due to product's alkalinity

11.2 Skin:
Corrosive to skin due to product's alkalinity. May be toxic when absorbed through skin.

11.3 Ingestion:
TOXIC – Human Oral LD_{LO} reported to be 50 mg/kg for Na_2S. Equivalent to 163 mg/kg for this product (based on sulfur content).

11.4 Inhalation:
TOXIC – Hydrogen sulfide inhalation is assumed. Human LC_{LO} is 600 ppm for 30 minutes for hydrogen sulfide; equivalent to 4500 ppm of respirable mist from this product.

11.5 Sub-chronic:
Irritation to the conjunctiva and cornea of the eye from vapors.

11.6 Chronic/Carcinogenic:
Not a known carcinogen. Chronic acute exposures to vapors may cause neurologic deficits like those in survivors of other severe asphixiant poisonings.

11.7 Teratogenic: Not Known

11.8 **Reproductive:** Not Known

11.9 **Mutagenic:** Not Known

12. Ecological Information

12.1 Toxicity:
Toxic to aquatic organisms. Sulfide ion reacts with oxygen; waters containing sulfide ion will not contain dissolved oxygen.

12.2 Distribution:
All components of this product are found naturally in all ecosystems.

12.3 Chemical Fate:
With dilution, the sulfide will be readily incorporated into the preexisting natural sulfur cycle.

13. Disposal Considerations

3.1 Waste Treatment:
Waste containing sulfide may be hazardous and may require disposal in an approved hazardous waste landfill. Sulfide can be oxidized with dilute hydrogen peroxide or any other oxidizing agent to non-hazardous sulfate; care should be taken ad the reaction may be violent.

14. Transportation Information

D.O.T. Shipping Name:	Corrosive liquids, toxic, n.o.s.
Technical Shipping Name:	Sodium Hydrosulfide Solution
D.O.T. Hazard Class:	8 – CORROSIVE, PGII
U.N./N.A. Number:	UN 2922
Product R.Q. (lbs):	5,000 lbs of Sodium Hydrosulfide; 23,000 lbs of this product
D.O.T. Label:	CORROSIVE
D.O.T. Placard:	CORROSIVE

Freight Class Bulk:	Inorganic Chemical
Freight Class Package:	Inorganic Chemical
Product Label:	Sodium Hydrosulfide Solution

15. Regulatory Information

OSHA Status:
This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200. It is classified as toxic based on ingestion information and corrosive based on its alkalinity.

TSCA Status:
Listed on TSCA Inventory

CERCLA Reportable Quantity:
5,000 lbs of Sodium Hydrosulfide 23,000 lbs of this product.

SARA Title III.
Section 302, Extremely Hazardous Substances: NONE
Section 311/312, Hazard Categories: Category 1 (Acute Hazard)
Section 313, Toxics Release Inventory: NONE

RCRA Status:
If discarded in its purchased form, this product could be a hazardous waste because of its alkalinity and/or sulfide content. Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing or derived from this product should be classified as a hazardous waste under 40 CFR 261.20-24.

16. Other Information

16.1 Ratings:

NFPA Rating: (National Fire Protection Association):

Health = 3
(Materials which on short exposure could cause serious temporary or residual injury.)

Fire = 1
(Materials which will burn in air when exposed to a temperature of 1500 Deg. F.)

Reactivity = 1
(Materials which are normally stable but which can become unstable at elevated temperature and pressure.)

Special = NA

16. Other Information (CONTINUED)

Prepared By: **CES Environmental Services, Inc. Technical Dept.**

Date: July 23, 2008

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSAREY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE THE MATERIAL SAFETY DATA SHEET PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

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Sodium Hydrosulfide Solution
Material Safety Data Sheet

Section	Title	Section	Title
1 –	Company and Product Identification	9 –	Physical and Chemical Properties
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4 –	First Aid Measures	12 –	Ecological Information
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6 –	Accidental Release Measures	14 –	Transport Information
7 –	Handling and Storage	15 –	Regulatory Information
8 –	Exposure Controls and Personal Protection	16 –	Other Information

1. Company and Product Identification

1.1 Product Name: Sodium Hydrosulfide Solution

Synonyms: Sodium Hydrogen Sulfide Solution, Sodium Bisulfide Solution, Sodium Sulfhydrate Solution

CAS Number: 16721-80-5

1.2 Recommended Uses:

1.3 Supplier: CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021

1.4 Emergency Contact: **Matt Bowman 713-826-1329**
CHEMTREC 800-424-9300

2. Composition and Information on Ingredients

2.1 Chemical Ingredients (% by wt)

COMPONENT	CAS #	EXPOSURE LIMITS	% BY WT
Sodium Hydrosulfide	16721-80-5	No ACGIH TLV or OSHA PEL established for Sodium Hydrosulfide.	5 – 20%
Sodium Sulfide			0 – 10%
Sodium Hydroxide			0 – 10%
Water	7732-18-5		95 – 60%

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3. Hazards Identification

Emergency Overview:

DANGER! CAUSES SEVERE BURNS TO EYES, DIGESTIVE TRACT, AND SKIN. THIS IS A HIGHLY ALKALINE LIQUID. HARMFUL IF SWALLOWED. HARMFUL IF MIST IS INHALED. Do not taste or swallow. Avoid Skin Contact. Use only with adequate ventilation. Wash thoroughly after handling. CONTACT WITH ACID RELEASES POISONOUS AND FLAMMABLE HYDROGEN SULFIDE GAS.

POTENTIAL HEALTH EFFECTS: Chemical burns result from contact with liquid or mist. Hydrogen sulfide gas exposure causes eye irritation, headache, and dizziness. Acute exposure to hydrogensulfide gas causes unconsciousness and paralysis of breathing muscles leading to death.

3.1 Route of Entry:
- Inhalation
- Skin Absorption
- Ingestion

3.2 Human Effects:
High alkalinity makes this product corrosive to mucous membranes – chemical burns result from contact. Mists and vapors cause irritation to the conjunctiva and cornea of the eye.

3.3. Acute Inhalation:
Severe respiratory distress because of corrosivity. Hydrogen sulfide gas, produced if this product contacts acid, causes confusion, weakness of the extremities, unconsciousness, pulmonary edema, asphyxiation and central respiratory paralysis leading to death.

Chronic Inhalation:
Extreme irritation to respiratory passages.

3.4 Acute Skin Contact:
Painful chemical burns. Systemic poisoning by sulfide causes headache, nausea, dizziness, confusion, weakness of the extremities, and possible unconsciousness.

Chronic Skin Contact:
Extreme irritation to skin.

3.5 Acute Eye Contact:
Alkali burns to conjunctiva and cornea with possible irreversible destruction of tissue.

Chronic Eye Contact:
Extreme irritation to the eyes caused by vapor or mist; corneal opacity.

3. Hazards Identification (CONTINUED)

3.6 Acute Ingestion:
Destruction of the lining of the esophagus and stomach. Rapid breathing, confusion, unconsciousness, paralysis of respiratory muscles leading to death.

Chronic Ingestion:
Headache, nausea, dizziness, confusion, and painful alkali burns to the esophagus.

3.7 Carcinogenicity:
- NTP – Not Listed
- IARC – Not Listed
- OSHA – Not Regulated

3.8 Medical Conditions Aggravated by Exposure:
- None are known.

4. First Aid Measures

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Have victim drink as much milk or water as possible. Never give anything by mouth to an unconscious person.

If mist is inhaled, remove to fresh air. Get medical attention immediately and contact a poison control center.

For eye contact, flush eyes with large amounts of water for at least 15 minutes and get IMMEDIATE medical attention. For skin contact, wash with soap and water. Wash clothing before reuse.

PHYSICIAN:
Contact causes caustic burns. Treat ingestion as hydrogen sulfide gas poisoning in addition to caustic burns.

5. Fire Fighting Measures

5.1 Flash Point:
- Non-flammable

5.2 Flammability Limits:
Hydrogen sulfide can collect in confined spaces above the liquid. It forms flammable mixtures with air from about 4% vapor up to about 45%.

5.3 Auto-ignition Temperature:
- Not Applicable

5. Fire Fighting Measures (CONTINUED)

5.4 General Hazard:
Poison, flammable hydrogen sulfide gas will be evolved from this product on exposure to acid or excessive heat.

5.5 Fire Fighting Procedures:
Firefighters should wear self-contained breathing apparatus. Do not use carbon dioxide fire extinguishers because toxic hydrogen sulfide gas will be liberated from this product.

5.6 Fire Fighting Equipment:
Use water in flooding quantities. A heavy fog of water may be effective in knocking down vapors.

5.7 Hazardous Combustion Products:
Poisonous sulfur dioxide gas will be generated if the vapors from this product burn.

6. Accidental Release Measures

6.1 General:
Avoid generating mist and keep this product away from acids. Use appropriate Personnel Protective Equipment (PPE). Spilled product is a RCRA hazardous waste.

6.2 Small Spill:
Absorb in dirt, sawdust, fly ash or other inert absorbant. Scoop up and store in sealed containers. Dispose of in accordance with local, state, or federal regulations.

6.3 Large Spill:
Dike to prevent entry into sewers or drains. Recover as much of the solution as possible. Mix solution with dilute excess hydrogen peroxide to oxidize sulfide and eliminate danger of hydrogen sulfide evolution.

7. Handling and Storage

7.1 Storage Temperature: Not Critical

7.2 Storage Pressure: Atmospheric

7.3 General:
Put a vapor trap or scrubber on tank vent.

- Poison hydrogen sulfide gas will be present in the vapor space above sodium hydrosulfide solution. Do not enter tanks or other vessels that have contained this product unless fresh air breathing apparatus is used.
- Do not store in contact with copper, zinc or aluminum.
- Preferred material of construction for storage tanks is stainless steel; however, carbon steel is acceptable.

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8. Exposure Controls and Personal Protection

8.1 Engineering Controls:
Adequate ventilation is required to remove the toxic and flammable vapors or mist which may be present. Safety shower sand eyewash fountain should always be available in the work area.

8.2 Respiratory Protection:
Use self-contained breathing apparatus or supplied-air respirator if the PEL for hydrogen sulfide might be exceeded.

8.3 Skin Protection:
Rubber suits and boots as needed for protection from splashing.

8.4 Eye Protection:
Chemical safety goggles and safety shield for protection from splashing.

9. Physical and Chemical Properties

9.1 Physical State:	Liquid
9.2 Vapor Pressure:	Not Applicable
9.3 Specific Gravity:	About 1.18
9.4 Solubility in Water:	Complete
9.5 pH	Highly Alkaline
9.6 Boiling Point:	About 107 Deg. C. (225 Deg. F.)
9.7 Melting Point:	About -18 Deg. C. (0 Deg. F.)
9.8 vapor Density:	Not Applicable
9.9 Evaporation Rate:	Not Applicable
9.10 Odor:	"Rotten Egg" Odor
9.11 Appearance:	Yellow to Amber Liquid

10. Stability and Reactivity

10.1 Chemical Stability:
Mixing with acids liberates poisonous hydrogen sulfide. Mixing with strong oxidizers causes a violent reaction. Mixing with strong alkalies may form solid, hydrated sodium sulfide.

10.2 Incompatibility:
Acids, strong oxidizers, and strong alkalies.

10.3 Hazardous Decomposition Products:
Very high temperatures will decompose this product to form poisonous hydrogen sulfide gas.

10.4 Hazardous Polymerization: Does Not Occur

11. Toxicological Information

11.1 Eye:
Corrosive due to product's alkalinity

11.2 Skin:
Corrosive to skin due to product's alkalinity. May be toxic when absorbed through skin.

11.3 Ingestion:
TOXIC – Human Oral LD_{LO} reported to be 50 mg/kg for Na_2S. Equivalent to 163 mg/kg for this product (based on sulfur content).

11.4 Inhalation:
TOXIC – Hydrogen sulfide inhalation is assumed. Human LC_{LO} is 600 ppm for 30 minutes for hydrogen sulfide; equivalent to 4500 ppm of respirable mist from this product.

11.5 Sub-chronic:
Irritation to the conjunctiva and cornea of the eye from vapors.

11.6 Chronic/Carcinogenic:
Not a known carcinogen. Chronic acute exposures to vapors may cause neurologic deficits like those in survivors of other severe asphixiant poisonings.

11.7 Teratogenic: Not Known

11.8 **Reproductive:** Not Known

11.9 **Mutagenic:** Not Known

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12. Ecological Information

12.1 Toxicity:
Toxic to aquatic organisms. Sulfide ion reacts with oxygen; waters containing sulfide ion will not contain dissolved oxygen.

12.2 Distribution:
All components of this product are found naturally in all ecosystems.

12.3 Chemical Fate:
With dilution, the sulfide will be readily incorporated into the preexisting natural sulfur cycle.

13. Disposal Considerations

3.1 Waste Treatment:
Waste containing sulfide may be hazardous and may require disposal in an approved hazardous waste landfill. Sulfide can be oxidized with dilute hydrogen peroxide or any other oxidizing agent to non-hazardous sulfate; care should be taken ad the reaction may be violent.

14. Transportation Information

D.O.T. Shipping Name:	Corrosive liquids, toxic, n.o.s.
Technical Shipping Name:	Sodium Hydrosulfide Solution
D.O.T. Hazard Class:	8 – CORROSIVE, PGII
U.N./N.A. Number:	UN 2922
Product R.Q. (lbs):	5,000 lbs of Sodium Hydrosulfide; 23,000 lbs of this product
D.O.T. Label:	CORROSIVE
D.O.T. Placard:	CORROSIVE
Freight Class Bulk:	Inorganic Chemical
Freight Class Package:	Inorganic Chemical
Product Label:	Sodium Hydrosulfide Solution

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15. Regulatory Information

OSHA Status:
This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200. It is classified as toxic based on ingestion information and corrosive based on its alkalinity.

TSCA Status:
Listed on TSCA Inventory

CERCLA Reportable Quantity:
5,000 lbs of Sodium Hydrosulfide 23,000 lbs of this product.

SARA Title III.
Section 302, Extremely Hazardous Substances: NONE
Section 311/312, Hazard Categories: Category 1 (Acute Hazard)
Section 313, Toxics Release Inventory: NONE

RCRA Status:
If discarded in its purchased form, this product could be a hazardous waste because of its alkalinity and/or sulfide content. Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing or derived from this product should be classified as a hazardous waste under 40 CFR 261.20-24.

16. Other Information

16.1 Ratings:

NFPA Rating: (National Fire Protection Association):

Health = 3
(Materials which on short exposure could cause serious temporary or residual injury.)

Fire = 1
(Materials which will burn in air when exposed to a temperature of 1500 Deg. F.)

Reactivity = 1
(Materials which are normally stable but which can become unstable at elevated temperature and pressure.)

Special = NA

16. Other Information (CONTINUED)

Prepared By: CES Environmental Services, Inc. Technical Dept.

Date: July 23, 2008

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSAREY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE THE MATERIAL SAFETY DATA SHEET PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet complies with the Canadian Controlled Product Regulations and the United States Occupational Safety and Health Administration (OSHA) hazard communication standard.

1. Product and Supplier Identification

Product: **Methanol (CH_3OH)**

Synonyms: Methyl alcohol, methyl hydrate, wood spirit, methyl hydroxide

Product Use: Solvent, fuel, feedstock

Company Identification: **Methanex Corporation, 1800 Waterfront Centre, 200 Burrard Street, Vancouver, B.C. V6C 3M1**

Non-Emergency Tel. #: (604) 661-2600

Emergency Tel. #: (CHEMTREC) 1-800-424-9300 (Canada and US)

Note: CHEMTREC number to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

Importer: **Methanex Methanol Company**
Suite 1150 – 15301 Dallas Parkway
Addison, Texas 75001
Telephone: (972) 702-0909

2. Composition

Component	% (w/w)	Exposure Limits*	LD_{50}	LC_{50}
Methanol (CAS 67-56-1)	99-100	ACGIH TLV-TWA: 200 ppm, skin STEL: 250 ppm, skin notation OSHA PEL: 200 ppm TLV Basis, critical effects: neuropathy, vision, central nervous system	5628 mg/kg (oral/rat) 20 ml/kg (dermal/ rabbit)	64000 ppm (inhalation/rat)

* Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

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3. Hazards Identification

Routes of Entry:

Skin Contact: Moderate Eye Contact: Moderate Ingestion: Major Inhalation: Major

Effects of Short-Term (Acute) Exposure:

Inhalation: Inhalation of high airborne concentrations can also irriate mucous membranes, cause headaches, sleepiness, nausea, confusion, loss of consciousness, digestive and visual disturbances and even death. NOTE: Odour threshhold of methanol is several times higher than the TLV-TWA. Depending upon severity of poisoning and the promptness of treatment, survivors may recover completely or may have permanent blindness, vision disturbances and/or nervous system effects. Concentrations in air exceeding 1000 ppm may cause irritation of the mucous membranes.

Skin Contact: Methanol is moderately irritating to the skin. Methanol can be absorbed through the skin and harmful effects have been reported by this route of entry. Effects are simialr to those described in "Inhalation"

Eye Contact: Methanol is a mild to moderate eye irritant. High vapour concentration or liquid contact with eyes causes irritation, tearing and burning.

Ingestion: Swallowing even small amounts df methanol could potentially cause blindness or death. Effects of sub lethal doses may be nausea, headache, abdominal pain, vomiting and visual disturbances ranging from blurred vision to light sensitivity.

Effects of Long-Term (Chronic) Exposure: Repeated exposure by inhalation or absorption may cause systemic poisoning, brain disorders, impaired vision and blindness. Inhalation may worsen conditions such as emphysema or bronchitis. Repeated skin contact may cause dermal irritation, dryness and cracking.

Medical Conditions Aggravated By Exposure: Emphysema or bronchitis.

4. First Aid Measures

Note: *Emergency assistance may also be available from the local poison control centre.*

Eye Contact: Remove contact lenses if worn. In case of contact, immediately flush eyes with plenty of clean running water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Obtain medical attention.

Skin Contact: In case of contact, remove contaminated clothing. In a shower, wash affected areas with soap and water for at least 15 minutes. Seek medical attention if irritation occurs or persists. Wash clothing before reuse.

Inhalation: Remove to fresh air, restore or assist breathing if necessary. Obtain medical attention.

Ingestion: Swallowing methanol is potentially life threatening. Onset of symptoms may be delayed for 18 to 24 hours after digestion. If conscious and medical aid is not immediately

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available, do not induce vomiting. In actual or suspected cases of ingestion, transport to medical facility immediately.

NOTE TO PHYSICIAN: Acute exposure to methanol, either through ingestion or breathing high airborne concentrations can result in symptoms appearing between 40 minutes and 72 hours after exposure. Symptoms and signs are usually limited to CNS, eyes and gastrointestinal tract. Because of the initial CNS's effects of headache, vertigo, lethargy and confusion, there may be an impression of ethanol intoxication. Blurred vision, decreased acuity and photophobia are common complaints. Treatment with ipecac or lavage is indicated in any patient presenting within two hours of ingestion. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Treatment protocols are available from most major hospitals and early collaboration with appropriate hospitals is recommended.

5. Fire Fighting Measures

Flash point:	11°C (TCC)
Autoignition temperature:	385 °C (NFPA 1978), 470 °C (Kirk-Othmer 1981; Ullmann 1975)
Lower Explosive Limit:	6% (NFPA, 1978)
Upper Explosion Limit:	36% (NFPA, 1978), 36.5% (Ullmann, 1975)
Sensitivity to Impact:	Low
Sensitivity to Static Discharge:	Low
Hazardous Combustion Products:	Toxic gases and vapours; oxides of carbon and formaldehyde.
Extinguishing Media:	Small fires: Dry chemical, CO_2, water spray Large fires: Water spray, AFFF(R) (Aqueous Film Forming Foam (alcohol resistant)) type with either a 3% or 6% foam proportioning system.

Fire Fighting Instructions: Methanol burns with a clean clear flame that is almost invisible in daylight. Stay upwind! Isolate and restrict area access. Concentrations of greater that 25% methanol in water can be ignited. Use fine water spray or fog to control fire spread and cool adjacent structures or containers. Contain fire control water for later disposal. Fire fighters must wear full face, positive pressure, self-contained breathing apparatus or airline and appropriate protective clothing. Protective fire fighting structural clothing is not effective protection from methanol. Do not walk through spilled product.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:

HEALTH: 1

FLAMMABILITY: 3

REACTIVITY: 0

6. Accidental Release Measures

Overview: Flammable liquid which can burn without a visible flame. Release can cause an immediate risk of fire and explosion. Eliminate all ignition sources, stop leak and use absorbent materials. If necessary, contain spill by diking. Fluorocarbon alcohol resistant foams may be applied to spill to diminish vapour and fire hazard. Maximize methanol recovery for recycling or re-use. Restrict access to area until completion of cleanup. Ensure cleanup is conducted by

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trained personnel only. Wear adequate personal protection and remove all sources of ignition. Notify all governmental agencies as required by law.

Personal Protection: Full face, positive pressure self-contained breathing apparatus or airline, and protective clothing must be worn. Protective fire fighting structural clothing is not effective protection from methanol.

Environmental Precautions: Biodegrades easily in water Methanol in fresh or salt water may have serious effects on aquatic life. A study on methanol's toxic efffects on sewage sludge bacteria reported little effect on digestion at 0.1% while 0.5% methanol retarded digestion. Methanol will be broken down to carbon dioxide and water.

Remedial Measures: Flammable liquid. Release can cause an immediate fire/explosion hazard. Eliminate all sources of ignition, stop leak and use absorbent materials. Collect liquid with explosion proof pumps. Do not walk through spill product as it may be on fire and not visible.

Large Spills: If necessary, contain spill by diking. Fluorocarbon alcohol resistant foams may be applied to spill to diminish vapour and fire hazard. Maximize methanol recovery for recycling or reuse. Collect liquid with explosion proof pumps.

Small Spills: Soak up spill with non-combustible absorbent material. Recover methanol and dilute with water to reduce fire hazard. Prevent spilled methanol from entering sewers, confined spaces, drains, or waterways. Restict access to unprotected personnel. Full. Put material in suitable, covered, labeled containers. Flush area with water.

7. Handling and Storage

Handling Procedures: No smoking or open flame in storage, use or handling areas. Use explosion proof electrical equipment. Ensure proper electrical grouding procedures are in place.

Storage: Store in totally enclosed equipment, designed to avoid ignition and human contact. Tanks must be grounded, vented, and should have vapour emission controls. Tanks must be diked. Avoid storage with incompatible materials. Anhydrous methanol is non-corrosive to most metals at ambient temperatures except for lead, nickel, monel, cast iron and high silicon iron. Coatings of copper (or copper alloys), zinc (including galvanized steel), or aluminum are unsuitable for storage. These materials may be attacked slowly by the methanol. Storage tanks of welded construction are normally satisfactory. They should be designed and built in conformance with good engineering practice for the material being stored. While plastics can be used for short term storage, they are generally not recommended for long-term storage due to deterioration effects and the subsequent risk of contamination.

Corrosion rates for several construction materials:

<0.508 mm/year	Cast iron, monel, lead, nickel
<0.051 mm/year	High silicon iron
Some attack	Polyethylene
Satisfactory	Neoprene, phenolic resins, polyesters, natural rubber, butyl rubber
Resistant	Polyvinyl chloride, unplasticized

8. Exposure Controls, Personal Protection

Engineering Controls: In confined areas, local and general ventilation should be provided to maintain airborne concentrations beloew permissable exposure limits. Ventilation systems must be designed according to approved engineering standards.

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Respiratory Protection: NIOSH approved supplied air respirator when airborne concentrations exceed exposure limits.

Skin protection: Butyl and nitrile rubbers are recommended for gloves. Check with manufacturer. Wear chemical resistant pants and jackets, preferably of butyl or nitrile rubber. Check with manufacturer.

Eye and Face Protection: Face shield and chemical splash goggles when transferring is taking place.

Footwear: Chemical resistant, and as specified by the workplace.

Other: Eyewash and showers should be located near work areas. NOTE: PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean, fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure aadequate protection.

9. Physical and Chemical Properties

Appearance: Liquid, clear, colourless
Odour: Mild characteristic alcohol odour
Odour Threshold: detection: 4.2 - 5960 ppm
(geometric mean) 160 ppm
recognition: 53 – 8940 ppm
(geometric mean) 690 ppm
pH: Not applicable
Vapour Pressure: 12.8 kPa @ 20°C
Solubility: Completely soluble
Vapour Density: 1.105 @ 15 °C
Freezing Point: -97.8 °C

Boiling Point: 64.7 °C @ 101.3 kPa
Critical Temperature: 239.4 °C
Relative Density: 0.791
Evaporation Rate: 4.1 (n-butyl acetate =1)

Partition Coefficient: Log P (oct) = -0.82
Solubility in other Liquids: Soluble in all proportions in other alcohols, esters, ketones, ethers and most other organic solvents

10. Stability and Reactivity

Chemical Stability: Yes

Incompatibility: Yes. Avoid contact with strong oxidizers, strong mineral or organic acids, and strong bases. Contact with these materials may cause a violent or explosive reaction. May be corrosive to lead, aluminum, magnesium, and platinum.

Conditions of Reactivity: Presence of incompatible materials and ignition sources.

Hazardous Decomposition Products: Formaldehyde, carbon dioxide, and carbon monoxide.

Hazardous Polymerization: Will not occur.

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11. Toxicological Information

LD_{50}:	5628 mg/kg (oral/rat), 20 ml/kg (dermal/rabbit)
LC_{50}:	64000 ppm (rat)
Acute Exposure:	See Section 3
Chronic Exposure:	See Section 3.
Exposure Limits:	See Section 2.
Irritancy:	See Section 3.
Sensitization:	No
Carcinogenicity:	Not listed by IARC, NTP, ACGIH, or OSHA as a carcinogen.
Teratogenicity:	No
Reproductive toxicity:	Reported to cause birth defects in rats exposed to 20,000 ppm
Mutagenicity:	Insufficient data
Synergistic products:	None Known

12. Ecological Information

Environmental toxicity: Methanol in fresh or salt water may have serious effects on aquatic life. A study on methanol's toxic effects on sewage sludge bacteria reported little effect on digestion at 0.1% while 0.5% methanol retarded digestion. Methanol will be broken down into carbon dioxide and water.

Biodegradability: Biodegrades easily in water.

13. Disposal Considerations

Review federal, provincial or state, and local government requirements prior to disposal. Store material for disposal as indicated in Section #7, ***Handling and Storage***. Disposal by controlled incineration or by secure land fill may be acceptable.

14. Transport Information

Transport of Dangerous Goods (TDG and CLR):	Methanol, Class 3(6.1), UN1230, P.G. II Limited Quantity: ≤ 1 litres
United States Department of Transport (49CFR): (Domestic Only)	Methanol, Class 3, UN 1230, P.G. II, (RQ 5000 lbs/2270 kg) Limited Quantity: ≤ 1 litres
International Air Transport Association (IATA):	Methanol, Class 3(6.1), UN1230, P.G. II Packaging Instruction: 305, 1 litre maximum per package,
International Maritime Organization (IMO):	Methanol, Class 3(6.1), UN1230, P.G. II, Flash Point = 12 °C EmS No. F-E, S-D Stowage Category "B", Clear of living quarters

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15. Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: Listed

WHMIS CLASSIFICATION: B2, D1A

UNITED STATES REGULATIONS:

29CFR 1910.1200 (OSHA):	Hazardous
40CFR 116-117 (EPA):	Hazardous
40CFR 355, Appendices A and B:	Subject to Emergency Planning and Notification
40CFR 372 (SARA Title III):	Listed
40CFR 302 (CERCLA):	Listed

16. Other Information

Preparation Date: October 13, 2005

Prepared by: Kel-Ex Agencies Ltd., P.O. Box 52201, Lynnmour RPO, North Vancouver, B.C., V7J 3V5

Disclaimer: The information above is believed to be accurate and represents the best information currently available to us. Users should make their own investigations to determine the suitability of the information for their particular purposes. This document is intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

Methanex Corporation and its subsidiaries make no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Methanex Corp. will not be responsible for damages resulting from use of or reliance upon this information.

Revisions: None

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MSDS Number: **M2015** * * * * * *Effective Date:* ***05/04/07*** * * * * * *Supercedes:* ***08/10/04***

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Mallinckrodt CHEMICALS J.T.Baker

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

METHYL ALCOHOL

1. Product Identification

Synonyms: Wood alcohol; methanol; carbinol
CAS No.: 67-56-1
Molecular Weight: 32.04
Chemical Formula: CH3OH
Product Codes:
J.T. Baker: 5370, 5595, 5794, 5811, 5842, 5869, 9049, 9063, 9065, 9066, 9067, 9069, 9070, 9071, 9073, 9076, 9077, 9091, 9093, 9096, 9097, 9098, 9263, 9822, 9830, V654, XL-319
Mallinckrodt: 3004, 3006, 3016, 3017, 3018, 3024, 3041, 3701, 4295, 5160, 8814, H080, H488, H603, H985, V079, V571

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Methyl Alcohol	67-56-1	100%	Yes

3. Hazards Identification

Emergency Overview

POISON! DANGER! VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. FLAMMABLE LIQUID AND VAPOR. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM AND LIVER.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Poison)
Flammability Rating: 3 - Severe (Flammable)
Reactivity Rating: 1 - Slight
Contact Rating: 3 - Severe (Life)
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER
Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation:
A slight irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. A person may get better but then worse again up to 30 hours later.
Ingestion:
Toxic. Symptoms parallel inhalation. Can intoxicate and cause blindness. Usual fatal dose: 100-125 milliliters.
Skin Contact:
Methyl alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur; symptoms may parallel inhalation exposure.
Eye Contact:
Irritant. Continued exposure may cause eye lesions.
Chronic Exposure:
Marked impairment of vision has been reported. Repeated or prolonged exposure may cause skin irritation.
Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

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4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion:
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Flash point: 12C (54F) CC
Autoignition temperature: 464C (867F)
Flammable limits in air % by volume:
lel: 6.0; uel: 36
Flammable Liquid and Vapor!
Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks or flames. Sensitive to static discharge.
Fire Extinguishing Media:
Use alcohol foam, dry chemical or carbon dioxide. (Water may be ineffective.)
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Vapors can flow along surfaces to distant ignition source and flash back.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
For Methyl Alcohol:
- OSHA Permissible Exposure Limit (PEL):
200 ppm (TWA)
- ACGIH Threshold Limit Value (TLV):
200 ppm (TWA), 250 ppm (STEL) skin
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Use explosion-proof equipment.
Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134). This substance has poor warning properties.
Skin Protection:
Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure.
Eye Protection:
Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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9. Physical and Chemical Properties

Appearance:
Clear, colorless liquid.
Odor:
Characteristic odor.
Solubility:
Miscible in water.
Specific Gravity:
0.8
pH:
No information found.
% Volatiles by volume @ 21C (70F):
100
Boiling Point:
64.5C (147F)
Melting Point:
-98C (-144F)
Vapor Density (Air=1):
1.1
Vapor Pressure (mm Hg):
97 @ 20C (68F)
Evaporation Rate (BuAc=1):
5.9

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
May form carbon dioxide, carbon monoxide, and formaldehyde when heated to decomposition.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Strong oxidizing agents such as nitrates, perchlorates or sulfuric acid. Will attack some forms of plastics, rubber, and coatings. May react with metallic aluminum and generate hydrogen gas.
Conditions to Avoid:
Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Methyl Alcohol (Methanol) Oral rat LD50: 5628 mg/kg; inhalation rat LC50: 64000 ppm/4H; skin rabbit LD50: 15800 mg/kg; Irritation data-standard Draize test: skin, rabbit: 20mg/24 hr. Moderate; eye, rabbit: 100 mg/24 hr. Moderate. Investigated as a mutagen, reproductive effector.

--------\Cancer Lists\----------

	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category
Methyl Alcohol (67-56-1)	No	No	None

12. Ecological Information

Environmental Fate:
When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.
Environmental Toxicity:
This material is expected to be slightly toxic to aquatic life.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

EPAHO003001485

Proper Shipping Name: METHANOL
Hazard Class: 3
UN/NA: UN1230
Packing Group: II
Information reported for product/size: 358LB

International (Water, I.M.O.)

Proper Shipping Name: METHANOL
Hazard Class: 3, 6.1
UN/NA: UN1230
Packing Group: II
Information reported for product/size: 358LB

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\---------------------------------

Ingredient	TSCA	EC	Japan	Australia
Methyl Alcohol (67-56-1)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\---------------------------------

Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Methyl Alcohol (67-56-1)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------------

Ingredient	-SARA 302- RQ	TPQ	------SARA 313------ List	Chemical Catg.
Methyl Alcohol (67-56-1)	No	No	Yes	No

--------\Federal, State & International Regulations - Part 2\----------------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Methyl Alcohol (67-56-1)	5000	U154	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No
Reactivity: No (Pure / Liquid)

Australian Hazchem Code: 2PE
Poison Schedule: S6
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **1** Flammability: **3** Reactivity: **0**
Label Hazard Warning:
POISON! DANGER! VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. FLAMMABLE LIQUID AND VAPOR. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM AND LIVER.
Label Precautions:
Avoid breathing vapor.
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Keep container closed.
Use only with adequate ventilation.
Keep away from heat, sparks and flame.
Label First Aid:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately.
Product Use:
Laboratory Reagent.
Revision Information:
No Changes.
Disclaimer:
****
Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS

EPAHO003001486

INFORMATION.
****
Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

EPAHO003001487

15,000 gallons

ALTIVIA

MATERIAL SAFETY DATA SHEET

Acid Alum

ALTIVIA 24 Hour Emergency Phone Number: 713-636-3189
Transportation Emergencies CHEMTREC: 800-424-9300

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Acid Alum
CHEMICAL NAME/ FAMILY:	Metal Salts/ Coagulant
TRADE NAMES/ SYNONYMS:	AQUALUM™; Acidified Aluminum Sulfate Solution; Sulfuric Acid, Aluminum Salt
MOLECULAR FORMULA:	$Al_2(SO_4)_3 .14H_2O/ H_2SO_4$
MANUFACTURER:	ALTIVIA, 1100 Louisiana, Suite 3160, Houston, TX 77002

SECTION 2: COMPOSITION/ INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% RANGE
Aluminum Sulfate	10043-01-3 (anhydrous)	32-38%
Sulfuric Acid*	7664-93-9	6.5-7.5%
Water	7732-18-5	Balance

* Denotes chemical subject to reporting requirements of Section 313 of Title III of the 1986 Superfund Amendments and Reauthorization Act (SARA) and 40 CFR Part 372.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER! Causes skin and eye irritation or burns. Do not get in eyes, on skin or on clothing. May be harmful if inhaled, do not breathe mist. May be fatal if swallowed. Not flammable but may release toxic vapors if decomposed in a fire.

POTENTIAL HEALTH EFFECTS

EYE
May cause corneal burns or severe irritation in eyes.

SKIN
Fumes or mists may cause irritation or burns to skin.

INGESTION
Oral and gastrointestinal irritation. Local tissue damage. Nausea, vomiting, diarrhea, and gastrointestinal bleeding may follow. **Can be fatal if swallowed.**

INHALATION
Irritation of the respiratory system.

SIGNS AND SYMPTOMS OF EXPOSURE
Irritation and or burns to exposed tissue, respiratory distress, nausea, vomiting or diarrhea.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Acute or chronic respiratory diseases. Dermatitis.

EFFECTS FOLLOWING REPEATED EXPOSURE
Long term exposure if inhaled may cause bronchial irritation, coughing, and bronchial pneumonia. Prolonged contact with eyes or skin may result in corneal burns, skin sensitization and burns. If ingested large doses may result in kidney/ liver and blood damage.

SECTION 4: FIRST AID MEASURES

EYES
Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention for irritation or any other symptom.

SKIN
Take off contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15-20 minutes. Get medical attention for irritation or burns. Wash clothing and thoroughly clean shoes before reuse.

INGESTION
Call a poison control center or doctor for immediate advice. Have person drink a glass of water immediately if able to swallow. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious person.

INHALATION
Remove person from exposure to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration (CPR). If individual is breathing, but with difficulty, get immediate medical attention.

NOTES TO PHYSICIAN
All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents.

See Section 11 for Toxicological Information.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT
Not Applicable

AUTOIGNITION TEMPERATURE
Not Applicable

FLAMMABLE LIMITS IN AIR (% BY VOLUME)
Not Applicable

FLAMABLE PROPERTIES
Will not burn

EXTINGUISHING MEDIA
Choose extinguishing media suitable for surrounding materials.

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MATERIAL SAFETY DATA SHEET – Acid Alum

HAZARDOUS COMBUSTION PRODUCTS
Thermal decomposition may release toxic and/ or hazardous gases such as oxides of sulfur.

FIRE FIGHTING INSTRUCTIONS
Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in a fire. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Move container from fire area if it can be done without risk. Water spray may be ineffective on fire but can protect fire-fighters and cool closed containers. Do not release runoff from fire control methods to sewers or waterways. Dike area to prevent runoff and water source contamination.

SECTION 6: ACCIDENTAL RELEASE MEASURES

WATER SPILL
Prevent additional discharge of material, if possible to do so without hazard.

LAND SPILL
Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, advise authorities.

GENERAL PROCEDURES
No smoking in spill areas. Isolate spill area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition, such as flames, hot glowing surfaces or electric arcs. Stop source of spill as soon as possible and notify appropriate personnel. Cleanup personnel must wear proper protective equipment (refer to Section 8). Decontaminate all clothing. Notify all downstream water users of possible contamination.

Create a dike or trench to contain all liquid material. **Acid Alum** can be carefully neutralized with Soda Ash or Lime. Spill materials may also be absorbed using clay, soil or nonflammable commercial absorbents. **Do not** place spill materials back in their original container. Containerize and label all spill materials properly.

RELEASE NOTES
Notify the National Response Center (800/424/8802) of uncontained releases to the environment in excess of the Reportable Quantity (RQ). See Section 15, Regulatory Information. Recycle or dispose of recovered material in accordance with all federal, state, and local, regulations.

For all transportation accidents, call CHEMTREC at 800/424-9300.

SECTION 7: HANDLING AND STORAGE

HANDLING

Do not get in eyes, or on skin, or clothing. Do not taste or swallow. Avoid breathing mists or fumes. Do not handle with bare hands. Carefully monitor handling, use and storage to avoid spills and leaks. Follow protective controls set forth in Section 8 when handling this product. **Do not eat, drink, or smoke in work area.** Wash hands prior to eating, drinking, or using restroom.

STORAGE

STORAGE CONDITIONS
Stainless steel or fiberglass tanks are recommended. Do not put concentrate or dilutions of concentrate on food or drink containers. Store in closed, properly labeled tanks or containers. Do not remove or deface labels or tags. Store in a cool, well ventilated place away heat sources direct sunlight and incompatible materials. Keep drums upright. Do not reuse empty containers without commercial cleaning or reconditioning.

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STORAGE TEMPERATURE
Do not allow product to freeze. Do not store above 49°C (120°F).

SECTION 8: EXPOSURE CONTROLS PERSONAL PROTECTION

ENGINEERING CONTROLS

VENTILATION
Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE AND FACE PROTECTION
Wear chemical goggles. A face shield should be worn in addition to goggles where splashing or spraying is possible.

SKIN PROTECTION
Wear chemical resistant clothing. Neoprene gloves, boots and apron or slicker suit.

RESPIRATORY PROTECTION
If airborne exposures exceed 1.0 mg/m^3, a negative pressure air-purifying respirator is recommended. Cartridges must be NIOSH/MSHA approved against dusts and mists having TWA than 0.05 mg/m^3.

GENERAL
Safety shower and eye wash station must be provided in the immediate work area. Protective equipment and clothing should be selected, used, and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer.

EXPOSURE GUIDELINES

Component Data: Aluminum Sulfate (10043-01-3)
PEL (OSHA): 2.0 mg/m^3 soluble salts as Al
TLV (ACGIH): 2.0 mg/m^3 soluble salts as Al

Component Data: Sulfuric Acid (7664-93-9)
PEL (OSHA): 1.0mg/m^3, 8 Hr. TWA
TLV (ACGIH): 1.0 mg/m^3, 8 Hr. TWA A2 (Sulfuric acid contained in strong inorganic acid mists)

MATERIAL SAFETY DATA SHEET – Acid Alum

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL FORMULA	$Al_2(SO_4)_3.14H_2O/ H_2SO_4$
MOLECULAR WEIGHT	Mixture
APPEARANCE	Colorless to amber liquid
ODOR	None
pH @ 25°C	<1
VAPOR PRESSURE	Not Established
VOLATILES, % BY VOLUME	Not Established
BOILING POINT	Not Established
CRYSTALLIZATION POINT	Not Established
SOLUBILITY IN WATER	Complete
SPECIFIC GRAVITY	1.29-1.32 @ 25°C (77°F)
DENSITY	10.75-11.00 lbs./gal @ 25°C (77°F)
VISCOSITY	Not Established

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY
Stable

CONDITIONS TO AVOID
Heat

INCOMPATIBILITY WITH OTHER MATERIALS
Strong oxidizers such as permanganate, sodium chlorite, chromates and peroxides. Corrosive to some metals.

HAZARDOUS DECOMPOSITION PRODUCTS
Aluminum oxides. Toxic and corrosive oxides of sulfur may be formed when heated to decomposition. At decomposition temperatures of 650°C (1200°F) and above, the sulfur trioxide formed is an oxidizing agent and may cause a combustion reaction.

HAZARDOUS POLYMERIZATION
Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ANIMAL TOXICOLOGY

EYE
May cause corneal burns or severe irritation in eyes.

SKIN
Fumes or mists may cause irritation or burns to skin.

ACUTE ORAL EFFECTS
Component Data: Aluminum Sulfate (10043-01-3) LD_{50} (oral, mouse) > 5,000 mg/kg
Aluminum Sulfate (10043-01-3) LD_{50} (oral, rat): 1930 mg/kg

Component Data: Sulfuric Acid (7664-93-9) LD_{50} is > 2,140 mg/kg

ALTIVIA

MATERIAL SAFETY DATA SHEET – Acid Alum

ACUTE INHALATION EFFECTS
Component Data: Sulfuric Acid (7664-93-9) 8 hour, LC_{50} (guinea pigs) 30 mg/m^3.

EFFECTS FOLLOWING PROLONGED OR REPEATED EXPOSURE
No available data for product.

CARCINOGENICITY
This product (or any component at a concentration of 0.1% or greater) is not listed by NTP, IARC, OSHA, EPA, or any other authority as a carcinogen.

MUTAGENICITY
Component Data: Aluminum Sulfate (10043-01-3), investigated as a mutagen.

REPRODUCTIVE/DEVELOPMENTAL TOXICITY
No available data for product.

SECTION 12: ECOLOGICAL INFORMATION

GENERAL COMMENT
No available data for product.
AQUATIC TOXICITY
Component Data: Sulfuric Acid (7664-93-9) Slightly to moderately toxic.
96 hour LC_{50} – Bluegill sunfish: 10.5 ppm
48 hour TLm – Flounder: 100-300 ppm

SECTION 13: DISPOSAL CONSIDERATIONS

SPILL RESIDUES
Processing, use or contamination of this product may change the waste management options. All disposals of this material must be done in accordance with Federal, state and local regulations. Waste characterization and compliance with disposal regulations are the responsibilities of the waste generator.

SECTION 14: TRANSPORT INFORMATION

THIS MATERIAL IS HAZARDOUS AS DEFINED BY 49 CFR 172.01 BY THE U.S DEPARTMENT OF TRANSPORTATION.

DOT IDENTIFICATION NO.: UN 1760

DOT SHIPPING DESCRIPTION (49 CFR 172.101): Corrosive liquid, N.O.S (Contains Aluminum Sulfate)

PACKAGING GROUP: III

PLACARD REQUIRED: Corrosive, 1760, Class 8

LABEL REQUIRED: Corrosive, Class 8

Label as required by EPA and by OSHA Hazard Communication Standard, and any applicable state and local regulations.

EMERGENCY RESPONSE GUIDE NUMBER: 154

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MATERIAL SAFETY DATA SHEET – Acid Alum

SECTION 15: REGULATORY INFORMATION

U S FEDERAL REGULATIONS

CERCLA REPORTABLE QUANTITY (RQ)

Ingredient	CAS NO.	RQ
Aluminum Sulfate	10043-01-3 (anhydrous)	5,000 lbs.
Sulfuric Acid	7664-93-9	1,000 lbs.

TSCA (TOXIC SUBSTANCES CONTROL ACT)
All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III

SARA SECTION 302 (EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 302.4):

Ingredient	CAS NO.	RQ
Sulfuric Acid	7664-93-9	1,000 lbs.

SARA SECTION 311/312 HAZARD CATEGORIES (40 CFR 370.2):

Fire Hazard	No
Reactivity Hazard	No
Release of Pressure	No
Acute Health Hazard	Yes
Chronic Health Hazard	No

SARA SECTION 313 (40 CFR 372.65):
Components identified with an asterisk (*) in Section 2 are subject to the reporting requirements of Section 313 of Title III of the 1986 Superfund Amendments and Reauthorization Act (SARA) and 40 CFR Part 372.

INTERNATIONAL REGULATIONS

CANADA

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)
This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

SECTION 16: OTHER INFORMATION

NFPA RATINGS	
HEALTH	3
FLAMMABILITY	0
INSTABILITY	0

HMIS CODES	
HEALTH	3
FLAMMABILITY	0
REACTIVITY	0
PROTECTION	C

RATING NOTES
Hazardous Materials Identification: 4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal.

EPAHO003001494

MATERIAL SAFETY DATA SHEET – Acid Alum

Emergency Information:	For Any Other Information Contact:
Call toll free 24 hours a day: 713-636-3189	ALTIVIA, Technical Marketing, 1100 Louisiana, Suite 3160, Houston, TX 77002. Phone: 713-658-9000 8 AM – 5 PM CST, Monday through Friday

Revisions

9/27/2004: This MSDS conforms to ANSI Standard Z400.1-1998.

12/21/2004: Update to DOT shipping name.

12/13/2005: Update to Emergency Response telephone number. Minor edits.

Disclaimer of Warranty:
The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. ALTIVIA provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. ALTIVIA knows of no medical condition, other than those noted on this material safety data sheet, which are generally recognized as being aggravated by exposure to this product.

6000 gals.

Material safety data sheet (MSDS)			
1. Coconut Fatty Acid			
2.Composition / Ingredients (Ref :4,5)			
Chemical Composition	:	A variable (within acceptable limits) mixture of Fatty Acids generally conforming to that obtained from Natural Coconut Oil.	
Average Molecular Weight	:	204 - 212	
Chemical Identity Saturated Fatty Acids ranging from C6 to C18 & Unsaturated C18 Fatty Acids.	:	Synonyms Coconut Fatty Acid or Coconut Acid.	CAS Nos. 67701-05-7 or 61788-47-4
3.Hazard identification (reference: 4, 5)			
Human Health Rating (Inhalation)	:	Slight (Vapour causes irritation only when heated)	
Flammability Rating	:	Slight	
Reactivity Rating	:	Slight	
Contact Rating	:	Mild	
Storage	:	General	
4. First-aid Measures (reference: 4, 5)			
Ingestion	:	Drink plenty of water & 2-3 cupfuls of milk.	
Skin	:	Remove contaminated clothing and wash exposed area with plenty of water followed by soap and water for at least 15 minutes.	
Eye	:	Irrigate the eyes with plenty of water for at least 15 minutes.	
Inhalation	:	Take person into fresh air and allow to rest	
**In all of the above cases, get a doctor to check the affected person.*			
5. Fire hazard and Fire-fighting Measures (reference: 4, 5)			
Flammability	:	Flammable and Combustible in contact with heat or fire	
Means of Extinction	:	Use Water spray, Carbon Dioxide, Dry Chemical or Alcohol Foam	

		Use Water to keep fire exposed container cool
Flash Point	:	160 ° C
Auto Ignition	:	325 ° C
Hazardous Combustion Product	:	None
6. Accidental Release (reference: 4, 5, 6)		
Personal Protection	:	Use complete protective gear as prescribed in Section 8. High risk of slipping as product is a liquid
Leak And Spill Procedures	:	Remove sources of ignition, ventilate area, sweep up the liquid in dry sand and shovel into a closed container. Collect spillages into sumps/traps so as to minimise contamination of drains, surface & ground waters.
7. Handling and Storage Measures (reference: 4, 5)		
Handling Containers	:	Use full protective gear. Protect containers against physical damage / direct sunlight / water
Storage Conditions of Containers	:	Use leak-proof and compatible Tanks (SS) / Drums (SS/MSLL/HDPE) Store in dry and well ventilated locations at ambient temperature (< 35 °C) away from direct sunlight.
8. Exposure Controls and Personal Protection Measures (reference: 6)		
Engineering Control : Use adequate ventilation to keep airborne concentrations low. Avoid inhalation of heated vapours.		
Personal Protection :		
Skin	:	Rubber Gloves
Respiration	:	Air respirator
Eyes	:	Splash - proof Safety Goggles
Feet	:	Safety Shoes
Body	:	Lab Coat

Hygienic precautions	:	Remove contaminated clothing and wash hands between breaks and at the end of duty hours. Eye washes & Emergency Showers must be located in all work & storage areas.
9. Physical and Chemical Properties (reference: 4)		
Physical State	:	Liquid above 30 °C
Appearance & Odour	:	Pale Yellow with characteristic Odour
Specific Gravity (20 °C)	:	0.88
Boiling Range	:	240 -270 °C at 760 mm
Melting Range	:	22 to 28 °C
Vapour Pressure	:	< 1mm at 20 °C
Solubility in water (20 °C)	:	Insoluble
10. Reactivity Data (reference: 1, 4, 5)		
Chemical Stability	:	Product stable under the prescribed storage conditions.
Incompatibility with Substances	:	Strong Oxidising Agents
Reactivity and under what Conditions	:	Heating as such or in the presence of any metals
Hazardous Decomposition	:	Acrid smoke & irritating fumes of Carbon Oxides when heated above its BP
Hazardous Polymerization	:	Will not occur
11. Toxicological Properties (reference: 2, 3, 4, 5)		
Toxicity	:	Non toxic
Skin contact	:	Mild Irritation
Inhalation	:	Irritant to Mucous membrane (only when heated)
Skin absorption	:	Slight
Eye contact	:	Slight Transient Irritation
Ingestion	:	rat LD_{50} > 22 gm/kg
Effect of Acute and Chronic Exposure to Material	:	The extensive uses of Coconut Fatty Acid in Industry have not been

		accompanied by any reports of injury.
Irritancy of Material	:	Slight
Carcinogenicity, Reproductive Effects, Teratogenicity, Mutagenicity	:	None Reported

12. Ecological Information (reference: 2, 4, 5)

The product should not get into waters without treatment. Dissolved in water the material is easily biodegradable (90 %) and will not cause any disturbance in the waste water treatment plants. Due to its insolubility in water larger amounts need to be eliminated by separators typically used for fats and oils.

Fish LC_{50} (96 hrs) > 900 mg/L
Water endangering class : 1 (slightly water endangering)

13. Waste Disposal (reference: 4, 5)

Leak And Spill Procedures	:	Sweep up the liquid in dry sand and shovel into a closed container
Disposal	:	Stored waste / recovered material used for recycle along with corresponding crude oils. For disposal of contaminated packing & any unrecoverable / recyclable materials observe local, state or federal regulations.

14. Transport Recommendations (reference: 4, 5)

No special conditions, as it is not a regulated product. However one should observe the usual precautionary measures for transporting chemical cargo.

15. Regulatory Requirements (reference: 4, 5)

According to the data available the product is not a regulated product. However one should observe the prescribed Federal, State & Local measures for dealing with chemicals.

Listed on EINECS(EU), TSCA(USA), DSL(Canada), AICS (Australia), MITI(Japan), Korea & Philippines.
EINECS No. :
Coconut Fatty Acid 266-929-0 or Coconut Acid 262-978-7
Not listed as a Carcinogen by NTP, IARC or OSHA

16. Other Information

Sources of information
1. Fatty Acids - Klare Markley (1960)
2. Palm Oil Developments No. 28 Page 22 - 40 (March 1998)

3. JAOCS 56 Pages 760A - 767A (1979)
4. Uniqema, USA - MSDS of Prifac 7907 Distilled Coconut Fatty Acid (14-02-2001)
5. Procter & Gamble Chemicals, USA - MSDS of C-110 & C-110K, Fatty Acids, C8-C18 Saturated & C18 Unsaturated (22/11/1998)
6. United Coconut Chemicals, Philippines – General Safety Precautions of its Products

Disclaimer
The information presented above is believed to be accurate and pertains only to the product when stored in a sealed condition as prescribed above. The information is given in good faith but no warranty express or implied is made. Users should make their own investigations to determine the suitability of the above mentioned safety information for their specific applications and processes

	Product ID (unless otherwise noted)	Net Weight (lbs)
1	5788	179
3	5736A	395
10	5785	338
11	5785	315
13	5754	145
27	5786	38
28	5756	133
29	5785	478
31	5710A	304
32	Biotec E85	370
33	5727	211
35	5785	76
38	5742	383
39	5724	75
40	5777D	247
42	5774	37
44	5714	80
45	5724	343
48	5727	63
50	5715	122
52	5708	363
53	5756	85
59	5701A	371
61	5751	91
62	5777	91
63	5738	382
64	5750	287
66	5774	159
67	5786	213
74	5710	400
97	5774	400
130	5736	400
139	5788	400
147	5710	399
163	5777D	375
171	5777	400
180	5751	381
182	5708	400
187	5733	400
191	5724	400
193	5708	38
196	n-decanal	89
197	5785	150
210	5708	400
212	5733	400

7.45 PDG

LOAD 1

Missing #ID

42 → 378016 → #423??

281621bs

+ Drum 423??

81

91 Drum

Missing 1 Drum

It

42

Copy w/BOL

224	5724	400
236	5777D	375
240	5788	400
244	5751	381
254	5777D	375
262	5724	400
268	5714	400
273	5777	400
282		400
287	5714	412
299	5739	400
310	5733	193
313	5708	316
314	5749	228
315	5755	234
317	5710	204
350	5785	27
352	5739	79
361	5788	392
363	5777	375
365	5710	400
366	5708	400
371	Pour Pt Depressant 500	400
377	5724	400
381	5750	399
397	5777D	400
407	5708	400
410	5750	399
411	5750	400
414	5708	408
423		
429	5708	400
434	5777D	375
443	5708	400
458	5714	400
459	5714	400
460	5714	400
461	5714	400
464	5777	375
466	5777	375
487	5777	350
491	5777D	375
492	5777D	400
497	5785	400
498	5711	315
500	5760	95
502	5710	399

503	5742	400
504	5714	400
518	5774	400
519	5714	400
520	5750	399
523	5785	360
526	5714	400
527	5708	400
528	5715	399
531	5708	400
532	5785	400
533	5785	400
541	5710	400
547	5710	400
556	5777	400
570	5708	400
577	5708	381
578	5751	200
580	5739	400
581	5739	200
583	5708	200
589	5738	400
590	5777D	400
592	5777	400
593	5777	400
597	5739	381
598	5751	400
602	5724	400
603	Biotec E85	400
611	5727	400
615	5774	230
617	5738	400
621	5774	200
626	5727	200
628	5710	133
635	5777D	375
637	5777D	200
639	5708	408
640	5708	408
641	5708	408
642	5708	400
646	5777	399
647	5724	375
648	5777D	400
654	5785	400
658	5789	400
659	5708	400

92

7

LOAD 2

30185 LBS 7.45 PPG

4052.1 G

91

Drum on Pallet

HOLE IN Drum

completed

COPY W/ BOL

663	5751	176
665	5708	408
666	5711E	408
667	5711E	408
668	5708	390
669	fatty acid	400
670	5708	400
671	5785	400
675	JA891U	1/5 full
677	5777	375
678	5750	399
679	5750	399
680	5750	399
681	5750	399
682	5751	390
684	5769	408
695	5714	412
697	5777D	375
698	5747	380
703	5708	400
704	5708	400
705	5708	400
706	5708	400
713	5785	132
714	5785	313
715	5739	104
719	5751	196
721	5751	198
722	5777	186
729	5727	186
733	5772	217
738	5750	179
739	5708	
741	5708	400
748	5733	164
751	5724	362
756	5754	156
757	5751	110
758	5751	40
766	5777D	375
769	5708	400
774	5739	400
780	5710	87
782	5777	194
783	5750	204

7.45

LOAD 3

784	5789	325
785	5708	42
787	5749	207
788	5733	372
789	5750	327
790	5769	236
795	5736	156
804	5785A	400
811	5710	400
814	5777D	400
818	5777	375
839	5777	375
840	5777	375
847	5708	400
850	5710	400
851	5754	400
853	5708	182
882	5751	381
895	5749	399
900	5710	399
902	5710A	399
904	5777D	375
905	5724	154
910	5777	395
922	5710	399
924	5715	399
925	5777	400
927	5751	380
931	5777	400
933	5733	401
936	5774	400
945	5714	412
946	5714	400
949	5774	399
972	5714	400
981	5710	400
1000	5710	399
1001	5730	400
1002	5785	126
1006	5786	139
1013	5715	400
1014	5708	408
1015	5785	400
1016	5714	400
1024	5710	400
1027	5714	400
1029	5715	337

Had every Drum loaded on list

92 Drums Jack

32943 LBS

44221

copy w/ BOL

20
x4
80
+90

1030	5714	400
1033	5708	386
1034	5724	400
1035	5788	392
1037	5708	400
1038	5788	392
1041	5724	400
1045	5750	375
1047	5738	400
1048	5724	399
1053	5708	400
1054	5750	400
1056	5786	388
1058	5708	400
1059	5789	400
1063	5751	381
1064	5739	400
1068	5788	372
1074	5708	400
1075	5751	400
1076	5750	400
1077	5708	400
1080	5708	400
1085	5736	91
1086	5760	149
1089	5714	412
1090	5714	412
1091	5788	392
1093	5714	400
1094	5786	338
1144	5777	375
1145	5777	400
1147	5777D	375
1148	5777D	375
1150	5747	381
1151	5777	375
1152	5777D	375
1154	5747	400
1156	5777	200
1157	5777	400
1160	5777D	375
1161	5747	381
1165	5777D	337
1172	5747	42
1173	5777	400

92

BOX # 4

TYPE OF DOCUMENTS: Box was from the desk of Lori Salazar.

DOCUMENTS OF INTEREST:

- Non RCRA manifests from various customers
- 3 ring binder customer service log from 6/3/09 - 8/4/09 showing company name type of load + CES job #. (Lori)
- Hand written notes for 7/24/09 - 7/30/09 on various loads written by Lori.
- Truck scale tickets
- Various customer files

VIOLATIONS SUPPORTED: DOT RCRA SDWA OSHA

BOX SEARECH BY: GRuff

DATE SEARCHED: 11/18/09

Denïette is
~~eheck~~ checking
to see if she
has this paper

T# 269

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593251 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (If any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	32500	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89479
1) PA-3005 2) 3) 4)

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: Jay Matlock | Signature | Month 7 | Day 31 | Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JUAN MENDOZA | Signature | Month 07 | Day 31 | Year 09

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Sam Brown | Signature | Month 7 | Day 31 | Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

225

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593253 JJK

GENERATOR

5. Generator's Name and Mailing Address

CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
Generator's Phone: (713) 676-1460
State ID: 88585

Generator's Site Address (if different than mailing address)

CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (If any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5000	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Folder ID : CES Internal Work

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89477

1) PA-3005 2) 3) 4)

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: Jay Mathock — Signature: Jay Mathock — Month 7 Day 31 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Wilson — Signature: Kevin Wilson — Month 7 Day 31 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: MILES ROOT — Signature: Miles Root — Month 7 Day 31 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

420

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593249 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5500	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89476
1) PA-3005 2) 3) 4)

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	Signature	Month	Day	Year
Jay Mathock		7	31	09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Kelley Brown		7	31	09
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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	Signature	Month	Day	Year
SAM BROWN		7	31	09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593247 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5000	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89430
1) PA-3005 2) 3) 4)

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: Bo Cumberland — Signature: Bo — Month 7 Day 30 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Wilcox — Signature — Month 7 Day 30 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Don Brown — Signature — Month 7 Day 30 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

#267

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593258 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5000	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
1) PA-3005 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89508

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: Bo Lumbreras — Signature — Month 8 Day 1 Year 07

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Wilson — Signature — Month 8 Day 1 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Clinton Hopkins — Signature — Month 8 Day 1 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

T# 269

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593252 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur, TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	44320	P	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89478
1) PA-3005 2) 3) 4)

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: Bo Cumberland — Signature — Month 7 Day 31 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Juan Mendoza — Signature — Month 7 Day 31 Year 09
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Clinton Hopkins — Signature — Month 8 Day 1 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

WK TICKET
IN HOUSTON

GSV 124105

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
			005593245 JJK

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.			5000		
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

89321

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 — Signature — Month — Day — Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JACK GIPSON — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	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 — Signature — Month — Day — Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

EPAHO004000010

29

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000079307
2. Page 1 of: 1
3. Emergency Response Phone: (713) 676-1460
4. Manifest Tracking Number: 005593242 JJK

GENERATOR

5. Generator's Name and Mailing Address: CES Environmental Services - Port Arthur State ID: 88585
4904 Griggs Road
Houston, TX 77021
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address): CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460 TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	3000	G	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89324
1) PA-3005 2) 3) 4)

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: Bo Campbell Jr. Signature: Month 7 Day 28 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Kevin Wilson Signature: Month 7 Day 28 Year 09
Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Sam Brown Signature: Month 7 Day 28 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Method: RSH Mercaptan sulfur 12/3/2008 2:55:02 PM
Start time: 7/28/2009 12:02:45 F

Results

No.	Comment / ID	Start time	Sample size and results			
1/1	269-WW	7/28/2009 12:02:45 PM		4.7198	g	
			R1 =	NaN	% as H2S	H2S Content
			R3 =	NaN	%Mercap no H2S	Mercaptan Content w/o H2S

Statistics

Rx	Name	n	Mean value	Unit	s	srel [%]
R1	H2S Content	1	NaN	% as H2S	NaN	NaN
R3	Mercaptan Content w/o H2S	1	NaN	%Mercap no H2S	NaN	NaN

(1) Modified
(2) Excluded
(3) Out of limits
(4) Resource expired
(5) srel above max srel
(6) srel above max srel for multiple determination
(7) Value out of limits, not saved in setup
(8) Sample data out of limits
(9) Standard evaluation used
(10) Result from buffer

T# 225

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000079307	1	(713) 676-1460	005593241 JJK

GENERATOR

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT	41,100	P	00081011
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES Internal Work
1) PA-3005 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89325

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: Dennette Sartin — Signature: Dennette Sartin — Month 7 Day 27 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JUAN MENDOZA — Signature: — Month 7 Day 27 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Sam Brown — Signature: — Month 7 Day 27 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

T # 225

METTLER TOLEDO T90 2.0.0
New titrator / Excellence Titrator

Serial No. 5128496284

Method:	**RSH**	**Mercaptan sulfur**	**12/3/2008 2:55:02 PM**
Start time:	**7/27/2009 4:04:49 PM**		

Results

No.	Comment / ID	Start time	Sample size and results			
1/1	WW-225	7/27/2009 4:04:49 PM		4.80	g	
			R1 =	NaN	% as H2S	H2S Content
			R3 =	NaN	%Mercap no H2S	Mercaptan Content w/o H2S

Statistics

Rx	Name	n	Mean value	Unit	s	srel [%]
R1	H2S Content	1	NaN	% as H2S	NaN	NaN
R3	Mercaptan Content w/o H2S	1	NaN	%Mercap no H2S	NaN	NaN

(1) Modified
(2) Excluded
(3) Out of limits
(4) Resource expired
(5) srel above max srel
(6) srel above max srel for multiple determination
(7) Value out of limits, not saved in setup
(8) Sample data out of limits
(9) Standard evaluation used
(10) Result from buffer

CES Environmental Services, Inc.

Bill Of Lading # : 89434

Folder ID :	CES Internal Work

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services - Port Arthur 11a)
2420 S. Gulfway Drive 11b)
Port Arthur , TX 77640 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which *said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to* carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	2	TP	750	G	Bleach
	0	TP		G	

Shipper : CES Environmental Services - Port Arthur

Per Chris Saylor **Signature** [signature] **Date :** 7-29-09

Carrier CES Environmental Services, Inc.

Per : Quinn Green **Signature :** [signature] **Date :** 7-29-09

Receiving Facility : CES Environmental Services, Inc.

Per : Sam Brown **Signature :** [signature] **Date :** 7.29.09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 678-1460
Fax. (713) 678-1676

Transportation Work Ticket

Folder ID : CES Environmental (CES - Port Arthur)
Class 1, Non-hazardous Wastewater

Date : 7/8/2009 **Manifest # :**

Client : CES Environmental Services - Port Arthur **Ticket :** 88670

Phone : **Consignee :** Newpark Environmental Services, LLC

Transporter : CES Environmental Services, Inc.

Signature Donnette Sartin **Signature**

Leave CES Yard :		**Arrive At Destination**	
Arrive At Customer :	1430 Paces	**Begin Unloading :**	
Begin Loading :	1521	**Finish Unloading :**	
Finish Loading :	1545	**Leave Destination :**	
Leave Customer :	1630	**Arrive At CES Yard :**	1800

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	99801
Tare Weight :		**Begining Odometer :**	99705
Net Weight :		**Total Miles :**	96

Driver : Bozeman, Donald **Tractor # :** ~~291~~ 295 **Tote # :**

Signature : Donald Bozeman **Trailer # :** 270 **Box # :**

Job Comments/Equipment :

Loading W/W from Paces
Having Trouble in Lab paperwork
could not deliver Load dropped on yard
at Paces. called Dispatch
Bob Toi Back to ceg

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	CES Environmental (CES - Port Arthur) Class 1, Non-hazardous Wastewater

Customer : CES Environmental Services - Port Arthur
Address : 2420 Gulfway Drive
City,State,Zip : Port Arthur TX , 77640
CES Contact : () -

Driver : **Bozeman, Donald**
Helper :
Date : 7/8/2009 Time : 2nd
Truck # 291 Trailer # 271

Job Description :

1. Load NH WASTEWATER into TRL 269 as directed by processing

2. Hau load to Newpark and offload

ID #: 88670

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:		Name:	
Close:	08:00 PM	Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	07:00 AM	Name:	Newpark	Name:	Newpark
Close:	05:00 PM	Number:	(409) 794-3119	Number:	(409) 794-3119

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard hat, safety glasses

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☑ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☑ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Delta (Delta-Deer Park)
Non-bulk Disposal

Date : 7/30/2009

Manifest # :

Delta Companies Group

Client :

Ticket : 89419

Phone : 2816804108

CES Environmental Services, Inc.

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature X

Signature

Leave CES Yard :	1245	Arrive At Destination	
Arrive At Customer :	1315	Begin Unloading :	
Begin Loading :	1500	Finish Unloading :	
Finish Loading :	1615	Leave Destination :	
Leave Customer :	1650	Arrive At CES Yard :	1725

Customer PO #:

Total Hours: 5.0

CES Unload: ☐

Gross Weight :		Ending Odometer :	393 953
Tare Weight :		Begining Odometer :	393 923
Net Weight :		Total Miles :	30

Driver : Hickman, Robert

Tractor # : 273

Tote # :

Signature : Robert Hickman

Trailer # : 242

Box # :

Job Comments/Equipment : Empty VAN Trailer #242 dropped on line at 1745 hrs.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Delta (Delta-Deer Park) Non-bulk Disposal

Customer : Delta Companies Group
Address : 334 Tidal Road
City,State,Zip : Deer Park TX , 77536
CES Contact : () -

Driver : Hickman, Robert
Helper :
Date : 7/30/2009 Time : ~~1300~~ 1:30 pm
Truck # 273 Trailer #

Job Description :

Site contact: Tommy Boyette @ (281) 680-4108

Pick up and label the following:

Manifest to CES -NH material - These are the only drums you will need to label - the rest should already be labeled w/ CES stickers
LINE 1: 15 drums of amine rags [CES#2702] ✓ -16 ✓
LINE 2: 13 drums of acid rags [CES#2704] ✓ - 15 ✓

BOL to CES
LINE 1: 5 drums of syn fluids [CES#2755] -9 ✓
LINE 2: 2 drums of Fire / Oil water [CES#2652] -2 ✓
LINE 3: 1 drum of Empty containers [CES#3001] -1 ✓
LINE 4: 1 drums of viscosity improver [CES#2868] -3 ✓

Manifest to TECO
LINE 1: 2 drums of Flammable solids [09-006-0742] - 11 ✓

Manifest to PCI
LINE 1: 10 drums of acetone / toluene [330285]* - 8 ✓
*May be labled for Safety Kleen #0040260484

Deliver to CES Houston & check into processing facility

ID #: 89419

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Tim Menard	Name:	Tim Menard
Close:	04:30 PM	Number:	(281) 680-4113	Number:	(713) 819-3172

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	05:00 AM	Name:	CES	Name:	Joy Baker
Close:	08:00 PM	Number:	(713) 676-1460	Number:	(281) 701-8511

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

VAN # 242

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000029199	1	(281) 680-4108	005596214 JJK

GENERATOR

5. Generator's Name and Mailing Address
Delta Chemical
334 Tidal Rd
Deer Park, TX 77536
State ID: 85855
Generator's Phone: (281) 680-4108

Generator's Site Address (if different than mailing address)
Delta Chemical
334 Tidal Road
Deer Park , TX 77536
(281) 680-4108

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
Pollution Control Industries
5485 Victory Lane
Millington TN, 38053
State ID D0047
Facility's Phone: 219-397-3951
U.S. EPA ID Number: TND000772186

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, Waste Flammable Liquids, n.o.s.,(acetone, toluene),3, PG II	8	DM	400	G	D022 D009H , D001, U002, U031, U159, U161
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
CES Job # - 89422
Profile ID: Delta Chemical
Non Bulk disposal
1) 330285, 9-30-10 2) 3) 4)

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: X Jeff CAMPBELL Signature: X Month: 7 Day: 30 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert Hickman Signature: Robert Hickman Month: 07 Day: 30 Year: 09
Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H061			

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 Signature Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

VAN # 242

CES Environmental Services, Inc.

Bill Of Lading # : 89419

Folder ID :	Delta (Delta-Deer Park) Non-bulk Disposal

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Delta Companies Group
334 Tidal Road
Deer Park , TX 77536
(281) 680-4108

11a) HOU-2755
11b) HOU-2652
11c) HOU-3001
11c) HOU-2868

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5&@ implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	9 RH	DM	495	G	NA1993, Combustible Liquid, n.o.s., 3, PG III
No	2	DM	110	G	Non-RCRA/Non-DOT Regulated Material (Oily water)
No	1	DM	40	P	Non-RCRA/Non-DOT Regulated Material (RCRA Empty Containers)
No	3	DM	150	G	Non-RCRA/Non-DOT Regulated Material (viscoplex)

Shipper : Delta Companies Group

Per : X _____ **Signature :** X _____ **Date :** 7/30/09

Carrier CES Environmental Services, Inc.

Per : Robert Hickman **Signature :** Robert Hickman **Date :** 07-30-09

Receiving Facility CES Environmental Services, Inc.

Per : Sam Brown **Signature :** _____ **Date :** 7-30-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

VAN #242

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000029199	1	(281) 680-4108	005596215 JJK

GENERATOR

5. Generator's Name and Mailing Address
Delta Companies Group
334 Tidal Rd
Deer Park, TX 77536
Generator's Phone: (281) 680-4108
State ID: 85855

Generator's Site Address (if different than mailing address)
Delta Companies Group
334 Tidal Road
Deer Park , TX 77536
(281) 680-4108

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non-DOT Regulated Material (amine rags)	16	DM	880	G	00154891
	2. Non-RCRA/Non-DOT Regulated Material (acid rags)	15	DM	825	G	00154891
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Delta (Delta-Deer Park)
CES Job # - 89423
Non-bulk Disposal
1) HOU-2702 2) HOU-2704 3) - 4) -

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: X JEFF CAMPBELL — Signature: X — Month 7 Day 30 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert Hickman — Signature: Robert Hickman — Month 07 Day 30 Year 09
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141	H141		

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: SAM BROWN — Signature — Month 7 Day 30 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : KMTEX (KMTEX - Port Arthur - TX)
Reg Non-Haz Wastewater

Date : 7/8/2009 **Manifest # :** 005592042

Client : KMTEX **Ticket :** 88664

Phone : 4099854200 **Consignee :** Newpark Industrial Disposal L.P.

Transporter : CES Environmental Services, Inc

Signature [signature] **Signature**

Leave ~~CES~~ NEWPARK Yard :	2:40 PM	Arrive At Destination	
Arrive At Customer :	3:15 PM	Begin Unloading :	
Begin Loading :	3:35 PM	Finish Unloading :	
Finish Loading :	4:10 PM	Leave Destination :	
Leave Customer :		Arrive At CES Yard :	6:15 PM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	295828
Tare Weight :		Begining Odometer :	295695
Net Weight :		Total Miles :	133

Driver : ~~Carrillo, Rudy~~ ROLANDO MORALES **Tractor # :** ~~282~~ 298 **Tote # :**

Signature : Rolando Morales **Trailer # :** ~~240~~ 221 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	KMTEX (KMTEX - Port Arthur - TX) Reg Non-Haz Wastewater Morales Rolando

Customer : KMTEX
Address : 2450 South Gulfway Drive
City,State,Zip : Port Arthur TX , 77641
CES Contact : () -

Driver : ~~Carriker,Rudy~~
Helper :
Date : 7/8/2009 Time : 1445
Truck # ~~282~~ 298 Trailer # ~~200~~ 221

Job Description :

1) Go to KMTEX and load wastewater as directed

THE LOAD TIME IS 2:45pm. DO NOT BE LATE.

2) Haul loads to Newpark and offload

NOTE:
- BE SURE TO HAVE KMTEX SIGN ALL OF YOUR TRANSPORTATION TICKETS

ID #: 88664

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	Pamela	Name:	
Close:		Number:	(409) 985-4200	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	Newpark	Name:	
Close:		Number:	(409) 794-3119	Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Level D

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☑ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 1 section

SIZE:

LOADING FROM (i.e. Tank): Tank

SIZE OF FITTING:

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☐ YES ☑ NO

PALLET JACK NEEDED: ☐ YES ☑ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☑ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : KMCO (KMCO-Crosby, TX)
Oily Water

Date : 7/31/2009 Manifest # :

KMCO, Inc.

Client : Ticket : 89501

Phone : 2813282501 CES Environmental Services, Inc.

Consignee :

Transporter : CES Environmental Services, Inc.

Signature Signature

Leave CES Yard :	12:45 PM	Arrive At Destination	
Arrive At Customer :	1:30 PM	Begin Unloading :	
Begin Loading :	2:00 PM	Finish Unloading :	
Finish Loading :	4:25 PM	Leave Destination :	
Leave Customer :	4:30 PM	Arrive At CES Yard :	5:15 PM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	301859
Tare Weight :		Begining Odometer :	301789
Net Weight :		Total Miles :	70

Driver : Rolando Morales Tractor # : 298 Tote # :

Signature : Rolando Morales Trailer # : 252 Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

KMCO

Scale In/Scale Out

PRODUCT Dumpster

CARRIER CEG TRAILER # 252

Scale In: GROSS 37420 lb INBOUND
07/31/2009 01:29PM

Scale Out:

Gross Weight:

Tare Weight: 37420 lb RECALLED

Net Weight: 12540 lb
07/31/2009 04:13PM

Driver On ☐ Off ☑ Weighed by:

KMCO Carrier Arrival/Departure

Appt Time: _____ B/L-P/O # _____

Arrival Time:

Departure Time:

Demurrage/DT Comments:

Demurrage payments based on scheduled arrival time to departure time as recorded above.

Driver Signature _____

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	KMCO (KMCO-Crosby, TX) Oily Water

Customer : KMCO, Inc.
Address : 16503 Ramsey Rd.
City,State,Zip : Crosby TX , 77532
CES Contact : Matt Bowman () -

Driver : ~~Jomein Potter~~ Rolando Morales
Helper :
Date : 7/31/2009 Time : 2nd 252
Truck # 283 Trailer # ~~233~~

Job Description :

SITE CONTACT: Control Room 281.328.0235 or Jerry Diese at 281-328-0210

Be onsite at 1pm - if you will be late call Jenny @ 713-367-8581 or dispatch

1. Pump out OILY WATER as directed

2. Haul load to CES and check into processing facility.

ID #: 89501

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	J. Diese	Name:	
Close:		Number:	(281) 328-0210	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	CES	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Flammable PPE, Nomex, ect.

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 2 sections

DRUM DOLLY NEEDED: ☐ YES ☐ NO

SIZE: 2"

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank): Tank

SIZE OF FITTING: they provide

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD988086831
2. Page 1 of: 1
3. Emergency Response Phone: (281) 599-4718
4. Manifest Tracking Number: 005596229 JJK

GENERATOR

5. Generator's Name and Mailing Address
NOV Monoflo
16503 Park Row
Houston, TX 77084
State ID: 20375
Generator's Phone: (281) 599-4718

Generator's Site Address (if different than mailing address)
NOV Monoflo
16503 Park Row
Houston , TX 77084
(281) 599-4718

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated tank water (degreaser water)	1	TT	300	G	00161102
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : National Oil Well-Monoflo (Monoflo-Houston)
Degreaser Water to CES
1) HOU-1986 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89398

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: X Richard Arce
Signature:
Month 7 Day 31 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Erick Woodland
Signature:
Month 07 Day 31 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H135 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: SAM BROWN
Signature:
Month 7 Day 31 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD988086831
2. Page 1 of 1
3. Emergency Response Phone: (281) 599-4718
4. Manifest Tracking Number: 005596229 JJK

5. Generator's Name and Mailing Address: NOV Monoflo, 16503 Park Row, Houston, TX 77084 — State ID: 20375
Generator's Phone: (281) 599-4718

Generator's Site Address (if different than mailing address): NOV Monoflo, 16503 Park Row, Houston, TX 77084 — (281) 599-4718

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: CES Environmental Services, Inc., 4904 Griggs Rd., Houston TX, 77021 — State ID 30900 — U.S. EPA ID Number: TXD008950461
Facility's Phone: (713) 676-1460

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated tank water (degreaser water)	1	TT	3000	G	00161102
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : National Oil Well-Monoflo (Monoflo-Houston)
Degreaser Water to CES
1) HOU-1986 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to *the applicable regulations of the Department of Transportation* CES Job # - 89398

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: X Richard Arce — Signature: [signature] — Month 7 Day 31 Year 09

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.: 26 [illegible]

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Irvin [illegible] — Signature: [signature] — Month 07 Day 31 Year 09
Transporter 2 Printed/Typed Name: [illegible] — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H135 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: SAM BROWN — Signature: [signature] — Month 7 Day 31 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000032

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : National Oil Well-Monoflo (Monoflo-Houston) Degreaser Water to CES

Date : 7/31/2009 **Manifest # :**

Client : NOV Monoflo **Ticket :** 89398

Phone : 2815994718 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X [signature] **Signature**

Leave CES Yard :	8:15	**Arrive At Destination**	12:30
Arrive At Customer :	9:10	**Begin Unloading :**	
Begin Loading :	9:35	**Finish Unloading :**	
Finish Loading :	11:20	**Leave Destination :**	
Leave Customer :	11:40	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	263497
Tare Weight :		**Begining Odometer :**	263447
Net Weight :		**Total Miles :**	50

Driver : ~~Espinal, Jose~~ Travis Woodard **Tractor # :** 104 **Tote # :**

Signature : [signature] **Trailer # :** **Box # :**

Job Comments/Equipment : Removed waste material from degreasing tank and rinsewater tank, wash out solid waste with customer's water hose as directed

Jack G-Technician

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

Bill Of Lading # : 89380

Folder ID :	National Oil Well Monoflo (Monoflo-Houston) Production Waste

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
NOV Monoflo
16503 Park Row
Houston , TX 77084
(281) 599-4718

CES #
11a) HOU-1169
11b) HOU-1271
11c) HOU-3246
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	DM	500	P	Non-RCRA/Non DOT regulated material (Coolant Oil)
No	16	DM	240	P	Empty Totes/Drums
Yes	3	CW	15	P	Environmentally Hazardous Substance, Solid, N.O.S. (fluorescent bulbs), 9, UN3077, III

Shipper : NOV Monoflo
Per : X **Signature :** X **Date :** 7-30-09

Carrier CES Environmental Services, Inc.
Per : Jose Espinal **Signature :** [signature] **Date :** 7-30-09

Receiving Facility CES Environmental Services, Inc.
Per : SAM BRAUN **Signature :** [signature] **Date :** 7-30-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD988086831	1	(281) 599-4718	005596216 JJK

GENERATOR

5. Generator's Name and Mailing Address
NOV Monahó
16503 Park Row
Houston, TX 77084
State ID: 20375
Generator's Phone: (281) 599-4718

Generator's Site Address (if different than mailing address)
NOV Monahó
16503 Park Row
Houston , TX 77084
(281) 599-4718

6. Transporter 1 Company Name: CES Environmental Services, Inc. | State ID H1339 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
Ritesco
1007 Vulcan Rd.
Benton AR, 72015
Facility's Phone: (501) 778-6325
State ID D0005
U.S. EPA ID Number: ARD981057870

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Waste paint related material, 3, UN1263, PG II	9	DM	4500	P	Universal , D001, D035, F003, F005
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Profile ID : National Oil Well Monahó (Monahó-Houston)
Production Waste
1) 0510-13730, Exp.6/25/10 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89381

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: Steve Doreubach | Signature | Month 7 | Day 30 | Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jose Espinal | Signature | Month 7 | Day 30 | Year 09

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H061			

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 | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

CES Environmental Services, Inc.

Bill Of Lading # : 89381

Folder ID :	National Oil Well Monoflo (Monoflo-Houstn) Production Waste

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
NOV Monoflo
16503 Park Row
Houston , TX 77084
(281) 599-4718

This is to certify that the above-named materials ar
11a) 0510-13730, Exp.6/25/10
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Rineco
1007 Vulcan Rd.
Benton , AR 72015

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5 implementing the Intermodal Safe Container Act of 1982 is set forth on the face of this Bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	9	DM	4500	P	Waste paint related material, 3, UN1263, PG II

Shipper : NOV Monoflo
Per : X **Signature :** X **Date :** 7-30-09

Carrier CES Environmental Services, Inc.
Per : Jose Espinal **Signature :** [signature] **Date :** 7-30-09

Receiving Facility Rineco
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : National Oil Well Monoflo (Monoflo-Houston)
Production Waste

Date : 7/30/2009 **Manifest # :** 005596217

NOV Monoflo

Client : **Ticket :** 89380

Phone : 2815994718 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	10:00	**Arrive At Destination**	1:30
Arrive At Customer :	10:30	**Begin Unloading :**	
Begin Loading :	10:45	**Finish Unloading :**	
Finish Loading :	12:50	**Leave Destination :**	2:30
Leave Customer :	12:54	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☒

Gross Weight :		**Ending Odometer :**	176649
Tare Weight :		**Begining Odometer :**	176583
Net Weight :		**Total Miles :**	59

Driver : Espinal, Jose **Tractor # :** 289 **Tote # :**

Signature : **Trailer # :** 248 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	National Oil Well Monoflo (Monoflo-Houston) Production Waste

Customer : NOV Monoflo
Address : 16503 Park Row
City,State,Zip : Houston TX , 77084
CES Contact : () -

Driver : **Espinal, Jose**
Helper :
Date : 7/30/2009 Time : 0600
Truck # 289 Trailer # 248

Job Description :

CONTACT: Steve Doranbach @ 281-704-1267 or Terri 281-599-4718 or Richard @ 832-969-9389

Be onsite at 8am

Pick up and label the following:
RECLYCLABLES (to CES):
-02 drums of used oil [CES # 1169] 3 = DM oil
-16 empty drums [CES# 1271] 16 = DM
-10 boxes of light bulbs [CES# 3246] 3 Box

Manifest to CES:
-4 Drums of degreaser water [CES# 1986]

HAZARDOUS (to Rineco)
-8 drums of paint watse [profile # 0510-13730] 9 = D

Return to CES and Check into processing facility.

ID #: 89380

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Steve Doranbach	Name:	
Close:	07:00 PM	Number:	(281) 704-1267	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	CES	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? HARD HAT,SAFTY GLASSES

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Zach System (Zach - LaPorte ,TX) Stream 3

Date : 7/14/2009 **Manifest # :**

Client : ZaCh System Corp. (La Porte) **Ticket :** 88905

Phone : 2814710943 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :		**Arrive At Destination**	17:25
Arrive At Customer :	16:00	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	16:40	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	548653
Tare Weight :		**Begining Odometer :**	548595
Net Weight :		**Total Miles :**	58

Driver : **Tractor # :** 279 **Tote # :**

Signature : J Sanchez **Trailer # :** 220 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

FAIRBANKS SCALES, NKC, MO. 1-800-451-4107 132768

WEIGHED ON A FAIRBANKS SCALE

CUSTOMER'S NAME _____

ADDRESS _____

COMMODITY 448 MAAHP

CARRIER _____

INBOUND 13160 lb
LOOP ID 220

INBOUND DATE 7-10-09 TIME 7:23PM

OUTBOUND DATE 7-12-09 TIME 4:35PM

51200 lb GROSS
13160 lb TARE
38040 lb NET
LOOP ID 220

DRIVER ON _____ OFF _____

PH-5

SHIPPER _____

WEIGHER S.D.

FAIRBANKS SCALE CAT. 16288

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Zach System (Zach - LaPorte ,TX) Stream 3

Customer : ZaCh System Corp. (La Porte)
Address : 914 South 16th Street
City,State,Zip : La Porte TX , 77571
CES Contact : () -

Driver :
Helper :
Date : 7/14/2009 Time :
Truck # Trailer #

Job Description :

John will sign your paperwork, unless it's after 4pm or he tells you otherwise

1. Return empty trailer #3001 to ZACH

2. Pickup trailer#220 from ZaCh

3. Return to CES and check into the processing facility.

Be sure to take placards with you for this load

John Parker: 713.824.3385

ID #: 88905

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

Bill Of Lading # : 89414

Folder ID :	Noltex (Noltex - La Porte, TX) Non Bulk Disposals

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Noltex
12220 Strang Road (Attn: Randy Boeding)
La Porte , TX 77571
(281) 842-5035

11a) HOU-2389
11b) HOU-2403
11c) HOU-2403
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54® implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	CW	200	P	Batteries, wet filled with acid, 8, UN2794, PG III
Yes	1	DM	125	P	Environmentally Hazardous Substance, solid (flourescent bulbs), 9, UN3077, III
Yes	7	CW	70	P	Environmentally Hazardous Substance, solid (flourescent bulbs), 9, UN3077, III
No			237		Light Bulbs 4' and 1-8'

Shipper : Noltex

Per : X Shawn Loonan **Signature :** X [signature] **Date :** 7-30-09

Carrier CES Environmental Services, Inc.

Per : Jose Espinal **Signature :** [signature] **Date :** 7-30-09

Receiving Facility CES Environmental Services, Inc.

Per : Sam Brown **Signature :** [signature] **Date :** 7-30-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

NOLTEX

GATE PASS AND LOAN FOLLOW-UP

Date _____

ARD: Please Pass

_____ _____

NAME EMPLOYEE NO.

TH THE FOLLOWING: ☐ **COMPANY PROPERTY** ☐ **PERSONAL PROPERTY** ☐ **SCRAP**

_____

_____

(SHOW COMPLETE DESCRIPTION: LINE OUT UNUSED SPACE)

_____

APPROVED (Scrap or Personal Property)

(TO BE COMPLETED WHEN COMPANY PROPERTY IS BEING LOANED)

ıe Above Items Have Been Loaned With Your Sanction. *Property So Loaned Must* Be Returned By _____

(DATE)

_____

APPROVED (Company Property Loan)

ROPERTY HAS BEEN RETURNED. Date _____

GUARD: Please ✓ One Box, Sign & Date

- ☐ Mat'l Hand Carried In.
- ☐ Mat'l Left Inside Gate.
- ☐ Mat'l Left Outside Gate.

Mat'l returned to _____ *location*

Supv. Sig. _____

Guard's Name_____ Date_____

_____ _____

(When Property Has Been Returned) SUPERVISOR'S NAME

ALL PASSES MUST BE PREPARED IN INK.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Noltex (Noltex - La Porte, TX)
Non Bulk Disposals

Date : 7/30/2009 **Manifest # :**

Noltex

Client : **Ticket :** 89414

Phone : 2818425035 CES Environmental Services, Inc.

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature X **Signature**

Leave CES Yard :	2:30	**Arrive At Destination**	4:30
Arrive At Customer :	3:00	**Begin Unloading :**	
Begin Loading :	3:35	**Finish Unloading :**	
Finish Loading :	3:55	**Leave Destination :**	5:00
Leave Customer :	4:00	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: X

Gross Weight :		**Ending Odometer :**	176683
Tare Weight :		**Begining Odometer :**	176642
Net Weight :		**Total Miles :**	41

Driver : Espinal, Jose **Tractor # :** 289 **Tote # :**

Signature : **Trailer # :** 248 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Noltex (Noltex - La Porte, TX) Non Bulk Disposals

Customer : Noltex
Address : 12220 Strang Road (Attn: Randy Boeding)
City,State,Zip : La Porte TX , 77571
CES Contact : () -

Driver : Espinal, Jose
Helper : Lift gate please
Date : 7/30/2009 Time : 2nd
Truck # 289 Trailer # 248

Job Description :

Site contact: Control Room (281) 842-5035

41
59
100

TAKE SHRINKWRAP FOR PICK UP

Please have customer sign recertifications & give in with transportation paperwork to CES

Pick up and label the following:
Bill of Lading
- 2 Pallets of Batteries (shrinkwrap) [CES#2389]
-2 DM of light bulbs [CES#2403]
-9 Boxes of light bulbs [CES#2403]

Return to CES and check into processing facility.

ID #: 89414

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	Control Room	Name:	
Close:		Number:	(281) 842-5035	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	ces	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

BOX NUMBER:

WK-tickel-
Houston

CES Environmental Services, Inc.

Bill Of Lading # : 88872

Folder ID :	Arkema (Haden Rd) Caustic Management

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Arkema, Inc. - Houston
2231 Haden Road
Houston , TX 77015
(713) 450-6770

11a) PA-2602
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur , TX 77640

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5④ implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	TT	43280	P	UN 2924, Flammable liquid. Corrosive, n.o.s., 3, PG II

Shipper : Arkema, Inc. - Houston

Per : Wesley Joy **Signature :** Wesley Joy **Date :** 07-16-09

Carrier CES Environmental Services, Inc.

Per : PRESTON SANDERS **Signature :** Preston Sanders **Date :** 07-16-09

Receiving Facility CES Environmental (Port Arthur)

Per : Johnstone Maleche **Signature :** [signature] **Date :** 07-16-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

WEIGHED ON A FAIRBANKS SCALE

CUSTOMER'S NAME _____

ADDRESS _____

COMMODITY Spent Caustic

CARRIER CES - 234

LOOP # 19 ID 0

INBOUND 32720 lb

INBOUND DATE 07-16-09 TIME 07:20 AM

OUTBOUND DATE 07-16-09 TIME 09:39 AM

4555

LOOP # 19

76000 lb GR
32720 lb TA
43280 lb NT

DRIVER ON _____ OFF _____

SHIPPER _____

WEIGHER _____

FAIRBANKS SCALE CAT. 16288

209

CES Environmental Services, Inc.

Bill Of Lading # : 88663

Folder ID :	Arkema (Haden Rd) - 97 SOL Material

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Arkema, Inc. - Houston
2231 Haden Road
Houston , TX 77015
(713) 450-6770

11a) ~~BOL~~ PA -3194
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
~~No~~ Yes	1	TT	38,100	P	RQ, UN1993, Flammable Liquids, N.O.S. (didodecyl sulfide), 3, PG III

Shipper : Arkema, Inc. - Houston
Per : Jessica Martinez **Signature :** Jessica Martinez **Date :** 7-08-09

Carrier CES Environmental Services, Inc.
Per : Joe Landy **Signature :** Landy **Date :** 7/08/09

Receiving Facility CES Environmental Services, Inc.
Per : Al Lagarda **Signature :** [signature] **Date :** 7-8-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Soltex (Soltex - Baytown)
Non-Bulk Disposal

Date : 7/31/2009 **Manifest # :** 005596232

Soltex c/o Lindon Manufacturing

Client : **Ticket :** 89390

Phone : 7136724450 Pollution Control Industries

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature **Signature**

Leave ~~CES Yard~~ PCI :	8:00	Arrive At Destination	
Arrive At Customer :	8:30	Begin Unloading :	
Begin Loading :	9:35	Finish Unloading :	
Finish Loading :	9:30	Leave Destination :	
Leave Customer :	10:00	Arrive At CES Yard :	10:30

Customer PO #:

Total Hours: 2hrs.

CES Unload: ☐

Gross Weight :		Ending Odometer :	122270
Tare Weight :		Begining Odometer :	122236
Net Weight :		Total Miles :	34

Driver : Rodriguez, Bobby **Tractor # :** 2000 **Tote # :**

Signature : **Trailer # :** 246 **Box # :**

Job Comments/Equipment : P/u 21 full totes and 2 drums from Soltex / Lindon. Haul to CES yard.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

#246 **Bill Of Lading # :** 89392

Folder ID :	Soltex (Soltex - Baytown) Product Drums

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Soltex c/o Lindon Manufacturing
7614 Wallisville Rd.
Houston , TX 77029
(713) 672-4450

11a) HOU-3388
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of this property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	2	DM	350	P	Non-RCRA/Non DOT regulated recyclable hydrocarbon (Naptel)

Shipper : Soltex c/o Lindon Manufacturing
Per : Jesus Chavez Signature : [signature] Date : 7-31-09

Carrier CES Environmental Services, Inc.
Per : Bobby Rodriguez Signature : [signature] Date : 7-31-09

Receiving Facility CES Environmental Services, Inc.
Per : Sam Barnes Signature : [signature] Date : 7-31-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

EPAHO004000052

713-675-2206

STRAIGHT BILL OF LADING – SHORT FORM – OR DELIVERY RECEIPT – ORIGINAL – NOT NEGOTIABLE for filing or record.

IF OR WHEN THIS INSTRUMENT EVER CONSTITUTES A BILL OF LADING, the Carrier, on shipping date shown below, has received, subject to the classifications and tariffs in effect on such date, the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

X	BILL OF LADING
	PRODUCT DELIVERY RECEIPT

NOTE: THE TERMS AND CONDITIONS OF THIS CONTRACT CONTAIN INDEMNITY AND LIMITATION ON LIABILITY PROVISIONS.
(This instrument is not a bill of lading when the property described below is moved in a vehicle (other than that of a common carrier) furnished and/or operated by the shipper or owner of the property, but is merely a receipt for said property on behalf of shipper or owner.)

ORIGIN NAME	ORG CODE	CUSTOMER CODE	SHIPPING DATE	CUSTOMER ORDER NUMBER	SHIPPER'S ORDER NUMBER
Soltex c/o Lindon Mfg.					

SHIP TO
CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021

BILL TO
Soltex
3707 FM 1960 West, Suite 560
Houston, Texas 77068

FREIGHT CHARGES TO BE:
Collect

C.O.D. CHARGE TO BE PAID BY:

RECEIVED $
To apply in prepayment of the charges on the property described hereon.
AGENT OR CASHIER
PER
(The Signature here acknowledges only the amount prepaid)

Mode of Transport
CES Truck

CAR / VEHICLE NO	ROUTING

PAGE 1 of 1

Number Drs./Lot No.	Description	
21 Totes/ LM0322380709	Sulfonic Acid/Mineral Spirits	41160 lbs
1 Drum/ B0600806	Naptel 310	380 lbs
1 Drum/ B0600807	Naptel 310	380 lbs

THE DESCRIPTION AND WEIGHT INDICATED ON THE BILL OF LADING ARE CORRECT

If required by 40 C.F.R. § 0172.204 – THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

CARRIER HEREBY CERTIFIES THAT THE CARGO TANK USED FOR THIS SHIPMENT IS A PROPER CONTAINER FOR THE COMMODITY LOADED THEREIN AND COMPLIES WITH DEPARTMENT OF TRANSPORTATION SPECIFICATIONS. TRANSPORTATION CO.

SUBJECT TO SECTION 7 OF CONDITIONS OF APPLICABLE BILL OF LADING, IF THE SHIPMENT IS TO BE DELIVERED TO THE CONSIGNEE WITHOUT RECOURSE ON THE CONSIGNOR, THE CONSIGNOR SHALL SIGN THE FOLLOWING STATEMENT: THE CARRIER SHALL NOT MAKE DELIVERY OF THIS SHIPMENT WITHOUT PAYMENT OF FREIGHT AND ALL OTHER LAWFUL CHARGES. SIGNATURE OF CONSIGNOR:

Shipper or Delivering Party:
Soltex, Inc.
c/o Lindon Manufacturing
7614 Wallisville Road
Houston, Texas 77029
Phone: 713-672-4450

PER

CARRIER

AGENT1

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Soltex (Soltex - Baytown) Non-Bulk Disposal

Customer : Soltex c/o Lindon Manufacturing
Address : 7614 Wallisville Rd.
City,State,Zip : Houston TX , 77029
CES Contact : Matt Bowman () -

Driver : **Rodriguez, Bobby**
Helper :
Date : 7/31/2009 Time : 2nd
Truck # 2000 Trailer # 246

Job Description :

Onsite Contact: Ellie MacNair @ 281-587-0900 or 832-928-7022

Pick & label the following;

Manifest to PCI:
-21 Totes of Corrosive Liquid [PCI#343547]

BOL to CES:
-2 drums of Naptel 310 [CES#3388]

Bring back to CES & check into processing facilty

ID #: 89390

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	Ellie MacNair	Name:	
Close:		Number:	(281) 587-0900	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	PCI	Name:	
Close:		Number:	(800) 388-7242	Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Corrosive PPE

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☑ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Rolled Alloys (Rolled Alloys- Hardy) Plasma Table

Date : 7/21/2009 **Manifest # :**

Client : Rolled Alloys **Ticket :** 88989

Phone : 7136962208 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature [signature] **Signature** [signature]

Leave CES Yard :	8:00 AM	**Arrive At Destination**	
Arrive At Customer :	8:45 AM	**Begin Unloading :**	
Begin Loading :	9:20 AM	**Finish Unloading :**	
Finish Loading :	6:30 pm	**Leave Destination :**	
Leave Customer :	6:40 pm	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	
Net Weight :		**Total Miles :**	

Driver : Gipson, Jack **Tractor # :** 104 **Tote # :**

Signature : Jack Gipson **Trailer # :** **Box # :**

Job Comments/Equipment : Clean solid SAND From Jet Table with @Air Machine, in to one VAC Box #2503

operater - JACK GIPSON
Helpers Joe, Jose, Sergio

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

Bill Of Lading # : 88989

Folder ID :	Rolled Alloys (Rolled Alloys- Hardy) Plasma Table

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Rolled Alloys
9818 E. Hardy Rd.
Houston , TX 77093
(713) 696-2208

CES Profile #
11a) HOU-1475
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container		Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
	No.	Type			
No	1	TT		G	Recyclable hydrocarbon and water mixture

Shipper : Rolled Alloys

Per : _____ **Signature :** _____ **Date :** _____

Carrier CES Environmental Services, Inc.

Per : _____ **Signature :** _____ **Date :** _____

Receiving Facility CES Environmental Services, Inc.

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Rolled Alloys (Rolled Alloys- Hardy) Plasma Table

Customer : Rolled Alloys
Address : 9818 E. Hardy Rd.
City,State,Zip : Houston TX , 77093
CES Contact : () -

Driver : Gipson, Jack
Helper : J.Ramirez
Date : 7/21/2009 Time : 0600
Truck # 104 Trailer #

Job Description :

SITE CONTACT Edward (713-816-7718)

Pump out Pump out Plasma Table

1) Pump OILY WATER as directed

2) Haul load to CES and offload where directed

ID #: 88989

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	Edward	Name:	
Close:		Number:	(713) 816-7118	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	CES	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Standard

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

SIZE:

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

PALLET JACK NEEDED: ☐ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☑ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Ameriforge Corp (Ameriforge Corp-Woodville)
Drum Management

Date : 7/24/2009 **Manifest # :**

CES Environmental Services, Inc.

Client : **Ticket :** 89217

Phone : 7136761460 Ameriforge Woodville

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature X **Signature**

Leave CES Yard :	8:45	**Arrive At Destination**	
Arrive At Customer :	11:30	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	12:00	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	176235
Tare Weight :		**Begining Odometer :**	176018
Net Weight :		**Total Miles :**	217

Driver : Jose Espinal **Tractor # :** 289 **Tote # :**

Signature : **Trailer # :** 217 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

Bill Of Lading # : 89218

Folder ID :	Ameriforge Corp (Ameriforge Corp-Woodville) Drum Management

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

CES Environmental Services, Inc. 11a)
4904 Griggs Rd 11b)
Houston , TX 77021 11c)
(713) 676-1460 11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
Ameriforge Corporation
483 CR 3020
Woodville , TX 75989

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5409 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	4	CW		Each	4' Light Bulb Boxes
No					
No					
No					

Shipper : CES Environmental Services, Inc.
Per : X Jimmy WATTS **Signature :** X Jimmy Watts **Date :** 7-24-09

Carrier CES Environmental Services, Inc.
Per : Jose Espinal **Signature :** Jose Espinal **Date :** 7-24-09

Receiving Facility Ameriforge Corporation
Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Ameriforge Corp (Ameriforge Corp-Woodville) Drum Management

Customer : Ameriforge Woodville
Address : 483 CR 3020
City,State,Zip : Woodville TX , 75979
CES Contact : () -

Driver : **Espinal, Jose**
Helper : first job
Date : 7/24/2009 Time : 0600
Truck # 289 Trailer # 217

Job Description :

Site contact is Jimmy Watts 409-283-8138 x 5327

Deliver the following:
4 - 4' light bulb boxes

WAIT FOR CUSTOMER TO PACKAGE LIGHT BULBS then..

Pickup and label the following:

Manifests to CES
~ 2 to 4 containers of universal liight bulbs (fluorescent/HID) (profile #3389)

Contact Lori w/ any problems (713) 417-5737

ID #: 89217

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Jimmy Watts409-283-8138	Name:	Scott Vaughn
Close:	04:00 PM	Number:	(409) 429-0489	Number:	(409) 594-2375

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Marlin Moser	Name:	Marlin Moser
Close:	08:00 PM	Number:	(713) 539-6574	Number:	(713) 539-6574

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard Hat, Safety Glasses, steel toes

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☑ YES ☐ NO

PALLET JACK NEEDED: ☑ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☑ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☑ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Axens (Axens @ Reactor Services International)
Al Alkyl Cylinders

Date : 7/28/2009 **Manifest # :**

Reactor Services International

Client : **Ticket :** 89313

Phone : 7138401133 VLS Recovery

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature Steven E Bayce **Signature**

Leave CES Yard :	230	**Arrive At Destination**	520
Arrive At Customer :	330	**Begin Unloading :**	500
Begin Loading :	330	**Finish Unloading :**	500
Finish Loading :	420	**Leave Destination :**	506
Leave Customer :	420	**Arrive At CES Yard :**	526

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	71033
Net Weight :		**Total Miles :**	

Driver : Gonzales, Joe **Tractor # :** 101 **Tote # :**

Signature : **Trailer # :** **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Arkema (Haden Rd) - 97 SOL Material

Date : 7/15/2009 **Manifest # :**

Client : CES Environmental Services, Inc. **Ticket :** 88914

Phone : 7136761460 **Consignee :** Intergulf Corporation

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	1100	**Arrive At Destination**	1130
Arrive At Customer :		**Begin Unloading :**	1130
Begin Loading :		**Finish Unloading :**	100
Finish Loading :		**Leave Destination :**	100
Leave Customer :		**Arrive At CES Yard :**	230

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	210977
Tare Weight :		**Begining Odometer :**	210740
Net Weight :		**Total Miles :**	

Driver : Gonzales, Joe **Tractor # :** 297 **Tote # :**

Signature : **Trailer # :** 229 **Box # :**

Job Comments/Equipment : Pre Trip Truck Trailer Prior Work
ECT FLAT TIRE ON TRAILER
WAITING for REPAIRS

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Quest Chemical Corp (Quest Chemical)
Non Haz Wastewater

Date : 7/29/2009 **Manifest # :**

Quest Chemical Corporation

Client : **Ticket :** 89379

Phone : 7138968188 **Consignee :** Quest Chemical Corporation

CES Environmental Services, Inc.

Transporter :

Signature **Signature**

Leave CES Yard :	800	**Arrive At Destination**	1015
Arrive At Customer :	845	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :	~~[illegible]~~	**Leave Destination :**	
Leave Customer :	935	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	102211
Tare Weight :		**Begining Odometer :**	102149
Net Weight :		**Total Miles :**	62

Driver : Sanders, Preston **Tractor # :** 295 **Tote # :**

Signature : Preston Sanders **Trailer # :** 271 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Quest Chemical Corp (Quest Chemical) Non Haz Wastewater

Customer : Quest Chemical Corporation
Address : 12255 FM 529
City,State,Zip : Houston TX , 77041
CES Contact : () -

Driver : **Sanders, Preston**
Helper :
Date : 7/29/2009 Time : 0700
Truck # 295 Trailer # 271

Job Description :

Take rejected load back to Quest - trailer #271 on CES yard.

Contact: Joe 281 799 9743 or Eric

Bruce 281-723-3655

ID #: 89379

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	07:30 AM	Name:	Tom Culp	Name:	Tom Culp
Close:	05:00 PM	Number:	(713) 896-8188	Number:	(713) 896-8188

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Marlin Moser	Name:	Marlin Moser
Close:	08:00 PM	Number:	(713) 676-1460	Number:	(713) 676-1460

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard hat, Safety glasses

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☑ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☑ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: ?

SIZE: ?

DRUM DOLLY NEEDED: ☐ YES ☑ NO

PALLET JACK NEEDED: ☐ YES ☑ NO

LOADING FROM (i.e. Tank): Tank

SIZE OF FITTING: 2" w/ camlock

TYPE OF FITTING: female

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☑ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☑ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4804 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 8/1/2009 **Manifest # :** 005596247

Client : CES Environmental Services - Port Arthur **Ticket :** 89506

Phone : 7136761460 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X _____ **Signature** _____

Leave CES Yard :	8:00	**Arrive At Destination**	
Arrive At Customer :	9:45	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	11:15	**Arrive At CES Yard :**	1:00

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	176872
Tare Weight :		**Begining Odometer :**	176683
Net Weight :		**Total Miles :**	189

Driver : Espinal, Jose **Tractor # :** 289 **Tote # :**

Signature : Jose Espinal **Trailer # :** 267 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000079307 | 2. Page 1 of 1 | 3. Emergency Response Phone: (713) 676-1460 | 4. Manifest Tracking Number: 005596247 JJK

GENERATOR

5. Generator's Name and Mailing Address: CES Environmental Services - Port Arthur State ID: 88585
4904 Griggs Road
Houston, TX 77021
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address): CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur , TX 77640
(713) 676-1460

6. Transporter Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460 TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA/Non DOT regulated wastewater	1	TT		G	000810111
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Purge ID : CES Internal Work
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89506
1) PA-3005 2) 3) 4)

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 | Signature | Month | Day | Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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 | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000069

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	CES Internal Work

Customer : CES Environmental Services - Port Arthur
Address : 2420 S. Gulfway Drive
City,State,Zip : Port Arthur TX , 77640
CES Contact : () -

Driver : **Espinal, Jose**
Helper : Houston Driver
Date : 8/1/2009 Time : 0700
Truck # 289 Trailer # 267

Job Description :

Haul loaded trailer to CES Houston
Check in with lab.

ID #: 89506

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	12:00 AM	Name:	PACES	Name:	
Close:	11:59 PM	Number:	(713) 676-1460	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	12:00 AM	Name:	CES	Name:	
Close:	11:59 PM	Number:	(713) 676-1460	Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard hat, safety glasses

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☑ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

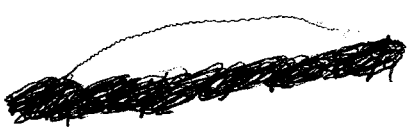
CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO



LOADING FROM (i.e. Tank): Tank

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : GSF WET (GSF-Houston) Iron Sponge Disposal

Date : 7/31/2009 **Manifest # :** 005596239

GSF Energy, LLC

Client : **Ticket :** 89503

Phone : 7136339320 Pollution Control Industries

Consignee :

CES Environmental Services, Inc.

Transporter :

Signature Francisco Tristan **Signature**

Leave CES Yard :	12:15	**Arrive At Destination**	
Arrive At Customer :	12:45	**Begin Unloading :**	
Begin Loading :	1:00	**Finish Unloading :**	
Finish Loading :	1:20	**Leave Destination :**	
Leave Customer :	1:30	**Arrive At CES Yard :**	2:15

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	158222
Tare Weight :		**Begining Odometer :**	158184
Net Weight :		**Total Miles :**	37

Driver : Rosales, Candido **Tractor # :** 290 **Tote # :**

Signature : **Trailer # :** 251 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	GSF WET (GSF-Houston) Iron Sponge Disposal

Customer : GSF Energy, LLC
Address : 9416 Ley Rd
City,State,Zip : Houston TX , 77078
CES Contact : () -

Driver : **Rosales, Candido**
Helper :
Date : 7/31/2009 Time : 2nd
Truck # 290 Trailer # 251

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	GSF WET (GSF-Houston) Iron Sponge Disposal

Customer : GSF Energy, LLC
Address : 9416 Ley Rd
City,State,Zip : Houston TX , 77078
CES Contact : () -

Driver : Rosales, Candido
Helper :
Date : 7/31/2009 Time : 2nd
Truck # 290 Trailer # 251

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	GSF WET (GSF-Houston) Iron Sponge Disposal

Customer : GSF Energy, LLC
Address : 9416 Ley Rd
City,State,Zip : Houston TX , 77078
CES Contact : () -

Driver : Rosales, Candido
Helper :
Date : 7/31/2009 Time : 2nd
Truck # 290 Trailer # 251

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	GSF WET (GSF-Houston) Iron Sponge Disposal

Customer : GSF Energy, LLC
Address : 9416 Ley Rd
City,State,Zip : Houston TX , 77078
CES Contact : () -

Driver : Rosales, Candido
Helper :
Date : 7/31/2009 Time : 2nd
Truck # 290 Trailer # 251

Job Description :

1) Pick up loaded box from GSF and drop on yard

Put manifest in in-transit box

1) Pick up loaded box from GSF and drop on yard

Put manifest in in-transit box

1) Pick up loaded box from GSF and drop on yard

Put manifest in in-transit box

1) Pick up loaded box from GSF and drop on yard

Put manifest in in-transit box

ID #: 89503

CUSTOMER INFORMATION

OPERATION HOURS:		**SHIPPING/RECEIVING CONTACT:**		**AFTER HOURS CONTACT:**	
Open :		**Name:**	Gary Valdez	**Name:**	
Close:		**Number:**	(713) 633-9320	**Number:**	

RECEIVING INFORMATION

OPERATION HOURS:		**SHIPPING/RECEIVING CONTACT:**		**AFTER HOURS CONTACT:**	
Open :		**Name:**	Maya Cargle	**Name:**	
Close:		**Number:**	(800) 388-7242	**Number:**	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Heavy Metal PPE

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☑ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☑ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: N/A

SIZE: N/A

LOADING FROM (i.e. Tank): N/A

SIZE OF FITTING: N/A

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☑ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

MDS
A6

10-day
for Rineco

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD988086831
2. Page 1 of 1
3. Emergency Response Phone: (281) 599-4718
4. Manifest Tracking Number: 005596216 JJK

5. Generator's Name and Mailing Address: NOV Monofio, 16503 Park Row, Houston, TX 77084 — State ID: 20375
Generator's Phone: (281) 599-4718

Generator's Site Address (if different than mailing address): NOV Monofio, 16503 Park Row, Houston, TX 77084 — (281) 599-4718

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID H1339 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: Kinetic, 1007 Vulcan Rd., Benton AR, 72015 — State ID D0005 — U.S. EPA ID Number: ARD981057870
Facility's Phone: (501) 778-6325

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Waste paint related material, 3, UN1263, PG II	9	DM	4500	P	Universal, D001, D035, F003, F005
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: National Oil Well Monofio (Monofio-Houston)
Production Waste
1) 0510-13730, Exp.6/25/10 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89381

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: x Steve Dorenbach — Signature: x [signature] — Month 7 Day 30 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Jose Espinal — Signature: [signature] — Month 7 Day 30 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H061			

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 — Signature — Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000078

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXCESQG
2. Page 1 of: 1
3. Emergency Response Phone: (832) 295-1196
4. Manifest Tracking Number: 005596218 JJK

GENERATOR

5. Generator's Name and Mailing Address
MSI Equipment Centers
1318 Bammel Rd
Houston, TX 77073
State ID: CESQG
Generator's Phone: (832) 295-1196

Generator's Site Address (if different than mailing address)
MSI Equipment Centers
1318 Bammel Road
Houston , TX 77073
(832) 295-1196

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Rineco
1007 Vulcan Rd.
Benton AR, 72015
State ID D0005
Facility's Phone: (501) 778-6325
U.S. EPA ID Number: ARD981057870

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Paint Related Material, 3, UN1263, PGII (Universal Waste)	7	DM	385	G	UNIV, 09H, D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Foster ID : MSI Equipment Centers (MSI-Houston)
Production Waste
1) 0601-00431 EXP.5/27/10 2) 3) 4)
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 84594

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: Joel Rivera
Signature: Joel Rivera
Month 7 Day 30 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Consido Rosales
Signature:
Month 7 Day 30 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

VAN # 242

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000029199
2. Page 1 of 1
3. Emergency Response Phone: (281) 680-4108
4. Manifest Tracking Number: 005596214 JJK

5. Generator's Name and Mailing Address: Delta Chemical, 334 Tidal Rd, Deer Park, TX 77536 — State ID: 85855
Generator's Phone: (281) 680-4108

Generator's Site Address (if different than mailing address): Delta Chemical, 334 Tidal Road, Deer Park, TX 77536 — (281) 680-4108

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Pollution Control Industries, 5485 Victory Lane, Millington TN, 38053 — State ID D0047 — U.S. EPA ID Number: TND000772186
Facility's Phone: 219-397-3951

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, Waste Flammable Liquids, n.o.s.,(acetone, toluene),3, PG II	8	DM	400	G	002200H, D001, U002, U031, U159, U161
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information — CES Job # - 89422
Folder ID: Delta Chemical
Non Bulk disposal
1) 330285, 9-30-10 2) 3) 4)

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: X Jeff Campbell — Signature: X [signature] — Month 7 Day 30 Year 01

16. International Shipments ☐ Import to U.S. ☐ 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: Robert Hickman — Signature: Robert Hickman — Month 07 Day 30 Year 09
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H061 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 — Signature — Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000080

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD008950461
2. Page 1 of 1
3. Emergency Response Phone: (713) 676-1460
4. Manifest Tracking Number: 005596201 JJK

5. Generator's Name and Mailing Address
CES Environmental Services, Inc. (Tankwash) State ID: 30900
4904 Griggs Road
Houston, TX 77021
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services, Inc. (Tankwash)
4904 Griggs Road
Houston, TX 77021
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
US Ecology
P.O. Box 307
Robstown TX, 78380
Facility's Phone: (800) 242-3209
State ID 50052
U.S. EPA ID Number: TXD069452340

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Hazardous waste, liquids, n.o.s., 9, NA3082, PG III	5	DM	2500	P	9013409H, D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : CES for Hazardous Liquids (Benzene)
1) 09-005-3469 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89413

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: JAMOS Pharm Signature: Month 7 Day 23 Year 07

16. International Shipments ☐ Import to U.S. ☐ 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 Signature Month Day Year
Transporter 2 Printed/Typed Name Signature Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H111, H132 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 Signature Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000081

Submitted profile
7.20.09

Polytex Fibers (Polytex Fibers - Houston TX)
Used Oil drums

DC Direct

EPAHO004000083

CONFIDENTIAL

CES Environmental Services, Inc.
Profit & Loss Sheet

CONFIDENTIAL

Billing/AP Information	
Name:	Polytex Fibers Corp
Contact:	Graciela Curiel
Address:	9333 Baythorne Drive
	Houston, Tx 77041
Phone:	(713) 690-9055
Fax:	(713) 939-3120

Salesperson:	Dana Carter		
Assigned:	X	Unassigned:	

Folder I.D.#	Polytex Fibers (Polytex Fibers-Houston Tx) Used oil drums

Job Contact:	Graciela Curiel		
	Phone:	(713) 690-9055	
	Fax:	(713) 939-3120	

P.O Required:	Y:	X	N:	Fuel Surcharge:	Y:	X	N:
City of Houston:	Y:	X	N:	4-hour Minimum:	Y:	X	N:

Base Oils **Black Oils** **Light Ends** **Glycols** **Emulsion Oils (>70% oil)** **Emulsion Oils (50%-70% oil)**

Job Estimate

Item	Vendor	Profile #	CES Cost	Customer Charge
Transportation Services	CES			$70.00/hour
Recycling of used oil	CES			$35.00/drum

Customer Special Request/Requirement

CONFIDENTIAL

EPAHO004000084

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **7/21/2009**

Dear **Graciela Curiel**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3429

Expiration Date 7/20/2011

Generator: Polytex Fibers Corp
Address: 9333 Baythorne Drive
Houston, TX 77041

Waste Information

Name of Waste: Used oil
TCEQ Waste Code #: RECYCLE
Container Type:
Detailed Description of Process Generating Waste:
Removal of used oil from equipment
Color: dark **Odor:** hydrocarbon **pH:** Na
Physical State:
Incompatibilities: None Known
Safety Related Data/Special Handling:

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Houston Recycle DC/LS

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Polytex Fibers Corp
Address: 9333 Baythorne Drive
City: Houston **State:** TX **Zip:** 77041
Contact: Graciela Curiel **Title:** Purchasing Agent
Phone Number: 713-690-9055 **Fax Number:** 713-939-3120
24/hr Phone Number: 800-628-0034
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:** NA

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Polytex Fibers Corp
Address: 9341 Baythorne Drive
City: Houston **State:** TX **Zip:** 77041
Contact: **Title:**
Phone Number: 713-690-9055 **Fax Number:** 713-939-3120

SECTION 3: General Description of the Waste

Name of Waste: Used Oil
Detailed Description of Process Generating Waste:

removal of used oil from equipment

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: dark **Odor:** hydrocarbon

Specific Gravity (water=1): 0.9 **Density:** 8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: RECYCLE

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<150		NA		NA	mg/l	NA	mg/l	0-1	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Used Hydraulic Oil	100	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. CES lab eval

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):
None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Graciela Curiel **Date:** 7/17/09

Printed Name/Title: Graciela Curiel

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 7-20-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$35.00/drum plus freight

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

Chlordtect, black oil compatibility, flash

5. Treatment and Handling Protocol:

Mix with black oils

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Prabhaker, Clint Hopkins, Sam Brown

Date: 7/15/09

From: Miles Root

Lab Memo: 09-139

Subject: **Polytex Fibers Evaluation 0709-34**

A sample of black oil from Polytex Fibers, Baythorne Dr., has been evaluated for potential use in our black oil for sales at CES. This sample is evaluation 0709-34 and represents a potential of 9-10 drums of material annually. Overall, this oil looks acceptable for blending with our black oil and its acquisition is recommended.

This oil is black in appearance and contains only a trace amount of particulates that can be centrifuged out. It has a typical oil odor, an API gravity of 28, no water, and blends just fine with our typical black oil. The chlor-d-tect is an acceptable 700 ppm. This oil is recommended for acquisition and it may be blended and sold with our other black oil without issues.

The table below summarizes the analytical testing.

Polytex Fibers	
Evaluation 0709-34	
Appearance	black
Solids, vol%	trace
Odor	typical oil odor
API gravity	28
Water, %	0
Chlor-d-tect, ppm	700
Black Oil Blendability	Okay

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

July 15, 2009

Polytex Fibers
Attn: Grace Curiel
9333 Baythorne
Houston, TX 77041

RE: Transportation and recycling of Used Oil

Dear Ms. Curiel,

CES Environmental Services, Inc. appreciates the opportunity to present to you our proposal for the transportation and recycling of used oil from your operations. Please find below our proposed scope of service and associated pricing for your consideration.

Scope of Service

- CES will assist the generator (Polytex Fibers) in creating a profile for the recyclable material.
- Upon profile approval, CES will arrange for a driver to pick up the drums of used oil. They will be returned to CES and recycled.
- CES will provide all proper shipping documents.

Estimated Costs

▪ Transportation Services:	$ 70.00/hour
▪ Recycling of Used Oil:	$ 35.00/drum

Conditions/Assumptions:

1. A profile must be approved prior to scheduling any disposal. Profile must be given at least 72 hours for approval.
2. There is a 4 hour minimum on all transportation services.
3. Cancelations must be given 24 hours in advance. If 24 hours notice is not given, a fee will be charged.
4. Transportation rate does not include any applicable fuel surcharges as per the U.S. Department of Energy National Diesel Average. Fuel surcharges are evaluated on a monthly basis. The current rate for July 2009 is 13.5%

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

5. Energy surcharge will be charged according to the national average utility pricing index on all disposal services. At the time of this quote, the energy surcharge is 1.0%. Rate is subject to change on a monthly basis.
6. A 1% Compliance surcharge will be charged in order to stay compliant with federal and state government requirements. This surcharge is applied against the entire invoice (including other surcharges and direct fees).

Thank you again for the opportunity and your interest in CES Environmental Services, Inc. If you have any questions or need additional assistance, feel free to contact me at (713) 748-9804.

Sincerely,
Dana R. Carter
Account Manager

ct w/ Joe &
see what the
count is

TNLF#217

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000008920	1	(281) 452-9000	005596161 JJK

GENERATOR

5. Generator's Name and Mailing Address

Slay Transportation Company
16643 Jacinto Port Blvd.
Houston, TX 77015
Generator's Phone: (281) 452-9000
State ID: 34084

Generator's Site Address (if different than mailing address)

Slay Transportation Company
16643 Jacinto Port Blvd (Attn: Ray Jeannott)
Houston, TX 77015
(281) 452-9000

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated waste sludge (sump sludge)	[redacted]	DM	[redacted]	P	00035191
	2.					
	3. Non-RCRA/Non DOT regulated waste sludge (tank truck heels)	18	DM	9000	P	00112191
	4.					

14. Special Handling Instructions and Additional Information

Folder ID : Slay Transportation Company (Slay Transportation - Houston)

This is to certify that the above-named materials are properly classified, described, packaged, marked & labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89271

1) HOU-1670 2) 3) HOU-1020 4)

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: L A.D. Woodard — Signature: X — Month 7 Day 27 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Candice Rosales — Signature: [redacted] — Month 7 Day 27 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141	H141	H141	

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: Sam Brown — Signature: [redacted] — Month 7 Day 27 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

X 248

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	TXR000008920	1	(713) 201-2469	005596183 JJK

GENERATOR

5. Generator's Name and Mailing Address
Slay Transportation Company
16643 Jacinto Port Blvd.
Houston, TX 77015
State ID: 84084
Generator's Phone: (713) 201-2469

Generator's Site Address (if different than mailing address)
Slay Transportation Company
16643 Jacinto Port Blvd (Attn: Ray Jeannott)
Houston, TX 77015
(713) 201-2469

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
Pollution Control Industries
5485 Victory Lane
Millington TN, 38053
Facility's Phone: 219-397-3951
State ID D0047
U.S. EPA ID Number: TND000772186

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN3148, Waste water-reactive liquid, n.o.s. (mondure), 4.3, PG II	1	DM		P	6098212H , D003
X	2. UN1993, Waste flammable liquids, n.o.s., (desmondure), 3, PGII		DM		P	6098212H , D001
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Slay Transportation Company (Slay Transportation - Houston)
1) 228939 2) 228932 3) 4)
This is to certify that the above-named materials are properly classified, described, packaged, marked & labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89375

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: A.D. Woodard Signature: A D Woodard Month: 07 Day: 29 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Joe Stanley Signature: J Stanley Month: 07 Day: 29 Year: 09

Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H061	H061		

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 Signature Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Slay Transportation Company (Slay Transportation - Houston)
Non Haz Drums

Date : 7/27/2009 **Manifest # :** 005596162 005596161 SSK

Client : Slay Transportation Company **Ticket :** 89271

Phone : 2814529000 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature X _____ **Signature** _____

Leave CES Yard :	8:00	**Arrive At Destination**	
Arrive At Customer :	9:00	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	4:00	**Arrive At CES Yard :**	4:45

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	157886
Net Weight :		**Total Miles :**	

Driver : Rosales, Candido **Tractor # :** 290 **Tote # :**

Signature : _____ **Trailer # :** 217 **Box # :**

Job Comments/Equipment : Helper = Percy

Brock down for about ~~4~~ 2 hours
lift gate wasn't working
properly
Truck and trailer stay at stay

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Slay Transportation Company (Slay Transportation - Houston) Non Haz Drums

Customer : Slay Transportation Company
Address : 16643 Jacinto Port Blvd (Attn: Ray Jeannott)
City,State,Zip : Houston TX , 77015
CES Contact : () -

Driver : Rosales, Candido
Helper : Percy
Date : 7/27/2009 **Time :** 0700
Truck # 290 **Trailer #** 217

Job Description :

Contact is Jesse Garza 713-201-2469

7:30

Pickup and label the following.:

HAZARDOUS (to PCI):
MANIFEST
~ 11 drums of MDI - PCI 228939 W
~ 4 drums of demondure - PCI 228932 W

NON-HAZARDOUS (to CES):
MANIFEST
~ 4 drums of Sump Sludge Profile #1670 4 W
~ 14 drums of waste solids profile #1020 18 W
1 W
18
1-DRUMS HAZ TRASH. W

please only pick up what is on this list*

Bring drums to CES and get with warehouse

ID #: 89271

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	07:00 AM	Name:	Jesse Garza	Name:	Jesse Garza
Close:	05:00 PM	Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Anthony (CES)	Name:	Leroy Arce
Close:	08:00 PM	Number:	(713) 676-1460	Number:	(713) 410-7789

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO
IF YES, WHAT? hard hat, safety glasses

HACSC REQUIRED: ☐ YES ☑ NO
IF YES, WHAT?

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD059504161 | 2. Page 1 of: 1 | 3. Emergency Response Phone: 713.231.5303 | 4. Manifest Tracking Number: 005596223 JJK

GENERATOR

5. Generator's Name and Mailing Address: CES Environmental Services, 4210 Greenbriar, Houston, TX 77021
Generator's Phone: 713 676 1460
Generator's Site Address (if different than mailing address): N/A

6. Transporter 1 Company Name: CES Environmental Services | U.S. EPA ID Number: TXD008154161

7. Transporter 2 Company Name | U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Waste Connections | U.S. EPA ID Number:
Facility's Phone:

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Waste, Non Regulated (Class 1 Surface)	1	CM	10	Y	1026 4091
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: 1709 0017 — Transfer Manifest (93 Internal

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 | Signature | Month: 7 | Day: 30 | Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	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 | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **GENERATOR'S INITIAL COPY**

EPAHO004000100

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Fax

To: Jeff Babin

Fax#: (225) 267-4570 Pages: 7

From: Lori @ CES Environmental

Date: 7/30/09

RE: Permit from the City of Houston allowing CES to take Haz w/w.

Jeff - I hope this Helps. Please Contact me if you have any questions, or need more info.

Thanks
Lori

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Glenn Shankle, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 28, 2008

Mr. Matt Bowman, President
CES Environmental Services, Inc.
4904 Griggs Road
Houston, Texas 77021

Re: Transmittal of Class 1 Permit Modification
CES Environmental Services, Inc - Houston
Industrial Solid Waste Registration No. 30900
Industrial Solid Waste Permit No. 39048
WWC Nos. 12143047, 12149729, 12224342-1, 12234282-1
RN100693282/CN600618946

Dear Mr. Bowman:

The Texas Commission on Environmental Quality has reviewed your application for a Class 1 permit modification dated November 6, 2007, received November 7, 2007, and revised April 17, 2008. The modification requests to list in Table IV.B. of the permit, a hazardous waste stream which CES is currently authorized to manage under the waste water treatment unit exemption in 40 CFR 264.1 (g)(6), without a RCRA hazardous waste permit. This waste stream will only be managed in a tank which is part of the waste water treatment system that discharges to a Publicly Owned Treatment Works.

Our evaluation indicates that the information presented is sufficient for a Class 1 permit modification. Transmitted herewith is the modification which is now part of your permit and should be attached thereto. Please note that notice of this modification request must be made as per the requirements of Title 30 Texas Administrative Code Sections 39.403 and 305.69(b)(1)(B) within 90 days after the change is put into effect.

Questions regarding this modification should be directed to me at 512/239-5747. If responding by letter, please include Mail Code MC 130 in the mailing address.

Sincerely,

Vaishali Tendolkar, Project Manager
Industrial & Hazardous Waste Permits Section
Waste Permits Division

VT/fp

Enclosure(s)

TABLE IV.B. - WASTES MANAGED IN PERMITTED UNITS

WASTE MATERIAL*	TYPE MATERIAL
Class 1, 2, and H* Industrial Waste	Inorganic Liquids
Class 1, 2, and H* Industrial Waste	Inorganic Solids
Class 1, 2, and H* Industrial Waste	Inorganic Sludges
Class 1, 2, and H* Industrial Waste	Organic Liquids
Class 1, 2, and H* Industrial Waste	Organic Solids
Class 1, 2, and H* Industrial Waste	Organic Sludges

* Hazardous Industrial Waste stream which CES is currently authorized to manage under the waste water treatment unit exemption in 40 CFR 264.1(g)(6) without a RCRA hazardous waste permit. All authorized hazardous industrial waste listed in Table IV.B. must only be managed in Tank 108.

TABLE IV.B. SUPPLEMENT
EPA HAZARDOUS WASTE NUMBERS

Characteristically Hazardous Wastes

D001 D002 D003 D004 D005 D006 D007 D008 D009 D010 D011 D012 D013
D014 D015 D016 D017 D018 D019 D020 D021 D022 D023 D024 D025 D026
D027 D028 D029 D030 D031 D032 D033 D034 D035 D036 D037 D038 D039
D040 D041 D042 D043

Hazardous Wastes From Non-specific Sources

F001 F002 F003 F004 F005 F034 F035 F037 F038 F039

Hazardous Wastes From Specific Sources

K011 K020 K022 K023 K024 K025 K026 K027 K035 K048 K049 K050 K051
K052 K060 K083 K085 K086 K087 K093 K094 K095 K096 K103 K104 K105
K112 K113 K114 K115 K116 K141 K142 K143 K144 K145 K147 K148 K149
K150 K151 K156 K157 K169 K170 K171 K172 K178

Acute Hazardous Wastes

P003 P005 P028 P048 P110

Toxic Wastes

U001 U002 U003 U004 U007 U008 U009 U012 U017 U019 U031 U037 U039
U041 U043 U044 U045 U048 U051 U052 U053 U055 U056 U057 U067 U070
U071 U072 U076 U077 U078 U079 U080 U081 U082 U084 U092 U101 U102
U103 U105 U106 U108 U110 U112 U113 U117 U118 U122 U123 U127 U130
U140 U147 U151 U152 U154 U159 U161 U162 U165 U167 U168 U169 U170
U183 U184 U188 U191 U194 U196 U207 U210 U213 U219 U220 U221 U223
U228 U239 U328 U353 U359

EPAHO004000103

CITY OF HOUSTON

Industrial Waste Permit Number: 9558

Department Of Public Works And Engineering
Wastewater Operations
Industrial Wastewater Service
10500 Bellaire Blvd.
Houston, Texas 77072
Phone: (281) 575-2800

Authorization to discharge under City of Houston Industrial Waste Ordinance Chapter 47; Article V.

CES ENVIRONMENTAL SERVICES, INC.*

is authorized to discharge into the City's collection system raw liquid waste in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit at the following location:

4904 Griggs Road
HOUSTON, TX 77021

Regulated Waste Offsite Disposal: **Yes**
EPA Categorical Limits Applicable: **Yes**
Significant Industrial User: **Yes**
Pretreatment: **Yes**
Category: **CENTRALIZED WASTE TREATMENT FACILITY**
Product/Service: **LIQUID AND SOLID WASTE PROCESSING, TREATMENT AND DISPOSAL - CENTRALIZED WASTE TREATMENT FOR METALS, OILS, AND ORGANIC WASTES**
NAICS Code(s): **562219**
Key Map No.: **534-J** Sewer Map No.: **1604B**
Treatment Plant: **SIMS SOUTH**

This permit shall become effective on **12/14/2008** and the authorization to discharge shall expire at midnight **12/14/2010.**

Signed this **2th** day of **December 2008**

Clyde Smith
Environmental Investigator V
City of Houston Pretreatment Program

EPAHO004000104

INDUSTRIAL SOLID WASTE PERMIT NO. 39048
ISWR NO. 30900

Texas Commission on Environmental Quality

Austin, Texas

PERMIT FOR INDUSTRIAL SOLID WASTE MANAGEMENT SITE issued under provisions of TEXAS HEALTH AND SAFETY CODE ANN. Chapter 361 (Vernon)

Name of Permittee:	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021
Site Owner:	CES Environmental Services, Inc. 4904 Griggs Road Houston, Texas 77021
Classification of Site:	Industrial Nonhazardous Solid Waste Processing and Storage, Off-site, Commercial

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

ISSUED: JUL 27 2004

For The Commission

TCEQ-0080 (Rev. 10-09-03)

CES ENVIRONMENTAL SERVICES INC
4904 GRIGGS RD
HOUSTON, TX 77021
ATTN: SEAN EASTON

EPA

ACKNOWLEDGMENT OF RCRA SUBTITLE C SITE IDENTIFICATION FORM

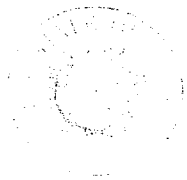
This is to acknowledge that you have filed a RCRA Subtitle C Site Identification Form for the facility located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that facility appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage, and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and on other hazardous waste management reports and documents required under Subtitle C of RCRA. A Subsequent RCRA Subtitle C Site Identification Form is required should any information on the original document change.

EPA I.D.Number:	**TXD008950461**
Facility Name and Address:	**CES ENVIRONMENTAL SERVICES INC** **4904 GRIGGS RD** **HOUSTON, TX 77021**

October 23, 2003

RECEIVED 10.27.03

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
H. S. Buddy Garcia, *Commissioner*
Glenn Shankle, *Executive Director*



JUN 2 4 2007

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 29, 2007

PRABHAKAR THANGUDU
CES ENVIRONMENTAL SERVICES INC
4904 GRIGGS RD
HOUSTON, TX 77021-3208

Re: Registration for Used Oil Activities at: CES ENVIRONMENTAL SERVICES
4904 GRIGGS RD
HOUSTON, TX 77021-3208

TCEQ Registration number: A85775 EPA ID Number: TXD008950461
Regulated Entity Number: RN100693282 Customer Number: CN600618946

ONE TIME REGISTRATION FOR THIS USED OIL HANDLERIssued: 05/19/2003

Dear Registrant:

The Texas Commission on Environmental Quality(TCEQ) has received your "Registration for Used Oil Handler" form. Our records indicate that your application is administratively complete and you are currently registered in the State of Texas as the following:

MARKETER WHO DIRECTS SHIPMENTS TO BURNER
MARKETER WHO FIRST CLAIMS UO
PROCESSOR
RE-REFINER
TRANSFER FACILITY
TRANSPORTER

A copy of this registration must be retained at your designated place of business and if you are registered as a transporter, in each vehicle used to transport the above mentioned.

Your assigned TCEQ Registration Number is A85775. Please contact our office within 30 days, whenever:

* your office mailing address changes;
* your registered facility name changes;
* there is a change in ownership; or
* the operations or management methods are no longer adequately described in your existing registration.

If you should have any questions, please feel free to contact the Used Oil Registration Program at (512) 239-6832 option 2.

cc: TCEQ REGION 12 - HOUSTON

USEcology

an American Ecology company

☐ US Ecology Nevada (Beatty) Fax (775) 553-2125
☐ US Ecology Idaho (Grand View) Fax (208) 834-2919
☑ US Ecology Texas (Robstown) Fax (361) 387-0794
Profile #:

A. CUSTOMER INFORMATION

*Waste as shipped will be : ☑ Industrial ☐ NON - Industrial *(Texas customers only)*

Generator: GATX Rail
Facility Address: 146 W. Brown Street
(No PO Box)
Mailing Address: PO Box 969
City/State/Zip: Hec ne TX 77859
Technical Contact: Dan Carter
Phone: 713-748-980 Fax: 713-676-1676

☐ Check If Billing is Same
Billing Company: CES Environmental Service Inc
Billing Address: 4904 Griggs Road
City/State/Zip: Houston, TX 77021
Billing Contact: Juanita Thomas
Phone No.: 713-676-1460 Fax No.: 713-676-1676
Email: jthomas@cesenvironmental.com

NAICS# ☐ CESQG ☐ SQG ☑ LQG EPA ID: TXD000835207 State ID#: 32643

B. SHIPPING INFORMATION

1. US DOT Shipping Name: Waste, Amines, Solid, Corrosive, n.o.s.(fatty acid derived amines) 2. Hazard Class: 8
3. UN/NA #: NA3259 4. Packaging Group: II 5. RQ: NA
6. Container Type: ☐ Bulk ☐ Totes ☐ Pallet Size: 55 gal 7. Frequency: ☐ Year ☑ QTR ☐ Month
☐ Boxes ☐ Bags ☑ Drums ☐ Other Quantity: 5 ☐ 1 Time ☐ Other

C. GENERAL MATERIAL & REGULATORY INFORMATION

1. Common name for this waste: Fatty Amines (Armeen TM-97)
2. Process generating the material: removal of heel prior cleaning RCRA empty rail cars
(include additional sheets if necessary)
3. Describe Physical Appearance of Waste: light yellow soft solid material
4. Describe odor of waste: ☐ None ☑ Slight ☐ Strong Describe:
5. Knowledge is from: ☐ Lab Analysis ☑ MSDS ☐ Process/Generator knowledge ☐ Other (specify)

☑ Yes ☐ No Is the material <500 PPMW VOC as generated
☐ Yes ☑ No Waste Subject to Benzene NESHAP regulations
☑ Yes ☐ No State waste codes: H (* LDR treatment sub-category) ☐ Wastewater ☑ Non-wastewater
☐ Yes ☑ No CERCLA Regulated (Superfund) Waste
☑ Yes ☐ No Is the waste restricted under EPA Land Disposal Restrictions (40 CFR 268), if yes please complete LDR form

☑ Yes ☐ No	EPA Haz. Waste (list codes)					D002		

☐ Yes ☑ No Exempt Waste: If yes, list ref. 40 CFR
☐ Yes ☑ No Contains UHCs/Constituents of Concern: List in section D
☐ Yes ☑ No Has the waste been treated after the initial point of generation?
☐ Yes ☑ No Subpart XX
☐ Yes ☑ No Alternative standards for Soil ?
Source Code G Form Code W Mgt. Method H

D. MATERIAL COMPOSITION (Physical/Chemical)

(Range Total > or = 100%) Values are ☑ TCLP ☐ TOTALS
(include additional sheets as necessary)

	typical value	unit	range
Armeen TM97 (tallowalkylamines)			100%

E. Does the waste exhibit or contain the following:

☐ Yes ☑ No	Oxidizer	☐ Yes ☑ No	React. Sulfides ppm
☐ Yes ☑ No	Explosive	☐ Yes ☑ No	React. Cyanides ppm
☐ Yes ☑ No	Organic Peroxide	☐ Yes ☑ No	Water/Air (Pyrophoric) React.
☐ Yes ☑ No	Shock Sensitive	☐ Yes ☑ No	Thermally Unstable
☐ Yes ☑ No	Tires	☐ Yes ☑ No	TSCA Regulated PCB Waste
☐ Yes ☑ No	Pyrophoric	☐ Yes ☑ No	Regulated Medical/Infectious Waste
☐ Yes ☑ No	Radioactive**	☐ Yes ☑ No	Compressed Gasses
☐ Yes ☑ No	Exempt RAD**		

**Additional Radiological info is provided in USEI's WAC Addendum

☐ Yes ☑ No Halogenated Organic Compounds? (per 40 CFR 268, Appendix III)

F. PHYSICAL CHARACTERISTICS

1. Flash Po NA °F (if <140°F, 2. Typical pH: >12.5 pH Range: ☐ ≤2
☐ Yes ☑ No Possibility of incidental liquids from transportation? ☐ >2, <12.50
☑ Yes ☐ No Does waste pass the EPA specified paint filter test? ☑ ≥ 12.5

G. GENERATOR'S CERTIFICATION:

☐ Yes ☑ No **I certify this material may be disposed of without further treatment.**

Certification Statement: I certify under penalty of law that I am familiar with this waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, and that all known or suspected hazards have been disclosed. Furthermore, I certify that this form was completed in accordance with the instructions provided.

Signature: Print Name: Ricardo Salias
Title: Cleaning Manager Date: 6/29/09

Facility use only
First review: Second review: Final review:
Date approved: Date Denied:

EPAHO004000108

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Phone: (713) 676-1460
Fax: (713) 676-1676

Invoice

Date	Invoice #
4/29/2009	55975

PAID

Bill To: T.T. Barge
Attn: Accounts Payable
19368 Hwy 36
Covington, LA 70433

P.O. No.	Terms	Project
	Net 30	Mile 183

Quantity	Description	Manifest #	Rate	Amount
	3/5/09			
1	Management of sodium hydroxide solution (<23% NaOH) @ $250.00 per load	BOL 82473	250.00	250.00
	3/6/09			
1	Management of sodium hydroxide solution (<23% NaOH) @ $250.00 per load	BOL 82476	250.00	250.00
	1% Compliance Fee		5.00	5.00

We appreciate your business!

Subtotal	$505.00
Sales Tax (8.25%)	$0.00
Total	$505.00

Late Payment Policy: Any unpaid balances begining on the 30th day after the account is due will accrue a per annum interest rate of 7.5%, unless otherwise stated in a formalized contract.

DC

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-1694**

Customer: **Praxair-Texas City**

Waste Generator: **Praxair-Texas City**

Waste Stream Name: **Natural gas condensate wastewater**

Expiration Date: **8/6/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

Customer Name

Signature

Company / Title

Date

Jenny:
I need to know the waste code from the NOR on this waste stream.
Thanks_

Morgan-
If recerted
~~#~~ any recoverable
Light ends or alcohols?

Get NOR 87342
Light ends? Recoverable product?

Report Name : JENNY RUST
Report Progam : TRACS_EXEC_DIR/ihw_nor_report
Date : 06-jul-2009 11:22:21
User ID : vgil

Selection Criteria

SW Regis. #s : 87342

Sort Criteria: Registration Number

87342 Praxair Inc

Solid Waste Registration Number: 87342 EPA Id: TXR000056150

Company Name: Praxair Inc
Site Name: Praxair
Site Location: 1720 Grant Ave, Gate 16, Texas City, TX
9
Primary Contact: Bush, David
Mailing Address: PO Box 1758

Texas City, TX 77592-1758

Region: 12
County: 84 Galveston
Land Type: Private

Title: Facility Manager
Site Street Address:

Initial Registration Date: 10/10/2003
Last Amendment Date: 03/10/2009
Last Date NOR Computer update: 03/17/200

Phone: 409-643-5626
1720 Grant Ave
Gate 16
Texas City, TX 77590

Registration Status: Active
Registration Type: Generator
Generator Type: Industrial

Reporting Method: STEERS

Hazardous Waste Generation Status: Conditionally Exempt Small Quantity Generator

Business Description: Hydrogen gas production

Note: Valid site address per RC Hemminger 10/25/06 tb

NAICS Code: 325120 Industrial Gas Manufacturing
Tax Identification #: 061249050
Handler Status:

Operator Information
Name: Praxair Inc
Phone: 409-643-5620
Address: PO Box 1758
Texas City, TX, 77592-1758

Owner Information
Name: Praxair Inc
Phone: 409-643-5620
Address: PO Box 1758
Texas City, TX, 77592-1758

Billing Contact:
Billing Address: ATTN: Accounts Payable
PO Box 1758
Texas City, TX 77592-1758

Title:

Phone:

As of 03/10/2009 - the next unassigned sequence number for WASTES is 0016 and
the next unassigned sequence number for UNITS is 005.

07/06/2009 11:39 FAX

003/007

EPAHO0040000112

87342 Praxair Inc

**** WASTE INFORMATION ****

Texas Waste Code	Waste Class	Status	Date of Status	Managed Onsite/ Offsite	Radio-active	TCEQ Audit Complete
****** Active Wastes ******						
00019992	2	Active	10/10/03	On/Off		No
00024891	1	Active	10/10/03	On/Off		No
00033111	1	Active	10/10/03	On/Off		No
[redacted]		Active	10/10/03	On/Off		No
00053102	2	Active	10/10/03	On/Off		Yes
00063902	2	Active	10/10/03	On/Off		No
00074041	1	Active	10/10/03	On/Off		No

Description from Generator: Plant refuse. General facility cleanup. 11/03/03
Texas Form Code: 999 Plant Refuse
Current Management Units: Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Oil contaminated soil/gravel. Cleanup of minor oils spills. 11/03/03
Texas Form Code: 489 Petroleum contaminated solids
Current Management Units: Contain Store Area 001
Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Asbestos, solid. Asbestos maintenance/replacement. 11/03/03
Texas Form Code: 311 Asbestos solids and debris
Current Management Units: Contain Store Area 001
Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Facility Wastewater. Hydrogen process wastewater. 11/03/03
Texas Form Code: 119 Other inorganic liquids
Current Management Units: WWTP 003
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Spent solid filters or adsorbents. Facility maintenance on hydrogen unit. 11/03/03
Texas Form Code: 310 Spent solid filters or adsorbents (inorganic)
Current Management Units: Contain Store Area 001
Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Non-hazrdous concrete/cement/gravel/soil/construction debris. Plant construction. 11/03/03
Texas Form Code: 390 Non-haz concrete, cement, construction debris
Current Management Units: Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

Description from Generator: Waste carbon. Maintenance on hydrogen production facility. 11/03/03
Texas Form Code: 404 Spent carbon
Current Management Units: Contain Store Area 001
* Origin Codes: 3 From non-haz waste mgmt

07/06/2009 11:39 FAX
004/007
EPAHO00400113

87342 Praxair Inc

Texas Waste Code	Waste Class	Status	Date of Status	Managed Onsite/ Offsite	Radio-active	TCEQ Audit Complete

****** Active Wastes ******

00082191 1 Active 10/10/03 On/Off No
Description from Generator: Organic liquid amine (methyldiethanol amine). Changeout of amine in hydrogen process. 11/03/03
Texas Form Code: 219 Other organic liquids
Current Management Units: Tank 004
Contain Store Area 001
* Origin Codes: 3 From non-haz waste mgmt

00094902 2 Active 02/03/04 On/Off No
Description from Generator: Spent blastings media. Generating process: blasting of metal equipment.
Texas Form Code: 490 Sand blasting waste
Current Management Units: Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

00103082 2 Active 04/28/04 On/Off No
Description from Generator: RCRA empty metal drums. Adding drummed fluids to equipment. Date of generation 4-28-04.
Texas Form Code: 308 Empty or crushed metal drums or containers
Current Management Units: Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

00113192 2 Active 06/28/04 On/Off No
Description from Generator: Refractory from maintenance on hydrogen reformer and process gas boiler. Date of generation 6-28-04.
Texas Form Code: 319 Other waste inorganic solids
Current Management Units: Misc Store Container 002
* Origin Codes: 3 From non-haz waste mgmt

0013009H H Active 07/23/07 On/Off No No
Description from Generator: Mercury contaminated ampoules with less than 0.001 pounds of mercury.
Texas Form Code: 009 Other lab packs
EPA Form Code: W001 Lab packs with no acute hazardous waste
EPA Hazardous Waste Numbers: D002 D009
Current Management Units: Misc Store Container 002
* Origin Codes: 1 Onsite-process/service
* Source Codes: G22 Laboratory analytical wastes (used chemicals)
* Measurement Points: 1 Before mixing
* NAICS Code: 325120 Industrial Gas Manufacturing
New Chemical Substance: Yes

00146091 1 Active 04/10/08 On/Off No No
Description from Generator: clean up material from grout resin
Texas Form Code: 609 Other organic sludges
Current Management Units: Misc Store Container 002
* Origin Codes: 1 Onsite-process/service
Company's Internal Code(s): GROUT RESIN

07/06/2009 11:39 FAX
005/007
EPAHO0040000114

87342 Praxair Inc

Texas Waste Code	Waste Class	Status	Date of Status	Managed Onsite/ Offsite	Radio-active	TCEQ Audit Complete

****** Active Wastes ******

00152191 1 Active 03/10/09 On/Off No No

Description from Generator: waste glycol from facility equipment- will recycle ethylene glycol and will waste propylene glycol
Texas Form Code: 219 Other organic liquids
Current Management Units: Contain Store Area 001
* Origin Codes: 1 Onsite-process/service
Company's Internal Code(s): WASTE GLYCOL

* The first value is considered the primary value (e.g. primary origin code).
As of 03/10/2009, the next unassigned sequence number for WASTES is 0016.

** No Longer Generated Wastes **

[redacted] Inactive 02/02/07 NA No No

Description from Generator: Natural Gas Condensate. Generating Process: Natural Gas moisture removal. Date of Generation 12-2-04.
Texas Form Code: 219 Other organic liquids
EPA Form Code: W219 Other organic liquid
EPA Hazardous Waste Numbers: D001
Current Management Units: Misc Store Container 002
* Origin Codes: 1 Onsite-process/service
* Source Codes: G11 Discarding off-specification or out-of-date chemic
* NAICS Code: 325120 Industrial Gas Manufacturing

As of 03/10/2009, the next unassigned sequence number for WASTES is 0016.

07/06/2009 11:40 FAX
006/007
EPAHO0400115

87342 Praxair Inc

**** UNITS AT THIS SITE MANAGING WASTE ****

Unit Number	Unit Type	Unit Status	Date of Status	Classes of Waste Managed in Unit Onsite / Offsite	Unit Permit Number	Unit # on Permit	Regulatory Status	Deed Recording Needed/Date
** 'Active', 'Closure Pending' & 'Closure Request' Units **								
001	Contain Store Area	Active	10/10/03	1 2/ NA	NA	NA	Non-Hazardous Regulated	NA /

Description from Company: Container storage area
Capacity: 550.0000 Capacity Unit of Measure: G
System Types: 141 Storage, bulking, and/or transfer off-site - no tr
Biennial System Regulatory Status: Regulatory status unknown
Wastes Currently Managed in Unit: 00024891 Oil contam 00033111 Asbestos, 00053102 Spent soli 00074041 Waste carb 00082191 Organic li
00152191 waste glyc

---

002 Misc Store Container | Active | 10/10/03 | 1 2 H/ NA | NA | NA | Non-Hazardous Regulated | NA /

Description from Company: Miscellaneous storage containers (Rolloffs). Various areas of facility as necessary. 20 Y
System Types: 141 Storage, bulking, and/or transfer off-site - no tr
Biennial System Regulatory Status: Regulatory status unknown
Wastes Currently Managed in Unit: 00019992 Plant refu 00024891 Oil contam 00033111 Asbestos, 00053102 Spent soli 00063902 Non-hazrdo
00094902 Spent blas 00103082 RCRA empty 00113192 Refractory 0012219H Natural Ga 0013009H Mercury co
00146091 clean up m

---

003 WWTP | Active | 10/10/03 | 2/ NA | NA | NA | RCRA Pmt Exempt-W.W.T. | NA /

Description from Company: Wastewater treatment plant at BP Refinery. Wastewater discharge piping to BP Refinery. Various (G)
System Types: 135 Discharge to sewer/POTW or NPDES (with prior stora
Biennial System Regulatory Status: Regulatory status unknown
Wastes Currently Managed in Unit: 00041192 Facility W

---

004 Tank | Active | 10/10/03 | 1/ NA | NA | NA | Non-Hazardous Regulated | NA /

Description from Company: Storage tank (dot transport vehicle)
Capacity: 4000.0000 Capacity Unit of Measure: G
System Types: 141 Storage, bulking, and/or transfer off-site - no tr
Biennial System Regulatory Status: Regulatory status unknown
Wastes Currently Managed in Unit: 00082191 Organic li

As of 03/10/2009, the next unassigned sequence number for UNITS is 005.

07/06/2009 11:40 FAX
007/007
EPAHO0040000116

Central File Room

12100 Park 35
Bldg. E, Rm. 103, Mail Code 213
Austin, TX 78753
Phone: (512) 239-2920
Fax: (512) 239-1850

Name:	JENNY RUST
Phone No:	(713) 800-7907
Fax No:	(713) 748-8664
From:	VANGIE
Date Requested:	7/6/2009
Regarding:	NOR 87342
No of Pages:	
Comments:	Per your request, please feel free to contact us with any questions or concerns. Thanks and have a wonderful day!

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-1768**

Customer: **GATX (Plantersville)**

Waste Generator: **GATX (Plantersville)**

Waste Stream Name: **Products**

Expiration Date: **6/14/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

☐ No changes, please recertify.

☐ Please send new profile as waste stream has changed.

☐ Analysis is NOT required for recertification.

☐ The following analysis is required for recertification. Please sumbit results of the following tests.

- TCLP Metals
- TCLP Volatiles
- TCLP Semi-volatiles
- Reactivity
- Corrosivity
- Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-1768**

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Expiration Date: **6/14/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

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- TCLP Metals
- TCLP Volatiles
- TCLP Semi-volatiles
- Reactivity
- Corrosivity
- Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

MDS
A-6

Need
Pounds or
Cals

CES Environmental Services, Inc.

Bill Of Lading # : 88425

Folder ID :	Targa Midstream Services (Targa - Mont Belvieu) LSNG Caustic w/Ammonia proceeded @ PACES

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Targa Midstream Services LP
10319 Hwy 146 North
Mont Belvieu , TX 77580
(281) 385-3215

11a) PA-2806
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur , TX 77640

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.64B implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	TT		P	UN1824, Sodium hydroxide solution, 8, PGII [LSNG spent caustic w/ammonia]

Shipper : Targa Midstream Services LP
Per : DeWayne Kelley **Signature :** DeWayne Kelley **Date :** 7-6-09

Carrier CES Environmental Services, Inc.
Per [illegible] **Signature :** [signature] **Date :** 7-6-09

Receiving Facility CES Environmental (Port Arthur)
Per : Johnstone Malecki **Signature :** [signature] **Date :** 7-06-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Targa Midstream Services (Targa - Mont Belveiu)
LSNG Caustic w/Ammonia processed @ PACES

Date : 7/6/2009 **Manifest # :**

Client : Targa Midstream Services LP **Ticket :** 88425

Phone : 2813853215 **Consignee :** CES Environmental (Port Arthur)

Transporter : CES Environmental Services, Inc.

Signature [signature] **Signature**

Leave CES Yard :	6:00AM	**Arrive At Destination**	
Arrive At Customer :	6:50 AM	**Begin Unloading :**	
Begin Loading :	7:15AM	**Finish Unloading :**	
Finish Loading :	8:15 AM	**Leave Destination :**	
Leave Customer :	9:00AM	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	106562
Net Weight :		**Total Miles :**	

Driver : Carrillo, Rudy **Tractor # :** 282 **Tote # :**

Signature : [signature] **Trailer # :** 234 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : T.T. Barge (mile 183- Donaldson, LA) Caustic

Date : 7/10/2009 **Manifest # :**

Client : T.T. Barge (Mile 183) **Ticket :** 88791

Phone : 2254732199 **Consignee :** CES Environmental (Port Arthur)

Transporter : CES Environmental Services, Inc.

Signature Robert Martin **Signature**

Leave CES Yard :	5:15 AM	**Arrive At Destination**	
Arrive At Customer :	9:30 AM	**Begin Unloading :**	
Begin Loading :	10:00 AM	**Finish Unloading :**	
Finish Loading :	11:00 AM	**Leave Destination :**	
Leave Customer :	11:15 AM	**Arrive At ~~CES~~ Yard :** (+9 ces)	3:50 PM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	296686
Tare Weight :		**Begining Odometer :**	296143
Net Weight :		**Total Miles :**	543

Driver : Morales, Rolando **Tractor # :** 298 **Tote # :**

Signature : Rolando Morales **Trailer # :** 261 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

goes w/ J#
88915

246

CES Environmental Services, Inc.

Bill Of Lading # : 88917

Folder ID :	Shawcor Pipe Protection (Shawcor-Pearland,Tx) Misc Drum Disposals/Recycling

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Shawcor Pipe Protection
4501 Knapp Road
Pearland , TX 77581
(281) 485-8321

11a) HOU-1671
11b) HOU-1711
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	22	~~DM~~		Each	Recyclable empty containers
~~No~~		~~DM~~		~~G~~	~~Recyclable glycol and water mixture~~

Shipper : Shawcor Pipe Protection

Per : Pedro Espinosa **Signature :** [signature] **Date :** 7/15/09

Carrier CES Environmental Services, Inc.

Per : [illegible] **Signature :** [signature] **Date :** 7/17/09

Receiving Facility CES Environmental Services, Inc.

Per : SAM BROWN **Signature :** [signature] **Date :** 7-17-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

241

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of 1
3. Emergency Response Phone: (281) 457-0200
4. Manifest Tracking Number: 005596165 JJK

5. Generator's Name and Mailing Address
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
State ID: 32360
Generator's Phone: (281) 457-0200

Generator's Site Address (if different than mailing address)
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
(281) 457-0200

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. non-RCRA/Non DOT regulated wastewater	1	TT	49,280	G	00221191
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : La Barge Pipe and Steel
Non-hazardous Wastewater
1) HOU-2557 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89279

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: Osiel GARZA Signature: [signature] Month 7 Day 27 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: ALFONSO SALAZAR Signature: [signature] Month 7 Day 27 Year 09
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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
H135

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. CESOG 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: SAM BROWN Signature: [signature] Month 7 Day 27 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000127

241

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	N/A	1	(281) 457-0200	005596165 JJK

GENERATOR

5. Generator's Name and Mailing Address
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
Generator's Phone: (281) 457-0200
State ID: 32360

Generator's Site Address (if different than mailing address)
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
(281) 457-0200

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: 49 280 — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
37 500 State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. non-RCRA/Non DOT regulated wastewater	1	TT	49.280	G	00021191
	2.					15.30
	3. 01345 01400					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : La Barge Pipe and Steel
Non-hazardous Wastewater
01500
1) HOU-2557 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89279

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. 11 8297

Generator's/Offeror's Printed/Typed Name: Osiel GARZA — Signature — Month 11 Day 17 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso SALAZAR — Signature — Month 7 Day 27 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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

H135

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2. CR50	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: SAM BROWN — Signature — Month 7 Day 27 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

Waiting on HMC manifests

CES Environmental Services, Inc.

Bill Of Lading # : 89187

Folder ID :	KMCO (KMCO-Crosby, TX) Oily Water

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
KMCO, Inc.
16503 Ramsey Rd.
Crosby , TX 77532
(281) 328-3501

This is to certify that the above-named materials ar
11a) HOU-1494
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5403 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	39900	P	Non DOT regulated oily water

Shipper : KMCO, Inc.
Per : Don Bryant Signature : Don Bryant Date : 7/24/09

Carrier CES Environmental Services, Inc.
Per : ROLANDO MORALES Signature : Rolando Morales Date : 07-24-09

Receiving Facility CES Environmental Services, Inc.
Per : _____ Signature : _____ Date : _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000835207	1	(979) 279-3481	005803753 JJK

GENERATOR

5. Generator's Name and Mailing Address
GATX (Hearne)
PO Box 969
Hearne, TX 77859
Generator's Phone: (979) 279-3481
State ID: 32643

Generator's Site Address (if different than mailing address)
GATX (Hearne)
1401 W. Brown St.
Hearne , TX 77859
(979) 279-3481

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated waste solids (railcar heels)	9	DM	3,950	P	99074091
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : GATX Hearne (GATX Hearne)
NH Drums
1) HOU-1363 2) 3) 4) CES Job # - 88217

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

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: Ricardo Salinas
Signature:
Month Day Year: 06 26 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: WILFRIDO ABREU
Signature:
Month Day Year: 06 26 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141	~~H141~~		

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: Al Longoria
Signature:
Month Day Year: 6 26 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

CES Environmental Services, Inc.

Bill Of Lading # : 88216

Folder ID	GATX Hearne (GATX Hearne) Gradual Drums

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
GATX (Hearne)
1401 W. Brown St.
Hearne , TX 77859
(979) 279-3481

CES Approval #
11a) HOU-2467
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.540 implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	4	DM	1,700	P	UN2582, Ferric chloride solution, 8, PGIII (Ferric Chloride Product)

Shipper : GATX (Hearne)
Per : x Ricardo Salinas **Signature :** x **Date :** x 06/26/09

Carrier CES Environmental Services, Inc.
Per : WILFRIDO ABREU **Signature :** **Date :** 06/26/09

Receiving Facility CES Environmental Services, Inc.
Per : Al Longoria **Signature :** **Date :** 6/26/09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

TRUCK - 283 BOX 642
TRAILER - 253

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000029199
2. Page 1 of 1
3. Emergency Response Phone: (281) 680-4108
4. Manifest Tracking Number: 005803812 JJK

5. Generator's Name and Mailing Address
Delta Chemical
334 Tidal Rd
Deer Park, TX 77536
State ID: 85855
Generator's Phone: (281) 680-4108

Generator's Site Address (if different than mailing address)
Delta Chemical
334 Tidal Road
Deer Park, TX 77536
(281) 680-4108

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non-DOT Regulated Material (Oily rags and debris)	1	CM	15	Y	00134891
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Delta Chemical (Delta Chemical Deer Park)
Bulk Class 1
1) HOU-2703 2) 3) 4)
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 88446

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: X Nick Cadiera
Signature: X [signature]
Month 7 Day 1 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: PETER SEMIEN JR
Signature: [signature]
Month 7 Day 1 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H132 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: Al Lamaria
Signature: [signature]
Month 7 Day 1 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

EPAHO004000133

Darlene w/
Light Bulb Dept
New Sales Rep
Angie went to a
New Dept.
Free delivery*
open Sat 8-4
(713) 863-8880

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transporation Work Ticket

Folder ID : Rineco (Hexion Brady, TX)
Non Haz Wastewater (CES 1730 & 1650)

Date : 6/17/2009 Manifest # : 002530211

Client : Hexion Specialty Chemicals (Brady, TX) Ticket : 86516

Phone : 3255972620 Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature _____ Signature _____

Leave CES Yard :	7:00 AM	Arrive At Destination	
Arrive At Customer :	2:30 PM	Begin Unloading :	
Begin Loading :	2:45 PM	Finish Unloading :	
Finish Loading :	5:00 PM	Leave Destination :	
Leave Customer :	5:15 PM	Arrive At CES Yard :	10:45 AM

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	289946
Tare Weight :		Begining Odometer :	289226
Net Weight :		Total Miles :	720

Driver : Morales, Rolando Tractor # : 298 Tote # : _____

Signature : Rolando Morales Trailer # : ~~248~~ 205 Box # : _____

Job Comments/Equipment : Comeback To Load More Weight Too Light

Truck Load Out Weight

Hexion Specialty Chemicals Inc.
Old Mason Rd. & AcFrac Drive 6/17/2009 5:13:32 PM
Brady, Texas 76825

ID #	143		Permit No.
Gross Weight	78360	Lbs.	002530211FLE
Net Weight	42540	Lbs.	Carrier Name
Tare Weight	35820	Lbs.	CES
			Tank No
			TOTES/ E DOCK

Print | Scale No: 1 | Trucking Firm | OK / Cancel

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Some may burn but none ignite readily.
- Containers may explode when heated.
- Some may be transported hot.

HEALTH

- Inhalation of material may be harmful.
- Contact may cause burns to skin and eyes.
- Inhalation of Asbestos dust may have a damaging effect on the lungs.
- Fire may produce irritating, corrosive and/or toxic gases.
- Some liquids produce vapors that may cause dizziness or suffocation.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.
- Keep unauthorized personnel away.
- Stay upwind.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

MUST TRAVEL
WITH SHIPMENT

EPAHO004000137

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical, CO_2, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Do not scatter spilled material with high pressure water streams.
- Dike fire-control water for later disposal.

Fire involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent dust cloud.
- Avoid inhalation of asbestos dust.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills

- Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Cover powder spill with plastic sheet or tarp to minimize spreading.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

EPAHO004000138

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Rineco (Hexion Brady, TX) Non Haz Wastewater (CES 1730 & 1850)

Customer : Hexion Specialty Chemicals (Brady, TX)
Address : 45 AC Frac Road
City,State,Zip : Brady TX , 76825
CES Contact : () -

Driver : **Morales, Rolando**
Helper :
Date : 6/17/2009 Time : 0500
Truck # 298 Trailer # ~~298~~ 205

Job Description :

Site contact: Don Clamp 325.597.2620

TAKE A DRUM STINGER!!

JOB SITE:
HEXION SPECIALTY CHEMICALS (Borden Chemical)
45 AC FRAC ROAD
BRADY, TX 76825
(325) 597-2620

1) Pump out WASTEWATER as directed load time is for 1 PM

2) Haul load to CES and get with Dispatch for more paperwork

ID #: 86516

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? Hard Hat Safty Glasses

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Inbound Load Report

Job Number : 87922

Type of Material: oily water

Job Date: 6/17/2009

Bill of Lading #: 87922

Customer: Enviro Solution

Gross Weight:

Tare Weight: **OR** **Total Gallons Shipped:** 5500

Net Weight:

Shipping Information

Carrier: Petroleum Express

Truck Number:

Trailer Number: 1276

CES Laboratory Use Only

Specific Gravity:

Pounds per Gallon:

Temperature:

Total Gross Gallons: 5500

% Water

% Solids 1

Total Net Gallons: 5500

(minus water and solids)

Misc Notes:

pH= 5
TOC= 94460
Phenol= 10
Solids= 1%
Flash Point < 80 F
~15% Oil ~84% H2O
Process to System 1

Surcharge @ $0.25 per gallon

Sample Analyst:

(signature)

Sample Analyst: Julius Prantil **Date:** 6/19/2009

STRAIGHT BILL OF LADING - SHORT FORM- Original - Not Negotiable

Shipper's No. ES

(Carrier) PETROLEUM EXPRESS SCAC.

Carrier's No. PE 8320

Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading:

at MONT BELVIEU, TX, date 6/17/09 from ENVIROSOLUTIONS

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address of consignee for purposes of notification only.)

TO: Consignee CES
Street
Destination HOUSTON, TX Zip

FROM: Consignee ENVIROSOLUTIONS
Street
Origin MONT BELVIEU, TX Zip

Route:

Delivering Carrier | Trailer Initial/Number 110/1276 | U.S. DOT Hazmat Reg. Number

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	ID Number	Packing Group	*Weight (subject to correction)	Class or rate	Labels required	Check column
1		OILY WATER				5500			
		NON-HAZARDOUS				GAL			
		NON-PLACARDED							
		JOB 879122							
		PROFILE #							
			Al Longoria					6/19/09	

Remit C.O.D. to:
Address:
City: State: Zip:

COD AMT: $

Charges Advanced $

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of consignor)

C.O.D FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES ☐ Prepaid ☐ Collect

*If the shipment moves between two ports by a carrier by water, the law regulates that the bill of lading shall state whether it is carrier's or shipper's weight.
Note - where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby
Specifically stated by the shipper be be not exceeding per

This is to certify that the above named materials are properly described, classified, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per

PLACARDS REQUIRED **PLACARDS SUPPLIED** ☐ YES ☐ NO - FURNISHED BY CARRIER

DRIVER'S SIGNATURE

SHIPPER: ENVIROSOLUTIONS
PER: DATE: 6/17/09

Permanent post office address of shipper

CARRIER: PE
PER: DATE: 6/17/09

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (§172.604)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000040410
2. Page 1 of: 1
3. Emergency Response Phone: (281) 474-5674
4. Manifest Tracking Number: 005596249 JJK

GENERATOR

5. Generator's Name and Mailing Address
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Road
Pasadena, TX 77507
State ID: 86634
Generator's Phone: (281) 474-5674

Generator's Site Address (if different than mailing address)
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Rd
Pasadena , TX 77507
(281) 474-5674

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA/Non DOT regulated waste sludge	1	TT	1,500	G	07055041
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Trimac DSI Transporters (Baypark Rd.)
Sump Sludge
1) HOU-1732 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89487

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: RUBEN O. ELIZONDO
Signature
Month: 08 Day: 01 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JACK GIBSON
Signature
Month: 08 Day: 01 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000040410
2. Page 1 of: 1
3. Emergency Response Phone: (281) 474-5674
4. Manifest Tracking Number: 005596249 JJK

GENERATOR

5. Generator's Name and Mailing Address
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Road
Pasadena, TX 77507
State ID: 86634
Generator's Phone: (281) 474-5674

Generator's Site Address (if different than mailing address)
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Rd
Pasadena, TX 77507
(281) 474-5674

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non-RCRA/Non DOT regulated waste sludge	1	TT	1,500	G	07035041		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Folder ID : Trimac DSI Transporters (Baypark Rd.)
Sump Sludge
1) HOU-1732 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 89487

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: X Ruben O. Elizondo
Signature
Month: 08 Day: 01 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JACK GIBSON
Signature
Month: 08 Day: 01 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000144

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000040410	1	(281) 474-5674	005596249 JJK

GENERATOR

5. Generator's Name and Mailing Address
Trimac DSI Transporters (Baypark Rd.) State ID: 86634
13301 Baypark Road
Pasadena, TX 77507
Generator's Phone: (281) 474-5674

Generator's Site Address (if different than mailing address)
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Rd
Pasadena, TX 77507
(281) 474-5674

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc. State ID 30900
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460 U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	Non-RCRA/Non DOT regulated waste sludge	1	TT	1,500	G	07035041		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Profile ID: Trimac DSI Transporters (Baypark Rd.)
Sump Sludge
1) HOU-1732 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 59157

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: Ruben O. Elizondo Signature: [signature] Month: 08 Day: 01 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JACK GIBSON Signature: [signature] Month: 08 Day: 01 Year: 09

Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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 Signature Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **DESIGNATED FACILITY TO GENERATOR**

EPAHO004000145

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000040410
2. Page 1 of 1
3. Emergency Response Phone: (281) 474-5674
4. Manifest Tracking Number: 005598249 JJK

5. Generator's Name and Mailing Address
Trimac DSI Transporters (Baypark Rd.) State ID: 56634
13301 Baypark Road
Pasadena, TX 77507
Generator's Phone: (281) 474-5674

Generator's Site Address (if different than mailing address)
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Rd
Pasadena, TX 77507
(281) 474-5674

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA/Non DOT regulated waste sludge	1	TT	1,500	G	07035049
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: Trimac DSI Transporters (Baypark Rd.)
Sump Sludge
1) HCU-1732 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 89487 -

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: Ruben O. Elizondo Signature: [signature] Month 8 Day 01 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: JACK GIPSON Signature: Jack Gipson Month 08 Day 01 Year 09
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H141 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 Signature Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

EPAHO004000146

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000040410
2. Page 1 of 1
3. Emergency Response Phone: (281) 474-5624
4. Manifest Tracking Number: 005596249 JJK

5. Generator's Name and Mailing Address
Trimac DSI Transporters (Baypark Rd.) State ID 85624
13301 Baypark Road
Pasadena, TX 77507
Generator's Phone: (281) 474-5624

Generator's Site Address (if different than mailing address)
Trimac DSI Transporters (Baypark Rd.)
13301 Baypark Rd
Pasadena, TX 77507
(281) 474-5624

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc. State ID 30900
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated waste sludge	1	TT	1,500	5	07035041
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Power ID: Trimac DSI Transporters (Baypark Rd.)
Sump Sludge
1) HOU-1782 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # [illegible]

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: Ruben A. Elizondo Signature: [signature] Month 09 Day 01 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Jack Gibson Signature: [signature] Month 09 Day 01 Year 09
Transporter 2 Printed/Typed Name Signature Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H141 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 Signature Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000147

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1678

Transportation Work Ticket

Folder ID : Trimac DSI Transporters (Baypark Rd.) Sump Sludge

Date : 8/1/2009 **Manifest # :**

Trimac DSI Transporters (Baypark Rd.)

Client : **Ticket :** 89487

Phone : 2814745674 **Consignee :** CES Environmental Services, Inc.

CES Environmental Services, Inc.

Transporter :

Signature X **Signature**

Leave CES Yard :	7:30 am	**Arrive At Destination**	
Arrive At Customer :	7:45 am	**Begin Unloading :**	
Begin Loading :	9:00 am	**Finish Unloading :**	
Finish Loading :	11:00 am	**Leave Destination :**	
Leave Customer :	11:15 am	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	
Tare Weight :		**Begining Odometer :**	
Net Weight :		**Total Miles :**	

Driver : Hernandez, Joe **Tractor # :** 104 **Tote # :**

Signature : J-Hernandez **Trailer # :** 107 **Box # :**

Job Comments/Equipment : REMOVED MATERIAL FROM TANK INTO TRUCK 105. EQUIPMENT USED: 100 FT FLEX HOSE, PRESSURE WASHER, HOSLUG TRAILER.

HERNANDEZ - LEADMAN

RAMIREZ

GIPSON

GREEN

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Trimac DSI Transporters (Baypark Rd.) Sump Sludge

Customer : Trimac DSI Transporters (Baypark Rd.)
Address : 13301 Baypark Rd
City,State,Zip : Pasadena TX , 77507
CES Contact : () -

Driver : **Hernandez, Joe**
Helper : J.Gipson, J.Ramirez, Q. Green (DON
Date : 8/1/2009 Time : 0600
Truck # 104 Trailer # 107

Job Description :

Take the following:
-confined space entry permit
- safety trailer
-PPE
-Tape
-200' of flex hose
-12 to 15' pole
-Utility truck
-Extra guys
-Pressure washer

SITE CONTACT: Ruben 832-265-7014(call upon arrival, perform job as directed by Ruben) if Ruben is not there then contact Sheldon Groomer # 281-413-3347

1) Clean out sludge from tanks and trenches
**be sure you have a 12-15' pole to tape to the hose, in order to reach the bottom of the tanks

2) suck into air machine then return to CES, get w/ Dispatch upon arrival

ID #: 89487

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Ruben	Name:	
Close:	05:00 PM	Number:	(832) 265-7014	Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

-PPE
-Tape
-200' of flex hose
-12 to 15' pole

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of
3. Emergency Response Phone: (281) 457-0200
4. Manifest Tracking Number: 005596165 JJK

5. Generator's Name and Mailing Address
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
State ID 32360
Generator's Phone: (281) 457-0200

Generator's Site Address (if different than mailing address)
LaBarge Pipe and Steel
400 S. Sheldon Road
Channelview, TX 77530
(281) 457-0200

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd
Houston TX 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. non-RCRA/Non DOT regulated wastewater	1	TT		G	00221121
	2.					15.30
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: LaBarge Pipe and Steel
Non-hazardous Wastewater
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Job Job # [illegible]
1) [illegible] 2) 3) 4)

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: Usel Garza Signature: [signature] Month 7 Day 27 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Alfonso Salazar Signature: [signature] Month 7 Day 27 Year 09
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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
H135

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. [illegible] 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 Signature Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000151

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2012353**

UID: 1248726897

Griggs

Date: 7/27/2009 Time: 3:36:24PM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS / CHARGE
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: CES2002

Gross: 43.40 Tare: 18.75 * Net: 24.65 *
* Manual Weight

Loads Today:	2	Qty Today:	2.00 Load
Order Loads:	846	Qty To Date:	834.00

Weighmaster: CHRIS ARSOLA

Delivery Instructions:
GROSS-86800
TARE---37500
NET---49280

PUBLIC WEIGHER STATE OF TEXAS

COPY 2 CUSTOMER

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

Customer Signature: _____

Carrier Signature: _____

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: 2012353

UID: 1248726897

Griggs

Date: 7/27/2009 Time: 3:36:24PM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS / CHARGE
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: CES2002

Gross: 43.40 Tare: 18.75 * Net: 24.65 *
* Manual Weight

Loads Today:	2	Qty Today:	2.00 Load
Order Loads:	846	Qty To Date:	834.00

Weighmaster: CHRIS ARSOLA

Delivery Instructions:
GROSS-86800
TARE---37500
NET---49280

PUBLIC WEIGHER STATE OF TEXAS

COPY 3 CARRIER

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

Customer Signature: _____

Carrier Signature: _____

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : La Barge Pipe and Steel
Non-hazardous Wastewater

Date : 7/27/2009 **Manifest # :** 005596165

Client : LaBarge Pipe and Steel Osiel GARZA **Ticket :** 89279

Phone : 2814570200 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	12.45	Arrive At Destination	15.30
Arrive At Customer :	013.20	Begin Unloading :	
Begin Loading :	01400	Finish Unloading :	
Finish Loading :	014.50	Leave Destination :	
Leave Customer :	01500	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :	86 800	Ending Odometer :	118297
Tare Weight :	37 500	Begining Odometer :	118258
Net Weight :	49 280	Total Miles :	

Driver : Bozeman, Donald **Tractor # :** 2002 **Tote # :**

Signature : [signature] **Trailer # :** 241 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1678

Transportation Work Ticket

Folder ID : La Barge Pipe and Steel
Non-hazardous Wastewater

Date : 7/27/2009

Manifest # : 005596165

Client : LaBarge Pipe and Steel (Ariel GARZA)

Ticket : 89279

Phone : 2814570200

Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature

Signature

Leave CES Yard :	12.45	Arrive At Destination	15.30
Arrive At Customer :	13.20	Begin Unloading :	
Begin Loading :	1400	Finish Unloading :	
Finish Loading :	14.50	Leave Destination :	
Leave Customer :	1500	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :	86,780	Ending Odometer :	118297
Tare Weight :	37500	Begining Odometer :	118258
Net Weight :	49280	Total Miles :	

Driver : Sazeman, Donald

Tractor # : 2002

Tote # :

Signature :

Trailer # : 241

Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	La Barge Pipe and Steel Non-hazardous Wastewater Salazar, Alfonso

Customer : LaBarge Pipe and Steel
Address : 400 S. Sheldon Road
City,State,Zip : Channelview TX , 77530
CES Contact : () -

Driver : ~~Bozeman, Donald~~
Helper :
Date : 7/27/2009 Time : 2nd
Truck # 2002 Trailer # 241

Job Description :

WEIGH LIGHT AND HEAVY @ A-1 SCALES if OPEN
or LOVE'S on McCarty(you will be reimbursed, if it's a weekend)

***scale tickets a MUST(make sure there is a copy of BOTH light and heavy weights for this load or cannot be billed)

SITE CONTACT: Julian @ 832-642-3432 and Jose @ (281) 594-6632

NEED 80' OF HOSE

1) Contact Jose PRIOR to pumping out WASTEWATER or pre-mixing

2) build air pressure in your trailer, so you're able to blow air into the tank for mixing before 1st pH reading (unless otherwise instructed by Jose)

3) if needed, socotherm will add caustic to adjust pH

4) once pH reading is between 3-9, vac out a full load of wastewater

3) Haul load to CES and offload

contact morgan w/ any problems 281-691-3296

ID #: 89279

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Jose Muniz	Name:	Jose Lira
Close:	03:00 PM	Number:	(281) 594-6632	Number:	(832) 519-7975

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT? hard hat

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 3 sections **DRUM DOLLY NEEDED:** ☐ YES ☐ NO

SIZE: **PALLET JACK NEEDED:** ☐ YES ☐ NO

LOADING FROM (i.e. Tank): **CAN CUSTOMER LOAD WITH FORKLIFT** ☐ YES ☐ NO

SIZE OF FITTING: 3" standard

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

TYPE OF FITTING:

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

Already Billed,
Should be filed
+ Put w/ Job

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD000835207
2. Page 1 of: 1
3. Emergency Response Phone: (979) 279-3481
4. Manifest Tracking Number: 005596536 JJK

GENERATOR

5. Generator's Name and Mailing Address
GATX (Hearne)
PO Box 969
Hearne, TX 77859
Generator's Phone: (979) 279-3481
State ID: 32643

Generator's Site Address (if different than mailing address)
GATX (Hearne)
1401 W. Brown St.
Hearne , TX 77859
(979) 279-3481

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA / Non DOT regulated wastewater	1	TT	4500	G	99091191
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : GATX Rail (GATX Rail -Hearne TX)
CES Job # - 86137
Non-Hazardous Wastewater from washrack
1) HOU-1383 2) 3) 4)

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: X Ricardo Salias
Signature:
Month 5 Day 14 Year 09

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Alfonso SALAZAR
Signature:
Month 5 Day 14 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H135 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: Al Lang
Signature:
Month 5 Day 14 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000835207	1	(979) 279-3481	005596536 JJK

GENERATOR

5. Generator's Name and Mailing Address
GATX (Hearne)
PO Box 969
Hearne, TX 77859
Generator's Phone: (979) 279-3481
State ID: 32643

Generator's Site Address (if different than mailing address)
GATX (Hearne)
1401 W. Brown St.
Hearne, TX 77859
(979) 279-3481

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non-RCRA / Non DOT regulated wastewater	1	TT	4500	G	9903181		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Folder ID : GATX Rail (GATX Rail-Hearne TX) CES Job # - 86137
Non-Hazardous Wastewater from washrack
1) HOU-1383 2) 3) 4)

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: X Ricardo Salinas X — Signature — Month 5 Day 14 Year 19

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar — Signature — Month 5 Day 14 Year 19

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al Langoria — Signature — Month 5 Day 14 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000159

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD074198961	1	(281) 328-3501	005594968 JJK

GENERATOR

5. Generator's Name and Mailing Address
KMCO, Inc.
16503 Ramsey Road
Crosby, TX 77532
State ID: 31904
Generator's Phone: (281) 328-3501

Generator's Site Address (if different than mailing address)
KMCO, Inc.
16503 Ramsey Rd.
Crosby , TX 77532
(281) 328-3501

6. Transporter 1 Company Name
CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number
TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number
TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non hazardous biosludge	1	TT	45000	G	20036072
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : KMCO (KMCO Crosby, TX)
Non-RCRA biosludge
1) HOU-1997 2) - 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85831

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: Don Bryant
Signature: Don Bryant
Month 05 Day 12 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar
Signature: Alfonso Salazar
Month 5 Day 12 Year 09

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: SAM BROWN
Signature:
Month 5 Day 12 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	TXD074198961	1	(281) 328-3501	005594968 JJK

GENERATOR

5. Generator's Name and Mailing Address
KMCO, Inc.
16503 Ramsey Road
Crosby, TX 77532
Generator's Phone: (281) 328-3501
State ID: 31904

Generator's Site Address (if different than mailing address)
KMCO, Inc.
16503 Ramsey Rd.
Crosby, TX 77532
(281) 328-3501

6. Transporter 1 Company Name
CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number
TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number
TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	Non hazardous biosludge	1	TT	45000	G	20036072	
	2.						
	3.						
	4.						

14. Special Handling Instructions and Additional Information
Folder ID : KMCO (KMCO Crosby, TX)
Non-RCRA biosludge
1) HOU-1997 2) - 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85831

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: Don Bryant
Signature: Don Bryan
Month 5 Day 12 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar
Signature: Alfonso Salazar
Month 5 Day 12 Year 09

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: SAM BROWN
Signature:
Month 5 Day 12 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000835207	1	(979) 279-3481	005594797 JJK

GENERATOR

5. Generator's Name and Mailing Address

GATX (Hearne)
PO Box 969
Hearne, TX 77859
State ID: 32643
Generator's Phone: (979) 279-3481

Generator's Site Address (if different than mailing address)

GATX (Hearne)
1401 W. Brown St.
Hearne , TX 77859
(979) 279-3481

6. Transporter 1 Company Name — U.S. EPA ID Number

CES Environmental Services, Inc. — State ID 30900 — TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

CES Environmental Services. Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA / Non DOT regulated wastewater	1	TT	5000	G	99091181
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Folder ID : GATX Rail (GATX Rail-Hearne TX)
Non-Hazardous Wastewater from washrack
1) HOU-1383 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85534

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: X Ricardo Salias — Signature — Month 5 Day 4 Year 9

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfaro Salazar — Signature — Month 5 Day 4 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: SAM BROWN — Signature — Month 5 Day 4 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000835207	1	(979) 279-3481	005534797 JJK

GENERATOR

5. Generator's Name and Mailing Address

GATX (Hearne) State ID: 32643
PO Box 969
Hearne, TX 77859
Generator's Phone: (979) 279-3481

Generator's Site Address (if different than mailing address)

GATX (Hearne)
1401 W. Brown St.
Hearne, TX 77859
(979) 279-3481

6. Transporter 1 Company Name — U.S. EPA ID Number

CES Environmental Services, Inc. — State ID 30900 — TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460

State ID 30500 — TXD008950461

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non-RCRA / Non DOT regulated wastewater	1	TT	5080	G	93091191		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

Folder ID : GATX Rail (GATX Rail-Hearne,TX)
Non-Hazardous Wastewater from washrack

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # -25534

1) HOU-1283 2) 3) 4)

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: X Ricardo Salias — Signature — Month 5 Day 4 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar — Signature — Month 5 Day 4 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: SAM BROWN — Signature — Month 5 Day 4 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

205

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXCESQG84199
2. Page 1 of: 1
3. Emergency Response Phone: (325) 597-2620
4. Manifest Tracking Number: 005596770 JJK

GENERATOR

5. Generator's Name and Mailing Address: Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady, TX 76825
State ID:
Generator's Site Address (if different than mailing address): Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady , TX 76825
Generator's Phone: (325) 597-2620
(325) 597-2620

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
U.S. EPA ID Number: TXD008950461
Facility's Phone: (713) 676-1460

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	RQ, UN3082, Environmentally Haz, Waste Liquid, n.o.s.,9,PGIII (Phenol, Formaldehyde)	1	TT	43100	G	00041151
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Ameco (Hexion Brady, TX)
Non Haz Wastewater (CES 1730 & 1850)
1) HOU-1730 2) load 165365 3) 4)
This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 86245

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: Jon Mosier
Signature
Month: 5 Day: 21 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar
Signature
Month: 5 Day: 21 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Al Longoria
Signature
Month: 5 Day: 21 Year: 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

205

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXCESQG84199	1	(325) 597-2620	005596770 JJK

GENERATOR

5. Generator's Name and Mailing Address: Rexton Specialty Chemicals (Brady, TX) State ID:
45 AC Frac Road
Brady, TX 76825
Generator's Phone: (325) 597-2620

Generator's Site Address (if different than mailing address): Rexton Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady , TX 76825
(325) 597-2620

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address: CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900 U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	RQ, UN3082, Environmentally Haz, Waste Liquid, n.o.s.,9,PGIII (Phenol, Formaldehyde)	1	TT	43100	G	D004 D011
	2.					
	3. 266201					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Rineco (Rexton Brady, TX)
Non Haz Wastewater (CES 1730 @ 1850)
1) HOU-1732 2) load 165365 3) 4) CES Job # - 86245

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

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: Jon Mosig Signature: Month 5 Day 21 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Salazar Signature: Month 5 Day 21 Year 09

Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Al Longoria Signature Month 5 Day 21 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)**

EPAHO004000165

209

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000642348	1	(832) 260-7601	005596747 JJK

GENERATOR

5. Generator's Name and Mailing Address
Lubrizol - Bayport
12801 Bay Area Blvd.
Pasadena, TX 77507
Generator's Phone: (832) 260-7601
State ID: 30325

Generator's Site Address (if different than mailing address)
Lubrizol - Bayport
12801 Bay Area Blvd. (Attn: Frank Hejtmanek)
Pasadena, TX 77507
(832) 260-7601

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA1993, Combustible Liquid, n.o.s., 3, PG III (alkylated phenol)	1	TT	4036	P	00512061
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Lubrizol (Lubrizol - Bayport)
B-485
CES Job # - 86439
1) HOU-2552 2) 3) 4)

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: S/O Pam Edison — Signature: S/O Pam Edison — Month 5 Day 22 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfredo Salazar — Signature — Month 5 Day 22 Year 9

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Al Longoria — Signature — Month 5 Day 22 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

209

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD000642348
2. Page 1 of 1
3. Emergency Response Phone: (832) 260-7601
4. Manifest Tracking Number: 005596747 JJK

5. Generator's Name and Mailing Address
Lubrizol - Bayport
12801 Bay Area Blvd.
Pasadena, TX 77507
State ID: 30325
CES Environmental Services
Generator's Phone: (832) 260-7601

Generator's Site Address (if different than mailing address)
Lubrizol - Bayport
12801 Bay Area Blvd. (Attn: Frank Hejtmanek)
Pasadena, TX 77507
(832) 260-7601

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA1993, Combustible Liquid, n.o.s., 3, PG III (alkylated phenol) 014.50 01600	1	TT	40360	P	00512061
	2.					
	3. 5-22-09					6:50
	4. 01700					

14. Special Handling Instructions and Additional Information
Folder ID : Lubrizol (Lubrizol - Bayport)
B-485
CES Job # - 86439
1) HOU-2552 2) 005596747 JJK 3) 71900 4) 108000

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: S/O Pam Edison 40360 Signature: S/O Pam Edison Month 5 Day 22 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Alfonso Salazar Signature: [signature] Month 5 Day 22 Year 9
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H141 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: Al Longoria Signature: [signature] Month 5 Day 22 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

TRUCK - 283
TRAILER - 253

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of: 1
3. Emergency Response Phone: (713) 732-4512
4. Manifest Tracking Number: 005596778 JJK

GENERATOR

5. Generator's Name and Mailing Address
Bigler, LP
PO Box 5009
Pasadena, TX 77508
State ID: 84331
Generator's Phone: (713) 732-4512

Generator's Site Address (if different than mailing address)
Bigler, LP
3003 Hwy 225 Suite 100
Pasadena, TX 77503
(713) 732-4512

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
U.S. EPA ID Number: TXD008950461
Facility's Phone: (713) 676-1460

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA/Non DOT regulated wastewater	1	TT	4886	G	90131142
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Bigler, LP (Bigler, LP Pasadena, TX)
Cooling Tower Waste Water
1) HOU-3265 2) PO#9C-310-468 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 86408

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: Billy Baker
Signature: Billy Baker
Month: 5 Day: 21 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: PETER SEMIEN JR.
Signature: Peter Semien Jr
Month: 5 Day: 21 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al Langonia
Signature
Month: 5 Day: 21 Year: 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRUCK - 253
TRAILER - 252

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of 1
3. Emergency Response Phone: (713) 732-4512
4. Manifest Tracking Number: **005596778 JJK**

5. Generator's Name and Mailing Address
Bigler, LP
PO Box 5009
Pasadena, TX 77508
State ID 84331
Generator's Phone: (713) 732-4512

Generator's Site Address (if different than mailing address)
Bigler, LP
3003 Hwy 225 Suite 100
Pasadena, TX 77503
(713) 732-4512

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA/Non DOT regulated wastewater	1	TT	<1586	G	001811
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: Bigler, LP (Bigler, LP Pasadena, TX)
Cooling Tower Waste Water
1) HOU-3265 2) PO#SC-310-466 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 86403

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: X Billy Barber
Signature: X Billy Barber
Month 5 Day 21 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: PETER SEMIEN JR.
Signature: Peter Semien Jr.
Month 5 Day 21 Year 09
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H135 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: Al Langevin
Signature:
Month 5 Day 21 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000169

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Bigler, LP (Bigler, LP Pasadena, TX)
Cooling Tower Waste Water

Date : 6/19/2009 Manifest # :

Client : Bigler, LP Ticket : 55306

Phone : 7137324512 Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature x Milton Adams Signature

Leave CES Yard :	1:30	Arrive At Destination	
Arrive At Customer :	2:00	Begin Unloading :	
Begin Loading :	2:29	Finish Unloading :	
Finish Loading :	2:52	Leave Destination :	
Leave Customer :	3:15	Arrive At CES Yard :	3:35

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	2438421
Tare Weight :		Begining Odometer :	2438138
Net Weight :		Total Miles :	

Driver : Semien, Peter Tractor # : 283 Tote # :

Signature : Peter Semien Jr. Trailer # : 252 Box # :

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

Bigler Terminals LP

P.O. BOX 5009
1500 NORTH SOUTH STREET
PASADENA, TEXAS 77503

NO. 0867

CARRIER CES

TRACTOR NO. 263

TRAILER NO. 252

GROSS

TARE

NET

Gross: 78480
05-19-09 02:59 pm

Gross: 37860
05-19-09 02:06 pm

net- 40,580
gallons 4,863

Customer Name BP

Product Waste water

Weigher Josh

Printed in U.S.A.

EPAHO004000171

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Bigler, LP (Bigler, LP Pasadena, TX) Cooling Tower Waste Water

Customer : Bigler, LP
Address : 3003 Hwy 225 Suite 100
City,State,Zip : Pasadena TX , 77503
CES Contact : () -

Driver : Semien, Peter
Helper :
Date : 5/19/2009 Time : 2nd
Truck # 283 Trailer # 252

Job Description :

Make sure you're weighing in/out at the Bigler scale, unless OTHERWISE instructed to weigh at the Albemarle scale

Lewis Brown 832-495-8199 or Brian Raybon can sign the manifest

Contact is Andy Duncan 713-732-4512, if you can't find either one of the guys listed above

BRING: (refinery Chemical Plant clothing)
nomex
hearing protection
hard hat, etc.
TWIC (proof of)

WATER IS LOCATED INSIDE OF THE ALBEMARLE PLANT- please get a map from Morgan if you need one

1) load water as directed

2) haul load to CES warehouse and offload

PLEASE TRY TO GET 4 LOADS A DAY

ID #: 86308

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Control Room	Name:	Andy Duncan
Close:	06:00 PM	Number:	(713) 740-1654	Number:	(713) 732-4512

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Sam Brown	Name:	On-call Dispatch
Close:	07:00 AM	Number:	(713) 676-1460	Number:	(713) 231-3803

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT? hard hat, safety glasses, steel toes

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☑ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☑ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CRA 000391
TRC 935
CES

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000011106	1	(281) 842-5035	005596750 JJK

GENERATOR

5. Generator's Name and Mailing Address
Noltex
12220 Strang Road (ATT Randy Boading)
La Porte, TX 77571
State ID 84343
Generator's Phone: (281) 842-5035

Generator's Site Address (if different than mailing address)
Noltex
12220 Strang Road (Attn: Randy Boading)
La Porte, TX 77571
(281) 842-5035

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Rhodia Inc
8615 Manchester Blvd
Houston TX, 77012
State ID 31013
Facility's Phone: (713) 928-3411
U.S. EPA ID Number: TXD008099079

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, Waste flammable liquids, n.o.s. (vinyl acetate, methanol), 3, UN1993, PG II	1	TT	5777	G	0001 [illegible]
				~~4061~~	~~P~~	
	2.			5776	P	
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: Noltex (Noltex - La Porte, TX)
Waste Organics
CES Job # 86446
20390
1) 0312003 2) 3) 4)

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: [illegible] Signature: [illegible] Month 5 Day 20 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible] Signature: [illegible] Month 5 Day 20 Year 09
Transporter 2 Printed/Typed Name: Signature: Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H050			

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: Seth Marshall Signature: Seth Marshall Month 5 Day 22 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000174

Vent _____

Gasket _____

Rhodia

LOADERS RECEIVING REPORT

Number 020391

Commodity Waste

Truck or Car Number 276/235

Date unloaded 5-22-09

Received from Noltex 00559607501 JJC

Gauge before unloading _____ inches, Gauge after unloading _____ inches, Temp. _____ °F

Shell Dia. _____ inches Stenciled Capacity _____ Gals.

Dome Gauge or Shell Outage _____ inches _____ inches in dome @ _____ G.P.I. _____ Gals.

Shell Outage 53940 ~~Gals.~~ BR

Actual Loaded Gauge _____ inches Total Net Gals. 15420 Gals.

_____ (GRAVITY AT CAR) x _____ (GALLONS) x 8.33 = _____ (AS IS WT/LBS.) x _____ (ANALYSIS) % = 38520

Gross	8:31	05 22 09
	GROSS	73760 lb
Tare	8:46	05 22 09
	GROSS	73760 lb STR
	TARE	19820 lb
Net	NET	53940 lb

In 1430 Gross 33720 Tare 18300 Net 15420 cdb out 1585

Calculated by _____ Loader _____ Plant _____

Plant Code 11106750 54772991

Account Code _____

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Noltex (Noltex - La Porte, TX)
Waste Organics

Date : 5/27/2009 **Manifest # :**

Noltex

Client : **Ticket :** 86740

Phone : 2818425035 **Consignee :**

CES Environmental Services, Inc.

Transporter :

Signature **Signature**

Leave CES Yard :	1:30	**Arrive At Destination**	
Arrive At Customer :	2:00	**Begin Unloading :**	
Begin Loading :	2:30	**Finish Unloading :**	
Finish Loading :	2:50	**Leave Destination :**	
Leave Customer :	3:00	**Arrive At CES Yard :**	3:30

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	115165
Tare Weight :		**Begining Odometer :**	115149
Net Weight :		**Total Miles :**	16

Driver : Rodriguez, Bobby **Tractor # :** 2000 **Tote # :**

Signature : **Trailer # :** 235 **Box # :**

Job Comments/Equipment : P/u empty trailer at RHodia Houston to CES yard.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Noltex (Noltex - La Porte, TX) Waste Organics

Customer : Noltex
Address : 12220 Strang Road (Attn: Randy Boeding)
City,State,Zip : La Porte TX , 77571
CES Contact : () -

Driver : **Rodriguez, Bobby**
Helper :
Date : 5/27/2009 Time : 2nd
Truck # 2000 Trailer # 235

Job Description :

PICK UP empty TRAILER 235 FROM RHODIA, haul to CES

Tank wash

ID #: 86740

CUSTOMER INFORMATION

OPERATION HOURS:

Open :	
Close:	

SHIPPING/RECEIVING CONTACT:

Name:	
Number:	

AFTER HOURS CONTACT:

Name:	
Number:	

RECEIVING INFORMATION

OPERATION HOURS:

Open :	
Close:	

SHIPPING/RECEIVING CONTACT:

Name:	
Number:	

AFTER HOURS CONTACT:

Name:	
Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

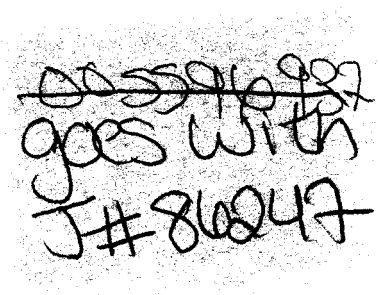
CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:


goes with
J#86247

TRK 107

CES Environmental Services, Inc.

Bill Of Lading # : 86443

Folder ID :	Honing Inc (Honing Inc) Non bulk disposal

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Honing Inc
12226 Taylor St
Houston , TX 77041
(713) 466-0205

This is to certify that the above-named materials ar
11a) HOU-2307
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

CARRIER :
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(b) implementing the Intermodal Safe Container Act of 1982 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	10	DM	10,000	P	Non-RCRA/Non-DOT Regulated Material (honing sludge)

Shipper : Honing Inc

Per : x Richard Villarre **Signature :** Richard Villarreal **Date :** 5, 21-09

Carrier CES Environmental Services, Inc.

Per : J. Hernandez **Signature :** [signature] **Date :** 5/21/09

Receiving Facility CES Environmental Services, Inc.

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Koch Heat Transfer Company (Koch Heat Transfer-Houston)
Contaminated Soil

Date : 5/15/2009 **Manifest # :**

Client : Koch Heat Transfer Company, LP **Ticket :** 96197

Phone : 7138498159 **Consignee :** HPP Corporation

Transporter : CES Environmental Services, Inc.

Signature X [signature] **Signature**

Leave CES Yard :	12:30	**Arrive At Destination**	
Arrive At Customer :	13:15	**Begin Unloading :**	
Begin Loading :	14:30	**Finish Unloading :**	
Finish Loading :	15:15	**Leave Destination :**	
Leave Customer :	15:20	**Arrive At CES Yard :**	1700

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	10023
Tare Weight :		**Begining Odometer :**	9934
Net Weight :		**Total Miles :**	89

Driver : Jerry L. Woodard **Tractor # :** 111 **Tote # :**

Signature : [signature] **Trailer # :** **Box # :**

Job Comments/Equipment : 1.25 - Delay Due To waiting For Forklift To unload other Trucks.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : Koch Heat Transfer Company (Koch Heat Transfer-Houston) 2 of 6
Contaminated Soil

Date : 5/15/2009 **Manifest # :**

Client : Koch Heat Transfer Company, LP **Ticket :** 86197

Phone : 7138498159 **Consignee :** HPP Corporation

Transporter : CES Environmental Services, Inc.

Signature [signature] **Signature**

Leave CES Yard :	12:30	**Arrive At Destination**	
Arrive At Customer :	13:15	**Begin Unloading :**	
Begin Loading :	14:30	**Finish Unloading :**	
Finish Loading :	15:15	**Leave Destination :**	11:00
Leave Customer :	15:20	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	100237
Tare Weight :		**Begining Odometer :**	99387
Net Weight :		**Total Miles :**	

Driver : Irvin L. Woodard **Tractor # :** 111 **Tote # :**

Signature : [signature] **Trailer # :** **Box # :**

Job Comments/Equipment : 1.25 - Delay Due To Waiting For Forklift To Unload Other Trucks.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Koch Heat Transfer Company (Koch Heat Transfer-Houston) Contaminated Soil

Customer : Koch Heat Transfer Company, LP
Address : 12602 FM 529
City,State,Zip : Houston TX , 77041
CES Contact : () -

Driver : Woodard Irwin
Helper :
Date : 5/15/2009 Time : 3rd
Truck # 711 Trailer # 2

Job Description :

SITE CONTACT: Trent office 713-849-8179,cell 713-899-4794

MAKE SURE YOU HAVE THE HPP BOL BEFORE YOU LEAVE CES

1) Pick up 3 totes of contaminated soil

2) Haul load to HPP and offload

ID #: 86197

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	06:00 AM	Name:	Trent	Name:	Trent cell phone
Close:	04:30 PM	Number:	(713) 849-8179	Number:	(713) 899-4794

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? standard

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 6 sections

DRUM DOLLY NEEDED: ☐ YES ☐ NO

SIZE: 3"

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

EPAHO004000184

CES Environmental Services, Inc.

4804 Griggs Road
Houston, TX 77021
Tel. (713) 676-1480
Fax. (713) 676-1678

Transportation Work Ticket

Folder ID : Socotherm La Barge, LLC (Shields St-Channelview)
Nonhaz Wastewater

Date : 5/19/2009 **Manifest # :** 005596713

Client : Socotherm LaBarge, LLC **Ticket :** 86350

Phone : 7133787200 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature _____ **Signature** _____

Leave CES Yard :	14:00	**Arrive At Destination**	17:00
Arrive At Customer :	14:55	**Begin Unloading :**	
Begin Loading :	15:15	**Finish Unloading :**	
Finish Loading :	16:00	**Leave Destination :**	
Leave Customer :	16:10	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	541735
Tare Weight :		**Begining Odometer :**	541686
Net Weight :		**Total Miles :**	49

Driver : ~~Salazar, Alfonso~~ Jose Sanchez **Tractor # :** 2002 **Tote # :** _____

Signature : J Sanchez **Trailer # :** 206 **Box # :** _____

Job Comments/Equipment : _____

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

State Certification of Weights and Measures

A-1 Public Scales
727 McCarty Dr. (Highway 90, Beaumont Rd.)
Mail to: P.O. Box 1261, Houston, TX 77251
Tel: (713) 675-9500, Fax: (713) 675-9501

Ticket No.

A110509

ReWeighed Ticket

Date: 5/19/2009

Time: 16:28:51

Certified

DEPARTMENT OF AGRICULTURE • TEXAS •

Account No	03185		
Customer	CES ENVIRONMENTAL SERVICES, INC.		
Truck No	279	Trailer	206
Pay Type	ReWeigh-Free	Amount	$0.00
Coming From		Going To	
Comments			

Driver's Name:

Driver's Signature:

Weights

Gross	84580
Tare	40060
Net LB	44520
Net TON	22.26
Steer	
Drive	
Trailer	

Weigher's Signature:

Wood George,
Certified Public Weigher,
Harris County, Texas

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

State Certification of Weights and Measures

A-1 Public Scales
727 McCarty Dr. (Highway 90, Beaumont Rd.)
Mail to: P.O. Box 1261, Houston, TX 77251
Tel: (713) 675-9600, Fax: (713) 675-9601

Ticket No.
A110509
1st Weigh Ticket
Date: 5/19/2009
Time: 14:25:19

Certified
DEPARTMENT OF AGRICULTURE • TEXAS •

Account No	03185
Customer	CES ENVIRONMENTAL SERVICES, INC.
Truck No	279
Trailer	206
Pay Type	Charge
Amount	$6.00
Coming From	
Going To	
Comments	

Driver's Name: _____
Driver's Signature: _____

Weights

Gross	40060
Tare	
Net LB	0
Net TON	0
Steer	
Drive	
Trailer	

Weigher's Signature: _____

Wood George,
Certified Public Weigher,
Harris County, Texas

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Socotherm La Barge, LLC (Shields St-Channelview) Nonhaz Wastewater

Customer : Socotherm LaBarge, LLC
Address : 817 Shields
City,State,Zip : Channelview TX , 77530
CES Contact : () -

Driver : Sanchez Jose
Helper :
Date : 5/19/2009 Time : 2nd
Truck # 279 Trailer # 206

Job Description :

WEIGH LIGHT AND HEAVY @ A-1 SCALES if OPEN
or LOVE'S on McCarty(you will be reimbursed, if it's a weekend)

***scale tickets a MUST(make sure there is a copy of BOTH light and heavy weights for this load or cannot be billed)

SITE CONTACT: Jose @ 832-519-7975

NEED 80' OF HOSE

1. Pump out WASTEWATER as directed

2. Haul load to CES and offload

contact morgan w/ any problems 281-691-3296

ID #: 86350

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	12:00 AM	Name:	Albino Jr.	Name:	Julian
Close:	12:00 PM	Number:	(832) 325-8086	Number:	(832) 642-3432

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:	CES	Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? standard

CAN CUSTOMER LOAD US : ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO **CUSTOMER OWNS BOX:** ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 80'

SIZE:

LOADING FROM (i.e. Tank):

SIZE OF FITTING:

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

MUST WEIGH LIGHT AND HEAVY

271

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
69506	1	(281) 876-2000	005594969 JJK

GENERATOR

5. Generator's Name and Mailing Address
Ferouk Systems
250 Pennbright
Houston, TX 77090
Generator's Phone: (281) 876-2000
State ID: 69506

Generator's Site Address (if different than mailing address)
Ferouk Systems
250 Pennbright
Houston , TX 77090
(281) 876-2000

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5000	G	CESQ2192
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Ferouk (Ferouk-Houston)
Waste Water
CES Profile # CES Job # - 85828
1) HOU-1498 2) 3) 4)

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 — Signature — Month 5 Day 12 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR — Signature — Month 5 Day 12 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: SAM BROWN — Signature — Month 5 Day 12 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
69506	1	(281) 876-2000	005594969 JJK

GENERATOR

5. Generator's Name and Mailing Address
Farouk Systems
250 Pennbright
Houston, TX 77090
State ID: 69506
Generator's Phone: (281) 876-2000

Generator's Site Address (if different than mailing address)
Farouk Systems
250 Pennbright
Houston , TX 77090
(281) 876-2000

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	5000	G	CES02192
	2. 01300					
	3. 013.45					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Farouk (Farouk-Houston)
Waste Water
CES Profile # CES Job # - 85828
1) HOU-1498 2) 3) 4)

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 — Signature — Month 5 Day 12 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Alfonso Salazar — Signature — Month 5 Day 12 Year 09
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Sam Brown — Signature — Month 5 Day 12 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXCESQG
2. Page 1 of: 1
3. Emergency Response Phone: (713) 378-7200
4. Manifest Tracking Number: 005594798 JJK

GENERATOR

5. Generator's Name and Mailing Address
Socotherm LaBarge, LLC
817 Shields
Channelview, TX 77530
State ID: CESQG
Generator's Phone: (713) 378-7200

Generator's Site Address (if different than mailing address)
Socotherm LaBarge, LLC
817 Shields
Channelview, TX 77530
(713) 378-7200

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	50880	G	FJT81192
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Socotherm La Barge, LLC (Shields St-Channelview)
Nonhaz Wastewater
1) HOU-2753 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85556

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: Homero Guzman
Signature: X Homero Guzman
Month 5 Day 14 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfredo Salazar
Signature:
Month 5 Day 14 Year 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Sam Brown
Signature:
Month 5 Day 4 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXCESQG	1	(713) 378-7200	005594798 JJK

GENERATOR

5. Generator's Name and Mailing Address
Socotherm LaBarge, LLC
817 Shields
Channelview, TX 77530
Generator's Phone: (713) 378-7200
State ID: CESQG

Generator's Site Address (if different than mailing address)
Socotherm LaBarge, LLC
817 Shields
Channelview, TX 77530
(713) 378-7200

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA/Non DOT regulated wastewater	1	TT	50880	G	F171182
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Socotherm La Barge, LLC (Shields St-Channelview)
Nonhaz Wastewater
1) HOU-2753 2)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 85556
3) 4)

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: Homero Guzman | Signature: X Homero Guzman | Month 5 | Day 14 | Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alonso Salazar | Signature: Alonso Salazar | Month 5 | Day 14 | Year 09

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Sam Brown | Signature | Month 5 | Day 14 | Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD074198961	1	(281) 328-3501	005592018 JJK

GENERATOR

5. Generator's Name and Mailing Address
KMCO, Inc.
16503 Ramsey Road
Crosby, TX 77532
State ID: 31904
Generator's Phone: (281) 328-3501

Generator's Site Address (if different than mailing address)
KMCO, Inc.
16503 Ramsey Rd.
Crosby , TX 77532
(281) 328-3501

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30900
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ, UN1993, Flammable Liquids, N.O.S. (xylenol), 3, I	1	TT	35900	P	900121SH, D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : KMCO (KMCO-Crosby, TX)
Oily Water
CES Job # - 86430
discrepancies — Bill Glushko 281 635-1114
1) HOU-[redacted] 3354 2) 3) 4)

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: Bill Glushko | Signature | Month 06 Day 02 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: WILFRIDO ABREU | Signature | Month 06 Day 02 Year 09

Transporter 2 Printed/Typed Name | Signature | Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
~~H141~~ H135			

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: Al Longoria | Signature | Month 6 Day 2 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000194

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD074198961	1	(281) 328-3501	005592018 JJK

GENERATOR

5. Generator's Name and Mailing Address

KMCO, Inc.
16503 Ramsey Road
Crosby, TX 77532
State ID: 31904
Generator's Phone: (281) 328-3501

Generator's Site Address (if different than mailing address)

KMCO, Inc.
16503 Ramsey Rd.
Crosby , TX 77532
(281) 328-3501

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460

State ID 30900

U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ, UN1993, Flammable Liquids, N.O.S. (xylenol), 3, I	1	TT	35900	P	9001218H, D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Folder ID : KMCO (KMCO-Crosby, TX)
Oily Water
CES Job # - 86430
discrepancies — Bill Glushko 281 635-1114
1) HOU-3354 2) 3) 4)

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: BILL GLUSKO — Signature — Month 06 Day 02 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: WILFREDO ABREU — Signature — Month 06 Day 02 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al Longwin — Signature — Month 6 Day 2 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD074198961	1	(281) 328-3501	005592018 JJK

GENERATOR

5. Generator's Name and Mailing Address

KMCO, Inc.
16503 Ramsey Road
Crosby, TX 77532
Generator's Phone: (281) 328-3501

State ID: 31904

Generator's Site Address (if different than mailing address)

KMCO, Inc.
16503 Ramsey Rd
Crosby, TX 77532
(281) 328-3501

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

CES Environmental Services, Inc.
4804 Griggs Rd
Houston TX 77021
Facility's Phone: (713) 926-1489

State ID 30900

U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NA, UN1993, Flammable Liquids, N.O.S. (xylenol), 3, I	1	TT	39600	P	D001		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

Folder ID: KMCO (KMCO-Crosby, TX)
City Water
CES Job # - 36450
discrepancy - B.11 Gl
28,635 lbs
1) NCL-1489 2) 3) 4)

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: BILL GLUSKO — Signature: [signature] — Month: 06 — Day: 02 — Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: WILFRIDO ABREU — Signature: [signature] — Month: 06 — Day: 02 — Year: 09

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al [illegible] — Signature: [signature] — Month: 6 — Day: 2 — Year: 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000196

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Manifest Tracking Number: 005592018 JJK

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1.							
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

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

Signature

Month 06 Day 02 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month 06 Day 02 Year 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H05			

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

Signature

Month 6 Day 2 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

EPAHO004000197

243

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD000835207	1	(979) 279-3481	005592478 JJK

GENERATOR

5. Generator's Name and Mailing Address
GATX (Hearne) State ID: 32643
PO Box 969
Hearne, TX 77859
Generator's Phone: (979) 279-3481

Generator's Site Address (if different than mailing address)
GATX (Hearne)
1401 W. Brown St.
Hearne, TX 77859
(979) 279-3481

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc. State ID 30900
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA / Non DOT regulated wastewater	1	TT	4500	G	99091191
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : GATX Rail (GATX Rail -Hearne TX)
Non-Hazardous Wastewater from washrack
1) HOU-1383 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 87740

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: JERRY JOHNSON Signature: Jerry Johnson Month 6 Day 16 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR Signature: Alfonso Salazar Month 6 Day 16 Year 09

Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al Longoria Signature Month 6 Day 16 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

243

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXD000835207
2. Page 1 of 1
3. Emergency Response Phone: (979) 279-3481
4. Manifest Tracking Number: 005592478 JJK

5. Generator's Name and Mailing Address: GATX (Hearne), PO Box 969, Hearne, TX 77859 — State ID: 32643
Generator's Phone: (979) 279-3481

Generator's Site Address (if different than mailing address): GATX (Hearne), 1401 W. Brown St, Hearne, TX 77859 — (979) 279-3481

6. Transporter 1 Company Name: CES Environmental Services, Inc. — State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: CES Environmental Services, Inc., 4904 Griggs Rd., Houston TX, 77021 — State ID 30900 — U.S. EPA ID Number: TXD008950461
Facility's Phone: (713) 676-1460

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	Non-RCRA / Non DOT regulated wastewater	1	TT	4500	G	99091191
	2. 4:30 7:30					
	3. 8:00 10.40					
	4. 10 45					

14. Special Handling Instructions and Additional Information
Folder ID: GATX Rail (GATX Rail-Hearne TX)
Non-Hazardous Wastewater from washrack
1) HOU-1383 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 87740

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: JERRY JOHNSON — Signature: Jerry Johnson — Month 6 Day 16 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: ALFONSO SALAZAR — Signature: Alfonso Salazar — Month 6 Day 16 Year 09
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H135 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: Al Longoria — Signature — Month 6 Day 16 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000199

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Tel: (713) 678-1460
Fax: (713) 678-1678

Transportation Work Ticket

Folder ID : Agribiofuels (Agribiofuels-Dayton, TX)
Waste from Biodiesel

Date : 6/12/2009 Manifest # :

Client : Agri Biofuels Ticket : 87526

Phone : 2818211110 Consignee : Newpark Environmental Services, LLC

Transporter : CES Environmental Services, Inc.

Signature : X · Ray Garcia Jinnie Tx. NewPark Signature

Leave CES Yard :	1300	Arrive At Destination :	
Arrive At Customer :	1430	Begin Unloading :	
Begin Loading :	drop TRL 221	Finish Unloading :	
Finish Loading :		Leave Destination :	
Leave Customer :	1445	Arrive At CES Yard :	1530

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	133307
Tare Weight :		Beginning Odometer :	133241
Net Weight :		Total Miles :	66

Driver : Bateman, Donald Tractor # : 291 Tote # :

Signature : Donald Bateman Trailer # : 221 Box # :

Job Comments/Equipment :

drop TRL 221 to be Loaded
pickup Monday

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO004000200

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1675

Transportation Work Ticket

Folder ID : Agribiofuels (Agribiofuels-Dayton, TX)
WW from Biodiesel

Date : 6/12/2009 **Manifest # :**

Agri Biofuels

Client : **Ticket :** 87526

Phone : 2818211110 **Consignee :** Newpark Environmental Services, LLC

Transporter : CES Environmental Services, Inc.

Signature X Ray Baca Jimmie Tx - NewPark **Signature**

Leave CES Yard :	1300	**Arrive At Destination**	
Arrive At Customer :	1430	**Begin Unloading :**	
Begin Loading :	drop TRL 221	**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	1445	**Arrive At CES Yard :**	1530

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	133307
Tare Weight :		**Begining Odometer :**	133241
Net Weight :		**Total Miles :**	66

Driver : Bozeman, Donald **Tractor # :** 291 **Tote # :**

Signature : Donald Bozeman **Trailer # :** 223 **Box # :**

Job Comments/Equipment :

drop TRL 221 to be Loaded
pickup Monday

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	Agribiofuels (Agribiofuels-Dayton, TX) W/W from Biodiesel

Customer : Agri Biofuels
Address : 138 Seaberg Industrial Rd
City,State,Zip : Dayton TX , 77535
CES Contact : () -

Driver : **Bozeman, Donald**
Helper :
Date : 6/12/2009 Time : 2nd
Truck # 291 Trailer # 223

Job Description :

SITE CONTACT: Chinton 409-782-0134

1) drop trailer as directed @ Agribiofuels, loaded trailer will be picked up on Monday

2) return to CES

Directions- take i-10 east to hwy 1-46 north
go to hwy 90 make a left ,you will see railroad tracks DO NOT GO OVER , make a right just before the tracks, then make a immediate left to go over tracks and go about 400 yards and you will see agri fuels.

ID #: 87526

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Mark Porter	Name:	Mark Porter
Close:	05:00 PM	Number:	(281) 821-1110	Number:	(832) 250-1828

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :	08:00 AM	Name:	Newpark	Name:	
Close:	05:00 PM	Number:	(409) 794-3119	Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☑ YES ☐ NO

IF YES, WHAT? hard hat, safety glasses, gloves

HACSC REQUIRED: ☐ YES ☑ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☑ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☑ NO

ROPPER PUMP: ☐ YES ☑ NO

BOX LINER REQUIRED ☐ YES ☑ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☑ *DOES NOT MATTER*

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO **CUSTOMER RENTED BOX:** ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED: 80 ft

SIZE:

LOADING FROM (i.e. Tank):

SIZE OF FITTING: 2"

TYPE OF FITTING:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000011155	1	(281) 471-4700	005596993 JJK

GENERATOR

5. Generator's Name and Mailing Address
Dana Containers
PO Box 3025
LaPorte, TX 77572
Generator's Phone: (281) 471-4700
State ID: 41263

Generator's Site Address (if different than mailing address)
Dana Container
902 Sens Road
La Porte, TX 77572
(281) 471-4700

6. Transporter 1 Company Name
U.S. Environmental Services, Inc.
State ID 30000
U.S. EPA ID Number
TXD000950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
TPI Deer Park Services LLC
2525 Independence Parkway South
Deer Park TX, 77536
Facility's Phone: (281) 930-2525
State ID 12259
U.S. EPA ID Number
TXD000719519

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	NA, Carbamate pesticide, liquid, toxic, flammable, UN2991, 6.1, II	16.	DM	880.	G	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Profile ID: Dana Container (Dana - LaPorte TX)
Haz. waste drums
1) 2) 3)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

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	Signature	Month	Day	Year
X [illegible]	X	06	01	09

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
WILFRIDO AGUILERA		06	01	09
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H134			

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	Signature	Month	Day	Year
[illegible]	[illegible]	06	03	09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000204

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : TM Deer Park Services LLC (Deer Park) drum trip. (10-day file)

Date : 6/5/2009 **Manifest # :**

Client : CES Environmental Services, Inc. (TSDF) **Ticket :** 87075

Phone : 7136761460 **Consignee :** TM Deer Park Services LLC

Transporter : CES Environmental Services, Inc.

Signature X Kurt Edwards **Signature** SAM BROWN

Leave CES Yard :	0700	**Arrive At Destination**	0730
Arrive At Customer :	0730	**Begin Unloading :**	0740
Begin Loading :	pre Loaded	**Finish Unloading :**	0747
Finish Loading :		**Leave Destination :**	0755
Leave Customer :		**Arrive At CES Yard :**	0830

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	152368
Tare Weight :		**Begining Odometer :**	152329
Net Weight :		**Total Miles :**	39

Driver : Bozeman, Donald **Tractor # :** 290 **Tote # :**

Signature : Donald Bozeman **Trailer # :** 244 **Box # :**

Job Comments/Equipment : Unloaded 16 drums

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	TM Deer Park Services LLC (Deer Park) drum trip. (10-day file)

Customer : CES Environmental Services, Inc. (TSDF)
Address : 4904 Griggs Road
City,State,Zip : Houston TX , 77021
CES Contact : () -

Driver : **Bozeman, Donald**
Helper :
Date : 6/5/2009 Time : 0600
Truck # 290 Trailer # 244

Job Description :

haul drumsr to TM in Deer Park and offload, offload time is Friday 6/5/09 @ 8 AM

Return to ces.

ID #: 87075

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

SIZE OF FITTING:

TYPE OF FITTING:

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

TRUCK – 283
TRAILER – 271

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD054447438	1	(936) 856-0617	005592112 JJK

GENERATOR

5. Generator's Name and Mailing Address
Entergy Texas - Lewis Creek Plant
11191 Longstreet Road
Willis, TX 77318
State ID: 31055
Generator's Phone: (936) 856-0617

Generator's Site Address (if different than mailing address)
Entergy Texas - Lewis Creek Plant
1191 Longstreet Road
Willis, TX 77318
(936) 856-0617

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur TX, 77640
State ID 88585
Facility's Phone:
U.S. EPA ID Number: TXR000079307

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ, Corrosive Liquids, N.O.S. (sulfuric acid), 8, UN1760, II	1	TT	3700	G	PRODUCT
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : United States Environmental Services (USES @ Lewis Creek Power Plant)
CES Job # - 86986
1) PA-3355 2) 3) 4)

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: Jason Neals
Signature:
Month 6 Day 3 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: PETER SEMIEN JR.
Signature:
Month 6 Day 3 Year 09
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	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: Johnstone Naleche
Signature:
Month 6 Day 03 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRUCK – 283
TRAILER – 271

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD054447438	1	(936) 856-0617	005592112 JJK

GENERATOR

5. Generator's Name and Mailing Address
Entergy Texas - Lewis Creek Plant
State ID: 31055
1191 Longstreet Road
Willis, TX 77318
Generator's Phone: (936) 856-0617

Generator's Site Address (if different than mailing address)
Entergy Texas - Lewis Creek Plant
1191 Longstreet Road
Willis, TX 77318
(936) 856-0617

6. Transporter 1 Company Name
CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number
TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur TX, 77640
State ID 88585
Facility's Phone:
U.S. EPA ID Number
TXR000079307

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ, Corrosive Liquids, N.O.S. (sulfuric acid), 8, UN1760, II	1	TT	3700	G	PRODUCT
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: United States Environmental Services (USES @ Lewis Creek Power Plant)
CES Job # - 66986
1) PA-3355 2) 3) 4)

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: Jason Nevills
Signature:
Month: 6 Day: 3 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Peter Semien Jr.
Signature:
Month: 6 Day: 3 Year: 09

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	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: Johnstone Maleche
Signature:
Month: 6 Day: 03 Year: 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

EPAHO004000209

TRUCK – 283
TRAILER – 271

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXD054447438	1	(936) 856-0617	005592112 JJK

GENERATOR

5. Generator's Name and Mailing Address
Entergy Texas - Lewis Creek Plant State ID: 31055
11191 Longstreet Road
Willis, TX 77318
Generator's Phone: (936) 856-0617

Generator's Site Address (if different than mailing address)
Entergy Texas - Lewis Creek Plant
1191 Longstreet Road
Willis, TX 77318
(936) 856-0617

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 | U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental (Port Arthur) State ID 98585
2430 Gulfway Dr.
Port Arthur TX, 77640
Facility's Phone: | U.S. EPA ID Number: TXR000079307

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. RQ, Corrosive Liquids, N.O.S. (sulfuric acid), 8, UN1760, II	1	TT	3700	G	PRODUCT		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Folder ID : United States Environmental Services (USES @ Lewis Creek Power Plant) CES Job # - 86986
1) PA-3355 2) 3) 4)

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: X JASON NEVILS | Signature | Month 6 | Day 3 | Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: PETER SENIOR JR. | Signature | Month 6 | Day 3 | Year 09

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	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: Johnstone Maleche | Signature | Month 6 | Day 03 | Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000210

CES Environmental Services, Inc.

Bill Of Lading # : 86986

Folder ID :	United States Environmental Services (USES @ Lewis Creek Power Plant) Sulfuric Acid

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :

Entergy Texas - Lewis Creek Plant
1191 Longstreet Road
Willis , TX 77318
(936) 856-0617

11a) PA-3355
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :

CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur , TX 77640

CARRIER :

CES Environmental Services, Inc.
4904 Griggs Rd.
Houston , TX 77021

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.5(f) implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
No	1	TT	2700	G	RQ, Corrosive Liquids, N.O.S. (sulfuric acid), 8, UN1760, II

Shipper : Entergy Texas - Lewis Creek Plant

Per : _____ **Signature :** _____ **Date :** _____

Carrier CES Environmental Services, Inc.

Per : _____ **Signature :** _____ **Date :** _____

Receiving Facility CES Environmental (Port Arthur)

Per : _____ **Signature :** _____ **Date :** _____

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

T
#206

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXCESQG84199
2. Page 1 of: 1
3. Emergency Response Phone: (325) 597-2620
4. Manifest Tracking Number: 005803681 JJK

GENERATOR

5. Generator's Name and Mailing Address
Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady, TX 76825
Generator's Phone: (325) 597-2620
State ID:

Generator's Site Address (if different than mailing address)
Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady , TX 76825
(325) 597-2620

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	RQ, UN3082, Environmentally Haz, Waste Liquid, n.o.s.,9,PGIII (Phenol, Formaldehyde)	1	TT	31540	G	D0041151
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Rineco (Hexion Brady, TX)
Non Haz Wastewater (CES 1730 & 1850)
1) HOU-1730 2) load 165596 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 86517

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: S. Sugin
Signature
Month 6 Day 24 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR
Signature
Month 6 Day 24 Year 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Al Lomeria
Signature
Month 6 Day 24 Year 09

EPA Form 8700-22 (Rev. 3-05) *Previous editions are obsolete.*

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

T
#206

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXCESQG84199
2. Page 1 of: 1
3. Emergency Response Phone: (325) 597-2620
4. Manifest Tracking Number: 005803681 JJK

GENERATOR

5. Generator's Name and Mailing Address
Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady, TX 76825
State ID:
Generator's Phone: (325) 597-2620

Generator's Site Address (if different than mailing address)
Hexion Specialty Chemicals (Brady, TX)
45 AC Frac Road
Brady , TX 76825
(325) 597-2620

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	RQ, UN3082, Environmentally Haz, Waste Liquid, n.o.s.,9,PGIII (Phenol, Formaldehyde)	1	TT	34540	G	D0041151
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : Rineco (Hexion Brady, TX)
Non Haz Wastewater (CES 1730 & 1850)
1) HOU-1730 2) load 165556 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 86517

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: S. Suggin
Signature
Month 6 Day 24 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR
Signature
Month 6 Day 24 Year 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☒ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: ATI LONGORIA
Signature
Month 6 Day 24 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000213

C-722-PD

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	1	(225) 267-4505	005803739 JJK

GENERATOR

5. Generator's Name and Mailing Address
T.T. Barge (Mile 237)
83 Hickory
Harahan, LA 70123
Generator's Phone: (225) 267-4505
State ID:

Generator's Site Address (if different than mailing address)
T.T. Barge (Mile 237)
5190 North River Road
Port Allen, LA 70767
(225) 267-4505

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30900 — U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3082, Hazardous waste, liquid, n.o.s., 9, PG III	1	TT	40000	P	OUTS102H, D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : T.T. Barge (T.T. Barge Mile 237- Port Allen, LA)
Hazardous Waste water
1) HOU-3366 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 88212

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: Jeffery Babin — Signature — Month 6 Day 26 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR — Signature — Month 6 Day 26 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

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: Al Longoria — Signature — Month 6 Day 26 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPAHO004000214

C-722-DD

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone: (225) 267-4505

4. Manifest Tracking Number: 005803739 JJK

GENERATOR

5. Generator's Name and Mailing Address
T.T. Barge (Mile 237)
83 Hickory
Harahan, LA 70123
Generator's Phone: (225) 267-4505
State ID:

Generator's Site Address (if different than mailing address)
T.T. Barge (Mile 237)
5190 North River Road
Port Allen, LA 70767
(225) 267-4505

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID 30900
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
Facility's Phone: (713) 676-1460
State ID 30900
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3082, Hazardous waste, liquid, n.o.s., 9, PG III	1	TT	40000	P	D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID : T.T. Barge (T.T. Barge Mile 237- Port Allen, LA)
Hazardous Waste water
1) HOU-3308 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation CES Job # - 88212

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: Jeffery Babin
Signature: 11/4/13 Jeffery Babin
Month 6 Day 26 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ALFONSO SALAZAR
Signature
Month 6 Day 26 Year 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H135			

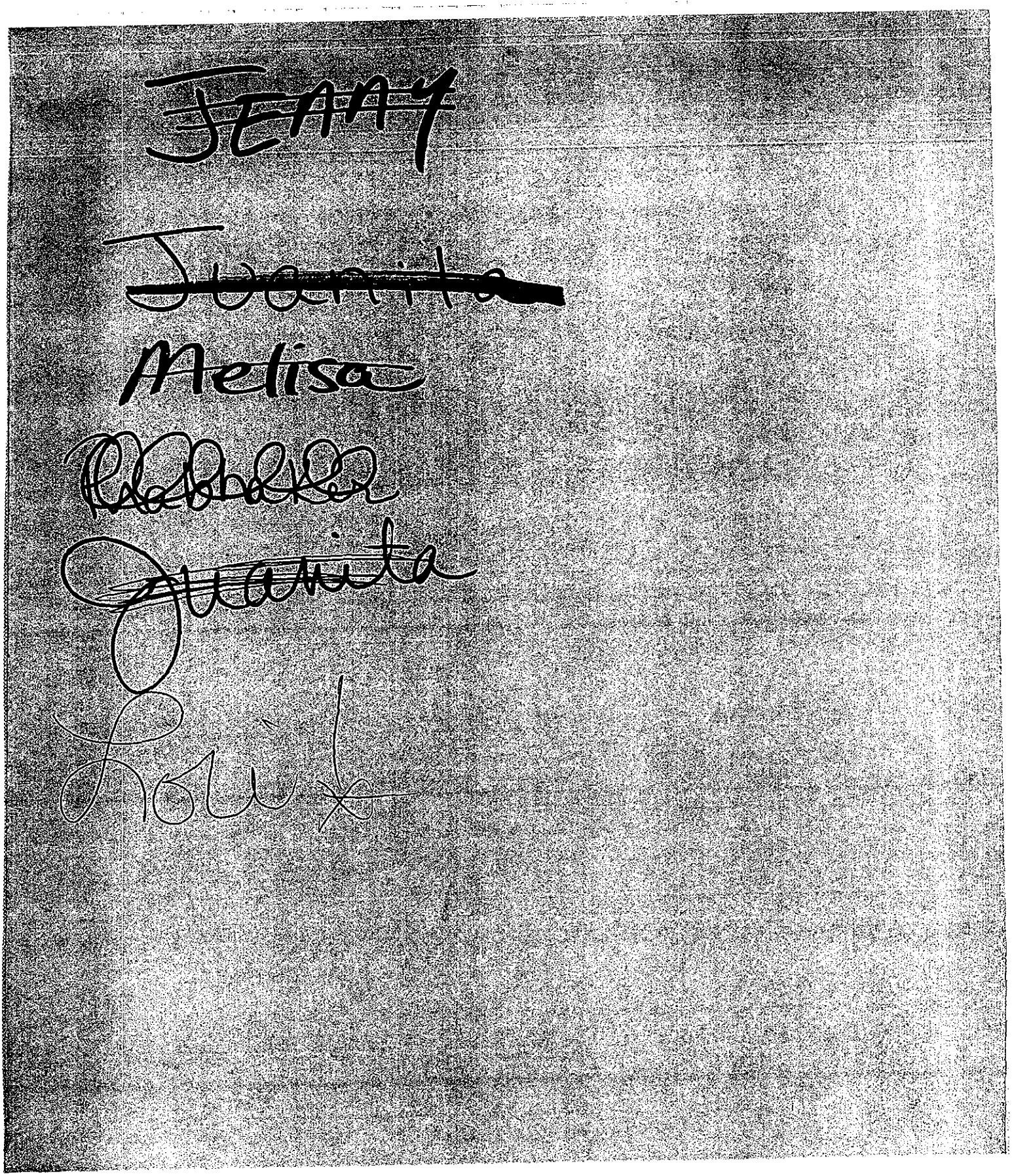
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: LEMOR A
Signature
Month 6 Day 26 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

EPAHO004000215


JEAN
Juanita
Melisa
Juanita

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000079307
2. Page 1 of 1
3. Emergency Response Phone: (713) 676-1460
4. Manifest Tracking Number: 005593247 JJK

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID - 88585
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2420 S. Gulfway Drive
Port Arthur, TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc. State ID 30300 U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd.
Houston TX, 77021
State ID 30300
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Non-RCRA, Non DOT regulated wastewater	1	TT	5000	G	00081011
	2.			35600		
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: CES Internal Work
1) PA-3005 2) 3) 4)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. CES Job # - 39430

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: Do Cumberland Signature: [signature] Month 7 Day 30 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Kevin Wilson Signature: [signature] Month 7 Day 30 Year 09
Transporter 2 Printed/Typed Name: Signature: Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H141 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: Pam Brown Signature: [signature] Month 7 Day 30 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000217

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 7/30/2009 **Manifest # :**

Client : CES Environmental Services - Port Arthur **Ticket :** 89430

Phone : 7136761460 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	0600	**Arrive At Destination**	1530
Arrive At Customer :	0700	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	1600
Leave Customer :	1350	**Arrive At CES Yard :**	1800

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	49794
Tare Weight :		**Begining Odometer :**	49602
Net Weight :		**Total Miles :**	192

Driver : Wilson, Kevin **Tractor # :** 2004 **Tote # :**

Signature : Kevin Wilson **Trailer # :** 268 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

TR 2004
TR 268

DATE 7-30-09 NO. 643

PORT ARTHUR CHEMICAL ENVIRONMENTAL SERVICES
P.O. BOX 218
2420 SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

DRIVER ON ☐ OFF ☑

WEIGHED BY_____

420

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TXR000079307
2. Page 1 of 1
3. Emergency Response Phone: (713) 676-1460
4. Manifest Tracking Number: 005593249 JJK

5. Generator's Name and Mailing Address
CES Environmental Services - Port Arthur
4904 Griggs Road
Houston, TX 77021
State ID: 85605
Generator's Phone: (713) 676-1460

Generator's Site Address (if different than mailing address)
CES Environmental Services - Port Arthur
2400 S. Gulfway Drive
Port Arthur, TX 77640
(713) 676-1460

6. Transporter 1 Company Name: CES Environmental Services, Inc.
State ID: 30500
U.S. EPA ID Number: TXD008950461

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CES Environmental Services, Inc.
4904 Griggs Rd
Houston, TX 77021
State ID: 30500
Facility's Phone: (713) 676-1460
U.S. EPA ID Number: TXD008950461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA, Non-DOT regulated wastewater	1	TT	5500	G	[illegible]
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Folder ID: CES Internal Work
1) R4-3005 2) 3) 4)

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Cert. No. [illegible]

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: Jay Matlock
Signature: Jay Matlock
Month 7 Day 31 Year 09

16. International Shipments ☐ Import to U.S. ☐ 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: Lelon Brown
Signature: [illegible]
Month 7 Day 31 Year 09
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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. H141 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: SAM BROWN
Signature: [illegible]
Month 7 Day 31 Year 09

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000220

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 678-1460
Fax. (713) 678-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 7/31/2009 Manifest # : 005593249

Client : CES Environmental Services - Port Arthur Ticket : 89476

Phone : 7136761460 Consignee : CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature [signature] Signature

Leave CES Yard :		Arrive At Destination	16:30
Arrive At Customer :	13:00	Begin Unloading :	
Begin Loading :		Finish Unloading :	
Finish Loading :		Leave Destination :	18:30
Leave Customer :	15:00	Arrive At CES Yard :	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :	68,720	Ending Odometer :	445934
Tare Weight :	33,120	Begining Odometer :	445742
Net Weight :	35,600	Total Miles :	192

Driver : Brown, Leroy Tractor # : ~~294~~ 285 Tote # :

Signature : [signature] Trailer # : ~~220~~ 420 Box # :

Job Comments/Equipment : Waiting to load.

Waiting to unload

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

TK 285

TR420

DATE 7-31-09 NO. 646

PORT ARTHUR CHEMICAL ENVIRONMENTAL SERVICES
P.O. BOX 218
2420 SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

89476

35600

DRIVER ON ☐ OFF ☑

WEIGHED BY L James

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of
3. Emergency Response Phone
4. Manifest Tracking Number: 005593253 JJK

GENERATOR

5. Generator's Name and Mailing Address
Generator's Site Address (if different than mailing address)
Generator's Phone:

6. Transporter 1 Company Name
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
U.S. EPA ID Number
Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1.			5.00		
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

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: Jay Matlock
Signature
Month: 7 Day: 30 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin W. Lacon
Signature
Month: 7 Day: 31 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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: Mike Rot
Signature
Month: 7 Day: 31 Year: 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

EPAHO004000223

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 7/31/2009 **Manifest # :**

Client : CES Environmental Services - Port Arthur **Ticket :** 89477

Phone : 7136761460 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature [signature] **Signature**

Leave CES Yard :	1300	Arrive At Destination	1500
Arrive At Customer :	1305	Begin Unloading :	
Begin Loading :		Finish Unloading :	
Finish Loading :		Leave Destination :	1630
Leave Customer :	1315	Arrive At CES Yard :	1900

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		Ending Odometer :	50100
Tare Weight :		Begining Odometer :	49917
Net Weight :		Total Miles :	191

Driver : Wilson, Kevin **Tractor # :** 2004 **Tote # :**

Signature : [signature] **Trailer # :** 420 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

TH 2004

TR225

DATE 7-31-09 NO. 647

PORT ARTHUR CHEMICAL ENVIRONMENTAL SERVICES
P.O. BOX 218
2420 SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

89498

DRIVER ON ☐ OFF ☑

WEIGHED BY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
TXR000029807		(713) 672-2160	005593258 JJK

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name — U.S. EPA ID Number

CES Environmental Services, Inc. — TXR000078691

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

CES Environmental Services Inc
9600 Bellaire Blvd
Houston TX 77036

Facility's Phone: (713) 672-2160 — TXD980868691

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non-RCRA Non DOT regulated material			300				
	2.			45880P				
	3.							
	4.							

14. Special Handling Instructions and Additional Information

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 — Signature — Month 12 — Day 1 — Year 05

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Wilson — Signature — Month 12 — Day 1 — Year 05

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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.	2.	3.	4.
H141			

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 — Signature — Month 12 — Day 1 — Year 05

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **TRANSPORTER'S COPY**

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 3/1/2009 **Manifest # :**

Client : CES Environmental Services - Port Arthur **Ticket :** 99508

Phone : 7136761460 ***Consignee :*** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :	0630	**Arrive At Destination**	1000
Arrive At Customer :	0700	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	0800	**Arrive At CES Yard :**	1230

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		***Ending Odometer :***	501300
Tare Weight :		***Begining Odometer :***	501108
Net Weight :		**Total Miles :**	192

Driver : Wilson, Kevin **Tractor # :** 2004 **Tote # :**

Signature : **Trailer # :** 225 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

TK.
TR 267

DATE 7-31-09 NO. 649

PORT ARTHUR CHEMICAL ENVIRONMENTAL SERVICES
P.O. BOX 218
2420 SOUTH GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

45880

DRIVER ON ❑ OFF ❑

WEIGHED BY_____

CES Environmental Services, Inc.

Bill Of Lading # : 89249

Folder ID :	Citgo Refinery (Citgo - Lake Charles, LA) Naphthenic Caustic Recycling

Original – Shipper Provided Short Form Straight Bill of Lading – Not Negotiable – Domestic

SHIPPED FROM :
Citgo Refinery
4401 LA Hwy 108
Lake Charles , LA 70665
(337) 708-6344

PO #4504854067
11a) PA-2641
11b)
11c)
11c)

The property described below, in apparent good order, except as noted (content and condition of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this as meaning any person or corporation authorized to be in possession of the property under the contract) agrees to carry to its unusual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. This Bill of Lading is a receipt for goods; it is not of itself a contract of carriage. It is mutually agreed, as to each carrier of all or as to any said over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions contained in the applicable contract between shipper and carrier or intermediary.

For payment: Charges to be billed to Shipper or the "Billed to" party are set forth in the governing contract with Shipper. No charges other than those contained therein may be billed to Shipper or the "Billed to" party without prior written consent of Shipper. The extra copy of this Bill of Lading, furnished at the time of shipment, must be attached to the freight bill submitted to Shipper or the "Billed to" party and sent to:

CONSIGNED TO :
CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur , TX 77640

CARRIER :
CES Environmental (Port Arthur)
2420 Gulfway Dr.
Port Arthur , TX 77640

This is to certify that the product stated below are properly classified, described, packaged, marked and labeled and is in proper condition for transportation according to the applicable regulations of the Department of Transportation. If this Shipment moves between to ports by a carrier by water, the law requires that the Bill of Lading shall state whether it is "carrier's or shipper's weight."

Intermodal Certificate: All information required by Federal Highway Administration regulations at 49 CFR 390.54© implementing the Intermodal Safe Container Act of 1992 is set forth on the face of this bill of lading. The shipper name herein is the tendering party.

Haz	Container No.	Container Type	Total Quantity	Unit Wt/Vol	Description of Materials, Special Marks, and Exceptions
Yes	1	TT	4500 gal	F	RQ< Corrosive liquids, n.o.s. (naphthenic caustic), 8, UN1760, PGII
			41820		

Shipper : Citgo Refinery
Per : Billy Lee **Signature :** Billy Lee **Date :** 7-31-09

Carrier CES Environmental (Port Arthur)
Per : Kevin Wilson **Signature :** Kevin Wilson **Date :** 7-31-09

Receiving Facility : CES Environmental (Port Arthur)
Per : Bo Cumberland **Signature :** Bo **Date :** 7-31-09

White (Generator Return Copy) Yellow (Transporter Copy) Pink (Receiving Facility Copy) Golden Rod (Generator 1st Copy)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 678-1460
Fax. (713) 678-1676

Transportation Work Ticket

Folder ID : Citgo Refinery (Citgo - Lake Charles, LA)
Naphthenic Caustic Recycling

Date : 7/31/2009 **Manifest # :**

Client : Citgo Refinery **Ticket :** 89249

Phone : 3377086344 **Consignee :** CES Environmental (Port Arthur)

Transporter : CES Environmental (Port Arthur)

Signature Billy Lee **Signature**

Leave CES Yard :	0630	**Arrive At Destination**	1230
Arrive At Customer :	0930	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	
Leave Customer :	1100	**Arrive At CES Yard :**	1300

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	49917
Tare Weight :		**Begining Odometer :**	49794
Net Weight :		**Total Miles :**	123

Driver : Wilson, Kevin **Tractor # :** 2004 **Tote # :**

Signature : Kevin Wilson **Trailer # :** 260 **Box # :**

Job Comments/Equipment :

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

Form B-160 (REV. 10-93)

BILL OF LADING OR SCALE TICKET

185907

If or when this instrument constitutes a Bill of Lading, the property described below, in apparent good order, is received by the carrier shown herein, which carrier agrees to transport to the consignee and destination shown herein subject to the terms and conditions of the special contract between the carrier and the consignor in effect on the date of the issue of the Bill of Lading. In the absence of a special contract, transportation will be subject to all the terms and conditions of the carrier's tariffs legally on file. It is further agreed by the carrier that the transportation of this shipment will be performed in compliance with all applicable Rules, Regulations and Laws.

CONSIGNEE C.E.S.

ADDRESS Houston, TX

ORDER NO. _____

PORT MSC. INC.

GROSS 75000 LBS. IN

TARE 23180 LBS. OUT

NET 11820 LBS. NET

11:00a.m. 07-21-09

- ☐ LIQUEFIED PETROLEUM GAS, (PROPANE/PROPYLENE MIXTURE), 2.1, UN1075, PLACARDED FLAMMABLE GAS
- ☐ SULFUR, MOLTEN, 9, NA2448, III, PLACARDED CLASS 9
- ☐ PETROLEUM COKE, NOT REGULATED MATERIAL, NO PLACARDS REQUIRED
- ☐ SULFURIC ACID, 8, UN1830, II, CORROSIVE RQ (SULFURIC ACID), PLACARDED CORROSIVE
- ☒ Caustic

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL FREE 1-800-424-9300 DAY OR NIGHT

PLACARDS: OFFERED _____ REFUSED _____
MSDS SHEETS ATTACHED

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

CARRIER CES

TRUCK NO. 2004 TRL. NO. 260

SHIPPER Citgo.

_____
DRIVER'S SIGNATURE

PER _____
LAKE CHARLES, LA.

EPAHO004000231

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 678-1460
Fax. (713) 678-1678

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 7/31/2009 **Manifest # :** 005593249

Client : CES Environmental Services - Port Arthur **Ticket :** 89476

Phone : 7136761460 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature **Signature**

Leave CES Yard :		**Arrive At Destination**	16:30
Arrive At Customer :	13:00	**Begin Unloading :**	
Begin Loading :		**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	18:30
Leave Customer :	15:00	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :	68,720	**Ending Odometer :**	445934
Tare Weight :	33,120	**Begining Odometer :**	445742
Net Weight :	35,600	**Total Miles :**	192

Driver : Brown, Leroy **Tractor # :** ~~204~~ 285 **Tote # :**

Signature : **Trailer # :** ~~225~~ 420 **Box # :**

Job Comments/Equipment : Waiting to load.

Waiting to unload

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

CES Environmental Services, Inc.

4804 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Transportation Work Ticket

Folder ID : CES Internal Work

Date : 7/27/2009 **Manifest # :**

Client : CES Environmental Services - Port Arthur **Ticket :** 89325

Phone : 7136761460 **Consignee :** CES Environmental Services, Inc.

Transporter : CES Environmental Services, Inc.

Signature Jeanette Sartin **Signature**

Leave CES Yard :		**Arrive At Destination**	6:30
Arrive At Customer :	3:00	**Begin Unloading :**	
Begin Loading :	P/M	**Finish Unloading :**	
Finish Loading :		**Leave Destination :**	7:15
Leave Customer :	4:30	**Arrive At CES Yard :**	

Customer PO #:

Total Hours:

CES Unload: ☐

Gross Weight :		**Ending Odometer :**	189973
Tare Weight :		**Begining Odometer :**	189878
Net Weight :		**Total Miles :**	95

Driver : Mendoza, Juan **Tractor # :** 2001 **Tote # :**

Signature : **Trailer # :** 225 **Box # :**

Job Comments/Equipment : Drop Trailer on Line.

White (CES Office) Yellow (CES Office / Billing) Pink (CES Office / IFTA) Golden Rod (Customer)

EPAHO004000233

Office DEPOT
1-800-GO-DEPOT
(1-800-463-3768)
www.officedepot.com
www.officedepot.ca

Friday 7/24/09

- Total 3 loads of Napthenic Caustic for Mon, Tues Wed for Next Week
- Buckeye Gulf Coast Pipelines Cancelled on Friday.
- Scheduled T.T Barge mile(183) for Today - relized Dot was wrong, put in on 22nd Haz w/w.
- Emailed Orval w/ targa about weight ticket Waiting on Response.
- Spoke ~~to~~ Don w/ HTH to schedule a load of Oily Water. Said he will get with me
- Spoke w/ Dakota + scheduled 2 loads of Haz w/w for tuesday 7/28/09.
- Stay schedule Drum pick up for monday 1st Job!

Monday 7/27/09

Follow up w/ chuck on scheduling
$ a Haz W/W for Tuesday. Called ~~chuck~~
~~No response~~. Got scheduled he Called
Scheduled LSNG load to Paces from Orval
scheduled ~~@~~ another load. Total is 2 loads
Slay add 1 more drum of (1020 p) told
Javier, Javi Called Rosales. print sticker
Slay's lift gate had Problem
Spoke with Gary Hutchins w/ NOV Portable
about invoices. Invormed Dan

Total had critical time @ 7 for caustic
and they did not receive it untill 10:30
Spoke w/ BO, said No unloaded trailers

Scheduled GATX (Herne) W/W load for tomorrow

Spoke w/ Jesse w/ Stolt about box not
delivered from thursday? Box was dropped
@ the yard instead of Going back to Gatx.
Returning box today @ 4 PM Spoke w/ Jesse.

Buckeye got rescheduled to friday

scheduled Noltex, Socotherm, H + Hayes

Jose

1.89 Hat

Tuesday 7/28/09

Spoke w/ Ruben + scheduled sump sludge from (Trimac Bayport) for tomorrow. Cancel Reschedule next available scheduled him for tom. spoke to shane w/ Hexion Diball schedule 2 loads of low formaldehyde for tomorrow ? No air machine available until end of week

Stay - liftgate is fixed, sending Joe to pick up trailer. 11:00 AM

Electrocoatings (Baywood) 2 loads of Nickel floor for tomorrow Need PO # 15554

Spoke with Jeff w/ T.T 239 + scheduled 2 loads a day for the rest of week.

Stay - 8 more drums to pick up, waiting on the oh to use fork lift.

Questchemical - Preston has been there since 9:30 am + they are trying to adjust PH

Farouk - spoke w/ Iris to see if we still offload today. YES

sent Jose Espinel to slay to pick up slay drums

sent Jose Sanchez to drop Zack trailer

Miller Transporters Ed Wickham

2 loads biosolids

(2) 457-6348

Shane

Tomrrow

Wednesday 7/29/09

Electro Coatings- running late 1st truck is leaving @ 10:20 1st truck will arrive @ 12- but no 2nd. Rescheduled both of them

T.T Barg 183 scheduled for tomorrow must be ther @ 10Am

Scheduled NOV mono, spoke w/ Richard the degreaser, he asked about degreaser that has not been Neutrilized.

Shceduled Targa CBF to PACE + Redirected to dirrider. 2 loads.

spoke w/ Ed from miller Trans he wants 2 loads of biosludge I scheduled 1 today and 1 tomorrow.

Amtex~ spoke w/ Fred + scheduled a Non haz W/W for tomorrow.

Spoke w/ Bruce from Quest chemical + scheduled The Quest chemical (Texas Tile) printed BOL + manifests

Various loads Caustic + Non haz loads

March 5

~~PO #~~ MC 269 DD 7/22/09

P MC 646 7/

MC 636 DD

[redacted]

Thursday 7/30/09
in Beeville

Follow up CALL Russ @ Rch To confirm Gallons are being offloaded / Buckeye moved to Monday ~~spoke to Russ~~
~~Follow up on Ruheem~~ w/ trimac about available air mover + schedule sump sludge J#89343 Done on Wednesday

Schedule Hexion Hope for 1 load on Monday 8/3/09

Delivered 10 totes to Quest Chemical J#89449 Cancelled

18¢/Gallon for disposal July 6th 21st

23/Cy Jeff
~~Box~~ Class I Solids Dynamic

Utility Truck
Pressure Washe
Confined Space entry
2 extra guys
Sheldon Streamer Trimac

Spoke to mitch w/ Quest he asked for How many Cy we picked up when we did The Texas tile. ~~Fax~~ E-mail him the pw

ORVAL
Scheduled LSNG, CBF for TARGA

Robert / scheduled Total Mon Tues Wed

Friday 7/31/09

follow up w/ Jeff w/ T.T 287 about scheduling 2 loads a ~~week~~ a day for the future or at least for next week.

follow up w/ Robert from total + see when he wants to schedule the LSNA load Next Week. Thats if you haven't heard from him.

Trimac ~ set up field service Job for the sludge in Sump, Get Safley Trailer, + confined space permit. Javi will get w/ me to let me know when to set up. Get w/ Sheldon groomer + let him know when we are doing this.

Monday 8/3/09

Scheduled 2 loads of Hgz W/W for Tues T.T Barge (287). Spoke with Jeff on friday. Get back w/ him + see to schedule 2 more on Wednesday

Buckeye picked up 3000-3500 Gallons.

Scheduled 3 rmco Oilywaters

8/3 8/4 8/5 8/6 8/7

CES Environmental Services, Inc.

Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	**Champion**	**RohMax USA, Inc.**	**Boise Cascade**	**Champion**	**Boise Cascade -closed 4/8**
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	**Champion**	**Boise Cascade**	**International Paper - Pineville**	**Farouk**	**International Paper - Pineville**
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	**Farouk**	**Champion**	**Liberty Forge**	**Champion**	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz. Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	**International Paper - Pineville**	CALL & MAKE SURE WE ARE GOOD AT BFI	**RohMax USA, Inc.**	**SUNDAY**
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	
	Smith International			**Boise Cascade**	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			**International Paper - Pineville**	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

EPAHO00400244

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2328**

Customer: **ZaCh System Corp. (La Porte)**

Waste Generator: **ZaCh System Corp. (La Porte)**

Waste Stream Name: **Acetic acid**

Expiration Date: **9/11/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2305**

Customer: **Lighthouse Environmental Inc**

Waste Generator: **Palm Center Police Station**

Waste Stream Name: **Unleaded gas**

Expiration Date: **8/22/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2299**

Customer: **Shawcor Pipe Protection/Compression Coat**

Waste Generator: **Shawcor Pipe Protection/Compression Coat**

Waste Stream Name: **Non hazardous waste glue**

Expiration Date: **8/22/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

TTLW

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2238**

Customer: **Milstead Environmental**

Waste Generator: **Milstead Environmental**

Waste Stream Name: **Water contaminated w/ultramarine blue (dye)**

Expiration Date: **8/24/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2307**

Customer: **Honing Inc.**

Waste Generator: **Honing Inc**

Waste Stream Name: **Honing sludge**

Expiration Date: **8/22/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2247**

Customer: **Phoenix Pollution Control**

Waste Generator: **Port of Houston**

Waste Stream Name: **Barge rinsewater**

Expiration Date: **8/28/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

- TCLP Metals ✓
- TCLP Volatiles ✓
- TCLP Semi-volatiles ✓
- Reactivity ✓
- Corrosivity ✓
- Ignitability ✓

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2319**

Customer: **Select Environmental**

Waste Generator: **Schooner Petroleum Services**

Waste Stream Name: **Oil, dirt, grease, debris**

Expiration Date: **9/7/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2323**

Customer: **MV Shila McKavid**

Waste Generator: **MV Shila McKavid**

Waste Stream Name: **Non hazardous, non-regulated rinse water**

Expiration Date: **9/7/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2344**

Customer: **Dana Container**

Waste Generator: **Dana Container**

Waste Stream Name: **Non hazardous waste sludge**

Expiration Date: **9/12/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

- ✓ TCLP Metals
- ✓ TCLP Volatiles
- ✓ TCLP Semi-volatiles
- ✓ Reactivity
- ✓ Corrosivity
- ✓ Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2378**

Customer: **Preston Environmental**

Waste Generator: **Siemens Westinghouse**

Waste Stream Name: **Sandblast sand**

Expiration Date: **9/27/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals ✓ RCRA II metals Totals only
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
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Waste Profile Re-Certification Form

CES Waste Approval #: **-2383**

Customer: **Houston Marine Services /TransMontinge**

Waste Generator: **Houston Marine Services /TransMontinge**

Waste Stream Name: **Bilge oil and water**

Expiration Date: **9/28/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

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Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-1111**

Customer: **Scott Specialty Gases**

Waste Generator: **Scott Specialty Gases**

Waste Stream Name: **Recyclable Oily Water**

Expiration Date: **9/1/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2333**

Customer: **QuietFlex Manufacturing Company**

Waste Generator: **QuietFlex Manufacturing Company**

Waste Stream Name: **Waste black ink**

Expiration Date: **9/12/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2320**

Customer: **Seatex**

Waste Generator: **Seatex**

Waste Stream Name: **Off spec product**

Expiration Date: **9/7/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

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Houston, TX 77021
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Waste Profile Re-Certification Form

CES Waste Approval #: **-2359**

Customer: **Oxy Vinyls**

Waste Generator: **Oxy Vinyls**

Waste Stream Name: **Non-hazardous wastewater**

Expiration Date: **9/17/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

☐ No changes, please recertify.

☐ Please send new profile as waste stream has changed.

☐ Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

- TCLP Metals ✓ RCRA 11 metals
- TCLP Volatiles
- TCLP Semi-volatiles
- Reactivity
- Corrosivity
- Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

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Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2379**

Customer: **Arkema, Inc.**

Waste Generator: **Arkema, Inc.**

Waste Stream Name: **Oronite Tetramer**

Expiration Date: **9/27/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2338**

Customer: **Harris County Forensic**

Waste Generator: **Harris County Forensic**

Waste Stream Name: **Non-hazardous waste solids**

Expiration Date: **9/12/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals ✓ RCRA 8 metals - Total
TCLP Volatiles
TCLP Semi-volatiles
Reactivity ✓
Corrosivity ✓
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2341**

Customer: **C.E.O. Performance Chemicals @ Advanced Blending**

Waste Generator: **C.E.O. Performance Chemicals @ Advanced Blending**

Waste Stream Name: **Unused alumnu**

Expiration Date: **9/12/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2268**

Customer: **Quality Valve and Machine Works**

Waste Generator: **Quality Valve and Machine Works**

Waste Stream Name: **Non-hazardous parts washer solution**

Expiration Date: **8/2/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals ✓
TCLP Volatiles ✓
TCLP Semi-volatiles ✓
Reactivity ✓
Corrosivity ✓
Ignitability ✓

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2272**

Customer: **Zap-Lok Pipeline**

Waste Generator: **Zap-Lok Pipeline @ Shawcor Pipe Protection**

Waste Stream Name: **Non-hazardous wastewater**

Expiration Date: **8/3/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

√ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
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Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2273**

Customer: **Shawcor Pipe Protection/Compression Coat**

Waste Generator: **Shawcor Pipe Protection/Compression Coat**

Waste Stream Name: **Recyclable used hydraulic oil**

Expiration Date: **8/3/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2275**

Customer: **Shawcor Pipe Protection/Compression Coat**

Waste Generator: **Shawcor Pipe Protection/Compression Coat**

Waste Stream Name: **Non-hazardous organic impacted soil**

Expiration Date: **8/2/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals RCRA 8 metals - Total
TCLP Volatiles
TCLP Semi-volatiles BTEX
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2283**

Customer: **Preston Environmental**

Waste Generator: **Rain For Rent**

Waste Stream Name: **Oily debris/soil**

Expiration Date: **8/15/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification.
Please sumbit results of the following tests.

- TCLP Metals ✓ RCRA 8 metals Totals ✓
- TCLP Volatiles ✓
- TCLP Semi-volatiles ✓
- Reactivity ✓
- Corrosivity ✓
- Ignitability ✓

Customer Name

Signature

Company / Title

Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **HOU-2287**

Customer: **Mack's Transmission**

Waste Generator: **Mack's Transmission**

Waste Stream Name: **Recyclable oily water**

Expiration Date: **8/10/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

✓ No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals
TCLP Volatiles
TCLP Semi-volatiles
Reactivity
Corrosivity
Ignitability

_____
Customer Name

_____
Signature

_____
Company / Title

_____
Date

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Waste Profile Re-Certification Form

CES Waste Approval #: **-2293**

Customer: **Dyna Drill**

Waste Generator: **Dyna Drill**

Waste Stream Name: **Non hazardous wastewater**

Expiration Date: **8/16/2009**

As per our waste analysis plan, CES Environmental Services, Inc. requires recertification of all approved waste profiles on an annual basis. The purpose of this form is to confirm that no changes have been made in the generation process of the aforementioned waste stream and that the waste stream remains classified as non-hazardous as per 40 CFR 261.3.

Generator hereby certifies that the components in the aforementioned waste stream and the process generating this waste stream remain the same as when issued the aforementioned CES Waste Approval Number: (Check Appropriate Box)

No changes, please recertify.

Please send new profile as waste stream has changed.

Analysis is NOT required for recertification.

✓ The following analysis is required for recertification. Please sumbit results of the following tests.

TCLP Metals ✓ RCRA 11 metals - Totals ✓
TCLP Volatiles X BTEX
TCLP Semi-volatiles ✓
Reactivity ✓
Corrosivity ✓
Ignitability ✓

Customer Name

Signature

Company / Title

Date

7/27 7/28 7/29 7/30 7/31

CES Environmental Services, Inc.

Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	**Champion**	**RohMax USA, Inc.**	**Boise Cascade**	**Champion**	**Boise Cascade -closed 4/8**
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	**Champion**	**Boise Cascade**	**International Paper - Pineville**	**Farouk**	**International Paper - Pineville**
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	**Farouk**	**Champion**	**Liberty Forge**	**Champion**	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	**International Paper - Pineville**		**RohMax USA, Inc.**	**SUNDAY**
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	
	Smith International			**Boise Cascade**	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			**International Paper - Pineville**	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

lectrus MSI 7 Waste Haul. Stains Wastepaint- Stay

lift Gate Stay

(2) 876-2000

EPAHO00400270

Lori Salazar

From: Dana Carter
Sent: Friday, July 24, 2009 3:16 PM
To: Lori Salazar
Subject: Slay drum inventory

J# 89271
89272

Here is slay drum inventory. He needs the pick up in the morning please.

Hazardous to PCI:
11-MDI – Profile 228939
4-DES – Proifle 228932

Non haz to CES:
7-Pit sludge – Profile 1670
17- Non haz Liquid/Sludge – Profile 1020

Thanks
Dana

Dana Carter
Account Manager
CES Environmental Services Inc.
Port Arthur Chemical and Environmental Services, LLC.
Office: 713-676-1460
Cell: 713-748-9804
Fax: 713-748-8664
visit us at www.cesenvironmental.com

From: Jesse Garza [mailto:jgarza@slay.com]
Sent: Friday, July 24, 2009 1:45 PM
To: Dana Carter
Subject: Drums

Dana, here's our inventory on the waste drums:
11-MDI
4-DES
1-Polyol
7-Pit sludge
16-Polymers

Jesse Garza
Tank Wash Manager
Slay Transportation Houston
Ofc: 281-452-9000 #3 #1
Fax: 281-458-0524

LSalazar22

Question ided Vaction?

figi Answer:

2284 Pin

C#0722SYS3087

$342.04

1436.57

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Disposal	15 yards	$75.00/yd	$1,125.00
Air MachineWashout	1 washout	$225.00/washout	$225.00
Compliance Fee		1%	$45.05
	Estimated	**Total**	**$ 4,550.05**

Conditions/Assumptions:

1. A profile must be approved prior to scheduling any disposal. Profile must be given at least 72 hours for approval.
2. The above total cost is based on estimated time and materials. You will be invoiced for actual time and materials.
3. There is a 4 hour minimum on all field service jobs.
4. Cancelations must be given 24 hours in advance. If 24 hours notice is not given, a fee will be charged.
5. Transportation rate does not include any applicable fuel surcharges as per the U.S. Department of Energy National Diesel Average. Fuel surcharges are evaluated on a monthly basis. The current rate for June 2009 is 9.5%. *Utililty truck charge includes fsc.
6. Energy surcharge will be charged according to the national average utility pricing index on all disposal services. At the time of this quote, the energy surcharge is 0.0%. Rate is subject to change on a monthly basis.
7. A 1% Compliance surcharge will be charged in order to stay compliant with federal and state government requirements. This surcharge is applied against the entire invoice (including other surcharges and direct fees).

Thank you again for the opportunity and your interest in CES Environmental Services, Inc. If you have any questions or need additional assistance, feel free to contact me at (713) 748-9804.

Sincerely,
Dana R. Carter
Account Manager

Lori Salazar

CES Environmental Services, Inc.

This notice contains important information about your right to COBRA continuation coverage, which is a temporary extension of coverage under the Plan. **This notice generally explains COBRA continuation coverage, when it may become available to you and your family, and what you need to do to protect the right to receive it.**

The right to COBRA continuation coverage was created by a federal law, the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA). COBRA continuation coverage can become available to you when you would otherwise lose your group health coverage. It can also become available to other members of your family who are covered under the Plan when they would otherwise lose their group health coverage. For additional information about your rights and obligations under the Plan and under federal law, you should review the Plan's Summary Plan Description or contact the Plan Administrator.

What is COBRA Continuation Coverage?

COBRA continuation coverage is a continuation of Plan coverage when coverage would otherwise end because of a life event known as a "qualifying event." Specific qualifying events are listed later in this notice. After a qualifying event, COBRA continuation coverage must be offered to each person who is a "qualified beneficiary." You, your spouse, and your dependent children could become qualified beneficiaries if coverage under the Plan is lost because of the qualifying event. Under the Plan, qualified beneficiaries who elect COBRA continuation coverage must pay for COBRA continuation coverage.

If you are an employee, you will become a qualified beneficiary if you lose your coverage under the Plan because either one of the following qualifying events happens:

- Your hours of employment are reduced, or
- Your employment ends for any reason other than your gross misconduct.

If you are the spouse of an employee, you will become a qualified beneficiary if you lose your coverage under the Plan because any of the following qualifying events happens:

- Your spouse dies;
- Your spouse's hours of employment are reduced;
- Your spouse's employment ends for any reason other than his or her gross misconduct;
- Your spouse becomes entitled to Medicare benefits (under Part A, Part B, or both); or
- You become divorced or legally separated from your spouse.
- Your dependent children will become qualified beneficiaries if they lose coverage under the Plan because any of the following qualifying events happens:
- The parent-employee dies;
- The parent-employee's hours of employment are reduced;
- The parent-employee's employment ends for any reason other than his or her gross misconduct;
- The parent-employee becomes entitled to Medicare benefits (Part A, Part B, or both);
- The parents become divorced or legally separated; or
- The child stops being eligible for coverage under the plan as a "dependent child."

When is COBRA Coverage Available?

The Plan will offer COBRA continuation coverage to qualified beneficiaries only after the Plan Administrator has been notified that a qualifying event has occurred. When the qualifying event is the end of employment or reduction of hours of employment, death of the employee, or the employee's becoming entitled to Medicare benefits (under Part A, Part B, or both), the employer must notify the Plan Administrator of the qualifying event.

You Must Give Notice of Some Qualifying Events

For the other qualifying events (divorce or legal separation of the employee and spouse or a dependent child's losing eligibility for coverage as a dependent child), you must notify the Plan Administrator within 60 days after the qualifying event occurs. You must provide this notice to your Human Resource and Support Services Supervisor. You will need present the appropriate documentation supporting your request for COBRA coverage (e.g., Birth Certificate, Certificate of Divorce or Legal Separation...etc).

How is COBRA Coverage Provided?

Once the Plan Administrator receives notice that a qualifying event has occurred, COBRA continuation coverage will be offered to each of the qualified beneficiaries. Each qualified beneficiary will have an independent right to elect COBRA continuation coverage. Covered employees may elect COBRA continuation coverage on behalf of their spouses, and parents may elect COBRA continuation coverage on behalf of their children.

COBRA continuation coverage is a temporary continuation of coverage. When the qualifying event is the death of the employee, the employee's becoming entitled to Medicare benefits (under Part A, Part B, or both), your divorce or legal separation, or a dependent child's losing eligibility as a dependent child, COBRA continuation coverage lasts for up to a total of 36 months. When the qualifying event is the end of employment or reduction of the employee's hours of employment, and the employee became entitled to Medicare benefits less than 18 months before the qualifying event, COBRA continuation coverage for qualified beneficiaries other than the employee lasts until 36 months after the date of Medicare entitlement. For example, if a covered employee becomes entitled to Medicare 8 months before the date on which his employment terminates, COBRA continuation coverage for his spouse and children can last up to 36 months after the date of Medicare entitlement, which is equal to 28 months after the date of the qualifying event (36 months minus 8 months). Otherwise, when the qualifying event is the end of employment or reduction of the employee's hours of employment, COBRA continuation coverage generally lasts for only up to a total of 18 months. There are two ways in which this 18-month period of COBRA continuation coverage can be extended.

Disability extension of 18-month period of continuation coverage

If you or anyone in your family covered under the Plan is determined by the Social Security Administration to be disabled and you notify the Plan Administrator in a timely fashion, you and your entire family may be entitled to receive up to an additional 11 months of COBRA continuation coverage, for a total maximum of 29 months. The disability would have to have started at some time before the 60th day of COBRA continuation coverage and must last at least until the end of the 18-month period of continuation coverage. You will need to provide the appropriate supporting documentation in order to request a disability extension of coverage.

Second qualifying event extension of 18-month period of continuation coverage

If your family experiences another qualifying event while receiving 18 months of COBRA continuation coverage, the spouse and dependent children in your family can get up to 18 additional months of COBRA continuation coverage, for a maximum of 36 months, if notice of the second qualifying event is properly given to the Plan. This extension may be available to the spouse and any dependent children receiving continuation coverage if the employee or former employee dies, becomes entitled to Medicare benefits (under Part A, Part B, or both), or gets divorced or legally separated, or if the dependent child stops being eligible under the Plan as a dependent child, but only if the event would have caused the spouse or dependent child to lose coverage under the Plan had the first qualifying event not occurred.

If You Have Questions

Questions concerning your Plan or your COBRA continuation coverage rights should be addressed to the contact or contacts identified below. For more information about your rights under ERISA, including COBRA, the Health Insurance Portability and Accountability Act (HIPAA), and other laws affecting group health plans, contact the nearest Regional or District Office of the U.S. Department of Labor's Employee Benefits Security Administration (EBSA) in your area or visit the EBSA website at www.dol.gov/ebsa. (Addresses and phone numbers of Regional and District EBSA Offices are available through EBSA's website.)

Keep Your Plan Informed of Address Changes

In order to protect your family's rights, you should keep the Plan Administrator informed of any changes in the addresses of family members. You should also keep a copy, for your records, of any notices you send to the Plan Administrator.

Plan Contact Information

Aetna
PO Box 88874
Chicago, Il 60695-1874
1-800-323-9930

Please sign below indicating that you have read and understand the terms of your rights to continued medical coverage under the Consolidated Omnibus Budget Reconciliation Act.

Employee Name (print) _____ Date: _____

Employee Signature _____

PROPRIETARY and CONFIDENTIAL

Property of CES Environmental Services, Inc & Port Arthur Chemical & Environmental Services, LLC.

Please check one:

☐ CES Environmental Services, Inc.

☐ Port Arthur Chemical and Environmental, LLC

EMPLOYMENT APPLICATION

Equal Opportunity Employer

COMPLETE THIS APPLICATION IN ITS ENTIRETY.

- Type or Print in Blue or Black Ink.
- Specify the Position for which you are applying.
- Sign your Name on the back of the Application. All Information provided is subject to Verification.
- Applications that are not completed in their entirety will not be considered for Employment reasons.
- **Note:** You may be required to complete a Post-Offer Medical Examination and/or Drug Screen as a condition of Employment.
- Applications for Employment are retained in CES Environmental Services, Inc. Active File for 60 Days only.
- Applicants must reapply after that time if they are interested in specific posted openings.

POSITION APPLYING FOR

Position: _____

Date Available: _____

How did you hear about this Position? _____

_____

_____

Personal Information

_____

Name | Social Security Number | Date of Birth

_____

Other Names Used | Drivers License

_____

Address | City | County | State | Zip Code

_____

Home Phone | Business Phone | Cell Phone

_____

Email Address

_____

If you have lived at your Current Address for Less Than Seven Years, please provide Previous Address(es). Use the back of this sheet if necessary.

Are you Seeking Full-Time Position ☐ Part-Time Position ☐ Temporary Position ☐

When will you be available for Employment? _____ What Schedule are you Available to Work? 1st ☐ 2nd ☐ 3rd ☐

Will you Travel? Yes ☐ No ☐ Relocate? Yes ☐ No ☐

Indicate any Travel or Relocation Limitations: _____

Are you at least 18 Years of Age? Yes ☐ No ☐

Are you currently authorized to work in the United States? Yes ☐ No ☐ Do You Possess a TWIC card? Yes ☐ No ☐

Have you ever worked for or applied for work at CES Environmental Services or Port Arthur Chemical & Environmental Services, LLC. previously? Yes ☐ No ☐

If Yes, When, What Position, and for Which Department? _____

Do you have any Relatives working for CES Environmental Services or Port Arthur Chemical & Environmental Services, LLC?
Yes ☐ No ☐

Personal Information *(Continued from First Page)*

Do you have a Pending Criminal Charge against you and/or have you ever been Convicted of a Crime, excluding Misdemeanors and Offenses which have been Annulled, Expunged or Sealed by the Court?
Yes ☐ No ☐ If Yes, please explain below. You may attach another Sheet if necessary. **Note:** A Conviction Record will not automatically Bar Employment with CES Environmental Services or Port Arthur Chemical & Environmental Services, LLC.

Nature of Charge _____ Disposition _____ Date _____

Nature of Charge _____ Disposition _____ Date _____

Education

School	Address	Study	Dates	Graduate?	Degree
High School					
College/University					
Business School					
Other					

Job Related Skills, Training and/or Qualifications

Please list any Job related Skills, Certifications or Training you have: Are you TWIC certified? Yes ☐ No ☐

What Language(s) do you Speak? _____

At what Proficiency Level? _____

Military Service History

Are you currently or have you been a Member of the U.S. Armed Forces? Yes ☐ No ☐
If so, which Branch of Service? Army ☐ Navy ☐ Air Force ☐ Marines ☐ Coast Guard ☐
What was your Discharge Status? Honorable ☐ Other Than Honorable ☐

Service Entry Date _____ Discharge Date _____

Comments (Note any Special Training or Recognition received): _____

PROPRIETARY and CONFIDENTIAL

Property of CES Environmental Services, Inc & Port Arthur Chemical & Environmental Services, LLC.

List each Position held, starting with your most recent. Account for all periods of time, including Full-Time, Part-Time, and Temporary Employment as well as periods of Unemployment. List the Duties you performed and identify Product Lines, Processes, Equipment, Materials, and Financial Responsibilities. Please use additional paper if necessary. **PLEASE COMPLETE IN ITS ENTIRETY. CONTACT INFORMATION IS REQUIRED.**

Previous Employment

Name of Present or Previous Employer / to / Dates (Month/Year)

Starting Title | Present/Last Title | Starting Pay | Ending Pay

Supervisor | Supervisor's Title | Phone

Address | City | State | Zip Code

Duties

Reason for Leaving

May we Contact this Employer? Yes ☐ No ☐

Previous Employment

Name of Present or Previous Employer / to / Dates (Month/Year)

Starting Title | Present/Last Title | Starting Pay | Ending Pay

Supervisor | Supervisor's Title | Phone

Address | City | State | Zip Code

Duties

Reason for Leaving

May we Contact this Employer? Yes ☐ No ☐

Previous Employment

Name of Present or Previous Employer / to / Dates (Month/Year)

Starting Title | Present/Last Title | Starting Pay | Ending Pay

Supervisor | Supervisor's Title | Phone

Address | City | State | Zip Code

Duties

Reason for Leaving

May we Contact this Employer? Yes ☐ No ☐

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References (Please list Three References)

Name _____ Relationship _____

Title _____ Telephone # _____ Work _____ Home _____

Name _____ Relationship _____

Title _____ Telephone # _____ Work _____ Home _____

Name _____ Telephone # _____ Work _____ Home _____

Title _____ Relationship _____

Authorization for Background Check

As part of our procedure for Processing your Employment Application and determining your eligibility for a Position with CES Environmental Services, Inc (CES) or Port Arthur Chemical & Environmental Services, LLC. (PACES) Criminal Records and other Background Checks may be obtained regarding you for Employment purposes. I hereby Consent to and Authorize CES and PACES or its Designated Agent to obtain One or More Consumer/Investigative Reports in connection with my Application for Employment. Such Reports may include, but are not limited to Information regarding my Criminal Record, Driving Record, Credit, Employment History, and Performance or other Investigative Reports, from such Agencies which may include, but are not limited to, Criminal Records Search Agencies and Consumer Information/Credit Bureaus. I acknowledge that I have read the Information contained on this Form carefully and Certify that all of the Information on the attached Data Sheet and in my Application for Employment is true and complete to the best of my knowledge. I also hereby release CES and PACES and its Officers, Directors, Shareholders, Employees, and other Agents and all other Persons, Companies, Schools, Consumer Information Agencies, Records Search Firms and other Entities of and from any and all potential liability arising from inquiries by CES and PACES and its Agents in connection with the Background Checks and/or Compilation or use of such Reports regarding me.

Signature: _____ Date: _____

Printed Name: _____

Acknowledgements

I certify that all the Information contained in this Application (and/or accompanying Resume, if any) is true and correct. It is understood and agreed that any misrepresentation made in this Application (and/or accompanying Resume) will be sufficient cause for separation from CES Environmental Services, Inc. (CES) or Port Arthur Chemical & Environmental Services, LLC. (PACES) if I have been Employed. Furthermore, I understand that I am free to Resign at any time, and CES or PACES reserves the right to Terminate my Employment at any time, with or without notice, and that no Representative of CES or PACES has the authority to make assurances to the contrary. Further, I understand that neither this Application nor any Handbook for Employees is intended to be or shall be construed to be an offered Contract or a Contract between CES or PACES and any of its Employees. If Employed by CES or PACES, I agree to conform to the Company's Policies and Procedures. I acknowledge and understand that I am Required to Sign the Universal Mandates Acknowledgement upon Hire.

Signature: _____ Date: _____

Reference Verification: Authorization for Release of Information
Non - DOT Regulated Positions

This section to be completed by prospective employer and signed by the applicant.

Employee Printed or Typed Name: _____

Employee SS or ID Number: _____

I hereby consent to and authorize CES or its designated agent to obtain one or more consumer/investigative reports in connection with my application for employment. Such reports may include, but are not limited to information regarding my criminal record, driving record, credit, employment history and performance, or other investigative reports, from such agencies which may include, but are not limited to, criminal records search agencies and consumer information/credit bureaus. I acknowledge that I have read the information contained on this form carefully and certify that all of the information on the attached data sheet and in my application for employment are true and complete to the best of my knowledge. I also hereby release CES Environmental Services, Inc. and its officers, directors, shareholders, employees and other agents and all other persons, companies, schools, consumer information agencies, records search firms and other entities of and from any and all potential liability arising from inquiries by CES and its agents in connection with the background checks and/or compilation or use of such reports regarding me.

_____

Signature Date

_____

Printed Name

Prospective Employer:

CES Environmental Services, Inc
4904 Griggs Rd
Houston, TX 77021
Office: 713-676-1460
Fax: 713-676-1676
Attn: Human Resource

Previous Employer Name: _____

Address: _____

_____

Phone: _____ **Fax:** _____

This section to be completed by the Previous Employer and transmitted by mail or fax to Prospective Employer.

1. **Please verify dates of employment** _____ **Title** _____
2. **Please provide description of duties** _____
3. **Was this employee timely and dependable?** Yes ☐ No ☐ **Honest?** Yes ☐ No ☐
4. **Is this employee eligible for rehire?** Yes ☐ No ☐

Name of the person providing the verification information: _____

Title: _____ **Phone:** _____ **Date:** _____

Reference Verification: Authorization for Release of Information DOT Regulated Positions

This Section to be completed by prospective Employer and Signed by the Applicant.

Employee Printed or Typed Name: _____

Employee SS or ID Number: _____

I hereby authorize the release of Information from my Department of Transportation regulated Drug and Alcohol Testing Records by my previous Employer(s). This release is in accordance with DOT Regulation 49 CFR Part 40, Section 40.25. I understand that Information to be released is limited to the following DOT Regulated Items:

- Alcohol Tests with a result of 0.04 or Higher.
- Verified Position Drug Tests.
- Refusals to be Tested.
- Other Violations of DOT Agency Drug and Alcohol Testing Regulations.
- Information obtained from previous Employers of a Drug and Alcohol Rule Violation.
- Documentation if any, of completion of the return to Duty Process following a Rule Violation.

Employee Signature: _____ Date: _____

Prospective Employer:

CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Office: 713-676-1460
Fax: 713-676-1676
Attn: Human Resource

Previous Employer Name: _____

Address: _____

_____

Phone: _____ Fax: _____

This Section to be completed by the Previous Employer and Transmitted by Mail or Fax to Prospective Employer.

1. Did the Employee have Alcohol Tests with a result of 0.04 or Higher?
2. Did the Employee have verified Position Drug Tests?
3. Did the Employee Refuse to be Tested?
4. Did the Employee have other Violations of DOT Agency Drug and Alcohol Testing Regulations?
5. Did a previous Employer Report a Drug and Alcohol Rule Violation to you?
6. If you answered "Yes" to any of the above Items, did the Employee complete the return to Duty Process?

NOTE: If you answered "Yes" to Item 5, you must provide the previous Employer's Report. If you answered "Yes" to Item 6, you must also Transmit the appropriate return to Duty Documentation (e.g. follow up Testing Record).

Name of the Person providing the Verification Information: _____

Title: _____ Phone: _____

Date: _____

DOT Regulated Positions (*Continued*)

Have you Violated any of the DOT Drug/Alcohol Violations listed below with any DOT Regulated Employer(s) that you have either applied to or been Employed with during the past Two Years prior to the Date of this Application?

DOT Drug/Alcohol Violations

1. Alcohol Test with a result of .04 or Higher Alcohol Concentration.
2. Verified Position Drug Test.
3. Refusals to be Tested (including Verified Adulterated or Substituted Drug Results).
4. Other Violations of DOT Agency Drugs and Alcohol Testing Regulations.

Yes ☐ No ☐

If Yes, please complete Section B of this Application. If No, please Sign below.

Signature: _____ Date: _____

SECTION B

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

I hereby Certify that the Information set forth in this Application is true and may be verified. I understand that Falsified Statements or Omissions from this Form shall be considered sufficient reason for Rejection of my Application for Employment. If already Employed, such Falsification shall be considered sufficient cause for Dismissal.

Signature: _____ Date: _____

PROPRIETARY and CONFIDENTIAL
Property of CES Environmental Services, Inc & Port Arthur Chemical & Environmental Services, LLC.

DOT Regulated Positions

If you are applying for a Position that is governed by DOT Regulation, please complete the following Information.

Social Security Number_____ Driver License Number_____ State_____

Name as it appears on your License_____

_____

Please print any other Names you have used

Gender Male ☐ Female ☐
Race Asian ☐ Black (Non-Hispanic) ☐ Hispanic White ☐ Other ☐

Have you applied to or been Employed with a Department of Transportation (DOT) Regulated Employer(s) in a Safety Sensitive Position during the Two Years prior to the Date of this Application or Transfer? Yes☐ No ☐

If yes, please complete Section A of this Application. If No, please Sign below.
I hereby Certify that the Information set forth in this Application is true and may be verified. I understand that Falsified Statements or Omissions from this Form shall be considered sufficient reason for Rejection of my Application for Employment. If already Employed, such Falsification shall be considered sufficient cause for Dismissal.

Signature: _____ Date: _____

SECTION A

Please list all DOT Regulated Employers you have either applied to or been Employed with in a Safety Sensitive Position during the Two Years prior to this Date of Application:

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

_____
Company Name

_____
Address

_____
Phone Position Dates of Employment

Please turn this Page over to complete Section Two of this Application.

CES/PACES Company Policy

THINK... USE GOOD JUDGMENT	CES Environmental Services, Inc.	***YOUR ATTITUDE COUNTS***
Date Issued: 07/24/2007	DEPARTMENT(S): -Operations -Processing -Maintenance and Field Services -Sales, Finance, and Administration	Revised Date: 06/04/2009
Policy Number: 07-008	Policy Title: Time Card Use	Policy Description: Explanation of when Hourly Employees need to clock in and clock out.

1 Purpose:

This Policy is in place in order to ensure **CES Environmental Services, Inc. (CES) and Port Arthur Chemical and Environmental Services, LLC (PACES) Employees** are correctly compensated for their time and that the company is managed as efficiently as possible.

2 General:

All Hourly and Salary **Employees** are required to clock in and out to correctly represent the time spent working for the company. Repeated failure to clock in or out will result in disciplinary action up to and including termination.

The only **Employees** exempt from punching the time clock are **Drivers** (when they are out of town); as well as those individuals expressly authorized by the President of CES/PACES. **Drivers** who are out of town are required to keep a log of all driving and work hours; which should be submitted to their **Logistics Supervisor** for approval.

If an **Employee** cannot remember if he/she punched or not, it is always better to punch again. If the **Employee** forgets to punch his/her time clock, they must inform their **Upper or Mid Level Manager** immediately. The **Upper or Mid Level Manager** will then report the missed punches to the **Office Supervisor** for corrections.

Furthermore, all **Employees** are required to take a minimum thirty (30) minute lunch break and to clock out and in before and after the lunch break. Failure to clock out or in for lunch will result in a deduction of one (1) hour for that day, regardless of whether or not the **CES Employee** actually took a one (1) hour lunch break.

Employee Name: _____ Signature _____ Date: _____

PROFILE EXPIRATION DETAILS

	Waste Code	TSDF	Profile Approval Number	Expiration Date	ast ran analytical	Required analyses for recertification
Class 1 Solids	90224091	BFI - Anahuac	L55Y59123	12/2 ~~12/27/08~~	10/17/07	
Class 1 Solids	90224091	Republic	06-0003	12/31/08	06/25/08	
Class 1 Solids	90224091	WM - Coastal Plains	CP-102956TX	07/30/09	12/15/06	
Class 1 Solids	90224091	WM - Conroe Landfill	CN-102956TX	07/30/09	12/15/06	
Class 1 Sludges	90206091	BFI - Anahuac	L55Y59121	12/27/08	10/17/07	
Class 1 Sludges	90206091	Republic	06-0002	12/31/08	06/25/08	
Class 1 Sludges	90206091	WM - Conroe Landfill	CN-104964TX	01/07/10	10/17/07	
tank wash sump sludge	90011191	Republic	06-0001	12/31/08	06/25/08	
roll-off box	90025191	Republic	04-0198	12/31/08	06/25/08	
Class 2 Solids	90234092	BFI - McCarty	L53Y59124	12/15/08	10/17/07	
Class 2 Solids	90234092	Republic	06-0006	12/31/08	06/25/08	
Class 2 Solids	90234092	WM- Coastal Plains	CP-104945TX	01/23/10	10/17/07	
Class 2 Sludges	90216092	BFI - McCarty	L53Y59122	12/15/08	10/17/07	
Class 2 Sludges	90216092	Republic	06-0005	12/31/08	06/25/08	
Class 2 Sludges	90216092	WM - Coastal Plains	CP-104967TX	01/23/10	10/17/07	
Class 1 Liquids	90241191	Newpark	0808081014BH	08/08/09	07/16/07	
Class 1 Liquids (Alcohol Exemption w.w)	90261191	Newpark	0111091071BH	01/10/10	01/07/08	
Class 1 Liquids	9029319H	US Ecology Texas, L.P.	09005427-0	01/03/09	12/14/07	

EPAHO004000286

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Disposal Facility:	Waste Profile #

I. Generator Information

Generator Name: Rolled Alloys			
Generator Site Address: 9818 E. Hardy Rd			
City: Houston	County: Harris	State: TX	Zip: 77093
Generator Mailing Address (if different):			
City:	County:	State:	Zip:
Generator Contact Name:		Email:	
Phone Number: (713)696-2216		Fax Number: (713)691-0247	

II. Waste Stream Information

Name of Waste: Cutting Sand

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ☒ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

☒ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Sample Date:	Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE
Sample ID Numbers:	

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Lori Salazar / Agent	Rolled Alloys
Authorized Representative Name And Title (Printed)	Company Name
Lori Salazar	7/20/09
Authorized Representative Signature	Date

7/20 7/21 7/22 7/23 7/24 7/25

CES Environmental Services, Inc.
Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	**Champion**	**RohMax USA, Inc.**	**Boise Cascade**	**Champion**	**Boise Cascade -closed 4/8**
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	**Champion**	**Boise Cascade**	**International Paper - Pineville**	**Farouk**	**International Paper - Pineville**
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	**Farouk**	**Champion**	**Liberty Forge**	**Champion**	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz. Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	**International Paper - Pineville**		**RohMax USA, Inc.**	**SUNDAY**
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	
	Smith International			**Boise Cascade**	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			**International Paper - Pineville**	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

Please make sure that all the Champion Loads go or Canceled

EPAHO004000288

7/13 7/14 7/15 7/16 7/17

CES Environmental Services, Inc.

Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	**Champion**	**RohMax USA, Inc.**	**Boise Cascade**	**Champion**	**Boise Cascade -closed 4/8**
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	**Champion**	**Boise Cascade**	**International Paper - Pineville**	**Farouk**	**International Paper - Pineville**
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	**Farouk**	**Champion**	**Liberty Forge**	**Champion**	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz. Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	**International Paper - Pineville**		**RohMax USA, Inc.**	**SUNDAY**
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	
	Smith International			**Boise Cascade**	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			**International Paper - Pineville**	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

Air Mover
Diaphr pump
How many
Guys

EPAHO004000289

BOX VANS

EPMTY TRL: 1. 248

2. 242

LOAED TRL : 1. 247 LOADED/FERRIC

2. 418

3. 230

4. 245

WORKING TRL : 1. 217

ROLLOFF BOXES

FULL BOXES 1. 622 CLASS 2 SLUDGE J#88878 7/14/09

EMPTY BOXES : 1. 621

2. 625

3. 643

4. 623

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Praxair Inc
Address: 622 Tidal Road
City: Deer Park **State:** TX **Zip:** 77536
Contact: Kiranmai Valluri **Title:**
Phone Number: 281-954-1867 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXD008073421
State ID No: 30296 **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Praxair Inc
Address: PO Box 808
City: Tonawanda **State:** Ny **Zip:** 14151
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Spent Carbon
Detailed Description of Process Generating Waste:

cabon used to polish wastewater prior to discharge

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: dark **Odor:** none

Specific Gravity (water=1): 1.2 **Density:** 9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 3000 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: 00174041

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Solids

Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		6-7		<25	mg/l	<25	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1000	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	*Ranges are acceptable*	*or %*
~~Spent Carbon~~	100	%
Gasoline		

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** *based upon the following generator knowledge:*

TCLP Metals:
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** _____

Printed Name/Title: _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: _____ ☐ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$75.00/yard plus freight

75/yd

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

Tests to be redirected

5. Treatment and Handling Protocol:

Redirect toas Class 1 Solids

Redirected to landfill Class 2 Solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

BOX VANS

EPMTY TRL: 1. 246

2. 245

LOAED TRL : 1. 247 LOADED/FERRIC

2. 418

3. 242

4. 230

WORKING TRL : 1. 244

2. 217

ROLLOFF BOXES

FULL BOXES 1. 623 CLASS 1 SLUDGE OFFLOADING TODAY

2. 643 CLASS 1 SLUDGE OFFLOADING TODAY

3. 625 CLASS 1 SLUDGE OFFLOADING TODAY

EMPTY BOXES : 1. 621

2. 622

7/6/09

BOX VANS

EPMTY TRL: 1. 246

2. 244

LOAED TRL : 1. 247 LOADED/FERRIC

2. 418

3. 242

4. 217

WORKING TRL : 1. 230

2. 245

ROLLOFF BOXES

FULL BOXES 1. 623 CLASS 1 SLUDGE OFFLOADING TODAY

2. 621 CLASS 2 SLUDGE OFFLOADING TODAY

3. 635 CLASS 1 SLUDGE OFFLOADING TODAY

4. 624 CLASS 2 SLUDGE OFFLOADING TODAY

EMPTY BOXES : 1. 625

7/6 7/7 7/8 7/9 7/10

CES Environmental Services, Inc.

Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	Champion	RohMax USA, Inc.	Boise Cascade	Champion	Boise Cascade -closed 4/8
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	Champion	Boise Cascade	International Paper - Pineville	Farouk	International Paper - Pineville
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	Farouk	Champion	Liberty Forge	Champion	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz. Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	International Paper - Pineville		RohMax USA, Inc.	SUNDAY
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	
	Smith International			Boise Cascade	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			International Paper - Pineville	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

EPAHO004000299

Lori Salazar

From: Dana Carter
Sent: Tuesday, June 30, 2009 2:24 PM
To: Lori Salazar
Cc: Jennifer Rust; Javier Rodriguez; Steve Stricker
Subject: FW: Thursday

Lori – please schedule a field service crew for San Jacinto College District South Campus Tank Cleanout for Thursday. T his job will be exactly like the job we did on the North campus (job #86041) with a few minor differences.

Job Information:

Folder ID: San Jacinto College District (South Campus – Beamer Road) TES Tank Cleanout

Requisition Number: R88588 J# 88465

Contact: Bill Miller 281-389-1840

Equipment/Supplies etc:
Air Machine with operator
3 field techs
PPE – standard
200 feet flex hose
Emergency Trailer
Confined space entry permit
Pressure washer and hoses
Utility truck and tools – squeegee etc to help push sludge towards hose

1) Pump out sludge from bottom of tank (sludge is pretty fine so it should be a very quick pump out)

2) Use pressure washer (if needed) to help move solids towards hose. Please make sure to pressure wash the diffusers at the bottom of the tank.

5) haul solids in airmachine back to CES

Let me know if you have any questions.

Thanks!
Dana

Dana Carter
Account Manager
CES Environmental Services Inc.
Port Arthur Chemical and Environmental Services, LLC.
Office: 713-676-1460
Cell: 713-748-9804
Fax: 713-748-8664
visit us at www.cesenvironmental.com

From: Jennifer Rust
Sent: Tuesday, June 30, 2009 12:57 PM
To: Dana Carter

Laboratory Analysis Report

Total Number of Pages: 9

Job ID : 09060624

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
GATX Hearne WW

Report To :	Client Name:	CES Environmental	P.O.#.: 0609-32
	Attn:	Dana Carter	Sample Collected By: Dana Carter
	Client Address:	4904 Griggs Rd	Date Collected: 06/23/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Wastewater Solids	Sludge	09060624.01

Sonia West

Released By: Sonia West
Title: Senior Project Manager
Date: 6/26/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/30/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 06/23/2009 13:25

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09060624

Date: 6/26/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

EPAHO004000302

LABORATORY TEST RESULTS

Job ID : 09060624

Date 6/26/2009

Client Name: CES Environmental
Attn: Dana Carter
Project Name: GATX Hearne WW

Client Sample ID: Wastewater Solids
Date Collected: 06/23/09
Time Collected: 08:00
Other Information:

Job Sample ID: 09060624.01
Sample Matrix Sludge

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				06/24/09 07:45	SG
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			06/26/09 10:15	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	180	mg/Kg	1	25			06/25/09 08:46	KS
SW-846 9045D	Corrosivity, pH								
	pH	8.67	s.u.					06/24/09 12:20	RK

QUALITY CONTROL CERTIFICATE

Job ID : 09060624 **Date :** 6/26/2009

Analysis : **Corrosivity, pH** **Method :** **SW-846 9045D** **Reporting Units :** **s.u.**

QC Batch ID : Qb09062406 **Created Date :** 06/24/09 **Created By :** Rkurup

Samples in This QC Batch : 09060624.01

QC Type: Duplicate

QC Sample ID: 09060470.03

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	8.96	8.98	s.u.	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO004000304

QUALITY CONTROL CERTIFICATE

Job ID : 09060624 **Date :** 6/26/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09062422 **Created Date :** 06/24/09 **Created By :** Sgarcia

Samples in This QC Batch : 09060624.01

QC Type: Duplicate

QC Sample ID: 09060470.03

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	86	104	83	85	102	1.2	20	75-125	

Refer to the Definition page for terms.

EPAHO004000305

QUALITY CONTROL CERTIFICATE

Job ID : 09060624 **Date :** 6/26/2009

Analysis : Reactive Sulfide **Method :** SW-846 7.3 **Reporting Units :** mg/Kg

QC Batch ID : Qb09062619 **Created Date :** 06/26/09 **Created By :** Ksudha

Samples in This QC Batch : 09060624.01

Sample Preparation : PB09062610 **Prep Method :** SW-846 7.3 **Prep Date :** 06/25/09 08:45 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09060470.03

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	1000	880	88	1000	880	88	0	20	40-120	

Refer to the Definition page for terms.

EPAHO004000306

QUALITY CONTROL CERTIFICATE

Job ID : 09060624 **Date :** 6/26/2009

Analysis : Reactive Cyanide **Method :** SW-846 7.3 **Reporting Units :** mg/Kg

QC Batch ID : Qb09062622 **Created Date :** 06/26/09 **Created By :** Ksudha

Samples in This QC Batch : 09060624.01

Sample Preparation : PB09062613 **Prep Method :** SW-846 7.3 **Prep Date :** 06/25/09 08:45 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09060470.03

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	25	10.9	43.7	25	11.3	45.2	3.3	20	40-120	

Refer to the Definition page for terms.

EPAHO004000307

A & B Labs — *Chain of Custody* — The Chain of Custody is a Legal Document — Page ____ of ____

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 0901a624

5. Project #

1. REPORT TO:		2. INVOICE TO:	
Company:	CES Environmental	Company:	CES Environmental
Address:		Address:	
Contact:	Dana Carter	Contact:	Juanita Thomas
Phone:	713-748-9801	Phone:	713-6716-1460
Fax: ☐	713-748-8604	Fax: ☐	713-~~6716~~-748-9801
E-mail: ☐	dcarter@cesenvironmental.com	E-mail: ☐	jthomas@cesenvironmental.com

3. PO # 0e09-32

4. Turnaround Time (Business Days)
- ☐ 1 Day*
- ☐ Other
- ☐ 2 Days*
- ☒ 3 Days*
- *Surcharge applies
- ☐ 7 Days - Standard

6. Project Name/Location: GATX Hearne WV

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Dana Carter CES Environmental
Sampler's Signature & Date: Dana Carter

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	No. of Containers	Analyses/Methods: PCL	18. REMARKS
01	MB Wastewater Solids	10.23.09	8am	✓		~~X~~		X					X	

13. No. of Containers
14. Containers*
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 Dana Carter	10.23.09	1250			
2					
3			21. RECEIVED BY LABORATORY	10/23/09	1325

22. KNOWN HAZARDS/COMMENTS

Temperature: ____ °C

Intact: Y or N Initials ____

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

*Containers: **VOA** - 40 ml vial; **A/G** - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; **P/O** - Plastic/other ____

**Preservatives: C - Ice; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other ____

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING ____ RENTAL ____ P/U ____

EPAHO00400308

Sample Condition Checklist

Date : **06/26/09**

A&B JobID : **09060624**	Date Received : **06/23/2009**	Time Received : **1:25PM**
Client Name : **CES Environmental**		
Temperature : **23.4°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	Cooler seal present and signed.	N/A	
2.	Sample(s) in a cooler.		X
3.	If yes, ice in cooler.		X
4.	Sample(s) received with chain-of-custody.	X	
5.	C-O-C signed and dated.	X	
6.	Sample(s) received with signed sample custody seal.	N/A	
7.	Sample containers arrived intact. (If no comment).	X	
8.	Matrix : Water ☐ Soil ☐ Liquid ☐ Sludge ☑ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	Sample(s) were received in appropriate container(s).	X	
10.	Sample(s) were received with proper preservative	N/A	
11.	All samples were logged or labeled.	X	
12.	Sample ID labels match C-O-C ID's	X	
13.	Bottle count on C-O-C matches bottles found.	X	
14.	Sample volume is sufficient for analyses requested.	X	
15.	Samples were received within the hold time.	X	
16.	VOA vials completely filled.	N/A	
17.	Sample accepted.	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Mgonzalez

Check in by/date : Mgonzalez / 06/23/2009

BOX VANS

EPMTY TRL:

LOAED TRL : 1. 247 LOADED/FERRIC

2. 418

3. 245

4. 242

WORKING TRL : 1. [redacted]

2. 230

ROLLOFF BOXES

FULL BOXES 1. 623 CLASS 1 SLUDGE OFFLOADING TODAY

2. 625 CLASS 1 SOLIDS/LIQUIDS

EMPTY BOXES : 1. 622

2. 621

3. 643

4. 624

Lori Salazar

From: Dana Carter
Sent: Friday, June 26, 2009 9:29 AM
To: Lori Salazar
Subject: profile to do

TT

Lori – I need a profile done that I know you can help with. Job will be for San Jacinto College District South Campus. A few months ago we did the exact same job for the North campus. Pull up the profile for that job and copy it for the south campus. Really all that will change is the address.

Let me know if you have any questions.

Thanks
dana

(1) 225
268-2856

Dana Carter
Account Manager
CES Environmental Services Inc.
Port Arthur Chemical and Environmental Services, LLC.
Office: 713-676-1460
Cell: 713-748-9804
Fax: 713-748-8664
visit us at www.cesenvironmental.com

(972)712-7205
5123 for Evelyn
7/2

Salzgitter Mannesmann
~~Stainless~~
Stainless tubes

TRIPLE RS
Services

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : San Jacinto College District
Address : 5800 Uvalde Rd. 4624 Fairmont Pkwy.
City, State, Zip : Pasadena TX 77049
Contact : Bill Miller **Title :**
Phone No : (281) 478-2736 **Fax :** (281) 478-2731
24 / HR Phone :
U.S EPA I.D No : na
State I.D : na **SIC Code**

SECTION 2: Billing Information

Company : San Jacinto College District
Address : 4624 Fairmont Pkwy.
City, State, Zip : Pasadena TX 77504
Contact : Bill Miller **Title :**
Phone No : (281) 478-2736 **Fax :** (281) 478-2731

SECTION 3: General Description of the Waste

Name of Waste : Class 2 Solids (thermal storage tank solids)

Detailed Description of the Process Generating Waste:

removal of solids that precipitated out of city water stored in the tank

Physical State : ☐ Liquid ☑ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☑ Combination

Color : brown **Odor :** none

Specific Gravity (Water=1) : 1.05 **Density :** none lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☐ Single-Phas ☑ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size : 3500

Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO004000312

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ5192

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : UN/NA : PG : RQ :

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	8-10	BRL mg/l	BRL mg/l	50-90 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	1000 mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
solids (rust, Etc.)	50-90	%
water	10-50	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard ~~standard~~ Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
analytical 09010198.01

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : BRL
TCLP Volatilies :
TCLP ~~Semi~~-Volatiles :
Reactivity : NON

Corrosivity : UON

Ignitability : >150F

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ *Air pollution control blow down water and sludges*
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ *Used oils*
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ *Underground storage remediation wastes*
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 5/4/2009

Printed Name / Title : Bill Miller / Assoc. Director of Physical Plant

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information : $75/yd

Compliance Officer : Prabhakar Thangudu

Date : 5/11/2009 **Status :** Approved Rejected

Approval Number : HOU-3312

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

June 25, 2009

San Jacinto College District – South Campus
Attn: Bill Miller
13735 Beamer Road
Houston, TX 77098

RE: Removal of sludge from TES Tank

Dear Mr. Miller,

CES Environmental Services, Inc. appreciates the opportunity to present to you our proposal for the removal and disposal sludge from your TES tank. Please find below our proposed scope of service and associated pricing for your consideration.

Scope of Service

- Prior to scheduling, CES will assist you in creating a waste profile.
- Upon profile approval, CES will provide a field service crew consisting of one supervisor and two technicians. The crew will utilize an air machine to pump out the sludge.
- In order to remove all material from the tank, the CES field service crew will utilize a confined space entry to enter the tank.
- The water will be brought to CES under profile and disposed of under permit.
- CES will provide all proper shipping documents.

Estimated Pricing (Time and Materials)

Description	Estimated Qty.	Price	Total
Air-Mover with Operator	8 hours	$125.00/hour	$1,000.00
Fuel Surcharge-air machine	Current rate	7.5%	$75.00
Field Technicians (3)	8 hours each	$30.00/hour/man	$720.00
PPE (per man/day)	4 men 1 day	$30.00/man/day	$120.00
Flex Hose (6 inch)	200 feet	$2.00/foot	$400.00
Confined Space Entry Kit	1 entry	$250.00/day	$250.00
Emergency Response Trailer	1 day	$250.00/day	$250.00
Pressure Washer	1 days	$125.00/day	$125.00
Utility Truck and Misc. Tools	1 days	$215.00/day	$215.00*

Lori Salazar

From: Dana Carter
Sent: Friday, June 26, 2009 10:18 AM
To: Lori Salazar
Subject: another profile
Attachments: Praxair Deer Park Spent Carbon.xls

Lori – I have another profile for you to complete. It is for Praxair in Deer Park. I am attaching a profile I already filled out so you wont have to complete all the generator information. EVERYTHING else will need to change. It is unused gasoline we are bringing in as a recyclable. Generating process is unused gasoline from operations. Try to look for a similar profile on ACCESS (this is how I learned how to do profiles – by copying). I can help get you started if you would like. Let me know when you are ready.

Thanks!
Dana

Dana Carter
Account Manager
CES Environmental Services Inc.
Port Arthur Chemical and Environmental Services, LLC.
Office: 713-676-1460
Cell: 713-748-9804
Fax: 713-748-8664
visit us at www.cesenvironmental.com

EPAHO004000317

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : IDM
Address : 11616 Galayda 10707 Honea Egypt Rd.
City, State, Zip : Houston TX 77086
Contact : William **Title :**
Phone No : (713) 409-0949 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave **Title :**
Phone No : (936) 483-3662 **Fax :** (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Unleaded Gasoline- unused

Detailed Description of the Process Generating Waste:

removed from a vehicle prior to use

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : yellow **Odor :** gas

Specific Gravity (Water=1) : .85 **Density :** 8 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 3

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO004000318

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : UN1203, Flammable liquid, n.o.s., PGII

Class : 3 **UN/NA :** UN1203 **PG :** II **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
<140	7	0 mg/l	0 mg/l	1 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
unleaded gas	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
***TCLP Semi-Volatiles* :** x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ *Underground storage remediation wastes*
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** _____

Printed Name / Title : _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer :

Date : _____ **Status :** Approved Rejected

Approval Number : _____

EPAHO004000321

6/29 6/30 7/1 7/2 7/3

CES Environmental Services, Inc.
Ongoing Job Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
RohMax USA, Inc.	**Champion**	**RohMax USA, Inc.**	**Boise Cascade**	**Champion**	**Boise Cascade -closed 4/8**
8 AM Trans from tank to sewer PO#255-47647290	2 loads of CLOW Critical Time of 530AM & turn-around	8 AM Trans from tank to sewer PO#255-47647290	3 loads of Caustic, 2 White Liquor Load	Shawn 1 loads of CLOW Critical Time of 6:30AM	3 loads of Caustic
Boise Cascade	**Champion**	**Boise Cascade**	**International Paper - Pineville**	**Farouk**	**International Paper - Pineville**
4 loads of Caustic, 2 White Liquor Load	1 load of RO Reject Water 07:30AM	4 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic	CT - 8:00am 1 load of w/w	3 loads of spent caustic
International Paper - Pineville	**Farouk**	**Champion**	**Liberty Forge**	**Champion** Shawn	
3 loads of spent caustic	CT - 8:00am 1 load of w/w	1 load of Haz. Water 05:30AM	2 loads of Absorbent and Metal Slag 1st and 15th or closest working day	2 loads of Haz Water - 5:30AM & turn around	
	Boise Cascade	**International Paper - Pineville**		**RohMax USA, Inc.**	**SUNDAY**
	3 loads of Caustic, 2 White Liquor Load	3 loads of spent caustic		8 AM Trans from tank to sewer PO#255-47647290	?
	Smith International			**Boise Cascade**	
	Drum Pickup / Take back totes?			4 loads of Caustic, 2 White Liquor Load	
	International Paper - Pineville			**International Paper - Pineville**	
	3 loads of spent caustic			3 loads of spent caustic	
				KMCO	?
				Critical Time 10 am. Load of w/w sludge profile 1997	

Do not schedule the loads shaded in

Reminder
Thursday

2 Non Haz Claw
1 Haz

TOC
113,000
~~Newport~~ system
45/G

$40 Recon
$80 New

5

~~Boise~~ P#RSU
Triple B Industrial
LC Bledsoe
5 open top w/ lids
medal 55/G
832-287-3824

EPAHO004000322

Lori Salazar

J Profit (2)

From: Dana Carter
Sent: Thursday, June 25, 2009 1:36 PM
To: Lori Salazar
Subject: FW: GATX Hearne drum inventory

Here is the drum inventory for gatx hearne.

Dana Carter
Account Manager
CES Environmental Services Inc.
Port Arthur Chemical and Environmental Services, LLC.
Office: 713-676-1460
Cell: 713-748-9804
Fax: 713-748-8664
visit us at www.cesenvironmental.com

From: Dana Carter
Sent: Wednesday, June 24, 2009 4:16 PM
To: 'Ricardo.Salias@gatx.com'
Subject: GATX Hearne drum inventory

Ricardo – here is the drum inventory I took today:

Non hazardous to CES:
9 - Profile 1363 ✓ 88217

Product to CES:
4 – Profile 2467 Ferric Chloride 88216

Hazardous to US Ecology:
13 – Profile 090056386 - Corrosive liquid
2 – Profile 090062039 – Hydrofluorosilicic acid
1 – Profile 090064862 – Poly Aluminum Hydroxychloride ✓ 88211
1 – Profile 090065436 – Hydroxylammonium Sulfate

Hazardous to PCI:
8 – Profile 236659 Flammable liquids
1 –Profile 235548 Waste Phenol Solutions ✓ 9910219H / V188
1 – Profile 343252 Nitrobenze

QUESTIONS:
Methyldiehtanolamine – found the msds sheet... I believe it is non haz but I have not profiled it. I did not fine any emails about profiling it.
Petroleum Alkylate Detergent
Fatty Amine
Dimethyldodeclyamine

Thanks!
Dana

Dana Carter
Account Manager
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Fax: 713-748-8664
visit us at www.cesenvironmental.com

EPAHO004000324

BOX VANS

EPMTY TRL: 1. 217

LOAED TRL : 1. 247 LOADED/FERRIC

2. 418

3. 245

WORKING TRL : 1. 244

2. 242

3. 246

ROLLOFF BOXES

FULL BOXES 1. 624 CLASS 2 SLUDGE

EMPTY BOXES : 1. 621

2. 625

3. 623

4. 622

CES Environmental Services, Inc.

JOB INFORMATION PROFILE

Folder ID :	GATX Rail (GATX-Plantersville,TX) Acidic Product Drum Recycling

Customer : GATX (Plantersville)
Address : 13018 Hwy 105
City,State,Zip : Plantersville TX , 77363
CES Contact : () -

Driver : **Rosales, Candido**
Helper : J.Ramirez
Date : 6/25/2009 Time : 0600
Truck # 290 Trailer # 244

Job Description :

Contact is Terry Nale (936) 894-3483

1) Deliver the following: BOL 88142

*-8 open top poly drums (for hazardous acidic wastes)
*- 0 open top metal drums (for non haz sandblast media) – no bungs needed
*-22 closed top poly w/ bung holes (for hazardous acidic wastes)
- 0 closed top metal with bung holes (for paint waste)

2) Pickup and label the following:
***NON-HAZARDOUS manifest (to CES):
~ 0 drums of Sandblast Media ✓ [profile #1107]

*** Manifest(to US Ecology) 88141 3/25/2010
~ 8 drums of acid waste [profile #090048690]

Manifest(to PCI)
~ 0 drum of universal paint waste ✓ [profile # 257572]

***PRODUCT-RECYCLABLE (to CES): BOL 88074
~ 8 drums of Ferric Chloride Product [profile #1768]
~ 13 drums of hydrochloric acid product [profile #1768]
~ 1 drums of Ferrous Chloride product [profile #1768] ✓

3) Return load to CES and get with Warehouse for offloading instructions

ID #: 88074

CUSTOMER INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

RECEIVING INFORMATION

OPERATION HOURS:		SHIPPING/RECEIVING CONTACT:		AFTER HOURS CONTACT:	
Open :		Name:		Name:	
Close:		Number:		Number:	

PURCHASE ORDER NUMBER REQUIRED: ☐ YES ☐ NO

IF YES, P.O. #:

PPE REQUIRED: ☐ YES ☐ NO HACSC REQUIRED: ☐ YES ☐ NO

IF YES, WHAT?

IF YES, WHAT?

CAN CUSTOMER LOAD US : ☐ YES ☐ NO

WASHOUT ANTICIPATED: ☐ YES ☐ NO

ROPPER PUMP: ☐ YES ☐ NO

BOX LINER REQUIRED ☐ YES ☐ NO

LOADING/UNLOADING TRAILER TYPE: ☐ REAR ☐ BELLY ☐ DOES NOT MATTER

BOX NUMBER:

CES OWNS BOX: ☐ YES ☐ NO

CUSTOMER OWNS BOX: ☐ YES ☐ NO

CES RENTED BOX: ☐ YES ☐ NO

CUSTOMER RENTED BOX: ☐ YES ☐ NO

AMOUNT OF HOSE NEEDED:

SIZE:

DRUM DOLLY NEEDED: ☐ YES ☐ NO

PALLET JACK NEEDED: ☐ YES ☐ NO

LOADING FROM (i.e. Tank):

CAN CUSTOMER LOAD WITH FORKLIFT ☐ YES ☐ NO

SIZE OF FITTING:

TYPE OF FITTING:

Note: Pallets are only good if they drive the forklift into the trailer. Otherwise, it is a huge and painful experience for the driver. If pallets are used, then the drums must be shrink wrapped.

FIELD SERVICE WORK

HELPER REQUIRED: ☐ YES ☐ NO **IF YES, HOW MANY?** 0

EQUIPMENT NEEDED:

CES Customer Service Log

CSR Lori (11)

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		W/M C/P	haul box 643 class 1 solids	86989	6/5/09	
2	Robert (713)594-1820	Oceaneering 11917	1000/G Process water 1800/G Sump w/Glycol	86983	6/03/09	Comp
3		Texas W/M	Fe2 bad 5	86988	6/2/09	Comp
4	Maya	PCI	Scheduled 10 day for 6/5/09 @ 8 AM C# 73401	87066	6/5/09	
5	Sam	Newpark	Scheduled Redirect to Newpark for Questchem	87065	6/3/09	
6	Rebecca	Dana Transport	schedule Outside trans of N/H W/W 10 AM	87068	6/5/09	
7	Vicky	New Park	Hexion Hope Redirect to Newpark	87069	6/5/09	
	Rebeca	Dana trans	outside trans Hexion Hope 7 AM of N/H W/W	87072	6/5/09	
9	Vicky	New Park	Hexion Hope Redirect to Newpark	87073	6/5/09	
10	Tiffany	TM Deerpark	Take 4 Drums for Dana to TM and off load 6AM	87075	6/5/09	*
11		SunCoast	Outside trans Oily Water C# 2803	87076	6/3/09	
12	Clint	Waste Conn "Republic"	haul Box 625 Class 1 Sludge	87125	6/5/09	
13	Robert	Oceaneering 11917	Suck up W/W from Sumps + Totes	87135	6/4/09	
14	Clint	BFI McCarty	haul Box 682 Class 11 Sludge	87170	6/5/09	
15	Gene	Tornado Technologies	Suck up W/W Bring back to CES	87176	6/8/09	
16	James Tomlinson	CES W/M	haul Roll tarp to W/M	87172	6/8/9	
17			TWM load of W/W outside trans Oily W	87202	6/4/9	
18		Phoenix Solu Cont	outside trans oily water	87303	6/5/9	
19		TWM	Outside trans Oily water	87309	6/5/9	
20		US Oil	Outside trans Oily water	87365	6/8/9	

CES Customer Service Log

CSR Lori W

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	mike	Hybritech DP	PCB Poly-tank	87502	6/9/09	
2	mike	Hybritech DP	PCB Grunt Water WO-68	87503	6/9/09	
3			Vam USA Drum Pickup	87379 87380	6/10/09	
4		Smith	Drum load	87505	6/10/9	
5		BFI	Offload Box 681 class II Sludge	87464	6/10/9	
6			Smith Drum load	87505	6/10/9	
7		Phonix	Transmontaigne	87466	6/9/9	
8	Steele	Rineco	outside transporter Rineco to pick up drums	87478	6/12/09	
9		Envirp Solutions	Outside trans	87488	6/9/9	6/10/09
10	Jeff Ingram	Hutchinson Hayes	Pump out Oily Water	87493	6/11/09	PO # 050168
11	Wendy	KMCO	Pick up load of P# 1494	87497	6/11/9	
12		US Oil	Outside trans P#3076 2 loads	87498	6/10/9	87499
13		TWM	Outside trans P# 1456	87500	6/10/9	
14	Rebecca	Danc Trans	Outside trans Hexion Hope AR	87507	6/12/9	
15	Rebecca	Danc Trans	Outside trans Hexion Hope AR	87508	6/12/9	
16		New Park	Redirect from Hex Hop to New Park	87509	6/12/9	
17		New Park	Redirect from Hope to New	87510	6/12/9	
18	Clint	New Park	3 loads to New Park Class I W/W	87503, 87504,	6/12/9	87505
19	Clint	Waste Connections	Class I Sludge Box 623	87506	6/11/9	
20	James	CES FW	Box 601 Republic	87588	6/12	

1566
2-3PM

CSR Lori (11)

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Wendy	KMCO	Oily water p#1494	87571	6/15	
2	Wendy	KMCO	Oily water p#1494	87072	6/15	
3	Melanie	Dana Trans Hexion Hop	load of water monday	87638	6/15	
4	Williams Brothers	CKG Service	DM's of P#1659	87615	6/12	
5		H+H Oil	Suck Out Oily Water	87632	6/15	
6		Newpark	Disposal Redirect from Hexion	87639	6/15	
7		DOH Bayport	Suck Oily water from Drums & tank	87646	6/15	
		LES	T 104 Rej fm Rep	87647	6/15	
9	Kadeidra	DOH Bayport	1 Drum Antifreeze 2 Drums Used Oil	87717	6/16	
10		Shane	Pond Water	87737	6/17	
11		Shane	Pond Water	87738	6/17	
12		Shane	Pond water	87739	6/18	
13	Melanie	Hexion AR Hop	Non haz w/w	87744	6/16	✓
14		Select Tapco	Deliver 3 bags + Pick up 3 bags	87747	6/16	*
15		T3 Energy Cypress	Suck out oily water po #pp290796	87783	6/17	
16	Rebecca	Dana Transport	outside trans wed Hexion Hope ARK 3-4	87799	6/17	
17	Shane	Hexion Diboll	out trans Andrews formaldehyd	87805	6/16	
18		Hexion Diboll	out trans Andrews formaldehyd	87806	6/17	
19		Newpar	Redirect to Newpark from Hexion Hope	87007	6/17	
20						

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Rebecca	Hexion AR Dana tran	Outside trans Dana Hope load of W/W	87817	6/18/09	7-8 AM
2		Newpark	Redirect to Newpark from Hexion Hope	87818	6/18/09	
3	Mike Corrigan	Lubrizol	PCB GW Polly tank	87816	6/17	
4	Mike	Lubrizol	PCB GW W0 62	87815	6/18	
5	Maya	PCI	10-day to offload drums	87853	6/23	
6	Carol	SK	10-day 6/22/09 @ 6 Drums + offload PM	87858	6/22	
7	Shane	Hexion Diabolu	load of low ~~Al~~ Friday form Al	87867	6/19	
			Offload box 622 class 2 solids	87881	6/18	
9			Offload Box 643 class 1 sludge	87882	6/18	
10	Billy Vieter	Oceanea 11917	Pick up 5 totes of Oily Rags	87960	6/19	
11		Waste connections	Offload Box 625 class 1 sludge	87999	6/23	
12		BFI	Off load Box 621 class 2 sludge	88000	6/23	
13		GATX Planter	Pump out N/H W/W 1st JOB Please	88072	6/24	
14		GATX Planter	Drum Pick up + Delivery	88074	6/25	
15		GATX Laport	Deliver 6 open top totes w/ sacks	88082	6/24	
16		Rectorseal	Pump out W/W haul TO LES	88099	6/24	
17		T.T. Barge mile (237)	Haz W/W	88098	6/25	
18		T.T. Barge mile (237)	Haz W/W	88097	6/25	
19		GATX Hearne	Drum Pick up Dana will give drum count	88135	6/26	
20		Total	PACES	88114	6/25	

Reminder get w/ shawn from Champion on Wednesday 7/1/09 and Remind we are doing fridays on thursday & we will be closed friday ✓

Check up Wit Rosemary Rohdic & schedule 5123 for Evalca for 7/2 ✓ left VM ?

Gatx Hearn w/ lool

CES Customer Service Log CSR_____

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		BFI	Offload box C624 Class II Sludge	88168	6/26	
2		Hexion Hope AR	W/W 7:00 AM	88177	6/26	
3		Newpark	Redirect from Hexion Hope	88180	6/26	
4		Hexion Hope	W/W 7:30	8878	6/26	
5		Newpark	Redirect from Hope	8818	6/26	
6		Coastal crew	outside trans 250	88186	6/25	
7		Newpark	CC Redirect	88191	6/25	
		Champion	RO Water	88207	6/26	
9		TARGA	LSNG Caustic	88257	6/30	
10		TARGA	LSNG Caustic	88258	7/1	Cancelled
11		TARGA	LSNG Caustic	88259	7/2	
12		Electro Coating	Nickle floor to Newpark	88297	7/2	Can wrong Fold ID
13		Electro Coating	Nichle floor to Newpark	88298	7/2	Can
14		W Com Republic	Disposal of class 1 sludge Box C625	88329	6/30	
15	Travis	Champion	RO W/W	88331	6/29	
16		TRINITY	Drum pick up	88336	6/30	
17	Jeff	T.T. Barge mile 237	Haz W/W	88332	6/30	
18	Jeff	T.T. Barge mile 237	Haz W/W	88333	6/30	
19		Amtex	Non Haz W/W	88338	6/29	
20	Stacie	10-day Rineco	Offload drums/Totes @ Rineco	88342	7/1	

CES Customer Service Log

CSR LORI

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		Evalca	Pick up haul V5123 to CES	88339	7/2/09	
2	Brenda	Rhodia	Haul V5123 from Evalca to Rhodia @ 7AM	88340	7/6/09	
3	Robert	Total Petro	Load of Nap Caus	88346	6/30/09	
4	Robert	Total Petro	" "	88347	7/1/09	
5	Robert	Total Petro	" "	88348	7/1/09	
6	Robert	Total Petro	" "	88349	7/2/09	
7	Dana	GATX Hearn	W/W Washrack	88352	6/30/09	
	Chuck	T.T Burge (183)	Haul To Systech	88368	7/1/09	Cancel
9	Dana	GATX Hearn	Grit Box to Republic	88423	7/1/09	
10	Lewis	TARGA	LSAG to PACES	88425	7/6/09	
11	Lewis	TARGA	LSNG to PACES	88426	7/8/09	
12	Lewis	TARGA	LSNG to PACES	88427	7/10/09	
13	Shane	Hexion Diabol	outside TRAS formalehyde	88454	7/2/09	
14	Shane	Hex Di	load of formaldehyde	88455	7/2/09	
15	Shane	Hex Diab	load of formalehyde	88456	7/2/09	
16	Shawn	Champion	Haz load	88461	7/1/09	Rej for low PHV on High Toe
17	Dana Bill	San Jac South	TES TANK Clean out	88482	7/2/09	
18		San Jac South	Truck to haul equp	88477	7/2/09	
19		Champion	Non haz Clow	88487	7/2/09	
20		Champion	Non Haz Clow	88489	7/2/09	

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		Tranter	pick up drums & totes	88491	7/7/09	
2		Electro Coating Bay	Nickle Rinse W/W	88497	7/2/09	Rejected High PH
3		Electro Bayward	Nickle Rinse W/W	88498	7/2/09	
4	mike	Lubrizol	PCB Ground Water pT	88507	7/2/09	
5	mike	Lubrizel	PCB GW WO-6R	88512	7/6/09	
6	Jesse	Stolt Tank Tech	pick up 20 Empty Drum	88527	7/2/09	
7	Travis	Champion	RO Water	88551	7/7/09	
	Travis	Champion	Ro Water	88552	7/7/09	
9	Travis	Champion	RO Water	88568	7/6/09	moved from Tues to Mon
10	Travis	Champion	RO Water	88569	7/7/09	cancelled
11	Travis	Champion	RO Water	88570	7/7/09	
12	Travis	Champion	RO Water	88571	7/7/09	
13	Shawn	Champion	Clow Non haz	88558	7/7/09	Cancelled by Shawn
14	Shawn	Champion	"Clow" Non haz	88559	7/7/09	
15	Shawn	Champion	Haz W/W	88561	7/8/09	Canceled & moved to Tues
16	Shawn	Champion	Haz W/W	88562	7/10/09	
17	Shawn	Champion	Haz W/W	88563	7/10/09	
18	Shawn	Champion	"Clow" Non Haz	88564	7/10/09	
19	Burger	Milstead	3 drums of p# 1499	88567	7/2/09	
20	Sam	Enviro Bay	Oily Water	88652	7/6/09	

CES Customer Service Log

CSR Lori (11)

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Robert	Total	Napthenic Caustic	88578	7/6/09	
2	Robert	Total	Napthenic Caustic	88579	7/7/09	
3	Robert	Total	Napthenic Caustic	88580	7/8/09	
4	Shane	Hexion Diaboll	formaldehyde	88618	7/10/9	
5	Shane	Hexion Diaboll	formaldehyde	88619	7/8/9	
6	Shane	Hexion Diboll	formaldehyde	88620	7/9/09	
7	Shane	Champion	Haz W/W from Wed	88617	7/7/09	
		Sun Coast	P# 2803	88650	7/6/09	
9	Shawn	Champion	Non haz for thursd	88662	7/9/9	Tues
10	Soni	US Ecology	10-day	88691	7/8/9	
11	Steve	Ameriforge	Septic Waste	88693	7/13/09	
12		GATX Laporte	6 Foes Fly Ash	88696	7/8/09	
13	Orval	TARGA	Disulfide Oil	88704	7/14/09	
14	Orval	Targa	Disulfide Oil	88705	7/16/09	
15		Foster to Newport		88[illegible]	7/8/09	
16	Shane	Hexion Diboll	Pond Water	88714	7/9/09	
17	Shane	Hexion Diboll	Pond Water	88715	7/9/09	
18	Dana	Slay	Drum pickup	88717	7/10/09	
19	Dana	Praxiar	Field Service	88719	7/10/09	
20	Don	HtH	Suck Oil	88721	7/10/09	

PM

Check up on Stay +/
Praxier P# /

Also Put 10-day Job for
PCi in

CES Customer Service Log

CSR Dori

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Maya	PCi	10-day	88724	7/17/09	
2	Chuck	TT Borg (183)	Pick up Caustic to PAG	88791	7/10/09	cancelled by Chuck
3	Becky	Hexion It	load of W/W	88790	7/13/09	
4	Ricardo	GATX It	Reg load go back	88799	7/10/09	
5	Chuck	TARGA (183)	Caustic	88797	7/14/09	
6	Chuck	TARGA (183)	Caustic	88798	7/17/09	
7	Steve	Americas	Drop Box @ Gulf Coast	88803	7/10/09	
		Total	Spent Napthenic Caustic	88831	7/14	
9	Robert	Total	Spent Napthenic Caustic	88833	7/15	
10	Robert	Total	SNC	88834	7/15	
11	Robert	Total	T SNC	88835	7/16	
12	Don	H+H Pfly	5000/G oil	88850	7/13	
13	Terrance	Hydrome	Phosphate Rins/W	88853	7/13	Cancel
14	mike	Lubrizol	Poly Tank	88858	7/16	
15	mike	Lubrizol	WO-6R	88859	7/16	
16	Fred	Amtex	W/W	88863	7/13	
17	Wendy	Kmco	Oily Water	88864	7/14	
18	Wendy	Kmco	Oily Water	88865	7/14	
19	Bruce	Questchem	Pump Out Product	88873	7/14	
20			Class II Sludge	88878	7/14	

CES Customer Service Log

CSR Lori

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Rudy	Amerifab	Oily Water	88879	7/14	
2	Robert	Total	Napth Caustic	88908	7/14	
3	Ethel	Tidepoint	High TOC Water	88907	7/14	
4	Sam		Class I Sludge Box 623	88912	7/15	
5	Sam		Class II Sludge Box 622	88913	7/15	
6		GATX Hearn	Class II Non Haz Box solids	88916	7/15	
7	Rep	GATX Hearn	Class	88920	7/15	
	Shane	Hexion Diboll	formaldeyde	88928	7/15	
9	Shane	Hexion Diboll	formaldeyde	88929	7/16	
10	Shane	Hexion Dib	formaldeyde	88930	7/16	
11	Shane	Hexion Dib	formaldeyde	88931	7/17	
12	Bruce	Quest	Haz w/w to TM	88941	7/15	
13	Beaky	Hexion ARK	Load w/w @ 7AM	88943	7/16	
14	Beaky	Hexion ARK	Load w/w @ 8AM	88956	7/17	
15	Dakota	T.T Boss 237	Haz w/w	88954	7/16	
16	Dakota	T.T Boss 237	Haz w/w	88955	7/16	
17		PGT International	Oily Water	88957	7/16	
18	Bill	Duco	Roll off Box w/ Line	88959	7/16	
19	Steve	Champion	RO w/w	88960	7/16	
20	Steve	Champion	RO w/w	88961	7/16	

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		Neu Pr	KMCO Redireted	88962	7/15	
2		Silwarlo	Pick up empty Dm	88973	7/17	
3		Amerifoy	12 open top Dms	88994	7/17	
4	Travis	Champion	RO W/W 3rd load	88995	7/16	
5		Burbank	pick up Empty drums	88996	7/17	
6	Orval	TARGA	LSNG	89039	7/21	
7	Orval	TARGA	LSNG	89040	7/24	
	Maik	Texas Watermgn	P#1456	89041	7/17	
9	Becky	Hexion Hope	NH W/W	89042	7/20	
10	Tom	Quest	3 drums of Floordry	89043	7/22	
11	Jim	Semasys	Pump Out Water	89044	7/17	
12	Fred	Amtex	Pump W/W	89048	7/20	
13	Robert	Total	Napth Caustic	89050	7/20	
14	Robert	Total	Napth Caustic	89051	7/21	
15	Robert	Total	Napth Caustic	89052	7/22	
16	Ricardo	GATX Hearn	W/W	89057	7/20	
17	Fred	Amtex	drum pick up	89084	7/21	
18	Lida	Tranter	Deliver Totes/Drums	89118	7/22	
19	Buck	Proxiar	Drum Pick up	89140	7/22	
20	Jimmy	Amerifoy Woodin	Drum Pick up	89141	7/22	

CES Customer Service Log

CSR Jori

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Robert	Total	Nap Caustic	89254	7/27	
2	Robert	Total	Napth Caustic	89255	7/28	
3	Robert	Total	Napth Caustic	89256	7/29	
4	Chuck	T.T (183)	Haz W/W	89252	7/24	
5	Dakota	T.T (283)	Haz W/W	89265	7/28	
6	Dakota	T.T (283)	Haz W/W	89266	7/28	
7		Slay Trans	Drum pick up	89271	7/27	
	Orval	Targa	LSNG	89276	7/28	
9	Ricardo	GATX Hex	W/W from Wash Pach	89281	7/28	
10	Chuck	T.T 183	Haz W/W	89284	7/28	
11	Tom	Quest Chem	Non haz W/W	89282	7/28	
12	Jesse	Stolt	Drop box from Thurs	89289	7/28	
13		Texas hw/m	Outside TRANS Oily Water	89293	7/28	
14		Buckeye	Pump out Amonia Take to Beevill	89294	7/31	
15	Becky	Hexicon Hope	load W/W OT	89299	7/28	
16	Becky	Hex Hop	load W/W OT	89298	7/28	
17	AARON	Noltex	Pick up Roll off Box	89314	7/28	
18		Socotherm La Barge	Pick up NON Haz	89315	7/28	
19	Ruben	Trimac	Suck up Sludge from Sun	89343	7/29	~~rescheduled~~
20		Electro Coating	Nickle Floor	89345	7/29	moved to tomorrow

mitch
Quest: 71
Invoice #
(7)896-8188 Ext 123
3000 G

CES Customer Service Log

CSR Lori

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1		Electro Coat	Nickle floor	89346	7/29	moved to tomorrow
2	Orval	Targa	Load of CBF to PA	89391	7/30	
3	Chuck	T.T Base 183	Haz W/W	89397	7/30	
4	Richard	New Pond		89398	7/30	
5	Orval	Targa	Load of CBF	89391	7/30	
6		Electro Electrocoat	Nickle floor	89400	7/30	
7		Electrocoat	Nickle floor	89401	7/30	
	Fred	Amtex	N H/W/W	89416	7/30	
9	Ed	Miller	Biosludge	89405	7/29	
10	Ed	Miller	Biosludge	89406	7/30	
11	Bruce	Quest Chemical Tile	3000 G of	89427	7/30	
12	Chuck	T.T Base 183	Haz W/W	89397	7/30	
13	Don	HHH Plating	Oily Water	89470	7/31	
14	Maya	PCI	10-day facility	89480	7/31	
15	Sam	USEcology	10-day facility	8948	8/3	
16	Becky	Hex Hop	W/W	89482	8/3	
17		Republic	Dynamic Box	89484	@ 7/31	
18	Sheldon	Trinity Bags	Field Service Tub	89487	8/1/09	
19	Orval	Targa	LSNG Load	89494	8/4/09	
20	Orval	Targa	LSNG Load	89495	8/7/09	

Joe Quest

CES Environmental Services, Inc.

CES Customer Service Log Form

	Contact Name	Company Name	Information	CES Job #	Date	Complete
1	Onal	Targa	CBF Load	89496	8/4/09	
2	Robert	Total	Nap Caustic	89497	8/3/09	
3	Robert	Total	Nap Caustic	89498	8/4/09	
4	Robert	Total	Nap Caustic	89499	8/5/09	
5	Jeff	T.T 237	Haz W/W	89537	8/4/09	
6	Jeff	T.T 237	Haz W/W	89538	8/4/09	
7	Ben	Socotherm	load of Non haz W/W	89554	8/3/09	
	Wendy	KMCO	load of Oily Water	89542	8/3/09	
9	Wendy	KMCO	load of Oily Water	8541	8/4/09	
10	Wendy	KMCO	load of Oily Water	89540	8/4/09	
11	Jeff	T.T 237	load of Haz W/W	8537	8/4/09	
12	Jeff	T.T 237	load of Haz W/W	89538	8/4/09	
13						
14						
15						
16						
17						
18						
19						
20						

Approved TMDPS waste steam number on top of each container

All drums must have bung type opening

Proper shipping label & placards visible from side of pallet

D.O.T. / U.N. approved container in good condition

Palletized

EPAHO00400348

GUIDELINES

FOR THE

CLASSIFICATION

AND

CODING

OF

INDUSTRIAL

AND

HAZARDOUS WASTES

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

WASTE PERMITS DIVISION

RG-022 Revised 2/05

EPAHO004000349

GUIDELINES FOR THE CLASSIFICATION AND CODING OF INDUSTRIAL AND HAZARDOUS WASTES

THIS IS A GUIDANCE DOCUMENT AND SHOULD NOT BE INTERPRETED AS A REPLACEMENT TO THE RULES.

The rules for classifying and coding industrial wastes and hazardous wastes may be found in 30 Texas Administrative Code (TAC) Sections (§§) 335.501-.521 (Subchapter R).

Prepared by:

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RG-022
Texas Commission on Environmental Quality

Revised February 2005

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Chapter 1

Introduction

Who Should Read This Booklet

The main purpose of this guidance document is to help generators of industrial and hazardous waste follow state and federal requirements on

- classifying and coding these wastes,
- keeping proper records, and
- notifying the Texas Commission on Environmental Quality (TCEQ) about the wastes, when required.

Specifically, this document gives guidance on the regulations in Title 30 of the Texas Administrative Code (TAC), Chapter 335, Subchapter R (Waste Classification). The rules in Subchapter R apply both to wastes generated in Texas and to those generated outside the state and sent to Texas for treatment, storage, and/or disposal. Correct and timely compliance with the regulations on industrial and hazardous wastes helps to protect the state's environment and safeguard the health of Texas citizens.

Waste Classes

Figure 1 shows the main categories of hazardous and nonhazardous waste. The following paragraphs give brief descriptions of these categories—important terms that will be used throughout this booklet. (For more details, see the classification checklist in Chapter 3 and the definitions in Chapter 8.)

Hazardous Waste

A hazardous waste is one that is listed as such by the U.S. Environmental Protection Agency (EPA) or that exhibits one or more hazardous characteristics (also as specified by the EPA). Hazardous wastes are threatening to human health and the environment.

Listed Hazardous Waste

EPA lists over 400 wastes as hazardous. For more information see Part I-A of the checklist in Chapter 3.

Characteristically Hazardous Waste

Waste that displays one or more of four hazardous characteristics:

- ***ignitability*** (easily flammable—for example, solvents);
- ***reactivity*** (capable of rapid chemical reaction–for example, peroxides);
- ***corrosivity*** (highly acidic or alkaline, able to dissolve metals or burn the skin–for example, hydrochloric acid or sodium hydroxide); and
- ***toxicity*** (a waste that can release toxic constituents into the environment—for example, lead-based paint).

For more information on hazardous characteristics, see Part I-B of the checklist in Chapter 3.

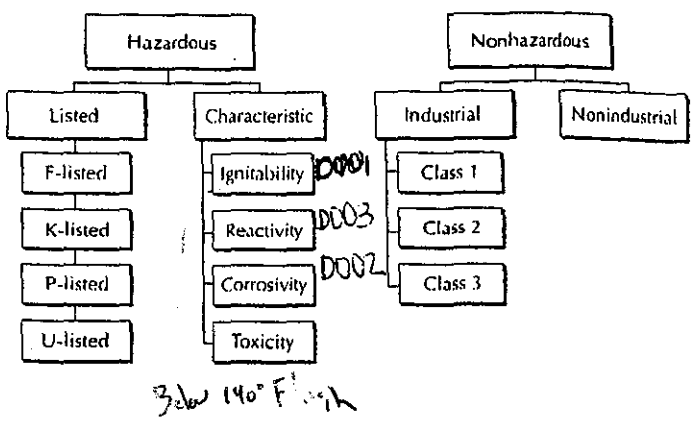
Nonhazardous Waste

Any industrial waste that is not listed as hazardous and does not have hazardous characteristics. (Class 1 nonhazardous industrial waste can include certain levels of constituents and specified properties that, at higher levels, might otherwise render the waste hazardous—see Part II of the checklist in Chapter 3.)

Industrial versus Nonindustrial Wastes

Industrial wastes result from (or are incidental to) operations of industry, manufacturing, mining, or agriculture—for example, wastes from power generation plants, manufacturing facilities, and laboratories serving an industry. *Nonindustrial wastes*, by contrast, come from sources such as schools, hospitals, churches, dry cleaners, most service stations, and laboratories serving the public.

Figure 1. Hazardous and Nonhazardous Wastes



Nonhazardous Industrial Waste

In this grouping, ***Class 1*** **waste** is considered potentially threatening to human health and the environment if not properly managed, because of the constituents and properties this class can include. Therefore, there are special handling requirements for Class 1 wastes. An example is water contaminated with ethylene glycol.

Examples of ***Class 2*** wastes include waste-activated sludge from biological wastewater treatment. ***Class 3*** includes materials such as demolition debris—for example, bricks—that are insoluble, do not react with other materials, and do not decompose. Class 2 and 3 wastes are often accepted by local landfills. However, a Class 2 or 3 designation does not mean that the waste is incapable of causing harm in every management (or mismanagement) situation.

What This Booklet Explains How to Do

After you have worked through this booklet (and that includes consulting the rules referred to in it), you will be able to accomplish the following tasks:

- **Identify *which wastes* you must classify, code, and notify** the TCEQ about. Chapter 2 introduces a key concept—"waste streams"— that helps you decide these points.
- **Classify your waste.** Chapter 3 gives you a step-by-step approach for putting your waste into one of four categories: either *hazardous* waste or *nonhazardous* industrial waste Classes 1, 2, or 3.
- Know what kind of information (either from **process knowledge** about your facility's operation or from **analytical testing**) that you must **document** and keep on **file** (Chapter 4).
- **Understand the 8-character Texas waste code.** Chapter 5 explains the components of the waste code:
  - ▼ 4-character ***sequence number*** (may be a number, letters, or a combination; generally, identifies a particular waste or where it came from);
  - ▼ 3-digit ***form*** code; and
  - ▼ 1-character classification (from Chapter 3).
- **Know how to notify TCEQ** about your wastes and **which TCEQ form** to use (Chapter 6).

Some Things This Booklet Does NOT Cover

Non*hazardous *Non*industrial Waste.** The rules in 30 TAC Chapter 335, ***do NOT apply to **nonhazardous** waste generated by **nonindustrial** facilities.

Selective Coverage of Chapter 335

Also, please be aware that this guidance document only covers 2 subchapters (A and R) of 30 TAC Chapter 335, which contains 18 subchapters in all. This booklet covers only classification and coding, documentation you must create and keep on file, and notifications you must send to TCEQ (and the forms to use for that purpose). This booklet is not a substitute for the complete rules themselves. (You can obtain your own copies of the full, official state rules from the TCEQ's publications unit. Ways to contact this unit are listed under the heading "TCEQ and EPA Forms" in Chapter 6.)

Classification versus Risk Reduction

There is an important distinction between (1) classifying your wastes; and (2) meeting the ***risk reduction standards***, which are set forth in 30 TAC Chapter 335, Subchapter S. Here are the most common situations where the risk reduction standards apply:

- a facility that handled industrial wastes is being closed;
- a site where unauthorized discharge of wastes occurred is being cleaned up.

If you are involved in a situation like these, you need to inform yourself about the risk reduction standards. The guidance document you are now reading does not cover this topic. (Again, you can obtain a copy of Subchapter S, and other information, from the TCEQ publications unit—see the heading "TCEQ and EPA Forms" in Chapter 6.)

Who Are "You" In This Booklet?

Throughout this guidance document, generators of industrial and/or hazardous wastes will be referred to as "generator," "generators," or—for a more direct way of writing—simply as "you." Also, 30 TAC Chapter 335, Subchapter R, will be referred to as "these rules" or "the rules." Finally, "this booklet," "this document," or "this guidance document" refers to *Guidelines for the Classification and Coding of Industrial and Hazardous Wastes*, TCEQ Publication Number RG-022—the booklet you are now reading.

Chapter 2

"Waste Streams"–A Key Concept

READ WHOLE PAGE

When the preceding chapter mentioned that this booklet will instruct you on how to classify, code and report about wastes, a question that naturally might have come to your mind is "***How*** do I know which wastes must be classified, coded, and reported?" (The general answer is that you must perform these processes on all hazardous wastes and nonhazardous industrial wastes.)

In discussing this point, federal regulators use the term *waste stream,* in both of the following senses: First, it can mean the total flow of all waste from homes, businesses, and industry. Second, within this total flow, smaller "waste streams" can be distinguished—for example, "the residential waste stream," "the recyclable waste stream," and others.

Similarly, within the overall flow of waste from your ordinary operations or processes, a number of particular waste streams can be identified. For example if your process ordinarily produces a hazardous acidic waste, and at some point you neutralize that waste, these are two separately identifiable "waste streams."

Each waste stream—the acidic waste and the neutralized waste, in this example–must be identified by an 8-character Texas waste code, which identifies the waste stream as a separate entity and gives information about its origin, general nature, and hazardous status. (Chapters 3 through 5 go into the details of how this 8-character code is arrived at.)

Table 2-1 gives examples of some situations in which the waste flow from an operation or process can produce more than one waste stream, each of which must be classified and coded; and an example of a situation that does *not* result in more than one waste stream. For specific guidance on specific waste streams, contact the TCEQ.

WATER VS SLUDGE

In general, whenever you have or suspect the existence of an additional, distinct waste stream, you must determine its classification (Chapter 3), arrive at a Texas waste code for it (Chapter 5), and in most cases notify TCEQ about the additional waste stream (Chapter 6—which also gives details about some of the exceptions to the requirements for notification: for example, a slight change or variation in a waste stream's composition may not require notification.)

DRAIN SLUDGE VS CENTRIFUGE

Table 2-1. An Operation's Overall Waste Flow Can Produce Multiple "Waste Streams"

IF you have WASTES that are ...	AND they come from PROCESSES that are ...	THEN the wastes are considered ...
different	similar	**different** "waste streams"—for example, a sludge removed from an electroplating vat is not the same waste stream as a liquid removed from an electroplating vat.
similar	different	**different** "waste streams"—for example, methylene chloride used in a paint- stripping operation is not the same waste stream as methylene chloride used in laboratory analysis.
similar	similar	**the same** "waste stream"—for example, a site may have several paint booths that perform the same activities with the same materials, and each produces drop cloth waste. These drop cloth wastes, from the various locations at this site, could be considered one waste stream as long as they were all classified the same (for more on classification, see Chapter 3).
altered physically or chemically by treatment	N/A	**different** "waste streams"—for example, if a sludge is dewatered, it may produce two new waste streams, one a solid and the other a liquid.

Chapter 3

Waste Classification Checklist

This chapter provides a checklist to help you classify your hazardous waste and your nonhazardous industrial waste. For an overview of these types of waste, refer back to Figure 1 in Chapter 1; for more details, refer to 30 TAC Chapter 335 Subchapter R Sections 335.501–508. (You can obtain your own copy of state rules from the TCEQ publications unit; ways to contact this unit are listed under the heading "TCEQ and EPA Forms" in Chapter 6.)

Process Knowledge vs. Analytical Testing

In determining a waste stream's classification, a generator may use *process knowledge* and/or *analytical testing*. Process knowledge is the owner or operator's knowledge about how the facility operates, how a waste was produced and handled, and other information based on operating experience. Analytical testing is information about a waste from laboratory analysis.

In the checklist, the nonhazardous classification criteria that could involve analytical testing have been marked with an *. This marking **does not** mean that analytical testing is the only way to evaluate these criteria. If sufficient process knowledge is available, little or no analysis may need to be performed. You should evaluate whether you have enough process knowledge about the waste to classify it or whether analytical testing is needed.

Documentation

Regardless of whether you rely on process knowledge or opt for analytical testing, you must fully document the information used in making your waste classification. **A completed checklist does not qualify as full documentation.** Documentation should be in a written and/or electronically stored format that is reasonably accessible and easily reproducible. For details on documentation requirements, see Chapter 4.

Part I. Hazardous Waste Determination

All waste generators should work through Part I of this checklist. In this part you will determine whether your waste is hazardous because (a) it is listed as hazardous by EPA or (b) it displays characteristics that EPA says make it hazardous.

In federal regulatory language, the first step in classifying your waste is called "making a *hazardous waste determination*." The definition of hazardous waste, based upon the Resource Conservation and Recovery Act (RCRA), is found in Title 40 of the Code of Federal Regulations (CFR), Part 261.

This TCEQ guidance document reflects the hazardous waste definition in the *Federal Register* as of July 1, 2004. If that definition changes, the generator is still responsible for making an accurate hazardous waste determination in accordance with the latest regulations—instead of with what is printed in this guidance document.

IF the answer to any of the questions in Part I is "Yes,"
THEN the waste is hazardous.

Possible *Exclusions* from Hazardous Classification

Under certain conditions, some types of wastes are excluded from being considered hazardous (40 CFR Sections 261.3–4). Generators may wish to review these exclusions before working through Part I of this checklist.

EPAHO004000356

Facility NOR No.:		Waste Code:	
Waste Stream Name:			

Part 1. General Information	
Description of Process which generates the waste:	
Description of the Waste Stream:	

Part 2. Hazardous Waste Determination		
If the answer to any of the questions in the Part is "yes", then the waste is hazardous. If it is hazardous, it cannot be classified as a non-hazardous waste. If the answers are "no" to *all* of the questions and the waste is an industrial waste, then proceed to Part 3. If the answers are "no" to all of the questions and the waste is a non-industrial waste, stop here		
1. Is the waste a listed hazardous waste, mixed with a listed hazardous waste, or derived from a listed hazardous waste?		
2. Is the waste ignitable per 40 CFR 261.21?		
3. Is the waste corrosive per 40 CFR 261.22?		
4. Is the waste reactive per 40 CFR 261.23?		
5. Is the waste toxic per 40 CFR 261.24?		

Part 3. Class 1 & class 2 Waste Determination	
If the answer to any of the questions in the Part is "yes", then the non-hazardous, industrial waste is a Class 1 waste. If all the answers to the following questions in this Part ar "no", then the industrial waste can be considered a Class 2 waste.	
1. Has the generator chosen to classify his non-hazardous waste as a Class 1 waste? (If yes, okay to stop here and answer N?A for the following questions.)	
2. Are any of those constituents listed in Table 1 of 30 TAC 335.521(a)(1) present at concentrations equal to or greater than levels identified in that table?	
3. Is the waste a container (if yes, see TNRCC rules)?	
4. Does the waste contain Regulated Asbestos Containing Material as defined in 40 CFR Part 61?	
5. Is the waste contaminated by a material that originally contained greater than or equal to 50 parts per million total polychlorinated biphenyls (PCBs)?	
6. Does the waste contain greater than or equal to 50 ppm PCBs?	
7. If your waste is specifically identified as a petroleum substance, or as contaminated with a material identified as a petroleum substance waste, does the waste contain greater than 1,500 ppm TPH?	
8. Is the waste from the production of a "new chemical substance"?	
9. Is the waste generated outside the state of Texas?	

Facility NOR No.:		Waste Code:	
Waste Stream Name:			
10. If the waste is a liquid, does it have a flash point of less than 65.6 degrees C)150 degrees F)?			
11. Is the waste a solid or semi-solid which, under conditions normally incident to storage, transportation, and disposal, is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily, and when ignited burns so vigorously and persistently as to create a serious hazard?			
12. Is the waste a solid or semi-solid which, when mixed with an equivalent weight of ASTm Type II laboratory distilled or de-ionized water, produces a solution having a pH less than or equal to 2 greater than or equal to 12.5?			
13. Is information lacking which demonstrates that the waste is a Class 2 or Class 3 waste?			
If the answer to any of the preceding questions in this Part is"yes", then the non-hazardous, industrial waste is a Class 1 waste. If all the answers are "no", then the industrial wste can be considered a Class 2 waste. If the answers are "no" to *all* of the preceding questins of this Part, the industrial generator may wish to evaluate the waste for a possible Class 3 classification.			

Manager Name

Manager Signature

Date

Part I-A. *Listed* Hazardous Waste Determination

The EPA lists some 400 hazardous wastes.

Information to Help You Make This Determination

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); — PG 64
- "K" listed waste (wastes from specific sources, Section 261.32); - PG 64
- "P" listed waste (unused acutely hazardous off-specification materials as well as container residues and spill residues of these materials, Section 261.33);
- "U" listed waste (unused toxic hazardous off-specification materials as well as container residues and spill residues of these materials, Section 261.33). PG 73

QUESTION: Is the waste a listed hazardous waste, or is it mixed with or derived from one? ☐ Yes ☐ No

Part I-B. *Characteristic* Hazardous Waste Determination

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

Information to Help You Make This Determination

Ignitability

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.)
- Nonliquid 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).

QUESTION: Is the waste ignitable according to 40 CFR Section 261.21? ☐ Yes ☐ No

Corrosiveness

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;
- liquid wastes that corrode steel at a rate greater than 6.35 mm (0.250 inches) per year.

QUESTION: Is the waste corrosive according to 40 CFR Section 261.22? ☐ Yes ☐ No

Reactivity

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. Generally, 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).

QUESTION: Is the waste reactive according to 40 CFR Section 261.23? ☐ Yes ☐ No

Toxicity → PAGE 61

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 3-1. The TCLP is described in EPA Method 1311 (SW-846).

QUESTION: Is the waste toxic according to 40 CFR Section 261.24? ☐ Yes ☐ No

Table 3-1. TCLP Regulatory Levels

arsenic —5.0 mg/l
barium — 100.0 mg/l
benzene — 0.5 mg/l
cadmium — 1.0 mg/l
carbon tetrachloride — 0.5 mg/l
chlordane — 0.03 mg/l
chlorobenzene — 100.0 mg/l
chloroform — 6.0 mg/l
chromium — 5.0 mg/l
o-cresol — 200.0 mg/l
m-cresol — 200.0 mg/l
p-cresol — 200.0 mg/l
cresol — 200.0 mg/l
2,4-D — 10.0 mg/l
1,4-dichlorobenzene — 7.5 mg/l
1,2-dichloroethane — 0.5 mg/l
1,1-dichloroethylene — 0.7 mg/l
2,4-dinitrotoluene — 0.13 mg/l
endrin — 0.02 mg/l
heptachlor (and its epoxide) — 0.008 mg/l
hexachlorobenzene — 0.13 mg/l
hexachlorobutadiene — 0.5 mg/l
hexachloroethane — 3.0 mg/l
lead — 5.0 mg/l
lindane — 0.4 mg/l
mercury — 0.2 mg/l
methoxychlor — 10.0 mg/l
methyl ethyl ketone — 200.0 mg/l
nitrobenzene — 2.0 mg/l
pentachlorophenol — 100.0 mg/l
pyridine — 5.0 mg/l
selenium — 1.0 mg/l
silver — 5.0 mg/l
tetrachloroethylene — 0.7 mg/l
toxaphene — 0.5 mg/l
trichloroethylene — 0.5 mg/l
2,4,5-trichlorophenol — 400.0 mg/l
2,4,6-trichlorophenol — 2.0 mg/l
2,4,5-TP (Silvex) — 1.0 mg/l
vinyl chloride — 0.2 mg/l

Review of Checklist Part I—Hazardous Waste

IF the answer to any of the preceding questions in Part I is "Yes,"
THEN the waste is HAZARDOUS; PROCEED to Chapter 4.

IF the answers are "No" to all the preceding questions,
AND the waste is NONINDUSTRIAL,
THEN STOP here.

IF the answers are "No" to all of the preceding questions,
AND the waste is INDUSTRIAL,
THEN PROCEED to Part II.

Part II: Nonhazardous Industrial Waste Classes 1 & 2

The determination in this part of the checklist applies only to nonhazardous industrial waste—see figure 1 in Chapter 1. (This part of the checklist is based on regulations found in 30 TAC Sections 335.505–06 and 335.508).

IF the answer to any of the **un-numbered** questions in this part of the checklist is "Yes,"
THEN the nonhazardous industrial waste is a Class 1 waste.

IF all the answers to the **un-numbered** questions in this part are "No,"
THEN the industrial waste is a Class 2 waste.

Generator's Self-Classification

QUESTION: Has the generator chosen to classify its nonhazardous waste as Class 1? ☐ Yes ☐ No

Container Waste

IF the waste is a container, greater than 5 gallons in holding capacity, which has held

- ▼ a hazardous substance (as defined in 40 CFR Part 302 and listed in Appendix A of this guidance document),
- ▼ a hazardous waste (including acutely hazardous wastes),
- ▼ a Class 1 waste, and/or
- ▼ a material that would be classified as a hazardous or Class 1 waste if disposed of,

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THEN answer questions 1 and 2. (*Please note that containers that have held acutely hazardous wastes must be triple-rinsed before they can be classified as empty*).

IF these conditions are not present in your situation,
THEN proceed to the next un-numbered question.

1. Has the container had all its residues removed? ☐ Yes ☐ No
2. Has the container been rendered unusable? ☐ Yes ☐ No

QUESTION: Are ***any*** of the answers to questions (1) or (2) above "NO"? ☐ Yes ☐ No

Regulated Asbestos-Containing Material (RACM)

(See Chapter 8, Definition of Terms, for information on RACM.)

QUESTION: Does the waste contain asbestos material identified as RACM, as defined in 40 CFR Part 61? * ☐ Yes ☐ No

Polychlorinated Biphenyls (PCBs)

QUESTION: Is the waste contaminated by a material that originally contained 50 or more parts per million (ppm) total PCBs? * ☐ Yes ☐ No

QUESTION: Does the waste contain 50 or more ppm PCBs?* ☐ Yes ☐ No

Petroleum Substance Waste

1. Is your waste specifically identified as a *petroleum substance* (see Chapter 8, Definitions of Terms) or contaminated with a material identified as a petroleum substance waste? ☐ Yes ☐ No

2. Does the waste contain more than 1,500 ppm total petroleum hydrocarbons (TPH)? ☐ Yes ☐ No

QUESTION: Are the answers to **both** of the numbered questions above "Yes"? (If one or both of the answers are "No," enter "No" for this question.) ☐ Yes ☐ No

"New Chemical Substance"

See "new chemical substances wastes" in Chapter 8, Definitions and Terms, for a description of how this particular type of waste may be classified as Class 2 or 3.

QUESTION: Is the waste from the production of a "new chemical substance," as defined by the federal Toxic Substances Control Act, 15 U.S.C.A. Section 2602(9)? ☐ Yes ☐ No

Out-of-State Origin

See "wastes generated out-of-state" in Chapter 8, Definitions of Terms, for details on how this particular type of waste may be classified as Class 2 or 3.

QUESTION: Is the waste generated outside Texas? ☐ Yes ☐ No

Constituent Levels and Specified Properties for Nonhazardous Industrial Class 1 Wastes

QUESTION: If the waste is a liquid, does it have a flash point of less than 65.6°C (150°F)? * ☐ Yes ☐ No

FLASH

QUESTION: Is the waste a solid or semi-solid that—under conditions normally encountered in storage, transportation, and disposal—

- is liable to cause fires through friction or through retained heat from manufacturing or processing; or
- can be ignited readily, and when ignited burns so vigorously and persistently as to create a serious hazard? ☐ Yes ☐ No

SOLID PH

QUESTION: Is the waste a semi-solid or solid that, when mixed with an equivalent weight of ASTM Type II laboratory distilled or deionized water, produces a solution with a pH of 2 or less or 12.5 or more? ☐ Yes ☐ No
(*Exception:* for solidified, stabilized, encapsulated, or otherwise chemically bound wastes, an exception is provided in 30 TAC Section 335.505(3)) *

QUESTION: Does the waste leach Class 1 toxic constituents at or above the levels listed in Table 1, Appendix 1 of 30 TAC Chapter 335 Subchapter R when submitted to the toxicity characteristic leaching procedure (TCLP)? * ☐ Yes ☐ No
(For a copy of Table 1, Appendix 1, see Appendix C of this guidance document.)

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(Where matrix interferences of the waste cause the Practical Quantitation Limit (PQL) of the specific analysis to be greater than the Maximum Concentration listed in Table 1, Appendix 1 of 30 TAC Chapter 335 Subchapter R, then the achievable PQL becomes the Maximum Concentration, provided that the generator maintains documentation that satisfactorily demonstrates to the TCEQ that lower levels of quantitation of a sample are not possible.)

A satisfactory demonstration includes the results from the analysis of the waste for that specific constituent by a laboratory using an appropriate method found in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods* (EPA SW-846); *Methods or Chemical Analysis of Water and Wastes* (EPA-600 series); *Standard Methods for the Examination of Water and Wastewater*; *American Society for Testing and Materials (ASTM) Standard Methods*; or an equivalent method approved by the TCEQ.

Lack of Class 2 or 3 Information

QUESTION: Is information lacking that demonstrates the waste belongs in Class 2 or 3? ☐ Yes ☐ No

Review of Checklist Part II: Class 1 or 2 Nonhazardous Industrial Waste

IF	the answer to any of the preceding **un-numbered** questions in Part II is "Yes,"
THEN	the nonhazardous industrial waste is a Class 1 waste.
PROCEED	to Chapter 4.
IF	the answers are "No" to all the preceding **un-numbered** questions in Part II,
THEN	the industrial waste is a Class 2 waste.
PROCEED	to Chapter 4.
IF	the answers are "No" to all of the preceding **un-numbered** questions in Part II,
AND	the industrial generator wishes to evaluate the waste for a possible Class 3 status,
THEN PROCEED	to Part III.

Part III: Nonhazardous Industrial Class 3 Waste

This part of the checklist applies only to nonhazardous, industrial waste that does not meet the definition of a Class 1 waste and is not specifically identified as a Class 2 waste. (The corresponding regulations for this part of the checklist can be found in 30 TAC Sections 335.507 and 335.508.)

Part III-A. Initial Determinations for Class 3 Status

IF the answer to any of the following questions in Part III-A is "Yes,"
THEN the nonhazardous, industrial waste ***cannot*** be considered a Class 3 waste.

Containers

QUESTION: Is the waste an empty container? ☐ Yes ☐ No

Medical Waste

(For a definition, see "medical wastes" in Chapter 8.)
QUESTION: Is the waste a medical waste regulated under 30 TAC Chapter 330, Subchapter Y? ☐ Yes ☐ No

Distilled Water Leaching Test

QUESTION: When subjected to the 7-day distilled water leaching test, does the waste leach constituents at or above the maximum contaminant levels listed in Table 3, Appendix I of 30 TAC Chapter 335, Subchapter R? * ☐ Yes ☐ No
(Table 3 is reproduced in Appendix D of this guidance document.)

Toxicity Characteristic Leaching Procedure

QUESTION: When submitted to the toxicity characteristic leaching procedure (TCLP), does the waste leach Class 1 toxic constituents listed in Table 1, Appendix I of 30 TAC Chapter 335 Subchapter R at or above their detection levels? * ☐ Yes ☐ No
(The list of Class 1 toxic constituents is reproduced in Appendix E of this guidance document.)

Exclusion: Excluded from this list of Class 1 toxic constituents are those addressed in the previous question (that is, constituents identified in Table 3, Appendix I of 30 TAC Chapter 335 Subchapter R).

Petroleum Hydrocarbons

QUESTION: Does the waste contain detectable levels of petroleum hydrocarbons (Method 1005)? * ☐ Yes ☐ No

Polychlorinated Biphenyls (PCBs)

QUESTION: Does the waste contain detectable levels of PCBs? * ☐ Yes ☐ No

Decomposition

QUESTION: Is the waste readily decomposable? ☐ Yes ☐ No

Review of Checklist Part III-A: Class 3 Nonhazardous Industrial Waste

IF the answer to any of the preceding questions in Part III-A is "Yes,"
THEN the nonhazardous, industrial waste ***cannot*** be considered a Class 3 waste.

IF all the answers to the preceding questions in Part III-A are "No,"
THEN proceed to Part III-B to continue the waste's evaluation for possible Class 3 status.

Part III-B: Final Determinations for Class 3 Status

Inertness

QUESTION: Is the waste inert? (Inertness refers to chemical inactivity of an element, a compound, or a waste.) ☐ Yes ☐ No

Insolubility

QUESTION: Is the waste essentially insoluble? ☐ Yes ☐ No
(*Note*: wastes that contain liquids are *NOT* considered insoluble.)

Review of Checklist Part III

IF the answer to any question under Part III-B is "No,"
THEN the nonhazardous, industrial waste ***cannot*** be considered a Class 3 waste.

IF all the answers to the questions in Part III-A are "No,"
AND all the answers to the questions in Part III-B are "YES,"
THEN the nonhazardous industrial waste is a Class 3 waste.

Part IV. Variance from Waste Classification

The TCEQ may determine, on a case-by-case basis, the merits of a variance request for a specific nonhazardous classification. The burden of justifying the need for a variance is on the requestor. The requestor must submit information sufficient to clearly indicate the issues involved, the reason(s) for the request, and both the positive and negative impacts that may result from the granting of the variance. (The regulations corresponding to these types of variance requests can be found in 30 TAC Section 335.514, Variance from Waste Classification Provisions.)

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* **As a reminder,** these characteristics need not necessarily be addressed by analytical testing. A generator may be able to address them through process knowledge. For more information on process knowledge, please see Chapter 4 of this guidance document.

Chapter 4

Process Knowledge, Analytical Testing, and Documentation Requirements

Introduction

Now that you know how to classify your wastes, you are ready to compile supporting documentation. Documentation should support the classification and coding of a waste stream. You must properly document each waste stream generated by the facility, and keep that documentation for at least three years after the waste is no longer generated, stored, or recycled or until the site is closed.

The regulations on documentation requirements can be found in 30 TAC Section 335.9 (Record Keeping and Annual Reporting Procedures Applicable to Generators), Section 335.70 (Record Keeping), Section 335.510 (Sampling Documentation), Section 335.511 (Use of Process Knowledge), and Section 335.513 (Documentation Required).

The TCEQ randomly audits a portion of waste stream *notifications* (see Chapter 6) in order to ensure proper classification and coding of waste in Texas. When the TCEQ sends you a request for information for the purpose of an audit, you must send the agency the information that you have gathered to make your hazardous waste determination/waste classification. Please use Chapter 4 as a guide to compiling supporting documentation for each waste stream generated at your facility.

Process Knowledge

If process knowledge is used in classifying a waste, that knowledge must be documented and kept on file for three years. Process knowledge must be in writing or stored in some electronic form. It cannot be stored solely in someone's mind. The process knowledge must support a generator's reasoning about why the waste has been given a particular classification. It must also support the generator's reasoning about why a particular test method was not performed.

The following are some examples of process knowledge that may assist in classifying waste:

- description of the waste;
- date of initial waste generation;
- a detailed description of the process generating the waste (that is, identification of chemicals or other materials in the process that generated the waste stream (including any potential breakdown products);
- manufacturer's literature such as Material Safety Data Sheets—MSDSs (although they were not created for the purpose of determining Texas waste classification, and do not contain information on all constituents found in a product, MSDSs may be helpful);
- full description of activities that generated the waste stream;
- identification of potential contaminants;
- other documentation generated in conjunction with the particular process.

Analytical Data

If a generator uses analytical data to classify a waste, the data must be supported by documentation of the sampling procedure and the analytical testing. The following lists specify information that must be maintained when analytical data is used for classification purposes.

Sampling Procedures

The following procedure must be documented:

- dates of sample collection;
- description of the site and/or unit from which the sample was taken, including sampling locations;
- the method and equipment used for sampling;
- a description of the sampling techniques, including collection, containerization, and preservation;

- rationale—that is, supporting reasons—for the sampling plan (why the number, type, and location of samples taken accurately represent the waste stream being characterized).

Analytical Testing

Documentation of analytical testing must include the following:

- Analytical **results** (including quality control data).
- Analytical **methods** (including any preparatory methods).
- The **detection limits** for each analysis.
- **Name of laboratory** performing the analysis.
- **Chain of custody**—documentation tracking the condition of the waste containers. For example, were the waste containers and their seal intact or broken upon arrival at the laboratory? Were the containers full, half-full, or empty? Did all the containers arrive at the laboratory or just a partial shipment?
- Documentation that satisfactorily demonstrates that lower levels of *quantitation* are not possible (this is only necessary when the waste media causes the *Estimated Quantitation Limit* (EQL) of a Class 1 toxic constituent (as listed in Appendix E of this guidance document) to be greater than the concentration listed (*matrix interference*). (Terms in italics are explained in Chapter 8.)

Classification Checklist

Although the checklist in Chapter 3 can be used to help classify industrial and hazardous waste, a generator should support the checklist's "yes" or "no" responses with process knowledge and/or analytical data. A completed checklist by itself is not sufficient documentation to submit to the TCEQ in response to a random audit of classification.

For example, a generator answers "no" to the question "Is the waste ignitable according to 40 CFR Section 261.21." You can support this response by submitting process knowledge, analytical data, or both. If process knowledge is used, it must be **specific**. A general statement such as "the waste is not ignitable" would not be sufficient.

Instead, you should document specific actions you took and their results, such as (1) reviewed all constituents that may be present in the waste; (2) determined that each constituent present in the waste does not meet the definition of an ignitable waste; and (3) determined that the process generating the waste does not introduce any ignitable characteristics to the waste stream. You should keep copies of your documentation demonstrating that the constituents in the waste stream would not cause the waste to exhibit the characteristic of ignitability.

Rule of Thumb about Documentation

Remember that documentation should demonstrate why a waste has been given a particular classification. Here's a good rule of thumb: if someone else can review your classification documentation, using the published criteria and/or the checklist, and arrive at the same classification you did, then you have probably done a good job of compiling supporting documentation for a waste classification. On the other hand, if someone reviews your classification and still has unanswered questions, then you may want to gather additional documentation (from process knowledge and/or analytical data) to support your classification of that waste stream.

Chapter 5

Texas Waste Code Formula

CESQG
SQG
LQG
PG 55

Chapter 5 describes the 8-digit Texas waste code that identifies each of your waste streams. (Part of the information to complete this waste code comes from the waste determination process (described in Chapter 3) and from the documentation you must compile and keep on hand (described in Chapter 4).)

The formula for the Texas waste code is given in Figure 5-1. The rules corresponding to this formula can be found in 30 TAC Section 335.503 (Waste Classification and Waste Coding Required).

Sequence Number

Although called a sequence "number," this part of the code may contain a mix of numbers and letters—alphanumeric; and sometimes it may consist of letters alone. Various types of 4-digit sequence numbers are used in the Texas waste code.

- An **arbitrary and unique 4-digit number from 0001 to 9999** (no alpha characters), which is assigned by the generator when adding a waste stream to Texas facility's *Notice of Registration* (see Chapter 6, Notification Requirements). Once assigned to a particular waste stream, a sequence number **cannot be reassigned** to another waste stream. Generators need not sequentially assign sequence numbers to a facility's waste streams.
- A **4-digit alphanumeric number** assigned by the TCEQ (under the **one-time shipment program**) to wastes generated by unregistered generators within Texas. (Spill waste not managed under the Emergency Response Program may be handled in this manner.)
- **"SPIL"** to be assigned only by the Emergency Response Team of the Field Operations Division **for spill wastes regulated under the Emergency Response Program.**
- **"OUTS"** to be used for **wastes generated outside of Texas.**
- **"CESQ"** to be used by **municipal hazardous and industrial CESQGs** (Conditionally Exempt Small-Quantity Generators).
- **"TSDF"** (treatment, storage, and disposal facilities), to be used by facilities that (1) receive and consolidate a waste stream with other like waste streams (thus not changing the form or composition of the waste); or (2) store a received waste without treating or changing its form or composition. This sequence number does not apply to wastes that are treated or altered in some other way. The "TSDF" designation is to be used only by **facilities that store and/or accumulate waste** from more than one site for subsequent shipment to a treatment or disposal facility.

Form Code

The second series of numbers found in the Texas waste code is the "form code." The list of form codes as well as flowcharts that depict the choosing of a form code can be found in Appendix G.

Form codes are broken down into 10 major categories. They are Lab Packs, Inorganic Liquids, Organic Liquids, Inorganic Solids, Organic Solids, Inorganic Sludges, Organic Sludges, Inorganic Gases, Organic Gases, and Plant Trash. The various form codes and corresponding descriptions can be found under these categories in Appendix G.

In determining a waste stream's form code, TCEQ recommends that the generator first determine the major category into which the waste stream fits. Then review all the form code descriptions in that category to determine which code or codes best describe your waste stream. From this narrowed-down list, choose a form code for the waste stream.

Classification

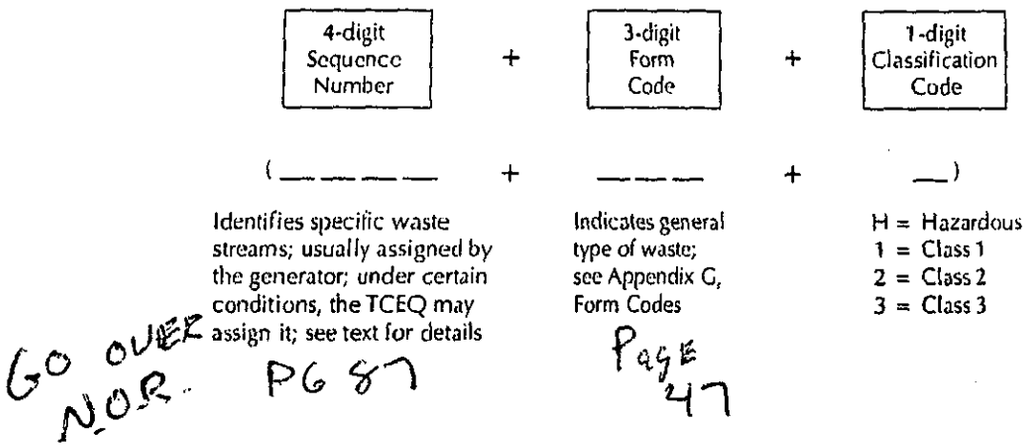
The waste stream's classification completes the Texas waste code. As Figure 5-1 showed, this part of the Texas waste code will be "H" or "1", "2", or "3".

Stop! Are You about to Misclassify a Waste?

Table 5-1 provides additional information about using certain combinations of form and class codes.

EPAHO004000368

Figure 5-1. Components of a Texas Waste Code



GO OVER NOR. PG 87

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Table 5-1. Questions to Ask about Some Combinations of Coding and Classification

IF the waste is ...	AND you assigned form codes ...	Are you sure about a classification of ...
Any Class 3 waste	Any form code	*Class 3?* (You must submit all supporting documentation)
Asbestos solids, debris, slurry, sludge, etc.	311, 515	*Class 2?* (Wastes that contain regulated asbestos-containing material are Class 1)
Oils	205, 206[a]	*Class 2?* (Wastes that contain more than 1,500 ppm total petroleum hydrocarbons are Class 1)
PCB-containing materials	297,298,394,395,396,397, 398,399,494,495,496,497, 498,499,598,599,698,699	*Class 2?* (Wastes that contain 50 ppm or more PCBs are Class 1)
Petroleum-containing materials	205,206[a],296,489,510,603, 606,695,696	(Petroleum substance wastes that contain more than 1,500 ppm total petroleum hydrocarbons are Class 1)
Plant trash	902 and 999[b]	*Hazardous, Class 1, or Class 3?* (Only wastes that are Class 2 may be given a form code for plant trash)
Spent lead acid batteries	309[c]	Hazardous

[a]If your waste oil is nonhazardous, is managed under 40 CFR 279 and 30 TAC 324, and is recycled 100 percent, then do not add to your Notice of Registration (the central record that the TCEQ compiles from waste notifications you send in—see Chapter 6, Notification Requirements and Forms).

[b]Only form codes 902 and 999 may be used.

[c]If all your lead acid batteries are managed under the "universal waste" rule in 40 CFR Part 273, then do not add to your Notice of Registration.

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Chapter 6

Notification Requirements and Forms

This chapter describes forms and supporting documentation you must send to the TCEQ to notify the agency about waste streams that you generate. The regulations on notification can be found in 30 TAC Section 335.6 (Notification Requirements), Section 335.502 (Conversion to New Waste Notification and Classification System), Section 335.508 (Classification of Specific Industrial Solid Wastes), Section 335.509 (Waste Analysis), and Section 335.513 (Documentation Required).

Notifications about Industrial or Hazardous Waste

You must submit information about industrial or hazardous wastes no later than 90 days after the waste's initial generation and before handling, shipment, or disposal; use TCEQ form 00002 or the TCEQ State of Texas Environmental Electronic Reporting System (STEERS) software. (For information on obtaining TCEQ forms and how to access the STEERS information, see this chapter's section "TCEQ and EPA Forms.")

Please Note: All Large-Quantity Generators (LQG) **must** use STEERS to update their Notice of Registration (NOR). This requirement, effective December 15, 1997, is found in 30 TAC Section 335.6(b). Therefore, if you are a LQG and you need to update your NOR to replace inactivated waste code, please do so using STEERS.

The TCEQ uses the information submitted on these forms to create a record called the ***Notice of Registration***, which contains site-specific waste management information about industrial and municipal hazardous waste generators in Texas.

Notifications about New Chemical Substance Waste

For a Class 2 or Class 3 waste generated as the result of the production of a "new chemical substance" (see Chapter 8, Definitions of Terms), you must follow the instructions below:

- Give the TCEQ notice that the waste is from the production of a "new chemical substance."
- Submit all supporting reasons and documentation used in that waste's classification.
- Manage nonhazardous waste from the production of a "new chemical substance" as a Class 1 waste, unless you can provide appropriate analytical data and/or process knowledge demonstrating that the waste meets the definition of a Class 2 or Class 3, and the TCEQ concurs. (For definitions of Class 2 and 3, see Chapter 8 and the classification checklist in Chapter 3.)
- If you have not received concurrence or denial from the TCEQ within 120 days from the date of your request for review, you may manage the waste according to the requested classification, but you must give the TCEQ 10 working days written notice before managing the waste as a Class 2 or a Class 3.

Notifications about Class 2 and Class 3 Out-of-State Waste

If you want to ship a nonhazardous waste into Texas, it is automatically considered a Class 1 waste (and expected to be managed as such) unless

- you request the TCEQ to review your waste classification documentation supporting a lower classification such as Class 2 or 3; and
- the TCEQ concurs with the lower classification.

After concurrence from the TCEQ you must comply with the lower classification's requirements on shipping, record keeping, and disposal of the waste. If, after review of your documentation, the TCEQ disagrees with your waste classification, you must continue managing the nonhazardous waste as Class 1 waste.

Notifications about Other Industrial and Hazardous Wastes from out of State

Please note the following special requirements for the documentation of industrial and hazardous waste that is imported to Texas from foreign countries and other U.S. states.

- If out-of-state generators and importers of record want to bring hazardous waste into Texas, they must have an EPA Identification number. Generators and importers who do not have this ID number must obtain one from the EPA, using EPA Form 8700-12.
- Out-of-state generators or importers of record must fill out a Uniform Hazardous Waste Manifest (TCEQ-00311) and place their EPA ID number in Box 1 of this form.
- In Box B of the Uniform Hazardous Waste Manifest, use one of the generic numbers for identifying the country or state of origin. For example: F0061 for hazardous and or nonhazardous industrial waste imported from Mexico, D0022 for Louisiana (Appendix H gives these codes). For more information about manifesting imported industrial and hazardous waste, see 40 CFR 262.60 and 30 TAC 335.76 (d).
- OUTS must be used as the 4-digit sequence number of the Texas waste code in Box I of the manifest.

Notifications about Alternate Analytical Methods

Generators who propose an alternate analytical method must validate their alternate method by demonstrating that it is equal to or superior in accuracy, precision, and sensitivity to the corresponding EPA-approved methods for analytical testing given in *Standard Methods for the Examination of Water and Wastewater*, SW-846, EPA-600/4-79/020.

In making this demonstration, the generator must provide the TCEQ, at a minimum, the following documentation:

- a full description of the proposed method (including all equipment and reagents to be used);
- a description of type of waste and *waste matrices* to be analyzed (for definitions of terms in italics, see Chapter 8);
- comparative results of the proposed method and corresponding SW-846 or *ASTM* method;
- a complete assessment of interferences with the proposed method (see, for example, *matrix interference* in Chapter 8);
- a description of quality control procedures;
- additional information as needed and/or requested by the TCEQ to adequately review the proposed alternate method.

TCEQ and EPA Forms

How to Order

Notification forms can be obtained in several ways:

- Contact the TCEQ regional office near you.
- On the Internet go to http://www.tceq.state.tx.us and select the "Forms & Publications" link. Access the Forms Database and type in the form number. (The instructions for form TCEQ-00002 are in a separate download file).
- Fax your order to 512/239-4488, or order forms by voice at 512/239-0028, the TCEQ's publications unit. Be sure to give the form ***numbers*** that you want; this information will help the TCEQ get the correct form to you as quickly as possible.

STEERS ANNUAL WASTE SUMMARY

How to Access STEERS

State of Texas Environmental Electronic Reporting System (STEERS) information, including an application package, can be obtained as follows:

- on the Internet, go to https://www2.tceq.state.tx.us/steers; or
- call the STEERS Help Line at (512) 239-6925.

Currently Available Forms

Notification forms available at the time of this printing include the following:

- The hazardous or industrial waste **"Initial Notification Form,"** used for initial notification about a site, and adding a waste stream to your Notice of Registration (see chapter 6) or when recording a 6-digit waste code into one or more 8-digit waste codes. (form number: **TCEQ-00002**)
- The **"Hazardous or Industrial Waste Management Unit Form,"** used when adding information about a waste management unit to a Notice of Registration. (form number: **TCEQ-00002**)

- The **"Uniform Hazardous Waste Manifest,"** used by generators and transporters of hazardous waste and by owners or operators of hazardous waste treatment, storage, and disposal facilities for both inter- and intrastate transportation. (form number: **TCEQ-00311**–Only order form available on the Web)
- The **"One-Time Shipment Request ... for Shipment of Class 1, 2, 3 and EPA Hazardous Waste,"** used by unregistered generators, not by generators that already have a site's Notice of Registration. (form number: **TCEQ-00757**)
- The EPA **"Notification of Regulated Waste Activity"** form, used when notifying EPA of a federally regulated hazardous waste activity—for example, the generation of hazardous waste. (form number: **EPA 8700-12**–Available on the Web as part of TCEQ-00002)

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Chapter 7

Management of Mechanical Shredding Wastes

The regulations on mechanical shredding waste can be found in 30 TAC Section 335.508 (Classification of Specific Industrial Solid Wastes).

Wastes generated by the mechanical shredding of automobiles, appliances, or other items of scrap, used, or obsolete metals are handled according to the provisions of the Texas Solid Waste Disposal Act, Health and Safety Code, Section 361.019 (Vernon Pamphlet 1992), until the TCEQ develops specific standards for the classification of this waste and ensures adequate disposal capacity.

These provisions say that you can dispose of mechanical shredding wastes in a municipal landfill facility authorized to accept Class 1 and 2 industrial solid wastes, if the shredding waste:

- contains no free liquids, and
- is not a hazardous waste.

As mentioned earlier, TCEQ may establish other requirements.

Chapter 8

Definitions of Terms

For readers' convenience, this chapter gives the full version of some abbreviations and brief descriptions of some important terms used in this guidance document. Full, official definitions can be found in the sources cited. Nothing in this chapter takes the place of any definitions in laws, rules, or regulations.

Acutely hazardous wastes (40 Code of Federal Regulations (CFRs) Parts 261.31–33 and subject to the exclusion established in 40 CFR Part 261.5; EPA hazardous waste numbers F020, F022, F023, F026, and F027)—A subset of *listed hazardous wastes* that carry the "H" code; they are considered very harmful to human health and the environment.

ASTM—American Society for Testing and Material

CFR—Code of Federal Regulations

Characteristically hazardous waste (40 CFR Part 261 Subpart C)—Any waste that exhibits the characteristics of ignitability, corrosivity, reactivity, and/or toxicity as defined by the EPA in 40 CFR Part 261 Subpart C. These are often referred to as the "D" wastes. (Also see Chapter 3 of this guidance document.)

Class 1 waste [30 TAC Section 335.1(14)]—Any waste or mixture of waste that, because of its concentration or physical or chemical characteristics is toxic; corrosive; flammable; a strong sensitizer or irritant; a generator of sudden pressure by decomposition, heat, or other means; or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, disposed of, or otherwise managed. (The checklist in Chapter 3 takes you through the process of distinguishing hazardous waste from nonhazardous Class 1 waste.)

Class 2 waste [30 TAC Section 335.1(15)]—Any individual waste or combination of waste that cannot be described as hazardous waste or as nonhazardous Class 1 or Class 3 waste.

Class 3 waste [30 TAC Section 335.1(16)]—Waste that is *inert* and *essentially insoluble* (see definitions of terms in italics), usually including but not limited to materials such as rock, brick, glass, dirt, certain plastics, rubber, and similar materials that are not readily decomposable.

Classification code (30 TAC Section 335.503)—This last digit of the Texas waste code represents the classification of the waste stream. The letter H represents hazardous wastes; and the number 1, 2, or 3 represents nonhazardous industrial waste Class 1, 2, or 3.

Conditionally Exempt Small-Quantity Generator (30 TAC Section 335.78)—Generators of less than 100 kg (220 lbs) per month of hazardous waste, or less than 1 kg (2.2 lbs) per month of *acutely hazardous waste* (see description of term in italics in this chapter).

Essential insolubility (30 TAC Section 335.507)—Is established when using:

- the Seven-Day Distilled Water Leachate Test, and the extract from the sample of waste does not leach greater than the Maximum Contaminant Level listed in Appendix 1, Table 3 of 30 TAC Chapter 335, Subchapter R;
- the test methods described in 40 Code of Federal Regulations Part 261, Appendix II, and the extract from the sample of waste does not exhibit detectable levels of the constituents found in Appendix 1, Table 1 of 30 TAC Chapter 335, Subchapter R;
- an appropriate test method, and a representative sampling of the waste does not exhibit detectable levels of total petroleum hydrocarbon (TPH); ("Petroleum substance wastes" are not subject to 30 TAC's subsection on essential insolubility.)
- an appropriate test method, and a representative sampling of the waste does not exhibit detectable levels of polychlorinated biphenyls (PCBs).

Form code (30 TAC Section 335.503)—This code describes the general type of waste stream. It consists of three numbers, the 5th, 6th, and 7th digits in the Texas waste code (see Figure 4-1 in Chapter 4). More than one form code may apply to a particular waste stream.

Hazardous substance (30 TAC Section 335.508)—Any substance designated as "hazardous" in 40 CFR Part 302 (Table 302.4) including, but not limited to, waste designated as hazardous in the Resource Conservation Recovery Act (RCRA).

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Hazardous waste (40 CFR 261.3.)—The EPA defines a waste as hazardous if it exhibits one or more of four hazardous "characteristics," or if it is one of several hundred wastes "listed" as hazardous. For details, see Chapters 1 and 3 of this guidance document.

Hazardous waste determination (30 TAC Section 335.504)—An evaluation of a waste to determine whether it meets the RCRA definition of a hazardous waste.

Inert (30 TAC Section 335.507)—Inertness refers to the chemical inactivity of an element, compound, or waste. Ingredients added to mixtures chiefly for the purposes of bulk and/or weight are normally considered inert.

Listed hazardous wastes (40 CFR Part 261 Subpart D)—Specific wastes that have been identified by the EPA as hazardous. These are often referred to as the "F" wastes (waste from nonspecific sources); "K" wastes (wastes from specific sources); "P" wastes (acutely hazardous off-specification materials, container residues, and spill residues of these materials); and "U" wastes (toxic, hazardous off-specification materials, container residues, and spill residues).

A waste is considered hazardous if

- it is listed in 40 CFR Part 261 Subpart D, or
- is mixed with or derived from a waste listed there, and
- has not been provided a particular exclusion from the definition of hazardous as provided in 40 CFR Sections 261.3–4.

Matrix interference—Interference with the precision of analytical testing for a particular constituent in a waste stream due to other material(s) in the sample (contamination by carryover). See also waste matrices.

Medical wastes (30 TAC Section 335.508)—Nonhazardous medical wastes that are subject to the provisions of 30 TAC Chapter 330 Subchapter Y are designated as Class 2 wastes. An example of such waste would be needle-bearing syringes from plant infirmaries.

"New chemical substance" waste (30 TAC Section 335.508)—If a nonhazardous industrial waste is generated as a result of the commercial production of a "new chemical substance" as defined by the federal Toxic Substances Control Act, *United States Code Annotated* (U.S.C.A.), Title 15, Section 2602(9), the generator must manage that waste as a Class 1 waste, unless the generator can provide appropriate analytical data and/or process knowledge demonstrating that the waste is Class 2 or Class 3, and the TCEQ concurs. If the generator has not received concurrence or denial from the TCEQ within 120 days from the date of the request for review, the generator may manage the waste according to the requested classification, but not before giving 10 working days written notice to the TCEQ.

Notice of Registration (NOR)—TCEQ term for the information it collects in its database on each hazardous or industrial waste handler: generator, receiver, transporter, and recycler. The NOR includes the facility's physical and mailing addresses, information on waste streams that are generated or handled at the site, a list of individual units at the facility where wastes are managed, and other information. It also contains the state facility identification numbers and the EPA facility number, issued by the TCEQ. The NOR serves to verify the information submitted by each handler. When a generator registers with the TCEQ using form TCEQ-00002, the agency sends back a printout of the information in its database about the site and generator. The handler should keep the NOR current and in on-site files and check it periodically to make sure that it accurately reflects the facility's waste streams and waste management units.

Petroleum-hydrocarbon-containing wastes (30 TAC Section 335.508)—Wastes resulting from the cleanup of leaking underground storage tanks (USTs), which are regulated under 30 TAC Chapter 334 Subchapter K (relating to Petroleum Substance Waste), are not subject to classification under 30 TAC Chapter 335 Subchapter R (Waste Classification).

Petroleum substance—A crude oil, or any refined or unrefined fraction or derivative of crude oil, that is a liquid at standard conditions of temperature and pressure. These substances include the following:

- combinations or mixtures of basic petroleum substances, such as crude oils, crude oil fractions, petroleum feedstocks, and petroleum fractions;
- aviation gasolines, aviation jet fuels, distillate fuel oils, residual fuel oils, gas turbine fuel oils, illuminating oils, lubricants, building materials, insulating and waterproofing materials, used oils;
- solvents or a combination or mixture of solvents—except for any listed substance regulated as a hazardous waste under the federal Solid Waste Disposal Act, Subtitle C (*United States Code*, Title 42, Section 6921, et seq.)—that are liquid at standard conditions of temperature (20° centigrade) and pressure (1 atmosphere). Examples include Stoddard

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solvent, petroleum spirits, mineral spirits, petroleum ether, varnish makers' and painters' *naphthas,* petroleum extender oils, and commercial hexane.

The following materials are ***not*** considered petroleum substances:

- polymerized materials, such as plastics, synthetic rubber, polystyrene, high- and low- density polyethylene;
- animal, microbial, and vegetable fats;
- food-grade oils;
- hardened asphalt and solid asphaltic materials, such as roofing shingles, roofing felt, hot mix and cold mix; and
- cosmetics.

Practical Quantitation Limits (PQLs)—See quantitation.

Process Knowledge—See examples in Chapter 4 under this subheading.

Quantitation—Generally, measurement of quantity or amounts. The word appears in a number of specialized terms used in waste regulation:

- ***Quantitation Limits*** (QLs) indicate the levels at which measurements can be "trusted."
- ***Practical Quantitation Limits*** (PQLs) and ***Estimated Quantitation Limits*** (EQLs) are levels that are routinely and reliably detected and quantitated in a variety of sample matrices. These are 3 to 5 times the Method Detection Limits (MDLs). (See Chapter 1, SW 846, 1992.)
- ***Method Detection Limits*** (MDLs) take into account the reagents, sample matrix, and preparation steps applied to a sample in specific analytical methods. (See 40 CFR Part 136, Appendix B; Chapter 1, SW 846, July 1992.)

RCRA—Resource Conservation and Recovery Act (amendment to the Solid Waste Disposal Act). Primarily designed to regulate five types of disposal activities: hazardous waste, solid waste, underground storage tanks, oil waste, and medical waste. In this guidance document, any mention of "RCRA" refers to RCRA Subtitle C, which applies to all handlers of hazardous waste, including generators; transporters; and operators of treatment, storage, and disposal (TSDF) facilities. (RCRA, a federal law, covers only whether a solid waste is either hazardous or nonhazardous. Texas regulations further subdivide nonhazardous waste into Classes 1, 2, and 3.)

Regulated asbestos-containing material (RACM) (30 TAC Sections 335.508)—RACM includes the following:

- **friable** asbestos containing more than 1 percent asbestos[1] that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure;
- **nonfriable** asbestos-containing material containing more than 1 percent asbestos as measured by the method found in 40 CFR Part 763, Subpart E, Appendix E, Section 1 that, when dry, *cannot* be crumbled, pulverized, or reduced to powder by hand pressure.
- **Category I** nonfriable asbestos includes packings, gaskets, resilient floor coverings, and asphalt roofing products);
- **Category II** nonfriable asbestos includes transite shingles, transite pipes, and any nonfriable asbestos material not defined as Category I.

Regulated generators (30 TAC Chapter 335 Subchapters A and C)—If you generate the following amounts of waste, you are a regulated generator and must follow regulations in Chapter 335:

Waste Type	Monthly Amount
Class 1	100 kg (220 lbs) or more
hazardous	100 kg (220 lbs) or more
acutely hazardous	1 kg (2.2 lbs) or more

If you generate less than the amounts shown above, you are considered a Conditionally Exempt Small-Quantity Generator and are not subject to regulations requiring notification, manifesting, and fees.

Sequence number (30 TAC Section 335.503)—The first 4 digits of the waste code (actually these four characters may be numbers, letters, or a combination of the two). The sequence number is used as an internal numbering system determined by each generator. The number of a waste may range from 0001 to 9999, and can only be used once.

Solid waste (30 TAC Section 335.1 and 40 CFR Section 261.2)—Any discarded material such as garbage; refuse; sludge from a waste treatment plant,

[1]As determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy.

water supply treatment plant, or air pollution control facility; or other material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations. Solid wastes include any material that is abandoned by being disposed of; burned or incinerated; or accumulated, stored, or treated before or in lieu of these activities. Certain recycled materials are also considered wastes. Solid wastes are often referred to simply as "wastes." For the complete definition of a "solid waste," please refer to 30 TAC Section 335.1 (Solid Waste).

Specific industrial solid waste (30 TAC Section 335.508)—A nonhazardous waste for which specific classification criteria and/or a form code have been established.

Stabilized wastes (30 TAC Section 335.508)—Wastes that originally exhibit hazardous characteristics can be *stabilized* so that they are no longer hazardous and can meet the criteria for classification as Class 1 or 2 nonhazardous industrial waste. For example a waste containing lead that exhibits the hazardous characteristic of toxicity can be stabilized by mixing with cement in the proper proportion to reduce the toxicity or mobility of contaminants. Depending on the process(es) used, stabilization achieves varying degrees of long-term effectiveness.

Synthetic oils—Oils not derived from crude oil, including those derived from shale, coal, or a polymer-based starting material; and nonpolymeric synthetic fluids that are used as hydraulic fluids and heat transfer fluids, such as those based on phosphate esters, diphenyl oxide, or alkylated benzenes. Synthetic oils are generally used for the same purpose as oils, and they present relatively the same level of hazardousness after use.

TAC—Texas Administrative Code. Title 30 of TAC contains TCEQ rules on industrial solid waste and municipal hazardous waste, among other subjects.

TSDF—Treatment, storage, and disposal facilities.

Universal Waste (30 TAC Section 335.261 and 40 CFR Part 273)—This rule covers five types of waste:

- all hazardous waste batteries as described in 40 CFR 273.2;
- mercury-containing thermostats as described in 40 CFR 273.4;
- some hazardous waste pesticides as described in 40 CFR 273.3;
- paint and paint-related waste as described in §335.262(b);
- lamps as described in 40 CFR §273.5, and §335.261(b)(16)(F).

The rule establishes a reduced set of regulatory requirements for facilities managing universal waste, depending on whether the facility falls into one of four categories:

- small-quantity handler of universal waste (SQHUW),
- large-quantity handler of universal waste (LQHUW),
- transporter of universal waste, or
- final destination facilities.

In addition, the rules establish a petitioning procedure whereby additional wastes may be added to the universal waste rule.

U.S.C.A.—*United States Code Annotated.*

Used oil (30 TAC Section 335.1, 30 TAC Section 324 (relating to used oil), and 40 CFR Part 279 (relating to standards for management of used oil)[2]—Any oil refined from crude oil, or any synthetic oil, that has been used and, from such use, is contaminated by physical or chemical impurities and cannot be used for its intended purpose (that is, it is a spent material).

Used oil fuel includes any fuel produced from used oil by processing, blending, or other treatment.

Waste—Unwanted materials left over from a manufacturing process; refuse from places of human or animal habitation.

Waste code—Also referred to as Texas waste code (30 TAC Section 335.503)—This 8-digit code identifies a waste stream. The first 4 digits are the ***sequence number***, the next 3 digits are the ***form code***, and the last digit is the waste's ***classification*** (sequence number + form code + classification code = waste code). (Some of the "digits" referred to here actually may be letters or a combination of letters and numbers.)

Waste matrices—Water and soil or sediment in which a waste is found.

[2]Rules applicable to nonhazardous used oil, are found in Chapter 324, state regulations on recyclable used oil, and 40 CFR Part 279, federal regulations on used oil recycling.

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Wastes generated out-of-state (30 TAC Section 335.508)—All nonhazardous industrial waste generated outside the state of Texas and transported into or through Texas for processing, storage, or disposal is classified as Class 1 unless the waste satisfies the Class 2 or 3 criteria as defined in 30 TAC Sections 335.506–8. A Class 2 or 3 waste determination, accompanied by all supporting process knowledge and analytical data, must be submitted to the TCEQ for approval.

Waste stream (30 TAC Section 335.503)—The total flow of solid waste from homes, businesses, institutions, and manufacturing plants that is recycled, burned, or disposed of in landfills; or segments of that total flow, such as the "residential waste stream" or the "recyclable waste stream." (It should be noted that the terms "waste stream", "solid waste", and "waste" are often used interchangeably by federal and state regulators as well as many members of the regulated community).

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Appendix A

Hazardous Substances

Applicability: **Empty Container Class 2 Evaluations**

The following is a listing of materials identified as hazardous substances (40 CFR Table 302.4) in effect at the time of this guideline's printing. (As amended at 57 FR 61492, Dec. 24, 1992; 58 FR 35314, June 30, 1993; 59 FR 31551, June 20, 1994; 60 FR 7824 Feb. 9, 1995). CAS numbers of the materials are also provided.

Hazardous Substance	CAS Number
Acenaphthene	83329
Acenaphthylene	208968
Acetaldehyde	75070
Acetaldehyde, chloro-	107200
Acetaldehyde, trichloro-	75876
Acetamide, N-(aminothioxomethyl)-	591082
Acetamide, N-9H-fluoren-2-yl-	53963
Acetic acid	64197
Acetic acid (2,4-dichlorophenoxy)-	94757
Acetic anhydride	108247
Acetone	67641
Acetone cyanohydrin	75865
Acetonitrile	75058
Acetophenone	98862
2-Acetylaminofluorene	53963
Acetyl bromide	506967
Acetyl chloride	75365
1-Acetyl-2-thiourea	591082
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Adipic acid	124049
Aldicarb	116063
Aldicarb sulfone	1646884
Aldrin	309002
Allyl alcohol	107186
Allyl chloride	107051
Aluminum phosphide	20859738
Aluminum sulfate	10043013
Ametycin (7-amino-9-a-methoxymitosane)	50077
5-(Aminomethyl)-3-isoxazolol	2763964
4-Aminopyridine	504245
Amitrole	61825
Ammonia	7664417
Ammonium acetate	631618
Ammonium benzoate	1863634
Ammonium bicarbonate	1066337
Ammonium bichromate	7789095
Ammonium bifluoride	1341497
Ammonium bisulfite	10192300
Ammonium carbamate	1111780
Ammonium carbonate	506876
Ammonium chloride	12125029
Ammonium chromate	7788989
Ammonium citrate, dibasic	3012655
Ammonium fluoborate	13826830
Ammonium fluoride	12125018
Ammonium hydroxide	1336216
Ammonium oxalate	6009707
Ammonium picrate	131748
Ammonium silicofluoride	16919190
Ammonium sulfamate	7773060
Ammonium sulfide	12135761
Ammonium sulfite	10196040
Ammonium tartrate	14307438
Ammonium thiocyanate	1762954
Ammonium vanadate	7803556
Amyl acetate	628637
iso-	123922
sec-	626380
tert-	625161
Aniline	62533
Anthracene	120127
Antimony	7440360
Antimony pentachloride	7647189
Antimony potassium tartrate	28300745
Antimony tribromide	7789619
Antimony trichloride	10025919
Antimony trifluoride	7783564
Antimony trioxide	1309644
Aroclor 1016	12674112
Aroclor 1221	11104282
Aroclor 1232	11141165
Aroclor 1242	53469219
Aroclor 1248	12672296
Aroclor 1254	11097691
Aroclor 1260	11096825
Arsenic	7440382
Arsenic acid H_3AsO_4	1327522
Arsenic disulfide	1303328
Arsenic pentoxide, As_2O_5	1303282
Arsenic trichloride	7784341
Arsenic trioxide, As_2O_3	1327533
Arsenic trisulfide	1303339
Arsinic acid, dimethyl-	75605
Asbestos	1332214
Auramine	492808

Hazardous Substance	CAS Number
Azaserine	115026
1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212671
Aziridine, 2-methyl	75558
Barium cyanide	542621
Benz[c]acridine	225514
Benzanthracene	56553
Benz[a]anthracene	57976
Benzene	71432
Benzene, dichloromethyl-	98873
Benzene, 2,6-diisocyanato-1-methyl-	91087
Benzene, m-dimethyl	108383
Benzene, o-dimethyl	95476
Benzene, p-dimethyl	106423
Benzenesulfonic acid chloride	98099
Benzene, (trichloromethyl)	98077
Benzidine	92875
Benzo[a]anthracene	56553
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol)	22961826
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate (Bendiocarb)	22781233
Benzo[b]fluoranthene	205992
Benzo(k)fluoranthene	207089
Benzoic acid	65850
Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo-[2,3-b]indol- 5-yl methylcarbamate ester (1:1) (Physostigmine salicylate)	57647
Benzonitrile	100470
Benzo[rst]pentaphene	189559
Benzo[ghi]perylene	191242
Benzo[a]pyrene	50328
p-Benzoquinone	106514
Benzotrichloride	98077
Benzoyl chloride	98884
Benzyl chloride	100447
Beryllium chloride	7787475
Beryllium powder	7440417
Beryllium fluoride	7787497
Beryllium nitrate	13597994
alpha-BHC	319846
beta-BHC	319857
delta-BHC	319868
2,2'-Bioxirane	1464535
Bis(2-chloroethyl) ether	111444
Bis(2-chloroethoxy)methane	111911
Bis(dimethylthiocarbamoyl) sulfide	97745
Bis(2-ethylhexyl) phthalate	117817
Bromoacetone	598312
Bromoform	75252
4-Bromophenyl phenyl ether	101553
Brucine	357573
1-Butanol	71363
2-Butenal	123739

Hazardous Substance	CAS Number
Butyl acetate	123864
iso-	110190
sec-	105464
tert-	540885
n-Butyl alcohol	71363
Butylamine	109739
iso-	78819
sec-	513495
sec-	13952846
tert-	75649
Butyl benzyl phthalate	85687
Butyric acid	107926
iso-Butyric acid	79312
Cadmium	7440439
Cadmium acetate	543908
Cadmium bromide	7789426
Cadmium chloride	10108642
Calcium arsenate	7778441
Calcium arsenite	52740166
Calcium carbide	75207
Calcium chromate	13765190
Calcium cyanide $Ca(CN)_2$	592018
Calcium dodecylbenzenesulfonate	26264062
Calcium hypochlorite	7778543
Captan	133062
Carbamic acid, butyl-, 3-iodo-2-n-butylcarbamate)	55406536
Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl, methyl ester (Benomyl)	17804352
Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605217
Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101279
Carbamic acid, dimethyl-,1-[(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	644644
Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119380
Carbamic acid, methyl-, 3-methylphenyl ester	1129415
Carbamic acid, [1,2-phenylenebis-(iminocarbonothioyl)]bis-, dimethyl ester	23564058
Carbamic acid, phenyl-, 1-methylethyl ester (Propham)	122429
Carbamic acid, methylnitroso-, ethyl ester	615532
Carbamic chloride, dimethyl-	79447
Carbamodithioic acid, dibutyl-, sodium salt	136301
Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95067
Carbamodithioic acid, diethyl-, sodium salt	148185
Carbamodithioic acid, dimethyl-, potassium salt	128030

Hazardous Substance	CAS Number
Carbamodithioic acid, dimethyl-, sodium salt	128041
Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid	144343
Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt	51026289
Carbamodithioic acid, methyl-, monopotassium salt	137417
Carbamodithioic acid, methyl-, monosodium salt	137428
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro -2-propenyl) ester	2303175
Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008415
Carbamothioic acid, butylethyl-, S-propyl ester	1114712
Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134232
Carbamothioic acid, dipropyl-, S-ethyl ester (EPTC)	759944
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888809
Carbamothioic acid, dipropyl-, S-propyl ester	1929777
Carbaryl	63252
Carbofuran	1563662
Carbofuran, phenol	1563388
Carbosulfan	55285148
Carbon disulfide	75150
Carbon oxyfluoride	353504
Carbon tetrachloride	56235
Chlorambucil	305033
Chlordane	57749
Chlorine	7782505
Chlornaphazine	494031
p-Chloroaniline	106478
Chlorobenzene	108907
Chlorobenzilate	510156
p-Chloro-m-cresol	59507
Chlorodibromomethane	124481
Chloroethane	75003
2-Chloroethyl vinyl ether	110758
Chloroform	67663
Chloromethyl methyl ether	107302
2-Chloronaphthalene	91587
2-Chlorophenol	95578
4-Chlorophenyl phenyl ether	7005723
3-Chloropropionitrile	542767
Chlorosulfonic acid	7790945
4-Chloro-o-toluidine, hydrochloride	3165933
Chlorpyrifos	2921882
Chromic acetate	1066304
Chromic acid	11115745
Chromic sulfate	10101538
Chromium	7440473
Chromous chloride	10049055
Chrysene	218019
Cobaltous bromide	7789437
Cobaltous formate	544183
Cobaltous sulfamate	14017415
Copper	7440508
Copper, dimethyldithiocarbamate	137291
Copper cyanide CuCN	544923
Coumaphos	56724
Creosote	8001589
Cresol(s)	1319773
m-Cresol	108394
o-Cresol	95487
p-Cresol	106445
Cumene	98828
Cupric acetate	142712
Cupric acetoarsenite	12002038
Cupric chloride	7447394
Cupric nitrate	3251238
Cupric oxalate	5893663
Cupric sulfate	7758987
Cupric sulfate, ammoniated	10380297
Cupric tartrate	815827
Cyanides	57125
Cyanogen	460195
Cyanogen bromide (CN)Br	506683
Cyanogen chloride	506774
Cyclohexane	110827
Cyclohexanone	108941
2-Cyclohexyl-4,6-dinitrophenol	131895
Cyclophosphamide	50180
2,4-D Acid	94757
2,4-D (isopropyl) Esters	94111
	94791
	94804
	1320189
	1928387
	1928616
Butoxyethl	1929733
	2971382
Isooctyl	25168267
Dichlorophenoxyaceticacid-polyproxybutyl	53467111
Daunomycin	20830813
DDD	72548
DDE	72559
DDT	50293
Diallate	2303164
Diazinon	333415
Dibenzo[a,h]anthracene	53703
1,2-Dibromo-3-chloropropane	96128
Dibutylnitrosoamine	924163
Di-n-butyl phthalate	84742
Dicamba	1918009
Dichlobenil	1194656
Dichlone	117806
Dichlorobenzene	25321226
1,2-Dichlorobenzene	95501
1,3-Dichlorobenzene	541731
1,4-Dichlorobenzene	106467
3,3'-Dichlorobenzidine	91941

Hazardous Substance	CAS Number
Dichlorobromomethane	75274
1,4-Dichloro-2-butene	764410
Dichlorodifluoromethane	75718
1,1-Dichloroethane	75343
1,2-Dichloroethane	107062
1,1-Dichloroethylene	75354
1,2-Dichloroethylene	156605
Dichloroethyl ether	111444
Dichloroisopropyl	108601
Dichloromethoxyethane	111911
Dichloromethyl ether	542881
2,4-Dichlorophenol	120832
2,6-Dichlorophenol	87650
Dichlorophenylarsine	696286
Dichloropropane	26638197
1,1-Dichloropropane	78999
1,3-Dichloropropane	142289
1,2-Dichloropropane	78875
Dichloropropane	8003198
Dichloropropene	26952238
2,3-Dichloropropene	78886
1,3-Dichloropropene	542756
2,2-Dichloropropionic acid	75990
Dichlorvos	62737
Dicofol	115322
Dieldrin	60571
Diethylamine	109897
Diethylarsine	692422
1,4-Diethylenedioxide	123911
O,O-Diethyl S-methyl dithiophosphate	3288582
Diethyl-p-nitrophenyl phosphate	311455
Diethyl-o-phthalate	84662
O,O-Diethyl O-pyrazinyl phosphorothioate	297972
Diethylstilbestrol	56531
Dihydrosafrole	94586
Diisopropylfluorophosphate	55914
3,3'-Dimethoxybenzidine	119904
Dimethylamine	124403
p-Dimethylamino-azobenzene	60117
3,3'-Dimethylbenzidine	119937
1,1-Dimethylhydrazine	57147
1,2-Dimethylhydrazine	540738
alpha,alpha-Dimethylphenethylamine	122098
2,4-Dimethylphenol	105679
Dimethyl phthalate	131113
Dimethyl sulfate	77781
Dinitrobenzene (mixed)	25154545
m-Dinitrobenzene	99650
o-Dinitrobenzene	528290
p-Dinitrobenzene	100254
4,6-Dinitro-o-cresol and salts	534521
Dinitrophenol	25550587
2,5-Dinitrophenol	329715
2,6-Dinitrophenol	573568
2,4-Dinitrophenol	51285
Dinitrotoluene	25321146
3,4-Dinitrotoluene	610399
2,4-Dinitrotoluene	121142
2,6-Dinitrotoluene	606202
Dinoseb	88857
Di-n-octyl phthalate	117840
1,2-Diphenylhydrazine	122667
Diphosphoramide, octamethyl-	152169
Diphosphoric acid, tetraethyl ester	107493
Dipropylamine	142847
Di-n-propylnitrosamine	621647
Diquat	85007
Disulfoton	298044
Dithiobiuret	541537
1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl]oxime (Tirpate)	26419738
Diuron	330541
Dodecylbenzenesulfonic acid	27176870
Endosulfan	115297
alpha-Endosulfan	959988
beta-Endosulfan	33213659
Endosulfan sulfate	1031078
Endothall	145733
Endrin & metabolites	72208
Endrin aldehyde	7421934
Epichlorohydrin	106898
Epinephrine	51434
Ethanimidiothioic acid, 2-(dimethylamino-N-hydroxy-2-oxo-, methyl ester (A2213)	30558431
Ethanimidiothioic acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester (Oxamyl)	23135220
Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]] bis-, dimethyl ester (Thiodicarb)	59669260
Ethanol, 2,2'-oxybis-, dicarbamate (Diethylene glycol, dicarbamate)	5952261
Ethion	563122
Ethyl acetate	141786
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate	51796
Ethyl cyanide	107120
Ethylenebisdithiocarbamic acid, salts & esters	111546
Ethylenediamine	107153
Ethylenediamine-tetraacetic acid (EDTA)	60004
Ethylene dibromide	106934
Ethylene glycol monoethyl ether	110805
Ethylene oxide	75218
Ethylenethiourea	96457
Ethylenimine	151564

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Hazardous Substance	CAS Number
Ethyl ether	60297
Ethyl methacrylate	97632
Famphur	52857
Ferric ammonium citrate	1185575
Ferric ammonium oxalate	2944674
Ferric chloride	7705080
Ferric fluoride	7783508
Ferric nitrate	10421484
Ferric sulfate	10028225
Ferrous ammonium sulfate	10045893
Ferrous chloride	7758943
Ferrous sulfate	7720787
Fluoranthene	206440
Fluorene	86737
Fluorine	7782414
Fluoroacetamide	640197
Fluoroacetic acid, sodium salt	62748
Formaldehyde	50000
Formic acid	64186
Fumaric acid	110178
Furan	110009
Furfural	98011
Glauramine	492808
Glycidylaldehyde	765344
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257
Guthion	86500
Heptachlor	76448
Heptachlor epoxide	1024573
Hexachlorobenzene	118741
Hexachlorobutadiene	87683
Hexachlorocyclohexane (all isomers)	608731
Hexachlorocyclohexane (gamma isomer - Lindane)	58899
Hexachlorocyclopentadiene	77474
Hexachloroethane	67721
Hexachlorophene	70304
Hexachloropropene	1888717
Hexaethyl tetraphosphate	757584
Hydrazine	302012
Hydrazine, 1,2-diethyl-	1615801
Hydrochloric acid	7647010
Hydrocyanic acid	74908
Hydrofluoric acid	7664393
Hydrogen sulfide H_2S	7783064
Hydroperoxide, 1-methyl-1-phenylethyl	80159
Indeno(1,2,3-cd)pyrene	193395
Iron, tris (dimethylcarbamodithioato-S,S')-	14484641
Isobutyl alcohol	78831
Isodrin	465736
Isophorone	78591
Isoprene	78795
Isopropanolamine dodecylbenzenesulfonate	42504461
Isosafrole	120581
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964
Kepone	143500
Lasiocarpine	303344
Lead	7439921
Lead acetate	301042
Lead arsenate	7784409
Lead chloride	7758954
Lead fluoborate	13814965
Lead fluoride	7783462
Lead iodide	10101630
Lead nitrate	10099748
Lead phosphate	7446277
Lead stearate	7428480
Lead subacetate	1335326
Lead sulfate	15739807
Lead sulfide	1314870
Lead thiocyanate	592870
Lithium chromate	14307358
Malathion	121755
Maleic acid	110167
Maleic anhydride	108316
Maleic hydrazide	123331
Manganese dimethyldithiocarbamate	15339363
Melphalan	148823
Mercaptodimethur	2032657
Mercuric cyanide	592041
Mercuric nitrate	10045940
Mercuric sulfate	7783359
Mercuric thiocyanate	592858
Mercurous nitrate	10415755
Mercury	7439976
Mercury fulminate	628864
Methacrylonitrile	126987
Methanesulfonic acid, ethyl ester	62500
Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl] oxy]phenyl]-, monohydrochloride	23422539
Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]-	17702577
Methanol	67561
Methapyrilene	91805
Methomyl	16752775
Methoxychlor	72435
Methyl bromide	74839
1-Methylbutadiene	504609
Methyl chloride	74873
Methyl chlorocarbonate	79221
3-Methylcholanthrene	56495
4,4'-Methylene(bis)chloroaniline	101144
Methylene bromide	74953
Methylene chloride	75092
Methyl ethyl ketone (MEK)	78933
Methyl ethyl ketone peroxide	1338234
Methyl hydrazine	60344
Methyl iodide	74884
Methyl isobutyl ketone	108101
Methyl isocyanate	624839
Methylmercaptan	74931
Methyl methacrylate	80626
Methyl parathion	298000

Hazardous Substance	CAS Number
Methylthiouracil	56042
Mevinphos	7786347
Mexacarbate	315184
Mitomycin C	50077
Monoethylamine	75047
Monomethylamine	74895
Naled	300765
1-Naphthalenamine	134327
2-Naphthalenamine	91598
Naphthalene	91203
1,4-Naphthalenedione	130154
Naphthenic acid	1338245
alpha-Naphthylthiourea	86884
Nickel	7440020
Nickel ammonium sulfate	15699180
Nickel carbonyl	13463393
Nickel chloride	7718549
Nickel cyanide $Ni(CN)_2$	557197
Nickel hydroxide	12054487
Nickel nitrate	14216752
Nickel sulfate	7786814
Nicotine, & salts	54115
Nitric acid	7697372
p-Nitroaniline	100016
Nitrobenzene	98953
Nitrogen dioxide NO_2	10102440
Nitrogen oxide NO	10102439
Nitroglycerine	55630
Nitrophenol (mixed)	25154556
m-Nitrophenol	554847
o-Nitrophenol	88755
p-Nitrophenol	100027
2-Nitropropane	79469
N-Nitrosodiethanolamine	1116547
N-Nitrosodiethylamine	55185
N-Nitrosodimethylamine	62759
N-Nitrosodiphenylamine	86306
N-Nitrosopyrrolidine	930552
Nitrotoluene	1321126
m-Nitrotoluene	99081
o-Nitrotoluene	88722
p-Nitrotoluene	99990
5-Nitro-o-toluidine	99558
Osmium tetroxide OsO_4	20816120
Paraformaldehyde	30525894
Paraldehyde	123637
Parathion	56382
Pentachlorobenzene	608935
Pentachloroethane	76017
Pentachloronitrobenzene	82688
Pentachlorophenol	87865
Perchloroethylene	127184
Phenacetin	62442
Phenanthrene	85018
Phenol	108952
Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl methylcarbamate)	64006
Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (Promecarb)	26313:
Phenylmercury acetate	6238
Phenylthiourea	10385
Phorate	29802:
Phosgene	7544!
Phosphine	7803512
Phosphoric acid	7664382
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60515
Phosphorus	7723140
Phosphorus oxychloride	10025873
Phosphorus pentasulfide	1314803
Phosphorus trichloride	7719122
Phthalic anhydride	85449
Piperidine, 1-nitroso-	100754
Piperidine, 1,1'-(tetrathiodicarbonothioyl)bis-(Bis(pentamenthylene)thiuram tetrasulfide)	120547
Polychlorinated biphenyls (PCBs)	1336363
Aroclor 1016	12674112
Aroclor 1221	11104282
Aroclor 1232	11141165
Aroclor 1242	53469219
Aroclor 1248	12672296
Aroclor 1254	11097691
Aroclor 1260	11096825
Potassium arsenate	7784410
Potassium arsenite	10124502
Potassium bichromate	7778509
Potassium chromate	7789006
Potassium cyanide KCN	151508
Potassium hydroxide	1310583
Potassium permanganate	7722647
Potassium silver cyanide	506616
Pronamide	23950585
1,3-Propane sultone	1120714
Propanedinitrile	109773
Propargite	2312358
Propargyl alcohol	107197
Propionic acid	79094
Propionic anhydride	123626
n-Propylamine	107108
Propylene oxide	75569
Pyrene	129000
Pyrethrins	121299
Pyridine	110861
Pyridine, 2-methyl-	109068
Pyrrolo[2,3-b] indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-Physostigmine	57476
Quinoline	91225
Reserpine	50555
Resorcinol	108463
Saccharin and salts	81072

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Appendix A—Hazardous Substances

Hazardous Substance	CAS Number
Safrole	94597
Selenious acid	7783008
Selenium	7782492
Selenium dioxide	7446084
Selenium sulfide SeS_2	7488564
Selenourea	630104
Silver	7440224
Silver cyanide AgCN	506649
Silver nitrate	7761888
Silvex (2,4,5-TP)	93721
Sodium	7440235
Sodium arsenate	7631892
Sodium arsenite	7784465
Sodium azide	26628228
Sodium bichromate	10588019
Sodium bifluoride	1333831
Sodium bisulfite	7631905
Sodium chromate	7775113
Sodium cyanide NaCN	143339
Sodium dodecyl-benzenesulfonate	25155300
Sodium fluoride	7681494
Sodium hydrosulfide	16721805
Sodium hydroxide	1310732
Sodium hypochlorite	7681529
Sodium methylate	124414
Sodium nitrite	7632000
Sodium phosphate, dibasic	7558794
Sodium phosphate, tribasic	7601549
Sodium selenite	10102188
Streptozotocin	18883664
Strontium chromate	7789062
Strychnine, & salts	57249
Styrene	100425
Sulfur monochloride	12771083
Sulfuric acid	7664939
2,4,5-T acid	93765
2,4,5-T amines	2008460
	1319728
	3813147
	6369966
	6369977
2,4,5-T (n-butyl) esters	93798
	1928478
	2545597
Isooctyl	25168154
Methylpropyl	61792072
2,4,5-T salts	13560991
1,2,4,5-Tetrachlorobenzene	95943
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (TCDD)	1746016
1,1,1,2-Tetrachloroethane	630206
1,1,2,2-Tetrachloroethane	79345
2,3,4,6-Tetrachlorophenol	58902
Tetraethyllead	78002
Tetraethyldithiopyrophosphate	3689245
Tetrahydrofuran	109999
Tetranitromethane	509148
Thallium	7440280
Thallium(I) acetate	563688
Thallium(I) carbonate	6533739
Thallium chloride TlCl	7791120
Thallium(I) nitrate	10102451
Thallium oxide Tl_2O_3	1314325
Thallium selenite	12039520
Thallium(I) sulfate	7446186
2H-1,3,5-Thiadiazine-2-thione, tetrahydro-3,5-dimethyl- (Dazomet)	533744
Thioacetamide	62555
Thiofanox	39196184
Thioperoxydicarbonic diamide, tetrabutyl (Tetrabutylthiuram disulfide)	1634022
Thioperoxydicarbonic diamide, tetraethyl (Disulfiram)	97778
Thiophenol	108985
Thiosemicarbazide	79196
Thiourea	62566
Thiourea, (2-chlorophenyl)-	5344821
Thiram	137268
Toluene	108883
Toluenediamine	95807
Toluene diisocyanate	584849
o-Toluidine	95534
p-Toluidine	106490
o-Toluidine hydrochloride	636215
Toxaphene	8001352
2,4,5-TP esters	32534955
Trichlorfon	52686
1,2,4-Trichlorobenzene	120821
1,1,1-Trichloroethane	71556
1,1,2-Trichloroethane	79005
Trichloroethene (Trichloroethylene)	79016
Trichloromethanesulfenyl chloride	594423
Trichloromonofluoromethane	75694
Trichlorophenol	25167822
2,3,4-Trichlorophenol	15950660
2,3,5-Trichlorophenol	933788
2,3,6-Trichlorophenol	933755
3,4,5-Trichlorophenol	609198
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
Triethanolamine dodecylbenzenesulfonate	27323417
Triethylamine	121448
Trimethylamine	75503
1,3,5-Trinitrobenzene	99354
Tris(2,3-dibromopropyl)phosphate	126727
Trypan blue	72571
Uracil mustard	66751
Uranyl acetate	541093
Uranyl nitrate	10102064
Urea, N-ethyl-N-nitroso-	759739
Urea, N-methyl-N-nitroso-	684935
Vanadium pentoxide	1314621
Vanadyl sulfate	27774136
Vinyl chloride	75014
Vinyl acetate	108054

Appendix A—Hazardous Substances

Hazardous Substance	CAS Number
Vinylamine, N-methyl-N-nitroso-	4549400
Warfarin, and salts, when present at concentrations greater than 0.3%	81812
Xylene (mixed)	1330207
Xylenol	1300716
Zinc	7440666
Zinc acetate	557346
Zinc ammonium chloride	52628258
Zinc, bis(dimethyl carbomodithioato-S,S')- (Ziram)	137304
Zinc, bis(diethylcarbamo dithioato-S,S')- (Ethyl Ziram)	14324551
Zinc borate	1332076
Zinc bromide	7699458
Zinc carbonate	3486359
Zinc chloride	7646857
Zinc cyanide $Zn(CN)_2$	557211
Zinc fluoride	7783495
Zinc formate	557415
Zinc hydrosulfite	7779864
Zinc nitrate	7779886
Zinc phenolsulfonate	127822
Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%	1314847
Zinc silicofluoride	16871719
Zinc sulfate	7733020
Zirconium nitrate	13746899
Zirconium potassium fluoride	16923958
Zirconium sulfate	14644612
Zirconium tetrachloride	10026116

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Appendix B

Ignitable Solids

(30 TAC Chapter 335 Subchapter R Appendix I Table 2)

Constituents listed from Department of Transportation Regulations, 49 CFR Part 173 Subpart E, October 1, 1993. Note: The presence of a constituent on this table in a nonhazardous waste does not automatically identify that waste as a Class 1 ignitable waste. The constituents on this table are examples of materials which could be considered Class 1 ignitable waste. The physical characteristics of the waste will be the determining factor as to whether or not a waste is ignitable. Refer to 30 TAC §335.505(2) (relating to Class 1 Waste Determination) for the Class 1 ignitable criteria.

Compound or Material	Compound or Material
Aluminum, metallic, powder	Calcium silicide
Alkali metal amalgams	Camphor, synthetic
Alkali metal amides	Carbon, activated
Aluminum alkyl halides	Celluloid
Aluminum alkyl hydrides	Cerium
Aluminum alkyls	Cesium metal
Aluminum borohydrides	Chromic acid or chromic acid mixture, dry
Aluminum carbide	Cobalt naphthenates, powder
Aluminum ferrosilicon powder	Cobalt resinate
Aluminum hydride	Decaborane
Aluminum phosphide	2-Diazo-1-naphthol-4-sulphochloride
Aluminum resinate	2-Diazo-1-naphthol-5-sulphochloride
Aluminum silicon powder	2,5-Diethoxy-4-morpholinobenzene-diazonium zinc choride
Ammonium picrate	Diethylzinc
2,2'-Azodi(2,4-dimethyl-4-methoxyvaleronitrile)	4-Dimethylamino-6-(2-dimethyaminoethoxy)-toluene-2-diazonium zinc chloride
2, 2'-Azodi(2,4-dimethylvaleronitrile)	Dimethylzinc
1, 1' Azodi(hexahydrobenzonitrile)	Dinitrophenolates
2,2'-Azodi(2-methyl-butyronitrile)	Dinitroresorcinol
Azodiisobutryonitrile	N,N'-Dinitroso-N,N'-dimethylterephthalamide
Barium, metallic	N,N'-Dinitrosopentamethylenetetramine
Barium alloys, pyrophoric	Diphenyloxide-4,4'-disulfohydrazide
Barium azide	Dipicryl sulfide
Benzene-1,3-disulfohydrazide	4-Dipropylaminobenzenediazonium zinc chloride
Benzene sulfohydrazide	Ferrocerium
4-(Benzyl(ethly)amino)-3-ethoxy-benzenediazonium zinc chloride	Ferrosilicon
4-(Benzyl(methyl)amino)-3-ethoxy-benzenediazonium zinc chloride	Ferrous metal
Borneol	Hafnium powder
Boron trifluoride dimethyl etherate	Hexamine
5-tert-Butyl-2,4,6-trinitro-m-xylene	Hydrides, metal
Calcium, metallic	3-(2-Hydroxyethoxy)-4-pyrrolidin-1-ylbenzenediazonium zinc chloride
Calcium carbide	Iron oxide, spent
Calcium chlorite	Isosorbide dinitrate mixture
Calcium cyanamide	Lead phosphite, dibasic
Calcium dithionite	Lithium acetylide-ethylene diamine complex
Calcium hypochlorite	Lithium alkyls
Calcium manganese silicon	Lithium aluminum hydride
Calcium silicon powder	Lithium amide, powdered
Calcium phosphide	Lithium borohydride
Calcium pyrophoric	Lithium ferrosilicon
Calcium resinate	

Appendix B—Ignitable Solids

Compound or Material	Compound or Material
Lithium hydride	Silicon powder, amorphous
Lithium metal	Silver picrate
Lithium nitride	Sodium, metallic
Lithium silicon	Sodium aluminum hydride
Magnesium granules	Sodium amide
Magnesium aluminum phosphide	Sodium borohydride
Magnesium diamide	Sodium chlorite
Magnesium phosphide	Sodium2-diazo-1-naphthol-4-sulphonate
Magnesium silicide	Sodium2-diazo-1-naphthol-5-sulphonate
Maneb	Sodium dichloro-s-triazinetrione
Manganese resinate	Sodium dinitro-ortho-cresolate
Methyl magnesium bromide	Sodium hydride
Methyldichlorosilane	Sodium hydrosulfite
Mono-(trichloro)tetra(monopotassium dichloro)-penta-s-triazinetrione	Sodium methylate
	Sodium nitrite and mixtures
N-Methyl-N'-nitronitrosoguanidine	Sodium picramate, wet
Naphthalene	Sodium potassium alloys
Nitrocellulose mixtures	Sodium sulfide, anhydrous
Nitroguanidine	Stannic phosphide
p-Nitrosodimethylaniline	Strontium phosphide
Paraformaldehyde	Sulfur
Pentaborane	Titanium metal powder
Peratic acid	Titanium hydride
Phosphorous, amorphous, red	Trichloroisocyanuric acid
Phosphorous, white or yellow	Trichlorosilane
Phosphoric anhydride	Trichloro-s-triazinetrione
Phosphorous pentachloride	Trinitrobenzoic acid
Phosphorus pentasulfide	Trinitrophenol
Phosphorus sesquisulfide	Trinitrotoluene
Phosphorus trisulfide	Urea nitrate
Picric acid	Zinc ammonium nitrite
Potassium, metallic	Zinc phosphide
Potassium dichloro-s-triazinetrione	Zinc powder
Potassium borohydride	Zinc resinate
Potassium dithionite	Zirconium hydride, powdered
Potassium phosphide	Zirconium picramate
Potassium sulfide, anhydrous	Zirconium powder
Rubidium metal	Zirconium scrap

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Appendix C

Class 1 Toxic Constituents' Maximum Leachable Concentrations

(30 TAC Chapter 335 Subchapter R Appendix I Table 1)

Applicability: **Class 1, 2, and 3 Waste Evaluations**

Values are based on information contained in Federal Registers Vol. 55 / Friday, July 27, 1990; Vol. 56 / June 7, 1991; and Integrated Risk Information Systems. Environmental Protection Agency, and 40 CFR 264 Appendix 9.

Compound	CAS No.	Concentration (mg/l)
Acenaphthene	83-32-9	210
Acetone	67-64-1	400
Acetonitrile	75-05-8	20
Acetophenone	98-86-2	400
Acrylamide	79-06-1	0.08
Acrylonitrile	107-13-1	0.6
Aniline	62-53-3	60
Anthracene	120-12-7	1050
Antimony	7440-36-0	1
Arsenic	7440-38-2	1.8
Barium	7440-39-3	100.0
Benzene	71-43-2	0.50
Benzidine	92-87-5	0.002
Beryllium	7440-41-7	0.08
Bis(2-chloroethyl) ether	111-44-4	0.3
Bis(2-ethylhexyl) phthalate	117-81-7	30
Bromodichloromethane	75-27-4	0.3
Bromomethane	74-83-9	5
Butylbenzyl phthalate	85-68-7	700
Cadmium	7440-43-9	0.5
Carbon disulfide	75-15-0	400
Carbon tetrachloride	56-23-5	0.50
Chlordane	57-74-9	0.03
Chlorobenzene	108-90-7	70
Chloroform	67-66-3	6.0
Chloro-m-cresol, p	59-50-7	7000
2-Chlorophenol	95-57-8	20
Chromium	7440-47-3	5.0
m-Cresol	108-39-4	200.0*
o-Cresol	95-48-7	200.0*
p-Cresol	106-44-5	200.0*
DDD	72-54-8	1
DDE	72-55-9	1
DDT	50-29-3	1
Dibutyl phthalate	84-74-2	400
1,4-Dichlorobenzene	106-46-7	7.5
3,3-Dichlorobenzidine	91-94-1	0.8
1,2-Dichloroethane	107-06-2	0.50
Dichlorodifluoromethane	75-71-8	700
1,1-Dichloroethylene	75-35-4	0.6
1,3-Dichloropropene	542-75-6	1
2,4-Dichlorophenol	120-83-2	10
2,4-Dichlorophenoxy-acetic acid (2,4-D)	94-75-7	10.0
Dieldrin	60-57-1	0.02
Diethyl phthalate	84-66-2	3000
Dimethoate	60-51-5	70
2,4-Dimethyphenol	105-67-9	70
2,6-Dimethyphenol	576-26-1	21
m-Dinitrobenzene	99-65-0	0.4
2,4-Dinitrophenol	51-28-5	7
2,4-Dinitrotoluene (and 2,6-, mixture)	602-01-7	0.13
Dinoseb	88-85-7	3.5
1,4-Dioxane	123-91-1	30
Dioxins (Polychlorinated dibenzo-p-dioxins)		
2,3,7,8-TCDD	1746-01-6	0.005
1,2,3,7,8-PeCDD	40321-76-4	0.010
1,2,3,4,7,8-HxCDD	57653-85-7	0.050
1,2,3,6,7,8-HxCDD	34465-46-8	0.050
1,2,3,7,8,9-HxCDD		0.050
Diphenylamine	122-39-4	90
1,2-Diphenylhydrazine	122-66-7	0.4
Disulfoton	298-04-4	0.1
Endosulfan	959-98-8	0.2
Endrin	72-20-8	.02
2-Ethoxyethanol	10-80-5	1400
Ethylbenzene	100-41-4	400
Ethylene dibromide	106-93-4	0.004
Ethylene glycol	107-21-1	7000
Fluoranthene	206-44-0	140
Fluorene	86-73-7	140

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Appendix C — Class I Toxic Constituents' Maximum Leachable Concentrations (MCLs)

Compound	CAS No.	Concentration (mg/l)
Furans (Polychlorinated dibenzofurans)		
2,3,7,8-TCDF	51207-31-9	0.050
1,2,3,7,8-PeCDF		0.100
2,3,4,7,8-PeCDF		0.010
1,2,3,4,7,8-HxCDF		0.050
1,2,3,6,7,8-HxCDF		0.050
1,2,3,7,8,9-HxCDF		0.050
Heptachlor	76-44-8	0.008
Heptachlor epoxide	1024-57-3	0.04
Hexachlorobenzene	118-74-1	0.13
Hexachloro-1,3-butadiene	87-68-3	0.4
Hexachlorocyclopentadiene	77-47-4	20
Hexachloroethane	67-72-1	3.0
Hexachlorophene	70-30-4	1
Isobutyl alcohol	78-83-1	1000
Isophorone	78-59-1	90
Lead	7439-92-1	1.5
Lindane	58-89-9	0.3
Mercury	7439-97-6	0.2
Methacrylonitrile	126-98-7	0.4
Methomyl	16752-77-5	90
Methoxychlor	72-43-5	10.0
2-Methoxyethanol	109-86-4	14.0
Methyl ethyl ketone	78-93-3	200.0
Methyl isobutyl ketone	108-10-1	200
Methylene chloride	75-09-2	50
Methyl parathion	298-00-0	0.9
Mirex	2385-85-5	0.7
Nickel	7440-02-0	70
Nitrobenzene	98-95-3	2.0
N-Nitroso-di-n-butylamine	924-16-3	0.06
N-Nitrosodiphenylamine	86-30-6	70
N-Nitrosomethylethylamine	10595-95-6	0.02
N-Nitroso-n-propylamine	621-64-7	0.05
N-Nitrosopyrrolidine	930-55-2	0.2
p-Phenylenediamine	106-50-3	20
Parathion	56-38-2	20
Pentachlorobenzene	608-93-5	3
Pentachloronitrobenzene	82-68-8	10
Pentachlorophenol	87-86-5	100.0
Phenol	108-95-2	2000
Pronamide	23950-58-5	300
Pyrene	129-00-0	5.9
Pyridine	110-86-1	4
Selenium	7782-49-2	1.0
Silver	7440-22-4	5.0
Styrene	100-42-5	700
1,1,1,2-Tetrachloroethane	630-20-6	10
1,1,2,2-Tetrachloroethane	79-34-5	2
Tetrachloroethylene	127-18-4	0.7
2,3,4,6-Tetrachlorophenol	58-90-2	100
Toluene	108-88-3	1000
Toxaphene	8001-35-2	0.3
trans-1,3-Dichloropropene	542-75-6	1
Tribromomethane (Bromoform)	75-25-2	70
1,2,4-Trichlorobenzene	120-82-1	70
1,1,1-Trichloroethane	71-55-6	300
Trichloroethylene	79-01-6	0.5
1,1,2-Trichloroethane	79-00-5	6
Trichlorofluoromethane	75-69-4	1000
2,4,5-Trichlorophenoxy-propionic acid (2,4,5-TP or Silvex)	93-72-1	1.0
1,2,3-Trichloropropane	96-18-4	20
2,4,5-Trichlorophenol	95-95-4	400.0
2,4,6-Trichlorophenol	88-06-2	2
Vanadium pentoxide	1314-62-1	30
Vinyl chloride	75-01-4	0.2
Xylenes (all isomers)	1330-82-1	7000

* If o-, m-, and p-cresol concentrations cannot be differentiated, the total cresol concentration is used. The Maximum Concentration for total cresol is 200.0 mg/l.

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Appendix D

7-Day Distilled Water Leachate Test's Maximum Contaminant Levels

(30 TAC Chapter 335 Subchapter R APPENDIX 1 Table 3)

Applicability: **Class 3 Waste Evaluations**

Values obtained from 40 Code of Federal Regulations Part 141, Subparts B and G, Maximum Contaminant Levels and 40 Code of Federal Regulations Part 143, Total Dissolved Solids.

Constituent	MCL (mg/l)
Arsenic	0.05
Barium	1
*Benzene	0.005
Cadmium	0.005
*Carbon tetrachloride	0.005
Chlordane	0.002
*Chlorobenzene	0.1
Chromium	0.1
2,4-D	0.07
*Dibromochloropropane	0.0002
*ortho-Dichlorobenzene	0.6
*para-Dichlorobenzene	0.075
*1,2-Dichloroethane	0.005
*1,1-Dichloroethylene	0.007
*trans-1,2-Dichloroethylene	0.1
*1,2-Dichloropropane	0.005
*Ethylbenzene	0.7
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Lead	0.05
Mercury	0.002
Methoxychlor	0.04
Pentachlorophenol	0.001
Selenium	0.05
Silver	0.05
*Styrene	0.1
*Tetrachloroethylene	0.005
*1,1,1-Trichloroethane	0.20
*Trichloroethylene	0.005
*Toluene	1
Toxaphene	0.003
2,4,5-TP (Silvex)	0.05
*Vinyl chloride	0.002
*Xylenes (total)	10
Total dissolved solids	500

* For a Class 3 waste classification, these constituents must also be evaluated using the test methods described in 40 Code of Federal Regulations, Part 261, Appendix II. See §335.507 (4) (A) (ii) for additional information.

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Appendix E

Class 1 Toxic Constituents

(other than those identified in Appendix C, *and their Estimated Quantitation Limits [EQLs]*)

Applicability: **Class 3 Waste Evaluations**

This table is to be utilized by the generator in evaluating detection limits for the identified constituents. The EQLs in this table are defined as the lowest detectable levels that can be reliably achieved using the Toxicity Characteristic Leaching Procedure (TCLP) at the time of the printing of this guideline. Applicable EPA method numbers are provided and can be found in EPA Report SW-846 "Test Methods for Evaluating Solid Waste" except where noted. Please note that more than one test method may be available for a particular constituent. Synonyms are provided in brackets "[]".

Constituent	EQL (mg/l)	Method(s)
Acenaphthene	0.2	8100
	0.01	8270
	0.02	8250
Acetone	0.1	8240
Acetonitrile	0.1	8015
[Methyl cyanide]	0.1	8030
Acetophenone	0.001	8250
	0.01	8270
Acrylamide	0.005	8015
Acrylonitrile	0.005	8030
[Vinyl cyanide]	0.005	8240
Anthracene	0.2	8100
	0.02	8250
	0.01	8270
Aniline	0.01	8250
[Benzyl amine]	0.01	8270
Antimony	0.2	204
	0.3	6010
	2.0	7040
	0.03	7041
	2.0	7000A
Benzidine [Dianiline]	0.44	8250
Beryllium	**	210
	0.003	6010
	0.05	7090
	0.002	7091
	0.05	7000A
Bis(2-chloroethyl) ether	0.057	8250
[Dichloroethyl ether]	0.01	8270
Bis(2-ethylhexyl)	0.02	8060
phthalate	0.25	8250
	0.01	8270
Bromodichloromethane	0.001	8010
	0.005	8240
Bromomethane	0.003	8010
[Methylbromide]	0.01	8240
Butylbenzyl phthalate	0.005	8060
[Benzylbutyl phthalate]	0.025	8250
	0.01	8270
Carbon disulfide [CS_2]	0.005	8240
Chloroform	0.0005	8010
	0.005	8240
p-Chloro-m-cresol	0.005	8040
	0.02	8270
2-Chlorophenol	0.003	8040
[o-Chlorophenol]	0.01	8270
m-Cresol	0.01	8270
o-Cresol	0.01	8270
p-Cresol	0.01	8270
DDD [Dichlorodiphenyl-	0.0001	8080
dichloroethane]	0.028	8250
	0.01	8270
DDE [Dichlorodiphenyl-	0.00004	8080
ethylene]	0.056	8250
	0.01	8270
DDT [Dichlorodiphenyl-	0.0001	8080
trichloroethane]	0.047	8250
	0.01	8270
Dibutyl phthalate	0.005	8060
	0.01	8270
1,4-Dichlorobenzene	0.004	8010
	0.003	8020
	0.013	8120
	0.01	8270
3,3-Dichlorobenzidine	0.02	8270
Dichlorodifluoromethane	0.01	8010
	0.005	8240
1,3-Dichloropropene	0.003	8010
	0.005	8240
2,4-Dichlorophenol	0.05	8040
	0.01	8270
Dieldrin	0.00002	8080
	0.01	8270
Diethyl phthalate	0.005	8060
	0.01	8270
Dimethoate	0.02	8270
2,4-Dimethylphenol	0.003	8040
	0.01	8270
2,6-Dimethylphenol	**	**

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Appendix E—Class I Toxic Constituents

Constituent	EQL (mg/l)	Method(s)
m-Dinitrobenzene	0.01	8270
2,4-Dinitrophenol	0.13	8040
	0.05	8270
2,4-Dinitrotoluene	0.0002	8090
(and 2,6-, mixture)	0.01	8270
Dinoseb	0.007	8150
	0.02	8270
1,4-Dioxane	0.15	8015
Dioxins (Polychlorinated dibenzo-p-dioxins)		
2,3,7,8-TCDD	0.000005	8280
1,2,3,7,8-PeCdd	0.00001	8280
1,2,3,4,7,8-HxCDD	0.00001	8280
1,2,3,6,7,8-HxCDD	0.00001	8280
1,2,3,7,8,9-HxCDD	0.00001	8280
Diphenylamine	0.01	8270
1,2-Diphenylhydrazine	0.2	1625
Disulfoton	0.002	8140
	0.01	8270
Endosulfan	0.0001	8080
	0.056	8250
Endrin	0.00006	8080
	0.01	8250
2-Ethoxyethanol	**	**
Ethylene dibromide [EDB] (Standard Methods for Examination of Water and Wastewater)	0.5	6231
Ethylene glycol	**	**
Fluoranthene	0.2	8100
	0.01	8270
Fluorene	0.2	8100
	0.01	8270
Furans (Polychlorinated dibenzofurans)		
2,3,7,8-TCDF	0.00001	8280
1,2,3,7,8-PeCDF	0.00001	8280
2,3,4,7,8-PeCDF	0.00001	8280
1,2,3,4,7,8-HxCDF	0.00001	8280
1,2,3,6,7,8-HxCDF	0.00001	8280
1,2,3,7,8,9-HxCDF	0.00001	8280
Hexachlorobenzene	0.0005	8120
	0.0	8270
Hexachloro-1,3-butadiene	0.0034	8120
	0.01	8270
Hexachlorocyclopentadiene	0.004	8120
	0.01	8270
Hexachloroethane	0.0003	8120
	0.01	8270
Hexachlorophene	0.05	8270
Isobutyl alcohol	0.05	8015
Isophorone	0.06	8090
	0.01	8270
Lindane	0.00004	8080
	0.01	8250
	0.00004	608
	0.01	625
Methacrylonitrile	0.005	8015
Methomyl	0.09	632
2-Methoxyethanol	**	**
Methyl ethyl ketone [MEK]	0.01	8015
	0.1	8240
Methyl isobutyl ketone [MIBK]	**	8015
	0.005	8240
Methylene chloride	0.005	8010
(Dichloromethane)	0.005	8240
Methyl parathion	0.0003	8140
	0.01	8270
Mirex	**	**
Nickel	0.04	249
	0.05	6010
	0.4	7520
	0.04	7000A
Nitrobenzene	0.04	8090
	0.01	8250
	0.01	8270
N-Nitroso-di-n-butylamine	0.01	8270
N-Nitrosodiphenylamine	0.01	8270
N-Nitrosomethylethylamine	0.02	8270
N-Nitroso-n-propylamine	0.01	8270
N-Nitrosopyrrolidine	0.01	8270
p-Phenylenediamine	0.01	8270
Parathion	0.01	8270
	0.0003	8140
Pentachlorobenzene	0.02	8270
Pentachloronitrobenzene	0.01	8270
Phenol	0.001	8040
	0.01	8270
Pronamide	0.01	8270
Pyrene	0.2	8100
	0.01	8270
Pyridine	0.005	8240
	0.01	8270
1,1,1,2-Tetrachloroethane	0.005	8010
	0.005	8240
1,1,2,2-Tetrachloroethane	0.0003	8010
	0.005	8240
2,3,4,6-Tetrachlorophenol	0.01	8270
trans-1,3-Dichloropropene	0.0034	8010
	0.005	8240
Tribromomethane [Bromoform]	0.002	8010
	0.005	8240
1,2,4-Trichlorobenzene	0.01	8270
1,1,2-Trichloroethane	0.0002	8010
[1,1,2-TCE]	0.005	8240
Trichlorofluoromethane	0.01	8010
[Freon 11]	0.005	8240
1,2,3-Trichloropropane	0.01	8010
	0.005	8240
2,4,5-Trichlorophenol	0.01	8270
2,4,6-Trichlorophenol	0.006	8040
	0.01	8270
Vanadium pentoxide	0.2	286
	0.08	6010
	2.0	7910
	0.04	7911

* If o-, m-, and p-cresol concentrations cannot be differentiated, the total cresol concentration is used.
** This information not available at time of publication.

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Appendix F

7-Day Distilled Water Leachate Test Procedure

30 TAC Chapter 335 Subchapter R Appendix 4)

Applicability: **Class 3 Waste Evaluations**

This test is intended only for dry, solid wastes, i.e., waste materials without any free liquids.

1. Place a 250 gram (dry weight) representative sample of the waste material in a 1500 milliliter Erlenmeyer flask.

2. Add 1 liter of deionized or distilled water into the flask and mechanically stir the material at a low speed for five (5) minutes.

3. Stopper the flask and allow to stand for seven (7) days.

4. At the end of seven (7) days, filter the supernatant solution through a 0.45 micron filter, collecting the supernatant into a separate flask.

5. Subject the filtered leachate to the appropriate analysis.

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Appendix G

Form Codes

(30 TAC Chapter 335 Subchapter R Appendix 3)

Applicability: **All Waste**

In determining a waste stream's form code, it is recommended that the generator first determine into which major category the waste stream fits (e.g. inorganic liquids). The generator should then review all the form code descriptors in that category to determine which code or codes best describe the generator's waste stream. The generator should then choose, from the narrowed-down list, a form code for the waste stream.

Form codes are fairly generic in their descriptions. It is possible that more than one form code may be applicable to a particular waste stream. Generators should assign the form code which best describes the waste stream. If more than one form code can "best describe" the waste stream, then the generator should choose one of those several codes.

Code	Waste Description
	Lab Packs
	Lab Packs *— Lab packs of mixed wastes, chemicals, lab wastes*
001	Lab packs of old chemicals only
002	Lab packs of debris only
003	Mixed lab packs
004	Lab packs containing acute hazardous wastes
009	Other lab packs (Specify in Comments)
	Liquids
	Inorganic Liquids *— Waste that is primarily inorganic and highly fluid (e.g., aqueous), with low suspended inorganic solids and low organic content*
101	Aqueous waste with low solvents
102	Aqueous waste with low other toxic organics
103	Spent acid with metals
104	Spent acid without metals
105	Acidic aqueous waste
106	Caustic solution with metals but no cyanides
107	Caustic solution with metals and cyanides
108	Caustic solution with cyanides but no metals
109	Spent caustic
110	Caustic aqueous waste
111	Aqueous waste with reactive sulfides
112	Aqueous waste with other reactives (e.g., explosives)
113	Other aqueous waste with high dissolved solids
114	Other aqueous waste with low dissolved solids
115	Scrubber water
116	Leachate
117	Waste liquid mercury
119	Other inorganic liquids (Specify in Comments)
198	Nonhazardous photographic chemical wastes (inorganic)
199	Brine solution that could also bear the form code 113
	Organic Liquids *— Waste that is primarily organic and is highly fluid, with low inorganic solids content and low-to-moderate water content*
201	Concentrated solvent-water solution
202	Halogenated (e.g., chlorinated) solvent
203	Non-halogenated solvent
204	Halogenated/non-halogenated solvent mixture
205	Oil-water emulsion or mixture
206	Waste oil
207	Concentrated aqueous solution of other organics
208	Concentrated phenolics
209	Organic paint, ink, lacquer, or vanish
210	Adhesives or epoxies
211	Paint thinner or petroleum distillates

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Code	Waste Description
212	Reactive or polymerizable organic liquids
219	Other organic liquids (Specify in Comments)
296	Ethylene glycol based antifreeze
297	Nonhazardous liquids containing greater than or equal to (>) 50 and less than (<) 500 ppm PCBs
298	Nonhazardous liquids containing greater than or equal to (>) 500 ppm PCBs
299	Nonhazardous photographic chemical waste (organic)

Solids

*(These codes **do not** apply to pumpable waste.)*

Inorganic Solids** — Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; **not pumpable

301	Soil contaminated with organics
302	Soil contaminated with inorganics only
303	Ash, slag, or other residue from incineration of wastes
304	Other "dry" ash, slag, or thermal residue
305	"Dry" lime or metal hydroxide solids chemically "fixed"
306	"Dry" lime or metal hydroxide solids not "fixed"
307	Metal scale, filings, or scrap
308	Empty or crushed metal drums or containers
309	Batteries or battery parts, casings, cores
310	Spent solid filters or adsorbents
311	Asbestos solids and debris
312	Metal-cyanide salts/chemicals
313	Reactive cyanide salts/chemicals
314	Reactive sulfide salts/chemicals
315	Other reactive salts/chemicals
316	Other metal salts/chemicals
319	Other waste inorganic solids (Specify in Comments)
388	Empty or crushed glass containers
389	Nonhazardous sandblasting waste
390	Nonhazardous concrete/cement/ construction debris
391	Nonhazardous dewatered wastewater treatment sludge
392	Nonhazardous dewatered air pollution control device sludge
393	Catalyst waste
394	Nonhazardous solids containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
395	Nonhazardous solids containing greater than or equal to (>) 500 ppm PCBs
396	Nonhazardous electrical equipment/ devices containing greater than or equal to (>) 50ppm and less than (<) 500 ppm PCBs
397	Nonhazardous electrical equipment/ devices containing greater than or equal to (>) 500 ppm PCBs
398	Nonhazardous soils containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
399	Nonhazardous soils containing greater than or equal to (>) 500 ppm PCBs

Organic Solids** — Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; **not pumpable

401	Halogenated pesticide solid
402	Non-halogenated pesticide solid
403	Solids resins or polymerized organics
404	Spent carbon
405	Reactive organic solid
406	Empty fiber or plastic containers
407	Other halogenated organic solids (Specify in Comments)
409	Other non-halogenated organic solids (Specify in Comments)
488	Wood debris
489	Petroleum contaminated solids
490	Sand blasting waste
491	Dewatered biological treatment sludge
492	Dewatered sewage or other untreated biological sludge
493	Catalyst waste
494	Solids containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
495	Solids containing greater than or equal to (>) 500 ppm PCBs
496	Electrical equipment/devices containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
497	Electrical equipment/devices containing greater than or equal to (>) 500 ppm PCBs
498	Soil containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
499	Soils containing greater than or equal to (>) 500 ppm PCBs

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Code	Waste Description
	Sludges
	(These codes only apply to pumpable waste.)
	Inorganic Sludges** — Waste that is primarily inorganic, with moderate-to-high water content and low organic content,* and ***pumpable
501	Lime sludge without metals
502	Lime sludge with metals/metal hydroxide sludge
503	Wastewater treatment sludge with toxic organics
504	Other wastewater treatment sludge
505	Untreated plating sludge without cyanides
506	Untreated plating sludge with cyanides
507	Other sludge with cyanides
508	Sludge with reactive sulfides
509	Sludge with other reactives
510	Degreasing sludge with metal scale or filings
511	Air pollution control device sludge (e.g., fly ash, wet scrubber sludge)
512	Sediment or lagoon dragout contaminated with organics
513	Sediment or lagoon dragout contaminated with inorganics only
514	Drilling mud
515	Asbestos slurry or sludge
516	Chloride or other brine sludge
519	Other inorganic sludges (Specify in Comments)
597	Catalyst waste
598	Nonhazardous sludges containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
599	Nonhazardous sludges containing greater than or equal to (>) 500 ppm PCBs
	Organic Sludges** — Waste that is primarily organic with low-to-moderate inorganic solids content and water content, and **pumpable
601	Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids
602	Still bottoms on non-halogenated solvents or other organic liquids
603	Oily sludge
604	Organic paint or ink sludge
605	Reactive or polymerizable organics
606	Resins, tars, or tarry sludge
607	Biological treatment sludge
608	Sewage or other untreated biological sludge
609	Other organic sludges (Specify in Comments)
695	Petroleum contaminated sludges other than still bottoms and oily sludges
696	Grease
697	Catalyst waste
698	Nonhazardous sludges containing greater than or equal to (>) 50 ppm and less than (<) 500 ppm PCBs
699	Nonhazardous sludges containing greater than or equal to (>) 500 ppm PCBs
	Gases
	***Inorganic Gases** — Waste that is primarily inorganic with a low organic content and is a gas at atmospheric pressure*
701	Inorganic gases
	***Organic Gases** — Waste that is primarily organic with low-to-moderate inorganic content and is a gas at atmospheric pressure*
801	Organic gases
	Plant Trash
	(In order to be considered for one of the two plant refuse designations, a waste must first meet the following two criteria.
	***First**, the waste **must** be a Class 2 waste. This means that a proper classification determination must be performed for each item which a facility is considering as one of the plant refuse designations. A waste is not a Class 2 solely because it has been designated as a plant refuse waste. **Hazardous** and **Class 1 wastes** are **not eligible** for designation as one of the plant refuses.*
	***Second**, the waste must meet the particular definition of the plant refuse term. For more information on these terms, please refer to the terms listed in this table as well as the "Definitions" section which follows this table.)*
902	**Supplemental plant production refuse** – any Class 2 waste from production, manufacturing, or laboratory operations as long as the total amount of the supplemental plant production refuse does not exceed twenty percent of the total plant trash (form code 999) volume or weight, whichever is less – this could include, but is not limited to, such things as metal parts, floor sweepings, and off-specification materials
999	**Plant Trash** – any Class 2 waste originating in the facility offices, laboratory, plant production area or food services/cafeteria operations that is composed of paper, cardboard,

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Code	Waste Description	Code	Waste Description
	linings, wrappings, paper and/or wooden packaging materials, uncontaminated food wastes and/or packaging, cafeteria wastes, glass, aluminum foil, aluminum cans, aluminum scrap, stainless steel, steel, iron scrap, plastics, styrofoam, rope, twine, uncontaminated rubber, uncontaminated wooden materials, equipment belts, wirings,		uncontaminated cloth, metal bindings, empty containers with a holding capacity of less than five gallons, uncontaminated floor sweepings, and personal cosmetics generated by facility personnel (does not include cosmetics generated as a result of manufacturing or plant production operations).

Form Code Definitions

The following are definitions of terms utilized in form codes:

Acidic – A material having a pH less than 7.0.

Alkaline – A material having a pH greater than 7.0.

Aqueous – A water solution containing organic and/or inorganic constituents dissolved in solution.

Caustic – A material which is corrosive or irritating to living tissue and has a pH greater than 7.

Inorganic – Chemicals that are not organic (i.e., water, carbon dioxide, carbon disulfide, iron, zinc, steel). Generally, if a waste is composed of more than 50% inorganic materials, it is considered an inorganic waste.

Organic – Chemicals composed primarily of carbon and hydrogen and their derivatives. (i.e. methylene chloride, benzene, petroleum products). In general, if a waste is composed of 50% or more organic materials, it is considered an organic waste.

Plant Trash – Includes the following Class 2 wastes which are produced as a result of plant production, manufacturing, laboratory, general office, cafeteria or food service operations; paper, cardboard, linings, wrappings, paper or wood packaging materials, food wastes, cafeteria wastes, glass, aluminum foil, aluminum cans, aluminum scrap, stainless steel, steel, iron scrap, plastics, styrofoam, rope, twine, uncontaminated rubber, uncontaminated wooden materials, equipment belts, wirings, uncontaminated cloth, metal bindings, empty containers with a holding capacity of less than five gallons, uncontaminated floor sweepings, and personal cosmetics generated by facility personnel (does not include cosmetics generated as a result of manufacturing or plant production operations). **Please note that hazardous waste and Class 1 waste can not be designated as "plant office refuse".** Plant trash shall not include oils, lubricants of any type, oil filters, contaminated soils, sludges, or wastewaters.

Examples of "plant trash" include Class 2 soda cans, lunch sacks, food scraps, envelopes, plastic binders, empty boxes, pallets, styrofoam shipping boxes, chemical container liners, shrink wrap, and broken glassware.

As another example, used typing paper from the secretarial area could be considered "plant trash" because it resulted from general office operations. (Please note that typing paper would normally be considered a Class 2 waste unless it were contaminated with something to cause it to be considered a hazardous or Class 1 waste. For example, if typing paper were used to clean up a spill of a F003 waste, it would be considered a hazardous waste.)

As another example, a Class 2 off-specification production chemical could not be considered "plant trash" because it does not meet the definition of a "plant trash". However, the Class 2 off-specification production chemical might be considered a "supplemental plant production refuse" as long as the weight/volume limits established for "supplemental plant production refuse" were not exceeded. (For more information on "supplemental plant production refuse" and weight/volume limits, please see "Supplemental Plant Production Refuse" in these definitions.

Reactive – A material is reactive if it is capable of detonation or explosive decomposition:
1. at standard temperature and pressure, or
2. if subjected to a strong ignition source, or
3. heated under confinement.

A material is also considered reactive if, when mixed with water it is:
1. potentially explosive, or
2. reacts violently, or
3. generates toxic gases or vapors (i.e. hydrogencyanide or hydrogensulfide).

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Form Code Definitions

A material is also considered reactive if it is:
1. normally unstable and readily undergoes violent changes, or
2. a forbidden explosive (see 49 CFR §173.53), or
3. a Class B explosive (see 49 CFR §173.88).

Solvent – A liquid used to dissolve another material.

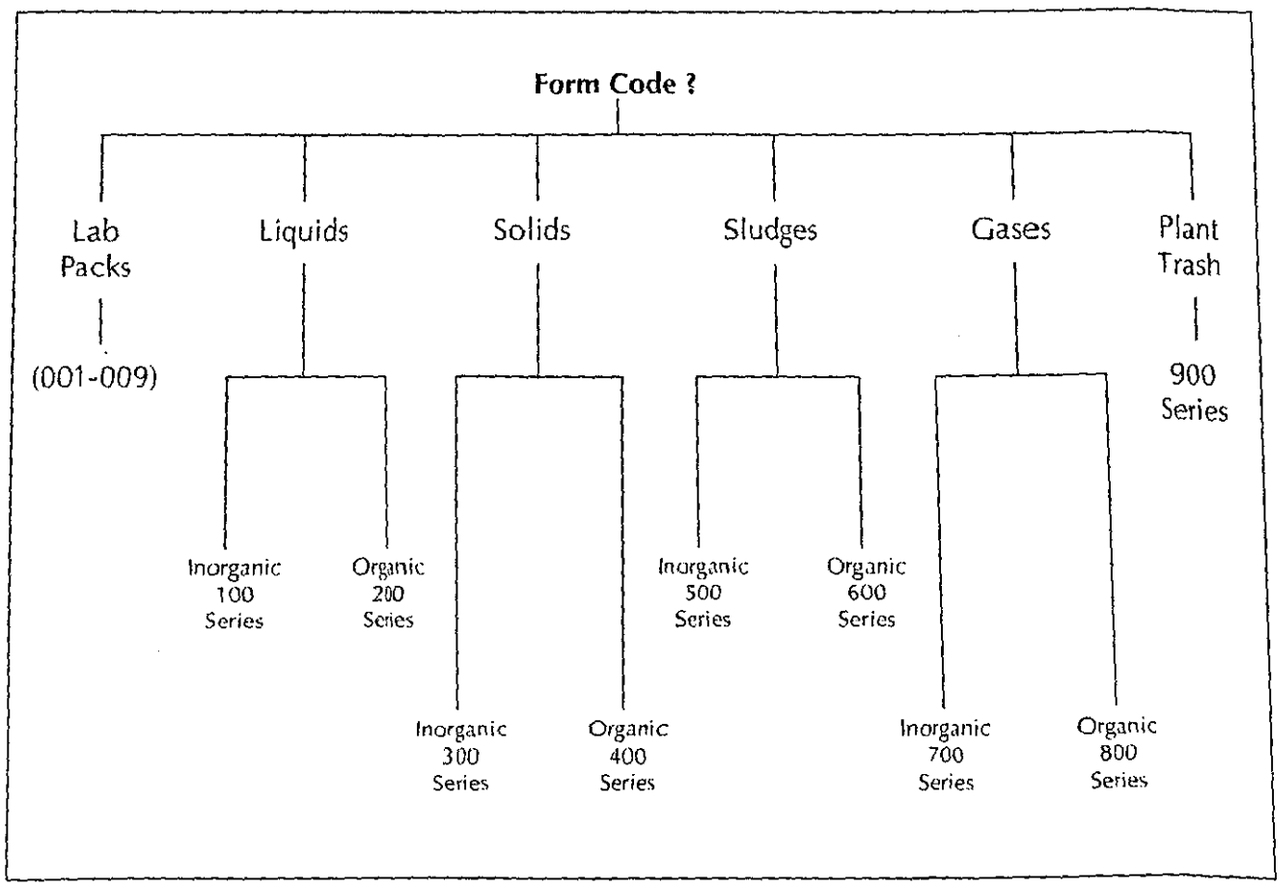
Supplemental Plant Production Refuse – Any **Class 2 Waste from production, manufacturing, or laboratory operations** can be designated as **"supplemental plant production refuse"** (form code 999) as long as the total amount of the supplemental plant production refuse **does not exceed twenty percent of the total plant production refuse volume or weight, whichever is less.**

Individual wastes which have been designated "supplemental plant production refuse" may be designated by the generator at a later time as a separate waste in order to maintain the "supplemental plant production refuse" at a level below 20% of the "plant trash" amount. For any waste stream so redesignated, the generator must provide the initial notification information required pursuant to 30 TAC Chapter 335.

Please note that hazardous waste and Class 1 waste can not be designated as "supplemental plant production refuse".

Examples of "supplemental plant production refuse" include Class 2 steel shavings, empty metal containers, aerosol cans, old chemicals, safety equipment, and machine parts.

Please note that when a site notifies the Commission that it generates "supplemental plant production refuse", it must include a list of those wastes which are expected to be included in the "supplemental plant production refuse" designation. If that list increases, the generator must notify the Commission of the additions to that list; otherwise, the Commission will not view the additions as "supplemental plant production refuse".



Liquids

Inorganic – 100 series

(Waste that is primarily inorganic and highly fluid, (e.g., aqueous), with low suspended solids and low organic content.)

Examples:

1. 99% water with 1% methanol **101**
2. 98% water with 2% methyl ethyl ketone MEK **102**
3. Waste sulfuric acid from plastics cleaning **104**
4. Water with 0.73% potassium permanganate **114**
5. Leachate from landfills **116**
6. Waste photographic fixer **198**

Organic – 200 series

(Waste that is primarily organic and is highly fluid, with low inorganic solids and low-to-moderate water content.)

Examples:

1. Solvent mixture 65% methylene chloride, 30% phenol, 5% cresol **204**
2. 95% motor oil, 5% water emulsion **205**
3. Used hydraulic oil **206**
4. Unused varnish and organic paint **209**
5. Waste ethylene glycol antifreeze **296**

Solids

Inorganic – 300 series

*(Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; **not pumpable.**)*

Examples:

1. Soil contaminated with naptha **301**
2. Incinerator ash **303**
3. Crushed RCRA empty metal drums **308**
4. Lead acid batteries, chips and cores **309**
5. Concrete, plaster and other construction debris **390**
6. Metalic catalyst waste **393**

Organic – 400 series

*(Waste that is primarily organic and solid, with low-to-moderate inorganic and water content; **not pumpable.**)*

Examples:

1. Unused malathion pellets **402**
2. Spent carbon from filters **404**
3. Wooden house exterior debris **488**
4. Paper contaminated with oil **489**
5. Sand blasting waste from petroleum tanks **490**
6. Dewatered sewage sludge **492**

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Appendix G—Form Codes

Sludges

Inorganic – 500 series

*(Waste that is primarily inorganic, with moderate-to-high water content, and low organic content, and **pumpable.**)*

Examples:

1. Wastewater treatment sludge containing phenolics **503**
2. Zinc plating wastewater sludge containing cyanide **506**
3. Sludge from pollution removal scrubber **511**
4. Sediment pond dragout contaminated with lead **513**
5. Water based drilling mud with brine **514**
6. Waste metal catalyst with 0.89% organics **597**

Organic – 600 series

*(Waste that is primarily organic, with moderate-to-high water content, and low inorganic content, and **pumpable.**)*

Examples:

1. Still bottoms from naptha recovery **602**
2. Ink and paint sludge from printing billboards **604**
3. Bioremediation sludge from oil spill cleanup **607**
4. Motor repair facility sludge with grease **603**
5. Refinery wastewater sludge with petroleum compounds **695**
6. Waste lubricating grease **696**

Lab Packs – 001-009 series

Examples:

1. Lab pack containing debris **002**
2. Lab pack containing old unused or partially used chemicals **001**

Plant Trash – 900 series

Examples:

1. Office debris (i.e., paper, plastic, alluminum cans and fax paper) **999**
2. Scrap plastic from molds of toys and souvenirs **902**
3. Packing debris from unpacking of raw materials **999**

Appendix H

Codes for Out-of-State Waste Generators and Receivers

Codes for States of the United States			
State or Country	Abbre-viation	Generator No.	Receiver No.
Alabama	AL	D0001	D0001
Alaska	AK	D0002	D0002
Arizona	AZ	D0004	D0004
Arkansas	AR	D0005	D0005
California	CA	D0006	D0006
Colorado	CO	D0008	D0008
Connecticut	CT	D0009	D0009
Delaware	DE	D0010	D0010
Dist. of Columbia		D0011	D0011
Florida	FL	D0012	D0012
Georgia	GA	D0013	D0013
Hawaii	HI	D0015	D0015
Idaho	ID	D0016	D0016
Illinois	IL	D0017	D0017
Indiana	IN	D0018	D0018
Iowa	IA	D0019	D0019
Kansas	KS	D0020	D0020
Kentucky	KY	D0021	D0021
Louisiana	LA	D0022	D0022
Maine	ME	D0023	D0023
Maryland	MD	D0024	D0024
Massachusetts	MA	D0025	D0025
Michigan	MI	D0026	D0026
Minnesota	MN	D0027	D0027
Mississippi	MS	D0028	D0028
Missouri	MO	D0029	D0029
Montana	MT	D0030	D0030
Nebraska	NE	D0031	D0031
Nevada	NV	D0032	D0032
New Hampshire	NH	D0033	D0033
New Jersey	NJ	D0034	D0034
New Mexico	NM	D0035	D0035
New York	NY	D0036	D0036
North Carolina	NC	D0037	D0037
North Dakota	ND	D0038	D0038
Ohio	OH	D0039	D0039
Oklahoma	OK	D0040	D0040
Oregon	OR	D0041	D0041
Pennsylvania	PA	D0042	D0042
Rhode Island	RI	D0044	D0044
South Carolina	SC	D0045	D0045
South Dakota	SD	D0046	D0046
Tennessee	TN	D0047	D0047
Utah	UT	D0049	D0049
Vermont	VT	D0050	D0050
Virginia	VA	D0051	D0051
Washington	WA	D0053	D0053
West Virginia	WV	D0054	D0054
Wisconsin	WI	D0055	D0055
Wyoming	WY	D0056	D0056

Country Codes (in Order of Assigned Numbers)		
State or Country	Generator No.	Receiver No.
Navajo Nation	D0057	D0057
Puerto Rico	D0060	D0060
Virgin Islands	D0066	D0066
Guam	D0075	D0075
American Samoa	D0083	D0083
Mexico	F0061	F0061
Japan	F0062	F0062
Canada	F0063	F0063
England	F0064	F0064
Spain	F0065	F0065
Denmark	F0067	F0067
Germany	F0068	F0068
Belgium	F0069	F0069
Finland	F0070	F0070
Netherlands	F0071	F0071
Pacific Islands	F0072	F0072
Venezuela	F0073	F0073
Marshall Islands	F0074	F0074
France	F0076	F0076
Malaysia	F0077	F0077
Austria	F0078	F0078
Holland	F0079	F0079
Hong Kong	F0080	F0080
Norway	F0081	F0081
Panama	F0082	F0082
Greece	F0084	F0084
Peru	F0085	F0085
Brazil	F0086	F0086
Offshore beyond 12 mi.	F0087	F0087
Saudi Arabia	F0088	F0088
Jamaica	F0089	F0089
Italy	F0090	F0090
Belize	F0091	F0091
Luxemburg	F0092	F0092
Haiti	F0093	F0093
Nicaragua	F0094	F0094
Australia	F0095	F0095
Sweden	F0096	F0096
El Salvador	F0097	F0097
Trinidad de Tobago	F0098	F0098
Taiwan	F0099	F0099
Cambodia	F0001	F0001
Bahamas Islands	F0002	F0002
Columbia	F0003	F0003
South Africa	F0004	F0004
China	F0005	F0005
India	F0006	F0006
Chile	F0007	F0007
Thailand	F0008	F0008
Slovenia	F0009	F0009
Netherlands Antilles (A,B,C)	F0010	F0010
Honduras	F0011	F0011

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HAZARDOUS WASTE REQUIREMENTS
(Checklist)

(1) Conditionally Exempt Small Quantity Generators (CESQG) 40 CFR 261.5.

NEED NO EPA ID #

CESQG's generate less than 100 kilograms (220 lbs) of HW per month and less than 1 kilogram (2.2 lbs) of acute HW (such as some pesticides, toxins or arsenic and cyanide compounds) per month. Many wastes that are recycled are included in this quantity determination.

- ☐ Perform hazardous waste determination (§262.11)
- ☐ Cannot accumulate > 1000 kg (2,200 lbs) at any time.
- ☐ Ensure delivery of HW to a proper recycling facility or TSDF.
- ☐ Keep records documenting proper disposal

(2) Small Quantity Generators (SQG) 40 CFR 262.

SQG's generate 100 - 1000 kilograms (220 – 2,200 lbs) of HW per month and less than 1 kilogram (2.2 lbs) of acute HW (such as some pesticides, toxins or arsenic and cyanide compounds) per month. Many wastes that are recycled are included in this quantity determination.

- ☐ Obtain a State/EPA ID Number (§262.12). Request EPA form 8700-12, "Notification of Regulated Waste Activity".
- ☐ Use manifest system (unless there is a reclamation agreement pursuant to §262.20(e)), and ship only to a permitted facility (262, Subpart B).
- ☐ Never exceed the 6000 kg (13,200 lbs) accumulation/180 day storage time limit.
- ☐ Emergency Planning (§269.34 (d)(5):

  (a) Have at least one employee or a designee with authority as Emergency Coordinator (EC) on 24-hour call.

  (b) Next to the telephone, post
  - (i) the EC's name and phone number;
  - (ii) fire department's number;
  - (iii) location of fire extinguishers; spill control equipment/material, and fire alarm.

  (c) Follow emergency procedures in §262.34(d)(5), including taking necessary steps to address spills and fires, and notifying the National Response Center (24-hour number: 800/424-8802).

- ☐ Training of personnel regarding proper HW handling and emergency response [§262.34(d)(5)(iii)].

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- ☐ Keep records (§262.44), including manifests, test results, etc., a minimum of three (3) years.
- ☐ Perform HW determination (§262.11), including LDR waste analyses (§268.7).
- ☐ Meet pre-transport requirements for packaging, labeling, marking and placarding (262 Subpart C).
- ☐ Meet satellite accumulation rules (§262.34(c)). Close and label these containers.
- ☐ Label containers and tanks with the words "Hazardous Waste" and label containers with accumulation start dates (§262.34(a)).
- ☐ Maintain and operate the facility in a clean, safe manner (§265.31).
- ☐ Emergency equipment (§265.32).
  - o Telephone or hand-held two-way radio;
  - o Internal communication or alarm system;
  - o Fire and spill control equipment (e.g. fire extinguishers, hoses, sprinklers, etc.);
  - o Neutralizing agents, spill adsorbents, overpack drums, standby 55-gallon drums, etc.;
  - o Test and maintain the emergency equipment (§265.33).
- ☐ Maintain adequate aisle space for evacuation, inspecting drums, etc. (e.g. no less than three (3) feet) (§265.35).
- ☐ Containers (e.g. drums, cans, etc.) must be kept closed at all times, except when it is necessary to add or remove waste.
- ☐ A Land Disposal Restrictions (LDR) Certification or Notification must accompany the initial manifest for a restricted waste. Generators who treat waste to meet land disposal restrictions must submit a waste analysis plan to the State (§268.7).

(3) Large Quantity Generators (LQG) 40 CFR 262.

LQG's generate 1000 kilograms (2,200 lbs) or more of HW per month or 1 kilogram (2.2 lbs) or more of acute HW (such as some pesticides, toxins or arsenic and cyanide compounds) per month. Many wastes that are recycled are included in this quantity determination.

- ☐ Perform HW determination (§262.11), including LDR waste analyses (§268.7).
- ☐ Obtain a State/EPA ID number (§262.12). Request EPA form 8700-12, "Notification of Regulated Waste Activity".
- ☐ Use manifest system, and ship to a permitted facility (262, Subpart B).
- ☐ Meet pre-transport requirements for packaging, labeling, marking and placarding (262 Subpart C).

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- ☐ Meet satellite accumulation rules (§262.34(c)). Close and label these containers.

- ☐ Label containers and tanks with the words "Hazardous Waste" and label containers with accumulation start dates (§262.34(a)).

- ☐ Do not store HW > 90 days (§262.34(b)).

- ☐ Keep all records (§262 Subpart D) for at least three (3) years (including manifests, test data, biennial reports, etc.).

- ☐ File a biennial report for HW shipped off site. Submit biennial report by March 1 of even numbered years (§262.41) covering generator activities for the previous year.

- ☐ File exception report for late or missing manifests from the designated facility (§262.42).

- ☐ Meet personnel training requirements, including documentation of training (§265.16).

- ☐ Maintain and operate the facility in a clean, safe manner (§265.31).

- ☐ Emergency equipment (§265.32).

  - o Telephone or hand-held two-way radio;
  - o internal communication or alarm system;
  - o fire and spill control equipment (e.g. fire extinguishers, hoses, sprinklers, etc.);
  - o neutralizing agents, spill adsorbents, overpack drums, standby 55-gallon drums, etc.;
  - o test and maintain the emergency equipment (§265.33).

- ☐ Maintain adequate aisle space for evacuation, inspecting drums, etc. (e.g. no less than three (3) feet) (§265.35).

- ☐ Attempt to make arrangements with local fire and police departments, hospitals, and emergency response contractors/equipment suppliers, with regards to emergency arrangements, hazards of materials handled, layout of facility, etc. (§265.37).

- ☐ Have a contingency plan meeting the requirements of 265 Subpart D. Emergencies that require implementation of the contingency plan must be reported to the State. Updated contingency plans must be distributed when facility conditions or emergency coordinators change.

- ☐ Containers (e.g. drums, cans, etc.) must be kept closed and in good condition, inspected at least weekly, be compatible with the HW stored, and separated from other incompatible wastes (e.g. keep cyanides away from acids) (265 Subpart I). Records must be kept of these inspections.

- ☐ Ignitable or reactive HW must be stored at least fifty (50) feet from the facility's boundary line (265 Subpart I).

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- ☐ Tanks must meet the requirements of 265 Subpart J (structural integrity; containment and detection of releases; inspections; response to leaks or spills; operating requirements; closure and post-closure care; special requirements for ignitable, reactive and/or incompatible wastes; waste analysis and trial tests).

- ☐ Special cautions (including "no smoking" signs) are required for ignitable or reactive wastes (§265.17).

- ☐ Security (e.g. a locked fence) and bermed containment areas (with roof and impermeable floor) for HW storage areas are strongly recommended.

- ☐ A Land Disposal Restrictions (LDR) Certification or Notification must accompany the initial manifest for a restricted waste. Generators who treat waste to meet land disposal restrictions must submit a waste analysis plan to the State (§268.7).

NOTES:

EPAHO004000406

Summary of Hazardous Waste Regulations
(Checklist)

This hazardous waste (HW) regulatory checklist should be used in conjunction with (and not as a substitute for) the federal and state HW regulations. This checklist includes the principal components of the HW regulations. Regulatory requirements may change because of changes in the regulations, new interpretations or guidance from EPA or State (DEP), judicial rulings, etc.

EPA defines three categories of hazardous waste generators based upon the quantity of hazardous waste they generate per month:

- ☐ (1) Conditionally exempt small quantity generators (CESQGs), which generate less than 220 lbs (100 kg) per month.
- ☐ (2) Small quantity generators (SQGs), which generate between 220 lbs (100 kg) and 2,200 lbs (1,000 kg) per month.
- ☐ (3) Large quantity generators (LQGs), which generate more than 2,200 lbs (1,000 kg); >2.2 lbs (1 kg) of acute hazardous waste per month.

Each category of generator must comply with the hazardous waste rules specific to that category.

(Determine your applicable "generator" category and follow the checklist below for that category)

USED OIL REQUIREMENTS FOR ALL GENERATORS
40 CFR PART 279

- ☐ Used oil may only be stored in tanks or containers.
- ☐ Containers and tanks must be in good condition and not leaking.
- ☐ Containers, tanks and fill pipes must be labeled "Used Oil."
- ☐ Spills must be cleaned up, and contaminated materials disposed of properly.
- ☐ * Used oil filters that have been properly drained and crushed are exempted from federal hazardous waste regulations, provided the filters are non-terne plated.
- ☐ Used oil should not be mixed with other materials (solvents, antifreeze, kerosene, paint, hazardous waste, etc.).
- ☐ Used oil is exempted from HW program only if it is managed through a used oil recycler.

* Note: **In many states, used "oil filters" may not be disposed of to landfills. They must be recycled by an oil filter processor or municipal refuse incinerator. Check with your state.**

EPAHO004000407

D - LIST

Characteristic Hazardous Wastes

1. Ignitable- ***D001***	A waste exhibits the characteristic of ignitability if the waste exhists in the following forms: o a liquid,other than an aqueous solution containing less than 24 percent alcohol by volume, with a flash point below 60° (140°F); o a non-liquid, which under standard conditions is capable of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns in a manner that creates a hazard o an ignitable compressed gas, which includes gases that form flammable mixtures at a concentration of 13 percent or less in air; or o an oxidizer, such as permanganate, inorganic peroxide, or nitrate, that readily stimulates combustion of organic materials.
2. Corrosives- ***D002***	A waste exhibits the characteristic of corrosivity if the waste: o is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5, using EPA-specified or approved test methods; or o is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 millmeters (0.250 inch) per year at a test temperature of 55° (130°.
3. Reactive- ***D003***	A waste exhibits the characteristics of reactivity if the waste: o is normally unstable and readily undergoes violent change without detonation; o reacts violently with water; o forms potentially explosive mixtures with water; o generates, when mixed with water, toxic gases, vapors, or fumes in a quantity sufficient to present a danger o is a cyanide or sulfide bearingwaste that generates toxic gases, vapors, or fumes at a pH between 2 and 12.5; o is capable of detonation or explosive reaction when subject to a strong initiating source or if heated in

confinement;
- is readily capable of detonation, explosive decomposition, or reaction at standard temperature and pressure; or
- is an explosive, as defined in 49 CFR Sections 173.51, 173.53 or 173.88.

4. Toxicity- ***See "D" List Below***

A waste exhibits the characteristic of toxicity when EPA-defined test procedures indicate that an extract derived from the waste contains certain toxicants. The toxicants to be tested for are: arsenic; barium; benzene; cadmium; carbon tetrachoride; chlordane; chlorobenzene; chloroform; chromium; o-, m- and p-cresol; 2,4-D; 1,4-dichlorobenzene; 1,2-dichloroethane; 1,1-dichlorethylene; 2,4-dinitrotoluene; Endrin; heptachlor (and its hydroxide); hexachlorobenzene; hexachlorobutadiene; hexachloroethane; lead; Lindane; mercury; methoxychlor; methyl ethyl ketone; nitrobenzene; pentachlorophenol; pyridine; selenium; silver; tetrachlorethylene, 2,4,5- and 2,4,6-trichlorophenol; 2,4,5-TP (Silvex); vinyl chloride.

Toxicity Characteristic Constituents and Regulatory Levels (TCLP)

EPA Waste No.	Constituent	CAS Number	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D006	Cadmium	7440-43-9	1.0
D007	Chromium	7440-47-3	5.0
D008	Lead	7439-92-1	5.0
D009	Mercury	7439-97-6	0.2
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D012	Endrin	72-20-8	0.02
D013	Lindane	58-89-9	0.4
D014	Methoxychlor	72-43-5	10.0
D015	Toxaphene	8000-35-2	0.5
D016	2,4-D	94-75-7	10.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D018	Benzene	71-43-2	0.5

D019	Carbon Tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D023	o-Cresol	95-48-7	200.0
D024	m-Cresol	108-39-4	200.0
D025	p-Cresol	106-44-5	200.0
D026	Cresol	1319-77-3	200.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13
D031	Heptachlor (and its hydroxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13
D033	Hexachloro-1,3-butadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	100-86-1	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D043	Vinyl chloride	75-01-4	0.2

RCRA Hazardous Waste - D-List

Table 1-Maximum Concentration of Contaminants for the Toxicity Characteristic

EPA HW No. (*1)	Contaminant	CAS No. (*2)	Regulatory Level (mg/L)	
D004	Arsenic	7440-38-2	5.0	
D005	Barium	7440-39-3	100.0	
D018	Benzene	71-43-2	0.5	
D006	Cadmium	7440-43-9	1.0	
D019	Carbon tetrachloride	56-23-5	0.5	
D020	Chlordane	57-74-9	0.03	
D021	Chlorobenzene	108-90-7	100.0	
D022	Chloroform	67-66-3	6.0	
D007	Chromium	7440-47-3	5.0.	
D023	o-Cresol	95-48-7	200.0	(*4)
D024	m-Cresol	108-39-4	200.0	(*4)
D025	p-Cresol	106-44-5	200.0	(*4)
D026	Cresol	.....	200.0	(*4)
D016	2,4-D	94-75-7	10.0	
D027	1,4-Dichlorobenzene	106-46-7	7.5	
D028	1,2-Dichloroethane	107-06-2	0.5	
D029	1,1-Dichloroethylene	75-35-4	0.7	
D030	2,4-Dinitrotoluene	121-14-2	0.13	(*3)
D012	Endrin	72-20-8	0.02	
D031	Heptachlor (and its epoxide)	76-44-8	0.008	
D032	Hexachlorobenzene	118-74-1	0.13	(*3)
D033	Hexachlorobutadiene	87-68-3	0.5	
D034	Hexachloroethane	67-72-1	3.0	
D008	Lead	7439-92-1	5.0	
D013	Lindane	58-89-9	0.4	
D009	Mercury	7439-97-6	0.2	
D014	Methoxychlor	72-43-5	10.0	
D035	Methyl ethyl ketone	78-93-3	200.0	
D036	Nitrobenzene	98-95-3	2.0	
D037	Pentrachlorophenol	87-86-5	100.0	
D038	Pyridine	110-86-1	5.0	(*3)
D010	Selenium	7782-49-2	1.0	
D011	Silver	7440-22-4	5.0	
D039	Tetrachloroethylene	127-18-4	0.7	
D015	Toxaphene	8001-35-2	0.5	
D040	Trichloroethylene	79-01-6	0.5	
D041	2,4,5-Trichlorophenol	95-95-4	400.0	
D042	2,4,6-Trichlorophenol	88-06-2	2.0	
D017	2,4,5-TP (Silvex)	93-72-1	1.0	
D043	Vinyl chloride	75-01-4	0.2	

*1 Hazardous waste number.
*2 Chemical abstracts service number.
*3 Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
*4 If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

13/01

F Listed Hazardous Wastes

Hazardous Wastes from Non-Specific Sources (F-List)

F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin,

	zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.
F007	Spent cyanide plating bath solutions from electroplating operations.
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri-or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediate used to produce its derivatives.
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri-and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent

	catalysts, and wastes listed in °261.31 or °261.32.).
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols, (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.
F032	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with ° 261.35 of this chapter and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (NOTE: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The listing for plants have previously used chlorophenolic formulation is administratively stayed whenever these waste are covered by the F034 or F035 listings. These stays will remain in effect until further administrative action is taken.).
F034	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving process generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The stay will remain in effect until further administrative action is taken.).
F035	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving process generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed

	administratively. The stay will remain in effect until further administrative action is taken.).
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in ° 261.31 (b) (2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment unit as defined in ° 261.31 (b) (2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under subpart D, or from a mixture of wastes classified under subparts C and D of this part. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027, and/or F028.).

The K-list (source-specific wastes). This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at 40 CFR §261.32

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Wood preservation: K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol	(T)
Inorganic pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments	(T)
K008	Oven residue from the production of chrome oxide green pigments	(T)
Organic chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile	(T)

	production of acrylonitrile	
K015	Still bottoms from the distillation of benzyl chloride	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	(T)
K026	Stripping still tails from the production of methy ethyl pyridines	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	(T)
K083	Distillation bottoms from aniline production	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes	(T)
K093	Distillation light ends from the production of phthalic	(T)

	anhydride from ortho-xylene	
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	(T)
K103	Process residues from aniline extraction from the production of aniline	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines	(C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K115	Heavy ends from the purification of toluenediamine in the	(T)

	production of toluenediamine via hydrogenation of dinitrotoluene	
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)

K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K159	Organics from the treatment of thiocarbamate wastes	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R,T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met	(T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process	(T)
K181	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of this section that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit	(T)

	subject to the design criteria in §258.40, (ii) disposed in a Subtitle C landfill unit subject to either §264.301 or §265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in §258.40, §264.301, or §265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of this section. Paragraph (d) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under §§261.21–261.24 and 261.31–261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met	
Inorganic chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process	(T)
Pesticides:		
K031	By-product salts generated in the production of MSMA and cacodylic acid	(T)
K032	Wastewater treatment sludge from the production of chlordane	(T)

K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	(T)
K035	Wastewater treatment sludges generated in the production of creosote	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton	(T)
K037	Wastewater treatment sludges from the production of disulfoton	(T)
K038	Wastewater from the washing and stripping of phorate production	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	(T)
K040	Wastewater treatment sludge from the production of phorate	(T)
K041	Wastewater treatment sludge from the production of toxaphene	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	(T)
K098	Untreated process wastewater from the production of toxaphene	(T)
K099	Untreated wastewater from the production of 2,4-D	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the	(C, T)

	acid dryer from the production of methyl bromide	
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives	(R)
K045	Spent carbon from the treatment of wastewater containing explosives	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	(T)
K047	Pink/red water from TNT operations	(R)
Petroleum refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry	(T)
K049	Slop oil emulsion solids from the petroleum refining industry	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry	(T)
K051	API separator sludge from the petroleum refining industry	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry	(T)
K169	Crude oil storage tank sediment from petroleum refining operations	(T)
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	(T)
K171	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	(I,T)
K172	Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	(I,T)
Iron and steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces	(T)
K062	Spent pickle liquor generated by steel finishing operations of	(C,T)

	facilities within the iron and steel industry (SIC Codes 331 and 332)	
Primary copper:		
Primary lead:		
Primary zinc:		
Primary aluminum:		
K088	Spent potliners from primary aluminum reduction	(T)
Ferroalloys:		
Secondary lead:		
K069	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the**Federal Register**)	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	(T)
Veterinary pharmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
Ink formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations	(T)

K087	Decanter tank tar sludge from coking operations	(T)
K141	Process residues from the recovery of coal tar, including. but not limited to. collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations)	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal	(T)
K147	Tar storage tank residues from coal tar refining	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms	(T)

RCRA Hazardous Waste - P-List

40 CFR 261.33(e)

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraph (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to be the small quantity exclusion defined in §261.5(e).

Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H3AsO4
P012	1327-53-3	Arsenic oxide As203
P011	1303-28-2	Arsenic oxide As205
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
[illegible]	542-62-1	Barium cyanide
[illegible]	106-47-8	Benzenamine, 4-chloro-
[illegible]	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-

RCRA Hazardous Waste - P-List

P042		51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046		122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014		108-98-5	Benzenethiol
P127		1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188		57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1).
P001	81-81-2 (*1)		2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028		100-44-7	Benzyl chloride
P015		7440-41-7	Beryllium powder
P017		598-31-2	Bromoacetone
P018		357-57-3	Brucine
P045		39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, ...O-[methylamino)carbonyl] oxime
P021		592-01-8	Calcium cyanide
P021		592-01-8	Calcium cyanide Ca(CN)2
P189		55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester.
P191		644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H-pyrazol-3-yl ester.
P192		119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester.
P190		1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester.
P127		1563-66-2	Carbofuran.
P022		75-15-0	Carbon disulfide
P095		75-44-5	Carbonic dichloride
P189		55285-14-8	Carbosulfan.
P023		107-20-0	Chloroacetaldehyde
P024		106-47-8	p-Chloroaniline
P026		5344-82-1	1-(o-Chlorophenyl)thiourea
[illegible]27		542-76-7	3-Chloropropionitrile
[illegible].9		544-92-3	Copper cyanide
[illegible]29		544-92-3	Copper cyanide Cu(CN)
[illegible]02		64-00-6	m-Cumenyl methylcarbamate.

RCRA Hazardous Waste - P-List

Hazardous waste No.	Chemical abstracts No.	Substance
P030	.....	Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta, 6aalpha,7beta,7aalpha)-
P051	72-20 -8 (*1)	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P191	644-64-4	Dimetilan.
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	534-52-1 (*1)	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol

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P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime.
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester.
P066	16752-77-5	Ethanimidothioic acid,...N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride.
P197	17702-57-7	Formparanate.
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan.
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate.
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S, S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate.
092	62-38-4	Mercury, (acetato-O)phenyl-
65	628-86-4	Mercury fulminate (R,T)
082	62-75-9	Methanamine, N-methyl-N-nitroso-

P064		624-83-9	Methane, isocyanato-
P016		542-88-1	Methane, oxybis[chloro-
P112		509-14-8	Methane, tetranitro- (R)
P118		75-70-7	Methanethiol, trichloro-
P198		23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy] phenyl]-, monohydrochloride.
P197		17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P050		115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-...hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059		76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-...3a,4,7,7a-tetrahydro-
P199		2032-65-7	Methiocarb.
P066		16752-77-5	Methomyl
P068		60-34-4	Methyl hydrazine
P064		624-83-9	Methyl isocyanate
P069		75-86-5	2-Methyllactonitrile
P071		298-00-0	Methyl parathion
P190		1129-41-5	Metolcarb.
P128		315-18-4	Mexacarbamate
P072		86-88-4	alpha-Naphthylthiourea
P073		13463-39-3	Nickel carbonyl
P073		13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P074		557-19-7	Nickel cyanide
P074		557-19-7	Nickel cynaide Ni(CN)2
P075	54-11 -5 (*1)		Nicotine, & salts
P076		10102-43-9	Nitric oxide
P077		100-01-6	p-Nitroaniline
P078		10102-44-0	Nitrogen dioxide
P076		10102-43-9	Nitrogen oxide NO
P078		10102-44-0	Nitrogen oxide NO2
P081		55-63-0	Nitroglycerine (R)
P082		62-75-9	N-Nitrosodimethylamine
P084		4549-40-0	N-Nitrosomethylvinylamine
P085		152-16-9	Octamethylpyrophosphoramide
P087		20816-12-0	Osmium oxide OsO4, (T-4)-
P087		20816-12-0	Osmium tetroxide
P088		145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194		23135-22-0	Oxamyl.
P089		56-38-2	Parathion
P034		131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
J48		51-28-5	Phenol, 2,4-dinitro-
47	534-52-1 (*1)		Phenol, 2-methyl-4,6-dinitro-, & salts

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P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene

Hazardous waste No.	Chemical abstracts No.	Substance
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl...S- [2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl...S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S- [2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitro-phenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid,...O-[4-[(dimethylami-no)sulfonyl]phenyl] O,O-dimethyl ester
71	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-ni-

			trophenyl) ester
P204		57-47-6	Physostigmine.
P188		57-64-7	Physostigmine salicylate.
P110		78-00-2	Plumbane, tetraethyl-
P204		57-47-6	Physostigmine.
P188		57-64-7	Physostigmine salicylate.
P098		151-50-8	Potassium cyanide
P098		151-50-8	Potassium cyanide K(CN)
P099		506-61-6	Potassium silver cyanide
P201		2631-37-0	Promecarb
P203		1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime.
P070		116-06-3	Propanal, 2-methyl-2-(methylthio)-,...O-[(methylamino)carbonyl]oxime
P101		107-12-0	Propanenitrile
P027		542-76-7	Propanenitrile, 3-chloro-
P069		75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081		55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017		598-31-2	2-Propanone, 1-bromo-
P102		107-19-7	Propargyl alcohol
P003		107-02-8	2-Propenal
P005		107-18-6	2-Propen-1-ol
P067		75-55-8	1,2-Propylenimine
P102		107-19-7	2-Propyn-1-ol
P008		504-24-5	4-Pyridinamine
P075	(*1)	54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204		57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-.
P114		12039-52-0	Selenious acid, dithallium(1+) salt
P103		630-10-4	Selenourea
P104		506-64-9	Silver cyanide
P104		506-64-9	Silver cyanide Ag(CN)
P105		26628-22-8	Sodium azide
P106		143-33-9	Sodium cyanide
P106		143-33-9	Sodium cyanide Na(CN)
P108	(*1)	157-24-9	Strychnidin-10-one, & salts
P018		357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	(*1)	57-24-9	Strychnine, & salts
P115		7446-18-6	Sulfuric acid, dithallium(1+) salt
P109		3689-24-5	Tetraethyldithiopyrophosphate
P110		78-00-2	Tetraethyl lead
P111		107-49-3	Tetraethyl pyrophosphate
P112		509-14-8	Tetranitromethane (R)
P062		757-58-4	Tetraphosphoric acid, hexaethyl

			ester
P113		1314-32-5	Thallic oxide
P113		1314-32-5	Thallium oxide Tl2O3
P114		12039-52-0	Thallium(I) selenite
P115		7446-18-6	Thallium(I) sulfate
P109		3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045		39196-18-4	Thiofanox
P049		541-53-7	Thioimidodicarbonic diamide [(H2 N)C(S)]2NH
P014		108-98-5	Thiophenol
P116		79-19-6	Thiosemicarbazide
P026		5344-82-1	Thiourea, (2-chlorophenyl)-
P072		86-88-4	Thiourea, 1-naphthalenyl-
P093		103-85-5	Thiourea, phenyl-
P185		26419-73-8	Tirpate.
P123		8001-35-2	Toxaphene
P118		75-70-7	Trichloromethanethiol
P119		7803-55-6	Vanadic acid, ammonium salt
P120		1314-62-1	Vanadium oxide V2O5
P120		1314-62-1	Vanadium pentoxide
P084		4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	(*1)	81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205		137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121		557-21-1	Zinc cyanide
P121		557-21-1	Zinc cyanide Zn(CN)2
P122		1314-84-7	Zinc phosphide Zn3P2, when present at concentrations greater than 10% (R,T)
P205		137-30-4	Ziram.

(*1) CAS Number given for parent compound only.

[§261.33(e) table amended at 59 FR 31551, June 20, 1994; revised at 60 FR 7848, Feb. 9, 1995; corrected at 60 FR 19165, April 17, 1995; 60 FR 25620, May 12, 1995]

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		[1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban.
U278	22781-23-3	Bendiocarb.
U364	22961-82-6	Bendiocarb phenol.
U271	17804-35-2	Benomyl.
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl -2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis [N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlo- rophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2- chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
2	106-46-7	Benzene, 1,4-dichloro-
60	72-54-8	Benzene, 1,1'-(2,2-

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		dichloroethylidene)bis [4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	181-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene

Hazardous waste No.	Chemical abstracts No.	Substance

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U248	181-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy -...2-(1-methoxyethyl)-3-methyl-1-ox-obutoxy]methyl]-...2,3,5,7a-t etrahydro-1H-pyrrolizin-1-yl ester,...[1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester.
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester.
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester.
109	23564-05-8	Carbamic acid, [1,2-phenylenebis (imino-

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		carbonothioyl)]bis-, dimethyl ester.
U097	79-44-7	Carbamic chloride, dimethyl-
U114	1111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, ...salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2, 3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2, 3,3-trichloro-2-propenyl) ester.
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester.
U279	63-25-2	Carbaryl.
U372	10605-21-7	Carbendazim.
U367	1563-38-8	Carbofuran phenol.
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H2CrO4 , calcium salt
U050	218-01-9	Chrysene
U051	.....	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, ...(1alpha,2alpha,3beta,4alpha, 5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)

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U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	194-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol

Hazardous waste No.	Chemical abstracts No.	Substance
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate.
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)

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U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester.
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate.
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)

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U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	1111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-...carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)

Hazardous waste No.	Chemical abstracts No.	Substance
U134	7664-39-3	Hydrogen fluoride (C,T)

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U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a- hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta [cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform

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U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10- [(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6 ,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
J047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'- [(3,3'-...dimethyl [1,1'-biphenyl]-4,4'-diyl)bis(azo)bis [5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate.
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-

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		amine,...N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol

Hazardous waste No.	Chemical abstracts No.	Substance
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate.
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)

U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I, T)
U373	122-42-9	Propham.
U411	114-26-1	Propoxur.
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U387	52888-80-9	Prosulfocarb.
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-...chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	181-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin

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U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride Tlcl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb.
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H2 N)C(S)]2S 2, tetra- methyl-
U409	23564-05-8	Thiophanate-methyl.
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride

Hazardous waste No.	Chemical abstracts No.	Substance
U389	2303-17-5	Triallate.
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine.
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue

U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	181-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18- [(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn3P2, when present at concentrations of 10% or less

1 CAS Number given for parent compound only.

[§261.33(f) table revised at 60 FR 7848, Feb. 9, 1995; corrected at 60 FR 19165, April 17, 1995; amended at 62 FR 32977, June 17, 1997; 63 FR 24625, May 4, 1998; 65 FR 14474, March 17, 2000]

*** TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ***
Notice of Registration
Industrial and Hazardous Waste

This registration does not constitute authorization of any waste management activities or facilites listed below. The registration reflects hazardous and/or industrial waste generation and management activities for which the registrant has provided notification. Requirements for solid waste management are provided by Texas Administrative code section 335 of the rules of the Texas Commission on Environmental Quality (TCEQ). Changes or additions to waste management methods referred to in this notice require written notification to the TCEQ.

Solid Waste Registration Number: 30900 EPA Id: TXD008950461

The Solid Waste Registration Number provides access to computerized and filed information pertaining to your operation. Please refer to that number in any correspondence.

Company Name: CES Environmental Services Inc
Site Name: CES Environmental Services
Site Location: 4904 Griggs Rd, Houston, TX
Primary Contact: Thangudu, Prabhakar
Mailing Address: 4904 Griggs Rd
Houston, TX 77021-3208
Region: 12
County: 101 Harris
Title: Vice President
Site Street Address: 4904 Griggs Rd
Houston, TX 77221-3298
Initial Registration Date: 02/18/1977
Last Amendment Date: 01/08/2007
Last Date NOR Computer update: 03/09/2007
Phone: 713-676-1460
Registration Status: Active HW Permit #: 39048 IW Permit #: 39048
Reporting Method: STEERS
Registration Type: Generator Receiver Transporter Transfer Facility
Generator Type: Industrial
Receiver Type: Commercial
Transporter Type: For hire Transport own waste
Transport Wst Class: 1 2 H Used Oil
Hazardous Waste Generation Status: Large Quantity Generator

Business Description: Operation of a nonhazardous industrial solid waste processing and storage facility.

NAICS Code: 562219 Other Nonhazardous Waste Treatment and Disposal
Handler Status: Recycler

Operator Information
Name: CES Environmental Services Inc
Phone: 713-676-1460
Address: 4904 Griggs Rd
Houston, TX, 77021-3208

Owner Information
Name: CES Environmental Services Inc
Phone: 713-676-1460
Address: 4904 Griggs Rd
Houston, TX, 77021-3208

Billing Address: ATTN: Environmental Dept
4904 Griggs Road
Houston, TX 44021-3208

Other Contact: Easton, Sean
Mailing Address: 4904 Griggs Rd
Houston, TX 77021
Role: Owner's Representative Phone:

Other Contact: Thangudu, Prabhakar
Mailing Address: 4904 Griggs Rd
Houston, TX 77021
Role: STEERS Contact Phone: 713-676-1460

As of 01/08/2007 - the next unassigned sequence number for WASTES is 9027 and
the next unassigned sequence number for UNITS is 123.

Section 335, Chapter 31 of the Texas Adminstrative Code specifies the notification, record keeping, manifesting and reporting requirements for hazardous and industrial solid wastes.

EPAHO004000447

30900 CES Environmental Services Inc

**** WASTE INFORMATION ****

Texas Waste Code	Waste Class	Status	Date of Status	Managed Onsite/ Offsite	Radio-active	TCEQ Audit Complete

****** Active Wastes ******

90011191 1 Active 06/18/02 On No

Description from Generator: Non RCRA regulated rinse water. Generating process: Rinsing w/ pressure washer of RCRA Empty containers. Date of generation 6-30-2002
Texas Form Code: 119 Other inorganic liquids
Current Management Units: Tank 101 102
Contain Store Area 107
WWTP 109
* Origin Codes: 1 Onsite-process/service

90025191 1 Active 06/18/02 On No No

Description from Generator: Non RCRA regulated waste sludge. Generating process: Removal of non haz from tanks and totes before destruction. Date of generation: 7-1-2002
Texas Form Code: 519 Other inorganic sludges
Current Management Units: Misc Store Container 103
* Origin Codes: 3 From non-haz waste mgmt

90049992 2 Active 06/18/02 On No Yes

Description from Generator: Plant trash generated from on-site activities. Date of generation: 7-1-02.
Texas Form Code: 999 Plant Refuse
Current Management Units: Misc Store Container 104
* Origin Codes: 1 Onsite-process/service

9005609H H Active 06/18/02 On/Off No No

Description from Generator: Flammable sludge. Generating process: removal of unused products from tank/tote management services. Date of generation: 7-1-02.
Texas Form Code: 609 Other organic sludges
EPA Form Code: W609 Other organic sludge
EPA Hazardous Waste Numbers: D001 F005
Current Management Units: Contain Store Area 105
* Origin Codes: 1 Onsite-process/service
* Source Codes: G09 Other production or service-related processes
* NAICS Code: 236220 Commercial and Institutional Building Construction

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EPAHO0400448

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number 002166024 JJK

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.					
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

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 — Signature — Month Day Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ 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)

	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 — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.

ral regulations require generators and transporters of hazardous waste and owners or ators of hazardous waste treatment, storage, and disposal facilities to complete this form A Form 8700-22) and, if necessary, the continuation sheet (EPA Form 8700-22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

e: Emergency Response phone number information should only be entered in Item 3 when is one phone number that applies to all the waste materials described in Item 9b. If a ation (e.g., consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the responding hazardous material identified in Item 9b.

9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification ber (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.–TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.–UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations, the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest, and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "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." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

II. Instructions for International Shipment Block

Item 16. International Shipments

For export shipments, the primary exporter must check the export box, and enter the point of exit (city and state) from the United States. For import shipments, the importer must check the import box and enter the point of entry (city and state) into the United States. For exports, the transporter must sign and date the manifest to indicate the day the shipment left the United States. Transporters of hazardous waste shipments must deliver a copy of the manifest to the U.S. Customs when exporting the waste across U.S. borders.

III. Instructions for Transporters

Item 17. Transporters' Acknowledgments of Receipt

Enter the name of the person accepting the waste on behalf of the first transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt. Only one signature per transportation company is required. Signatures are not required to track the movement of wastes in and out of transfer facilities, unless there is a change of custody between transporters.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Note: Transporters carrying imports, who are acting as importers, may have responsibilities to enter information in the International Shipments Block. Transporters carrying exports may also have responsibilities to enter information in the International Shipments Block. See above instructions for Item 16.

IV. Instructions for Owners and Operators of Treatment, Storage, and Disposal Facilities

Item 18. Discrepancy

Item 18a. Discrepancy Indication Space

1. The authorized representative of the designated (or alternate) facility's owner or operator must note in this space any discrepancies between the waste described on the Manifest and the waste actually received at the facility. Manifest discrepancies are: significant differences (as defined by §§ 264.72(b) and 265.72(b)) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives, rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept, or container residues, which are residues that exceed the quantity limits for "empty" containers set forth in 40 CFR 261.7(b).

2. For rejected loads and residues (40 CFR 264.72(d), (e), and (f), or 40 CFR 265.72(d), (e), or (f)), check the appropriate box if the shipment is a rejected load (*i.e.*, rejected by the designated and/or alternate facility and is sent to an alternate facility or returned to the generator) or a regulated residue that cannot be removed from a container. Enter the reason for the rejection or the inability to remove the residue and a description of the waste. Also, reference the manifest tracking number for any additional manifests being used to track the rejected waste or residue shipment on the original manifest. Indicate the original manifest tracking number in Item 14, the Special Handling Block and Additional Information Block of the additional manifests.

3. Owners or operators of facilities located in unauthorized States (*i.e.*, states in which the U.S. EPA administers the hazardous waste management program) who cannot resolve significant differences in quantity or type within 15 days of receiving the waste must submit to their Regional Administrator a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (40 CFR 264.72(c) and 265.72(c)).

4. Owners or operators of facilities located in authorized States (*i.e.*, those States that have received authorization from the U.S. EPA to administer the hazardous waste management program) should contact their State agency for information on where to report discrepancies involving "significant differences" to state officials.

Item 18b. Alternate Facility (or Generator) for Receipt of Full Load Rejections

Enter the name, address, phone number, and EPA Identification Number of the Alternate Facility which the rejecting TSDF has designated, after consulting with the generator, to receive a fully rejected waste shipment. In the event that a fully rejected shipment is being returned to the generator, the rejecting TSDF may enter the generator's site information in this space. This field is not to be used to forward partially rejected loads or residue waste shipments.

Item 18c. Alternate Facility (or Generator) Signature

The authorized representative of the alternate facility (or the generator in the event of a returned shipment) must sign and date this field of the form to acknowledge receipt of the fully rejected wastes or residues identified by the initial TSDF.

Item 19. Hazardous Waste Report Management Method Codes

Enter the most appropriate Hazardous Waste Report Management Method code for each waste listed in Item 9. The Hazardous Waste Report Management Method code is to be entered by the first treatment, storage, or disposal facility (TSDF) that receives the waste and is the code that best describes the way in which the waste is to be managed when received by the TSDF.

Item 20. Designated Facility Owner or Operator Certification of Receipt (Except As Noted in Item 18a)

Enter the name of the person receiving the waste on behalf of the owner or operator of the facility. That person must acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date of receipt or rejection where indicated. Since the Facility Certification acknowledges receipt of the waste except as noted in the Discrepancy Space in Item 18a, the certification should be signed for both waste receipt and waste rejection, with the rejection being noted and described in the space provided in Item 18a. Fully rejected wastes may be forwarded or returned using Item 18b after consultation with the generator. Enter the name of the person accepting the waste on behalf of the owner or operator of the alternate facility or the original generator. That person must acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date they received or rejected the waste in Item 18c. Partially rejected wastes and residues must be re-shipped under a new manifest, to be initiated and signed by the rejecting TSDF as offeror of the shipment.

RECYCLED HYDROCARBON + WATER 93

REGULATORY STATUS OF MIXTURES OF WATER AND RECYCLABLE PETROLEUM PRODUCTS

This policy statement addresses the regulatory status of mixtures of water and unused petroleum products, such as gasoline, where the mixture contains recoverable product in a sufficient quantity to be recycled, and the product is recycled as a standard practice. Such mixtures may be generated as a result of routine tank maintenance, due to spills of unused product, through removal of petroleum-contaminated groundwater or surface water, or due to other circumstances.

40 CFR 261.2 C(3)

Under the Commission's rules, discarded materials that are recycled by being reclaimed are generally considered solid waste, and such materials are therefore subject to regulation by the Commission. See 30 Tex. Admin. Code § 335.1 (definition of "solid waste"). Pursuant to its rules, however, EPA does not consider certain listed commercial chemical products or off-specification commercial chemical products to be solid wastes when those products are recycled in a manner consistent with their normal use. See 40 C.F.R. § 261.33 (1994); 50 Fed. Reg. 14,219 (1985). By analogy, EPA has also indicated that it does not consider "non-listed" commercial chemical products or off-specification commercial chemical products to be solid wastes, as long as those products are recycled in accordance with their normal use. See 50 Fed. Reg. 14,219 (1985).

In informal guidance, EPA has discussed the application of these principles in the context of mixtures of water and petroleum products. Under certain circumstances, these mixtures may constitute off-specification commercial chemical products that are not subject to RCRA regulation as solid wastes unless discarded. A June 14, 1991 letter opinion from EPA Assistant Administrator Don Clay states that "[t]o the extent that the mixing of product and water is unavoidable and the recovery of the product is a standard practice in the management of the off-specification product, RCRA does not apply."

In order for a petroleum product/water mixture to be exempt from regulation as a solid waste, however, the EPA opinion cautions that the product must be recovered as part of a "legitimate recycling operation." For example, if no product can or will be recovered, the mixture should not be considered an off-specification commercial chemical product. Likewise, if a product/water mixture with a particular level of recoverable product is intentionally generated to avoid regulation of petroleum-contaminated water as a solid waste, then management of the mixture would not generally be considered part of a legitimate recycling operation. Similarly, a product/water mixture should probably be regulated as a solid waste if it is a managed as a waste-like material, e.g. "placed in a surface impoundment or stored in tanks for an extended period of time," rather than as a valuable product.

10-7847

The EPA opinion further cautions that

> in the event of an enforcement action, any party claiming that a material is not a solid waste must be able to demonstrate that the conditions of the exclusion being claimed are met. For example, in this case, a party may be required to demonstrate that the

off-specification product can and will actually be recovered. Also, a demonstration that the mixture of product and water was not generated to avoid regulation of the water alone as a hazardous waste may be required.

The Commission's rules specifically provide that respondents to an enforcement action who claim that a material is not a solid waste "must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption." See 30 Tex. Admin. Code § 335.1 (subsection (H) of definition of "solid waste").

Based on the available EPA guidance, the Commission is interpreting the definition of "solid waste" in its rules and statutes as not including mixtures of water and unused commercial petroleum products where the mixture contains a recoverable amount of product that will be recovered in a timely manner as part of a legitimate recycling operation. After all recoverable product has been separated from the mixture, the remaining water must be managed in accordance with all applicable federal and state regulations.

EPAHO004000454

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TNRCC REGULATORY GUIDANCE

Industrial and Hazardous Waste Permits
RG-370
April 2000

SUBJECT: **Managing Paint and Paint-Related Waste Under the Universal Waste Rule**

Introduction

This document contains only brief, general explanations of a few main points in the rules on managing paint and paint-related wastes as Universal Waste; it does not take the place of any laws or regulations.

Terms used. In this guidance document, the pronouns "I," "my," or "you" refer to people or companies covered by the regulations being explained. "We" refers to the Texas Natural Resource Conservation Commission (TNRCC) in general or, in particular, to the Industrial and Hazardous Waste Permits division or its staff. To avoid repeating words, we use the abbreviation PPRW for "paint and paint-related waste"; and UW for Universal Waste. (For other abbreviations see the section at the end of the document.)

The Basics

What is the Universal Waste (UW) Rule?

The UW Rule offers alternatives to the otherwise applicable regulations for managing four types of waste:

- batteries as described in 40 Code of Federal Regulations (CFR) Part 273.2;
- pesticides as described in 40 CFR Part 273.3;
- thermostats as described in 40 CFR Part 273.4, and
- paint and paint-related waste as described in 30 Texas Administrative Code (TAC) Section 335.262 (b).

What is paint and paint-related waste (PPRW) under the UW Rule?

The UW ruled under 30 TAC Section 335.262 says that PPRW is:

- used or unused paint and paint-related material which is "hazardous waste" as defined under Section 335.1(56) (relating to Definitions), and as determined under Section 335.504 (relating to Hazardous Waste Determination); and
- any mixture of pigment and a suitable liquid that forms a closely adherent coating when spread on a surface or any material that results from painting activities.

Why is the UW rule an advantage to me?

- No manifest is required when transporting PPRW.
- No notification to TNRCC is required.
- You do not have to use a registered transporter.
- The waste does not count toward your total hazardous waste generator status.
- The waste is exempt from year-end fees.
- The waste may be accumulated up to one year.

What PPRWs qualify for handling as UW?

- Used or unused paint;
- Spent solvents used in painting (for example, combinations of thinner and paint, lacquer, or varnish);
- Personal Protective Equipment (PPE), contaminated rags, gloves, and debris resulting from painting operations;
- Coating waste paint, overspray, overrun paints, paint filters, paint booth stripping materials, paint sludges from water-wash curtains;
- Cleanup residues from spills of paint (this excludes cleanup residues from a spill of PPRW being managed as UW);
- Cleanup residues from painting and paint-removal activities; and
- Other paint-related wastes generated as a result of the removal of paint.

What kinds of businesses or individuals can use the UW rule?

Any individual or business that generates, accumulates, treats, stores, disposes of, recycles, or otherwise manages the four types of UW (for a list of them, see "What is the UW Rule" on page 1.)

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I generate PPRW that could be classified as UW, but I would rather manage it as hazardous waste. May I do that?

Yes. The decision to handle PPRW as hazardous waste or UW is up to the generator.

When was PPRW brought under the UW Rule?

TNRCC published the final rule on October 22, 1999, and made it effective as of October 24, 1999.

Where can I find the UW rule?

- Federal rules are found in 40 CFR Part 273.
- Texas rules are found in 30 TAC Section 335.261 and Section 335.262.

Categories of UW Handlers and Hazardous Waste Generators

What are the categories of UW handlers?

Handlers of UW are categorized as Small-Quantity Handlers and Large-Quantity Handlers.

- **Small-Quantity Handler of UW** means a universal waste handler that ***does not*** accumulate more than 5,000 kilograms total of universal waste at any time.
- **Large-Quantity Handler of UW** means a universal waste handler that accumulates more than 5,000 kilograms total (calculated collectively) of universal waste at any time.

Are these UW categories different from the ones for hazardous waste generators?

Yes, the UW Handler categories are independent of the categories used to describe hazardous waste generators. Hazardous waste (HW) generators are categorized as:
(1) Large Quantity Generators (LQGs);
(2) Small-Quantity Generators (SQGs); and
(3) Conditionally Exempt Small-Quantity Generators (CESQGs).

How do the UW rules apply to CESQGs ?

A CESQG may choose to manage its PPRW as UW.

Notification and Reporting

Do I have to notify TNRCC about PPRWs I handle as UW?

No. The TNRCC's rules in Section 335.261 (universal waste) do not refer to 30 TAC Section 335.6, which contains general notification requirements for industrial solid waste activities.

Do I use the 8-digit Texas waste code when I handle PPRWs as UW?

No. Once you decide to handle PPRW as UW, the 8-digit Texas waste code is no longer required.

Do I have to notify EPA if I start handling PPRW as UW?

If you are a Large-Quantity Handler of PPRW as UW, and you have previously notified EPA about your hazardous waste management activities, you are not required to renotify EPA. First-time notifiers must submit an 8700-12 notification form to the TNRCC. (This form is available online from TNRCC's Web site. http://www.tnrcc.state.tx.us/forms.html.)

Does PPRW managed as count toward my generator status?

No: 40 CFR Part 261.5 (c)(6) and the May 11, 1995, *Federal Register* (60 FR 25502) both state that UW handlers should not count these wastes toward their monthly quantity determination.

Storing and Transporting UW

How long can a receiving facility accumulate PPRW managed as UW before shipping it to another UW handler?

Each receiving facility can accumulate the waste for an entire year before sending it off to another handler or destination facility. This time limit can be extended if the handler can prove that the extension is necessary to facilitate proper recovery, treatment, or disposal.

What if PPRW generated in Texas is going outside the state for recycling or disposal?

PPRW managed as UW can only be sent off-site to another universal waste handler meeting the standards in 40 CFR Part 273.10-273.40, a destination facility meeting the standards in 40 CFR Part 273.60-273.62, or a foreign destination. So far, Texas is the only state that recognizes PPRW as UW. Therefore, shipments outside Texas would have to comply with the full hazardous waste requirements (for example, rules on transportation, manifests, and interim storage).

What is a destination facility?

It is a facility that treats, disposes of, or recycles a particular category of UW. Destination facilities must comply with all current applicable requirements for hazardous waste management facilities.

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Is a manifest required for PPRW managed as UW that goes outside Texas for recycling or disposal?

For portions of the trip through Texas, and any other states where the waste is a UW, you do not need a transporter with an EPA identification number per 40 CFR Part 263.11 (a hazardous waste transporter), and you do not need a manifest. However, for the portion of the trip through states that do not consider the waste to be a UW, a manifest is required, and the waste must be moved by a registered transporter in compliance with 40 CFR Part 263.

Within Texas, do I need to use a registered transporter to haul my PPRW managed as UW?

No, you may use a common carrier for in-state transport of your PPRW managed as UW; however, this waste is not exempt from federal Department of Transportation (DOT) standards in 49 CFR Part 172 that apply to the shipment of hazardous waste.

What are the labeling requirements for storing and shipping of PPRW managed as UW?

The words "UW—Paint and Paint Waste" or "Paint and Paint-Related Waste" must be marked clearly on each container as described in 30 TAC Section 335.262 (F). In addition, this description also must be added to the DOT shipping description in accordance with 49 CFR Part 172.

How do I manage a spill of PPRW handled as UW?

If you are responsible for managing waste from a spill or release,you must determine whether the resulting waste is hazardous according to 40 CFR Part 261. If hazardous, it must be managed in accordance with all applicable requirements found in 40 CFR Parts 260 through 272. If the resulting waste is nonhazardous, then it must be managed in accordance with all applicable state and local requirements.

What regulations cover recycling facilities that receive PPRW managed as UW?

Recycling facilities are excluded from the definition of "UW handlers" (see 40 CFR 273.6). Under those requirements, storage before recycling is regulated (see CFR 261.6(c)(1)).

What regulations apply to a mixture of a solid waste with PPRW managed as UW?

The UW rules apply only to wastes meeting the criteria for being classified as UW. They do not apply to mixtures of UW and a solid waste. Intentional mixing of universal waste with solid waste to avoid classification as a hazardous waste is not allowed. A handler who mixes UW and solid waste to avoid regulation is treating that waste, which would make him or her subject to the regular hazardous waste regulations.

Abbreviations and Terms

CESQG—Conditionally Exempt Small Quantity Generator

CFR—Code of Federal Regulations

DOT U.S. Department of Transportation

PPRW(s)—Paint and Paint-Related Waste(s)

Section refers to a part of Title 30 TAC which contains state environmental rules.

TAC Texas Administrative Code

UW Universal Waste

For More Information, Contact:

Technical Analysis Team
I&HW Permits / MC-130
TNRCC Waste Permits Division
PO Box 13087
Austin TX 78711-3087
Phone No. (512) 239-6412
Fax No. (512) 239-6410

U.S. Department of Transportation
Phone No. (800) 832-5660

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PLACARDING NOTES 98

- Are there tanks with diamond labels or placards on the premises?
- What type of package is being shipped? Cylinders and drums are often used for hazardous materials shipments.
- Is a hazard class label, proper shipping name, or identification number on the package?
- Are there any handling precautions?

• Hazardous Waste Manifest

When transporting hazardous wastes, you must sign by hand and carry a Uniform Hazardous Waste Manifest. The name and EPA registration number of the shippers, carriers, and destination must appear on the manifest. Shippers must prepare, date, and sign by hand the manifest. Treat the manifest as a shipping paper when transporting the waste. Only give the waste shipment to another registered carrier or disposal/treatment facility. Each carrier transporting the shipment must sign by hand the manifest. After you deliver the shipment, keep your copy of the manifest. Each copy must have all needed signatures and dates, including those of the person to whom you delivered the waste.

• Placarding

Attach the appropriate placards to the vehicle before you drive it. You are only allowed to move an improperly placarded vehicle during an emergency, in order to protect life or property.

Placards must appear on both sides and ends of the vehicle. Each placard must be:

- Easily seen from the direction it faces.
- Placed so the words or numbers are level and read from left to right.
- At least three inches away from any other markings.
- Kept clear of attachments or devices such as ladders, doors, and tarpaulins.
- Kept clean and undamaged so that the color, format, and message are easily seen.

To decide which placards to use, you need to know:

- The hazard class of the materials.
- The amount of hazardous materials shipped.
- The total weight of all classes of hazardous materials in your vehicle.

Always make sure that the shipper shows the correct basic description on the shipping paper and verifies that the proper labels are shown on the packages. If you are not familiar with the material, ask the shipper to contact your office.

• Placard Tables

There are two placard tables, Table 1 and Table 2. Table 1 materials must be placarded whenever any amount is transported.

PLACARD TABLE 1 - ANY AMOUNT

IF YOUR VEHICLE CONTAINS ANY AMOUNT OF...	PLACARD AS...
1.1	Explosives 1.1
1.2	Explosives 1.2
1.3	Explosives 1.3
2.3	Poison Gas
4.3	Dangerous When Wet
6.1 (PG 1, inhalation hazard only)	Poison
7 (Radioactive Yellow III Label only)	Radioactive

Except for bulk packagings, the hazard classes in Table 2 need placards only if the total amount transported is 1,001 pounds or more including the package. Add the amounts from all shipping papers for all the Table 2 products you have on board. You may use DANGEROUS placards instead of separate placards for each Table 2 hazard class when:

- You have 1,001 pounds or more of two or more Table 2 hazard classes, requiring different placards, and
- You have not loaded 5,000 pounds or more of any Table 2 hazard class material at any one place. You must use the specific placard for this material.

If the words INHALATION HAZARD are on the shipping paper or package, you must display POISON placards in addition to any other placards needed by the product's hazard class.

You need not use EXPLOSIVES 1.5, OXIDIZER, and DANGEROUS placards if a vehicle contains Division 1.1 or 1.2 explosives and is placarded with EXPLOSIVES 1.1 or 1.2 placards. You need not use a Division 2.2 NON-FLAMMABLE GAS placard on a vehicle displaying a Division 2.1 FLAMMABLE GAS or for oxygen a Division 2.2 OXYGEN placard.

Placards used to identify the primary hazard class of a

material must have the hazard class or division number displayed in the lower corner of the placard. No hazard class or division number is allowed on placards used to identify a secondary hazard class of a material.

Placards may be displayed for hazardous materials even if not required so long as the placard identifies the hazard of the material being transported.

PLACARD TABLE 2 -- 1,001 POUNDS OR MORE

Category of Material (Hazard class division number and additional description, as appropriate)	Placard Name
1.4	Explosives 1.4
1.5	Explosives 1.5
1.6	Explosives 1.6
2.1	Flammable Gas
2.2	Non-Flammable Gas
3	Flammable
Combustible Liquid	Combustible*
4.1	Flammable Solid
4.2	Spontaneously Combustible
5.1	Oxidizer
5.2	Organic Peroxide
6.1 (PG I or II, other than PG I inhalation hazard)	Poison
6.1 (PG III)	Keep Away From Food
6.2	(None)
8	Corrosive
9	Class 9**
ORM-D	(None)

* FLAMMABLE placard may be used in place of a COMBUSTIBLE placard on a cargo tank or portable tank.

** Class 9 Placard is not required for domestic transportation.

Test Your Knowledge

1. What is a shipper's certification? Where does it appear? Who signs it? CARGO PACKAGE FLIGHT ON SHIPPING PAPERS
2. When may non-hazardous materials be described by hazard class words or identification numbers? NEVER
3. Name five hazard classes that require placarding in any amount. 1.1 1.2 1.3 2.3 POISON GAS 6.1 EXPLOSIVES 7 RADIO
4. A shipment described on the Hazardous Waste Manifest may only be delivered to another ~~fill in the blank~~ carrier or treatment facility, which then signs the ~~fill in the blank~~ giving you a copy which you must keep. MANIFEST
5. Your load includes 20 pounds of Division 2.3 gas and 1,001 pounds of flammable gas. What placards do you need, if any? POISON GAS 2.1 FLAMMABLE GAS

These questions may be on your test. If you can't answer them all, re-read pages 9-6 through 9-9.

9.4 LOADING AND UNLOADING

- **General Loading Requirements**
  - Do all you can to protect containers of hazardous materials. Don't use any tools which might damage containers or other packaging during loading. Don't use hooks.
  - Before loading or unloading, set the parking brake. Make sure the vehicle will not move.
  - Many products become more hazardous when exposed to heat. Load hazardous materials away from heat sources.
  - Watch for signs of leaking or damaged containers: LEAKS SPELL TROUBLE! Do not transport leaking packages. Depending on the material, you, your truck, and others could be in danger.

Containers of Class 1 (explosives), Class 3 (flammable liquids), Class 4 (flammable solids), Class 5 (oxidizers), Class 8 (corrosives), Class 2 (gases), and Division 6.1 (poisons) must be braced to prevent movement of the packages during transportation.

No Smoking. When loading or unloading hazardous materials, keep fire away. Don't let people smoke nearby. Never smoke around:

Class 1 (EXPLOSIVES) | Division 2.1 (FLAMMABLE GAS) | Class 5 (OXIDIZERS)

Class 4 (FLAMMABLE SOLIDS) | Class 3 (FLAMMABLE LIQUIDS)

100

Reliable Solutions
524 Morse Ave., Schaumburg, IL 60193
Phone: 847-891-1625 - Fax 847-891-2336
E-mail: info@reliablesolutions.com

DOT Hazardous Material Regulations (49 CFR 100-179)

Purpose: The purpose of the DOT hazardous material regulations (HMR) are to promote the safe transportation of hazardous material through the effective communication of information concerning the hazards of hazardous materials being transported. Through the communication of this information, accidents are either altogether avoided or, emergency responders are properly prepared to respond to a given incident or accident.

Overview

The requirements of HMR

Hazardous Material Classification

Shipping papers	Marking
Labeling	Placarding
Packaging	Employee Training

Hazardous Material Classification

Do any of the following pertain to your product in question?

Hazard Classes listed in descending order of Hazard

Product Hazards	Yes	No
Poisonous by inhalation - Liquid		
Flammable Liquid - PG I (Flash point <73F, BP<=95F)		
Flammable Liquid - PG II (Flash point <73F, BP>95F)		
Flammable Liquid - PG III (Flash point >=73F<=141F, BP>95F)		
Corrosive - PG I (Full destruction of skin after 3 min. exposure, observed 60 min.)		
Corrosive - PG I I(Full destruction of skin after 3 -60 min. exposure, observed after 14 days)		
Corrosive - PG III (Full destruction of skin after >60 min. exposure, observed after 14 days)		
Flammable Solid		
Spontaneously Combustible		
Oxidizer		
Combustible Liquid (Flash point >141 F < 200 F)		

10

Poisonous other than by inhalation	

Are any of the above categories checked Yes? _____ If no, material is not DOT Hazardous.

Are any of the above categories checked Yes? _____ If yes, material is DOT Hazardous.

If more than one Hazard checked yes, hazard precedence table needs to be consulted to determine primary and subsidiary hazards.

Primary hazard: _____

Subsidiary Hazard: _____

Shipping Papers

Shipping papers of DOT Hazardous materials must contain the following:

Proper shipping Name as listed in Hazardous Material Table. If a material is described on the HMT with a "n.o.s." description, the technical name of the hazardous component must be entered in association with the basic description. Hazard Class (not required for combustibles) Identification number (UN or NA) Packing group, in roman numerals Total quantity including the unit of measurement

Shippers Certification:

Each person who offers a hazardous material for transportation shall certify that the material is offered for transportation in accordance with the regulations by including a shippers certification statement on the shipping papers. This statement might read:

"I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations"

Hazardous and Non Hazardous Materials:

When hazardous and non-hazardous materials are described on the same shipping paper, the hazardous material entries must be:

Entered First or Printed in a contrasting color or highlighted or Identified by the entry of an "X" placed before the PSN in a column captioned "HM"

Accessibility of Shipping Papers:

For those of you running your own trucks, the shipping papers must be readily accessible. Specifically they must be within the drivers immediate reach when he is at the wheel. This may be a holder on the door, or on the seat next to the driver. When the driver is not at the wheel, the papers must be in a holder on the drivers door or on the drivers seat. All hazardous shipping papers must appear first or be distinctively tabbed. Trucks must also be equipped with Emergency Response Information. A copy of the North American Emergency response Guide

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label Codes	Special provisions (§172.102)	(8) Packaging (§173.***)			(9) Quantity limitations		(10) Vessel stowage		Placard Advisory Consult §172.504 & §172.505 to determine placard *Denotes placard for any quantity
							Exceptions	Nonbulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)	
	Acrylic acid, stabilized	8	UN2218	II	8, 3	B2, IB2, T7, TP2	154	202	243	1 L	30 L	C	25, 40	CORROSIVE
	Acrylonitrile, stabilized	3	UN1093	I	3, 6.1	B9, T14, TP2, TP13	None	201	243	Forbidden	30 L	E	40	FLAMMABLE
	Actuating cartridge, explosive, see Cartridges, power device													
	Adhesives, *containing a flammable liquid*	3	UN1133	I	3	B42, T11, TP1, TP8, TP27	150	201	243	1 L	30 L	B		FLAMMABLE
				II	3	149, B52, IB2, T4, TP1, TP8	150	173	242	5 L	60 L	B		FLAMMABLE
				III	3	B1, B52, IB3, T2, TP1	150	173	242	60 L	220 L	A		FLAMMABLE
	Adiponitrile	6.1	UN2205	III	6.1	IB3, T3, TP1	153	203	241	60 L	220 L	A		POISON
	Aerosols, *corrosive, Packing Group II or III, (each not exceeding 1 L capacity)*	2.2	UN1950		2.2, 8	153, A34	306	None	None	75 kg	150 kg	A	48, 87, 126	NONFLAMMABLE GAS
	Aerosols, *flammable, (each not exceeding 1 L capacity)*	2.1	UN1950		2.1	153, N82	306	None	None	75 kg	150 kg	A	48, 87, 126	FLAMMABLE GAS
	Aerosols, flammable, n.o.s. *(engine starting fluid) (each not exceeding 1 L capacity)*	2.1	UN1950		2.1	153, N82	306	304	None	Forbidden	150 kg	A	48, 87, 126	FLAMMABLE GAS
	Aerosols, *non-flammable, (each not exceeding 1 L capacity)*	2.2	UN1950		2.2	153	306, 307	None	None	75 kg	150 kg	A	48, 87, 126	NONFLAMMABLE GAS
	Aerosols, *poison, each not exceeding 1 L capacity*	2.2	UN1950		2.2	153	306	None	None	Forbidden	Forbidden	A	48, 87, 126	NONFLAMMABLE GAS
	Air bag inflators, compressed gas *or* Air bag modules, compressed gas *or* Seat-belt pretensioners, *compressed gas*	2.2	UN3353		2.2	133	166	166	166	75 kg	150 kg	A		NONFLAMMABLE GAS
I	Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners	1.4G	UN0503	II	1.4G	161	None	62	None	Forbidden	75 kg	02		EXPLOSIVES 1.4
	Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners	9	UN3268	III	9	160	166	166	166	25 kg	100 kg	A		CLASS 9
	Air, compressed	2.2	UN1002		2.2	78	306	302	302	75 kg	150 kg	A		NONFLAMMABLE GAS
	Air, refrigerated liquid, *(cryogenic liquid)*	2.2	UN1003		2.2, 5.1	T75, TP5, TP22	320	316	318, 319	Forbidden	150 kg	D	51	NONFLAMMABLE GAS
	Air, refrigerated liquid, *(cryogenic liquid) non-pressurized*	2.2	UN1003		2.2, 5.1	T75, TP5, TP22	320	316	318, 319	Forbidden	Forbidden	D	51	NONFLAMMABLE GAS
	Aircraft engines (including turbines), see Engines, internal combustion													
	Aircraft evacuation slides, see Life saving appliances etc.													
	Aircraft hydraulic power unit fuel tank *(containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)*	3	UN3165	I	3, 6.1, 8		None	172	None	Forbidden	42 L	E		FLAMMABLE
	Aircraft survival kits, see Life saving appliances etc.													
G	Alcoholates solution, n.o.s., *in alcohol*	3	UN3274	II	3, 8	IB2	None	202	243	1 L	5 L	B		FLAMMABLE
	Alcoholic beverages	3	UN3065	II	3	24, B1, IB2, T4, TP1	150	202	242	5 L	60 L	A		FLAMMABLE
				III	3	24, B1, IB3, N11, T2, TP1	150	203	242	60 L	220 L	A		FLAMMABLE
	Alcohols, n.o.s	3	UN1987	I	3	T11, TP1, TP8, TP27	None	201	243	1 L	30 L	E		FLAMMABLE
				II	3	IB2, T7, TP1, TP8, TP28	150	202	242	5 L	60 L	B		FLAMMABLE
				III	3	B1, IB3, T4, TP1, TP29	150	203	242	60 L	220 L	A		FLAMMABLE
G	Alcohols, flammable, toxic, n.o.s.	3	UN1986	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	E	40	FLAMMABLE
				II	3, 6.1	IB2, T11, TP2, TP27	None	202	243	1 L	60 L	B	40	FLAMMABLE
				III	3, 6.1	B1, IB3, T7, TP1, TP28	None	203	242	60 L	220 L	A		FLAMMABLE

HAZARDOUS MATERIALS TABLE

EPAHO00400462

REPORTABLE QUANTITY

TABLE 1 TO APPENDIX A — HAZARDOUS SUBSTANCES, Continued

Hazardous Substances	Reportable Quantity (RQ) Pounds (Kilograms)
1,2-Benzenedicarboxylic acid, dimethyl ester	5000 (2270)
1,2-Benzenedicarboxylic acid, dioctyl ester	5000 (2270)
1,3-Benzenediol	5000 (2270)
1,2-Benzenediol,4-[1- hydroxy-2-(methylamino) ethyl]-	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	5000 (2270)
Benzeneethanamine, alpha,alpha-dimethyl-	5000 (2270)
Benzenesulfonic acid chloride	100 (45.4)
Benzenesulfonyl chloride	100 (45.4)
Benzenethiol	100 (45.4)
Benzidine	1 (0.454)
1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	100 (45.4)
Benzo[a]anthracene	10 (4.54)
1,3-Benzodioxole, 5-(2-propenyl)-	100 (45.4)
1,3-Benzodioxole, 5-(1-propenyl)-	100 (45.4)
1,3-Benzodioxole, 5-propyl-	10 (4.54)
Benzo[b]fluoranthene	1 (0.454)
Benzo[k]fluoranthene	5000 (2270)
Benzo[j,k]fluorene	100 (45.4)
Benzoic acid	5000 (2270)
Benzonitrile	5000 (2270)
Benzo[g,h,i]perylene	5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl) -, & salts, when present at concentrations greater than 0.3%	100 (45.4)
Benzo[a]pyrene	1 (0.454)
3,4-Benzopyrene	1 (0.454)
p-Benzoquinone	10 (4.54)
Benzo[rst]pentaphene	10 (4.54)
Benzotrichloride	10 (4.54)
Benzoyl chloride	1000 (454)
1,2-Benzphenanthrene	100 (45.4)
Benzyl chloride	100 (45.4)
Beryllium ¢	10 (4.54)
Beryllium chloride	1 (0.454)
Beryllium dust ¢	10 (4.54)
Beryllium fluoride	1 (0.454)
Beryllium nitrate	1 (0.454)
alpha - BHC	10 (4.54)
beta - BHC	1 (0.454)
delta - BHC	1 (0.454)
gamma - BHC	1 (0.454)
2,2'-Bioxirane	10 (4.54)
Biphenyl	100 (45.4)
(1,1'-Biphenyl)-4,4'-diamine	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine 3,3'-dichloro-	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine 3,3'-dimethoxy-	10 (4.54)
(1,1'-Biphenyl)-4,4'-diamine 3,3'-dimethyl-	10 (4.54)
Bis(2-chloroethoxy) methane	1000 (454)
Bis(2-chloroethyl) ether	10 (4.54)
Bis(2-ethylhexyl)phthalate	100 (45.4)
Bromoacetone	1000 (454)
Bromoform	100 (45.4)
4-Bromophenyl phenyl ether	100 (45.4)
Brucine	100 (45.4)
1,3-Butadiene	10 (4.54)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1 (0.454)
1-Butanamine, N-butyl-N-nitroso-	10 (4.54)
1-Butanol	5000 (2270)
2-Butanone	5000 (2270)
2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl] oxime	100 (45.4)
2,3-Isopropanopyride	10 (4.54)

Hazardous Substances	Reportable Quantity (RQ) Pounds (Kilograms)
2-Butenal	100 (45.4)
2-Butene, 1,4-dichloro-	1 (0.454)
2-Butenoic acid, 2-methyl-,7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy] methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-ylester,[1S-[1alpha (Z),7(2S*,3R*),7aalpha]]-	10 (4.54)
Butyl acetate	5000 (2270)
iso- Butyl acetate	.....
sec- Butyl acetate	.....
tert- Butyl acetate	.....
n-Butyl alcohol	5000 (2270)
Butylamine	1000 (454)
iso- Butylamine	.....
sec- Butylamine	.....
tert- Butylamine	.....
Butyl benzyl phthalate	100 (45.4)
n-Butyl phthalate	10 (4.54)
Butyric acid	5000 (2270)
Iso-Butyric acid	.....
Cacodylic acid	1 (0.454)
Cadmium ¢	10 (4.54)
Cadmium acetate	10 (4.54)
Cadmium bromide	10 (4.54)
Cadmium chloride	10 (4.54)
Calcium arsenate	1 (0.454)
Calcium arsenite	1 (0.454)
Calcium carbide	10 (4.54)
Calcium chromate	10 (4.54)
Calcium cyanamide	1000 (454)
Calcium cyanide	10 (4.54)
Calcium cyanide Ca(CN)2	10 (4.54)
Calcium dodecylbenzene sulfonate	1000 (454)
Calcium hypochlorite	10 (4.54)
Camphene, octachloro-	1 (0.454)
Captan	10 (4.54)
Carbamic acid, ethyl ester	100 (45.4)
Carbamic acid, methylnitroso-, ethyl ester	1 (0.454)
Carbamic chloride, dimethyl-	1 (0.454)
Carbamide, thio-	10 (4.54)
Carbamimidoselenoic acid	1000 (454)
Carbamothioic acid, bis (1-methylethyl)-, S-(2,3-dichloro-2-) ester	100 (45.4)
Carbaryl	100 (45.4)
Carbofuran	10 (4.54)
Carbon bisulfide	100 (45.4)
Carbon disulfide	100 (45.4)
Carbonic acid, dithallium (I+)	100 (45.4)
Carbonic dichloride	10 (4.54)
Carbonic difluoride	1000 (454)
Carbonochloridic acid, methyl ester	1000 (454)
Carbonyl sulfide	100 (45.4)
Carbon oxyfluoride	1000 (454)
Carbon tetrachloride	10 (4.54)
Catechol	100 (45.4)
Chloral	5000 (2270)
Chloramben	100 (45.4)
Chlorambucil	10 (4.54)
Chlordane	1 (0.454)
Chlordane, alpha & gamma isomers	1 (0.454)
Chlordane, technical	1 (0.454)
Chlorine	10 (4.54)
Chlornaphazine	100 (45.4)

HAZARDOUS SUBSTANCES RQ

Weight Tickets

A-6 Desk
Top Right
Drawer
MRS 8/4/09

CES

w/w

2855

06/16/200902:38 PM

73820 lb G

28300 lb T (MEM)

45520 lb. N

EPAHO004000465

12897

HEXION™

Specialty Chemicals

DIBOLL, TEXAS 75941

LOAD OF Pond WATER _____ DRIVER _____

TO: _____ FROM: _____

TRUCK I.D. _____ TRAILER I.D. 270

TRUCK EMPTY → TARE

270 ID. NO.
31080 lb GR
10:40 AM 07/23/09

TRUCK FULL → GROSS

270 ID. NO.
77180 lb GR
31080 lb TR
RECALLED

NET

46100 lb NT
11:57 AM 07/23/09

SOUTHERN
CRUSHED CONCRETE

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2012129**

UID: 1246542363

Griggs

Date: 7/2/2009 Time: 8:46:56AM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS / CHARGE
P.O.: Job:
Product: 009 SCALE WEIGHT (NO CHARGE)
Carrier: Vehicle: CES236

Delivery Instructions:
EMPTY-28780

Gross: 14.38 Tare: 0.01 * Net: 14.37 *
* Manual Weight

Loads Today:	1	Qty Today:	14.37 Ton
Order Loads:	15	Qty To Date:	266.62

Weighmaster: CHRIS ARSOLA

PUBLIC WEIGHER STATE OF TEXAS

COPY 3 CARRIER

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

Customer Signature: _____

Carrier Signature: _____

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2011715**

UID: 1242914640

Griggs

Date: 5/21/2009 Time: 9:05:35AM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: 2000
Delivery Instructions:
GROSS 75860 LBS

Gross: 37.93 * Tare: 0.01 * Net: 37.92 *
* Manual Weight

Loads Today: 1 Qty Today: 1.00 Load
Order Loads: 782 Qty To Date: 770.00

Weighmaster: Daniel Sandoval

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

PUBLIC WEIGHER STATE OF TEXAS

Customer Signature: V-426

COPY 2 CUSTOMER

Carrier Signature: _____

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: 2011715

UID: 1242914640

Griggs

Date: 5/21/2009 Time: 9:05:35AM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: 2000
Delivery Instructions:
GROSS 75860 LBS

Gross: 37.93 * Tare: 0.01 * Net: 37.92 *
* Manual Weight

Loads Today: 1 Qty Today: 1.00 Load
Order Loads: 782 Qty To Date: 770.00

Weighmaster: Daniel Sandoval

NOTICE: The carrier and customer are independent entities and are not for any purpose employees, agents, or representatives of Southern Crushed Concrete (SCC). The carrier and customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to this transaction. It is the customary practice of SCC to scan and maintain electronic copies of signed tickets. Carrier and Customer agree that an electronic or scanned copy is as effective, valid and enforceable as the originally - signed ticket.

PUBLIC WEIGHER STATE OF TEXAS

Customer Signature: V-426

COPY 3 CARRIER

Carrier Signature: _____

LIMECO, INC.

P.O. BOX 2435
8721 INDUSTRIAL
PEARLAND, TX 77588

92027

PHONE: OFFICE (281) 482-4900

DATE 5-27-09

TRAILER NO. L 26 TRUCK NO. K 23 DRIVER Sam

SOLD TO: C ES

SHIPPED TO: Griggs. Rd

Weigh-Out:
11:19 am 05/27/09
Recalled ID#: 22

		GROSS	51120 lb Gross
SHIPPING POINT	PUMP OFF ✓	TARE	29760 lb Tare
GALENA PARK	SPREAD	NET	21360 lb Net
SCHURMIER ✓	HI CAL ✓	GALS % SOLID	39%
OTHER	CARBIDE	APPROX. DRY TONS	4.16

We make delivery to curbline of property or road only, unless specifically authorized by, and responsibility for damage to property, or injury to persons, assumed by purchaser.

ARRIVAL

RECEIVED BY X

DEPARTURE

WEIGHT TICKET #

P.O.# 377629

JOB #

EPAHO004000469

☐ SEE BACK OF DELIVERY RECEIPT

DATE 05/22/09

6 DLS 056 JM2 CCHOY526

FREIGHT BILL # CFL#63436326-1

SHIPPER 6400 O BT BL
SOUTHWEST ENGINEERS
39478 HWY 190 E
SLIDELL LA 70461

Central Freight Lines, Inc.

CORPORATE HEADQUARTERS
P.O. BOX 2638
WACO, TX 76702-2638
PHONE (254) 772-2120

ROUTING
2835274001 FB# 634363261

REFERENCE COPY

IL

CONSIGNEE 3600
CES ENVIRONMENTAL SERVICES
4904 BRIDGE ROAD
ATTN LAUREN THOMAS
HOUSTON TX 77021

REF. #
BL 243191631
PO# 377606
0000000000

SCAC=CENF
LBS

UNITS	P	HM	DESCRIPTION	WEIGHT IN LBS	RATE	CHARGES	EXTRA SERVICE PERFORMED
1			DR COMPOUND INDUSTRIAL PROCESS WATER TREATING LIQUID NON-HAZ BILLED FOR TERMINAL 6400 FUEL SURCHARGE FC SMC3*SLOGCZ 0204/01/2005 TRFB @@@SYN 050 - ORIGINAL CLASS 0001 DRUM(S) 052609 EXPECTED DELIVERY	488	M		YES ____ NO ____

DRIVER

UNITS

DATE

TIME

RECEIVED IN GOOD ORDER EXCEPT AS NOTED	RECEIVING CO. NAME		SURCHARGE	CONTINUED
X				AMT. COLLECTED
PRINT LAST NAME	SEAL #	INTACT ON RECEIPT	AMT. DUE	
➡ Langoria		X		

☐ SEE BACK OF DELIVERY RECEIPT

DATE 05/22/09

6 DLS 056 JM2 CCHOY526

FREIGHT BILL # CFL#63436326-1

SHIPPER 6400 O BT BL
SOUTHWEST ENGINEERS
39478 HWY 190 E
SLIDELL LA 70461

Central Freight Lines, Inc.

CORPORATE HEADQUARTERS
P.O. BOX 2638
WACO, TX 76702-2638
PHONE (254) 772-2120

ROUTING
2835274001 FB# 634363261

REFERENCE COPY

IL

CONSIGNEE 3600
CES ENVIRONMENTAL SERVICES
4904 BRIDGE ROAD
ATTN LAUREN THOMAS
HOUSTON TX 77021

REF. #
BL 243191631
PO# 377606
0000000000

SCAC=CENF
LBS

UNITS	P	HM	DESCRIPTION	WEIGHT IN LBS	RATE	CHARGES	EXTRA SERVICE PERFORMED
1			*PREPAID CHARGES ON INVOICE COPY ONLY* ** THANK YOU FOR YOUR BUSINESS AND ** * CONFIDENCE, CENTRAL FREIGHT LINES *	488			YES ____ NO ____

DRIVER

UNITS

DATE

TIME

RECEIVED IN GOOD ORDER EXCEPT AS NOTED	RECEIVING CO. NAME		SURCHARGE	
X				AMT. COLLECTED
PRINT LAST NAME	SEAL #	INTACT ON RECEIPT	AMT. DUE	
➡		X		

SALES ORDER

SORB-ALL COMPANY
P. O. BOX 21148 (713) 223-4575
HOUSTON, TEXAS 77226-1148
FAX # (713) 223-4579

18488

TO CES Environment

DATE 5/21/09 | CUSTOMER ORDER NO. 377623

SHIP TO
4904 Griggs

SALESPERSON Loren | TAX EXEMPT NO.

CASH	CHARGE	C.O.D.	MDSE. RETD	PAID OUT	SHIP VIA	F.O.B. POINT	TERMS
	✓						Net 30

QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	TOTAL
10	3300	Sawdust - (Bulk Bag)	85 00	
~~10~~	~~6000~~	Pallets	5 00	

10 PALLETS DELIVERED
10 PALLETS RETURNED
Odd UNLOADER'S INITIALS

RECEIVED BY Al Longoria

TOTAL

Thank You

CERTIFICATE OF AUTHORITY
FOR
PUBLIC WEIGHER
OF
HARRIS COUNTY, TEXAS
CERTIFICATE NO. 10763

ALBEMARLE CORPORATION
2500 NORTH SOUTH ST.
PASADENA, TX 77503
(713) 740-1000

WEIGH TICKET NO.
16618

INBOUND 40760 lb
LOOP ID 1430

5-11-2009 8:24AM

LOOP ID 1430 5-11-2009 9:35AM

78700 lb GROSS
40760 lb TARE
37940 lb NET

TRAILER OR CAR MARKS: _____
TRAILER OR CAR NUMBER: 206
FLEET: CES
SEAL NO.: _____
STENCIL WEIGHT: _____
REMARKS: _____

Bigler

CHECK STATUS:
INBOUND CAR ☐
STENCIL WEIGHT CHECK ☐
#14/RIP TRACK RELEASE ☐
CAR OVERWEIGHT ☐
_____ AREA NOTIFIED
ISO-TANK, WITH-CHASSIS ☐
RETURN TRAILER ☐
MFAC SUCK OUT ☐

Weigher's Signature

CERTIFICATE OF AUTHORITY
FOR
PUBLIC WEIGHER
OF
HARRIS COUNTY, TEXAS
CERTIFICATE NO. 10763

ALBEMARLE CORPORATION
2500 NORTH SOUTH ST.
PASADENA, TX 77503
(713) 740-1000

WEIGH TICKET NO.
16638

INBOUND 41000 lb
LOOP ID 1493

5-11-2009 11:47AM

LOOP ID 1493 5-11-2009 12:41PM

78040 lb GROSS
41000 lb TARE
37040 lb NET

TRAILER OR CAR MARKS: _____
TRAILER OR CAR NUMBER: 206
FLEET: CFS
SEAL NO.: _____
STENCIL WEIGHT: _____
REMARKS: _____

Bisley

CHECK STATUS:

- INBOUND CAR ☐
- STENCIL WEIGHT CHECK ☐
- #14/RIP TRACK RELEASE ☐
- CAR OVERWEIGHT ☐
- _____ AREA NOTIFIED
- ISO-TANK, WITH-CHASSIS ☐
- RETURN TRAILER ☐
- MFAC SUCK OUT ☐

Weigher's Signature

ELECTRONIC SCALE TICKET

NO. MLO PO # 7631

DATE 4-25-09

BUYER
SELLER

ADDRESS

CITY STATE ZIP

COMMODITY WASTEWATER

PRICE

REMARKS 428 SEALS 2379957
1-2 237958

DRIVER ☐ ON ☐ OFF

WEIGHER Connie Freeman

Coastal Chemical Co.
Pasadena, TX

Tare Weight =	27750
Target Weight =	44940
Net Weight =	45070
Steering Axle =	11240
Drive Axle =	30590
Trailer Axle =	30890
Gross Weight =	72820

29DEC11 05:55 AM

To Reorder Tickets Call:

Advanced Weigh Technologies, Inc.
Phone 713-691-4878

Oily water

#70743

State Certification of Weights and Measures Ticket no.: 192954

A 1 Public Scales

727 McCarty Highway 90 (Beaumont Rd)
Phone 713-675-9500 P.O. Box 1261 Houston, Texas 77251

Time In: 15:57:43 Date In: 08/21/2008
Time Out 15:57:43 Date Out 08/21/2008

Certified

Trailer :237 Tractor :295
Payment Type: Charge

Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185

From
To
Material
Total Charge 6.00
Weighmaster RS

Gross:	81740
Tare:	0
Net:	0
Tons:	0.00
Steer:	0
Drive:	0
Trailer:	0

Driver: _____

This is to certify that I have this day weighed the above described articles and that the weight and conditions set forth are true and correct.

Wood George
Certified Public Weigher
Harris County, Texas

60620589

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

"WEIGH WHAT WE SAY OR WE PAY"®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:
(1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale.

DATE: 8-21-2008
APPROXIMATE TIME: 1240
SCALE 2009
60620589 **LOCATION:** SUNMART 201
BELTLOOP 8 AND GESSNER
HOUSTON TX

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

STEER AXLE	00 lb
DRIVE AXLE	9100 lb
TRAILER AXLE	23180 lb
* GROSS WEIGHT	32280 lb

DEPARTMENT OF AGRICULTURE • TEXAS •

WEIGH NUMBER
0589

This is to certify that the following merchandise was weighed, counted, or measured by a public weigher, and when properly signed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED FREIGHT ALL KINDS

COMPANY CES TRACTOR # 295 TRAILER # 237

FEE 8.50 WEIGHMASTER OR WEIGHER SIGNATURE TAI FULL WEIGH TICKET # (IF REWEIGH)

DRIVER IN TRUCK UNLESS CHECKED HERE: ___

© CAT SCALE® FORM TEXAS 05/07

CUSTOMER COPY

8/21 Atlantz Industrial Oily Water

EPAHO004000476

METTLER TOLEDO

AUTHORIZED SIGNATURE

Newpark Env. Services LC CN 56250
26400 WILBER RD
WINNE TX 77665

ID	1	GROSS	83720 lb (i)
VEHICLE	608	TARE	27720 lb
TIME	10:20 AM	NET	56000 lb
DATE	03 06 09		

11936

HEXION™

Specialty Chemicals

DIBOLL, TEXAS 75941

LOAD OF DIST. WATER _____ DRIVER _____

TO: _____ FROM: _____

TRUCK I.D. _____ TRAILER I.D. 5071

TRUCK EMPTY → TARE

5071 ID. NO.
27300 lb GR
08:19 AM 04/10/09

TRUCK FULL → GROSS

5071 ID. NO.
68600 lb GR
27300 lb TR
RECALLED
41300 lb NT

NET

10:18 AM 04/10/09

EPAHO004000478

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

DATE 3-27-09 (CES)

CUSTOMER'S NAME CTI

ADDRESS

CITY STATE ZIP

PRODUCT NAME Clow H_2O

DRIVER: ON ___ OFF ✓

ORDER # BILL OF LADING #

SHIPPER WEIGHER D. Wiggins

TRUCK # 280 TRAILER # 256

REMARKS D/O

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

10:14 MAR 27 2009
280 ID. NO.
34700 lb GR

12:00 MAR 27 2009
280 ID. NO.
65660 lb GR
34700 lb TR RECALLED
30960 lb NT

CES

EPAHO004000479

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

DATE 3-27-09 (EST)

CUSTOMER'S NAME CTI

ADDRESS

CITY STATE ZIP

PRODUCT NAME Clear H_2O

DRIVER: ON ____ OFF ✓

ORDER # BILL OF LADING #

SHIPPER WEIGHER D. Wiggins

TRUCK # 280 TRAILER # 256

REMARKS D/U

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

10:14 MAR 27 2009
280 ID. NO.
34700 lb GR

12:00 MAR 27 2009
280 ID. NO.
65660 lb GR
34700 lb TR RECALLED
30960 lb NT

CST

Load 0 KSO
LAB RELEASE AUTHORIZATION

3-7-09 1845
DATE TIME

Lubrizol

RELEASING OFFICER

☐ 12801 BAY AREA BLVD. • PASADENA, TEXAS 77507
☑ P.O. BOX 158 • DEER PARK, TEXAS 77536

DELIVERY NET WT.
Weigh-In:
ID#: 336
03:30 PM 03/07/09
34200 lb

Weigh-Out:
ID#: 336
06:36 PM 03/07/09
76380 lb Gross
34200 lb Tare
42180 lb Net

COMPANY CES DRIVER C. Rosales

TRUCK NO. 298 TRAILER 221 PICK-UP ✓ DELIVERY N/A

PRODUCT PHL-1 DESTINATION Freedonia KS

COMPT. N/A LOADED BY: Clarifier Unit

00559193 1 JJK
(B / L NO.

DRIVER: ON ✓ OFF N/A

TICKET NO.

CERTIFICATION NUMBER

Misty Wiels
CERTIFIED PUBLIC WEIGHER SIGNATURE

3012323 (2050 - GKM 12/2007)

EPAHO004000481

Load & Go
LAB RELEASE AUTHORIZATION

3-7-09 1845
DATE TIME

Lubrizol

RELEASING OFFICER

☐ 12801 BAY AREA BLVD. • PASADENA, TEXAS 77507
☒ P.O. BOX 158 • DEER PARK, TEXAS 77536

DELIVERY NET WT.
Weigh-In:
TDN: 336
03:30 PM 03/07/09
34200 lb

Weigh-Out:
TDN: 336
06:36 PM 03/07/09
76380 lb Gross
34200 lb Tare
42180 lb Net

COMPANY CES DRIVER C. Kasalas

TRUCK NO. 298 TRAILER 221 PICK-UP ✓ DELIVERY N/A

PRODUCT PHL-1 DESTINATION Freedonia KS

COMPT. N/A LOADED BY: Clarifier Unit

005591931 JJK
(B / L NO.

DRIVER: ON ✓ OFF N/A

TICKET NO.

CERTIFIED WEIGHT
CERTIFICATION NUMBER

Misty Daniels
CERTIFIED PUBLIC WEIGHER SIGNATURE

3012323 (2050 - GKM 12/2007)

EPAHO004000482

METTLER TOLEDO

693-825

AUTHORIZED SIGNATURE

Newpark Env. Services LC CN 51847
26400 WILBER RD
WINNE TX 77665

ID	1	GROSS	89340 lb (1)
VEHICLE	1418	TARE	32800 lb
TIME	11:47 AM	NET	56540 lb
DATE	10 14 08		

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

DATE 10-16-08

CUSTOMER'S NAME CES Environmental

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PRODUCT NAME Hazardous Wastewater

DRIVER: ON ___ OFF ✓

ORDER # _____ BILL OF LADING # _____

SHIPPER _____ WEIGHER S/O CHolmes

TRUCK # 293 TRAILER # 270

REMARKS P/U

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

Job 73973

05:56 OCT 16 2008
293 ID. NO.
32020 lb GR

06:44 OCT 16 2008
293 ID. NO.
73460 lb GR
32020 lb TR RECALLED
41440 lb NT

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

74070.

DATE 10-16-08

CUSTOMER'S NAME CES Environmental

ADDRESS

CITY STATE ZIP

PRODUCT NAME Hazardous Wastewater

DRIVER: ON ___ OFF ✓

ORDER # BILL OF LADING #

SHIPPER WEIGHER S.C. Holmes

TRUCK # 293 TRAILER # 270

REMARKS P/U

10:46 OCT 16 2008
293 ID. NO.
76520 lb GR
31800 lb TR RECALLED
44720 lb NT

10:04 OCT 16 2008
293 ID. NO.
31800 lb GR

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

CES Environmental

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

74098

DATE 10-16-08

CUSTOMER'S NAME CES

ADDRESS

CITY STATE ZIP

PRODUCT NAME Clow Process wastewater

DRIVER: ON ___ OFF ✓

ORDER # BILL OF LADING #

SHIPPER WEIGHER S/O C. Holmes

TRUCK # 293 TRAILER # 252

REMARKS P/U

74070

CES Environmental

15:52 OCT 16 2008
293 ID. NO.
79060 lb GR
34920 lb TR RECALLED
43140 lb NT

15:05 OCT 16 2008
293 ID. NO.
34920 lb GR

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

CERTIFICATE OF AUTHORITY
FOR
PUBLIC WEIGHER
OF
HARRIS COUNTY, TEXAS
CERTIFICATE NO. 10763

ALBEMARLE CORPORATION
2500 NORTH SOUTH ST.
PASADENA, TX 77503
(713) 740-1000

WEIGH TICKET NO.:
07003

INBOUND 33140 lb
LOOP ID 1291

77721

12-16-2008 7:35AM

LOOP ID 1291 12-16-2008 11:08AM

74480 lb GROSS
33140 lb TARE
41340 lb NET

TRAILER OR CAR MARKS: _____
TRAILER OR CAR NUMBER: 1264
FLEET: CES
SEAL NO.: _____
STENCIL WEIGHT: _____
REMARKS: _____

CF3 waste

CHECK STATUS:

- INBOUND CAR ☐
- STENCIL WEIGHT CHECK ☐
- #14/RIP TRACK RELEASE ☐
- CAR OVERWEIGHT ☐
- _____ AREA NOTIFIED
- ISO-TANK, WITH-CHASSIS ☐
- RETURN TRAILER ☐
- MFAC SUCK OUT ☐

Weigher's Signature

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

CES Job # 77790

DATE 12/16/08

CUSTOMER'S NAME CES

ADDRESS

CITY STATE ZIP

PRODUCT NAME

DRIVER: ON ___ OFF X

ORDER # BILL OF LADING #

SHIPPER WEIGHER N. Martinez

TRUCK # 296 TRAILER # 241

REMARKS P/U

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

CES

14:30 DEC 16 2008
241 ID. NO.
39500 lb GR

15:18 DEC 16 2008
241 ID. NO.
81320 lb GR
39500 lb TR RECALLED
41820 lb NT

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

DATE 12-30-08

CUSTOMER'S NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PRODUCT NAME _____

DRIVER: ON ___ OFF ___

ORDER # _____ BILL OF LADING # _____

SHIPPER _____ WEIGHER _____

TRUCK # 299 TRAILER # 206

REMARKS _____

Gross - 74120
Net - 39640
Tare 34480

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

EPAHO004000489

DANA CONTAINER, INC.
CLEANING DIVISION
P.O. BOX 150
AVENEL, N.J. 07001
732-750-9100

- [ ] AVENEL
- [ ] BALTIMORE
- [ ] CHARLOTTE
- [ ] DETROIT
- [ ] HAMMOND
- [x] LA PORTE
- [ ] NITRO
- [ ] PAULSBORO
- [ ] SUMMIT
- [ ] OTHER

1503146

PO #:

TRACTOR:

CUSTOMER: CES

TRAILER: 229 (type)

ADDRESS:

DROP-OFF DRIVER:

DATE: 10/9/08

SERVICES	PRODUCT HAULED	WORK ORDERED	WORK PERFORMED	TIME	RATE	CHARGE
Comp I:	[illegible]	03	03			
Comp II:						
Comp III:						
Comp IV:						
Comp V:						
Pump:						
Hoses:						
Heel:		017	3g (H)			
Waste Treatment Surcharge:						

Term. Sup. Ruben Fe

P/U Driver: DATE: 10/9/08

Sub-Total	$
Sales Tax	$
Total	$

WORK CODE:

01 Steam & Dry
02 Rinse. Steam & Dry
03 Detergent Wash & Dry
04 Solvent Flush
05 Caustic Wash & Dry
06 Air Dry
07 Dry Bulk Trailer
08 External Trailer Wash
09 External Tractor Wash
10 Valve Pack
11 Steam Internally
12 Steam Coils
13 Pump w/Trailer
14 Pump w/out Trailer
15 Hoses
16 Hand Labor - 2 Men
17 Product Residue
18 Extras

EPAHO004000490

® DANA CONTAINER, INC.
CLEANING DIVISION
P.O. BOX 150
AVENEL, N.J. 07001
732-750-9100

☐ AVENEL ☑ LA PORTE
☐ BALTIMORE ☐ NITRO
☐ CHARLOTTE ☐ PAULSBORO
☐ DETROIT ☐ SUMMIT
☐ HAMMOND ☐ OTHER

1505644

PO #: _____

TRACTOR: _____

CUSTOMER: CES

TRAILER: 208 (type)

ADDRESS: _____

DROP-OFF DRIVER: _____

DATE: 12-4-01

SERVICES	PRODUCT HAULED	WORK ORDERED	WORK PERFORMED	TIME	RATE	CHARGE
Comp I:	Caustic	02	02			
Comp II:						
Comp III:						
Comp IV:						
Comp V:						
Pump:						
Hoses:						
Heel:						
Waste Treatment Surcharge						

Term. Sup. _____

P/U Driver: _____ DATE: _____

Sub-Total	$
Sales Tax	$
Total	$

WORK CODE:

01 Steam & Dry
02 Rinse, Steam & Dry
03 Detergent Wash & Dry
04 Solvent Flush
05 Caustic Wash & Dry
06 Air Dry
07 Dry Bulk Trailer
08 External Trailer Wash
09 External Tractor Wash
10 Valve Pack
11 Steam Internally
12 Steam Coils
13 Pump w/Trailer
14 Pump w/out Trailer
15 Hoses
16 Hand Labor - 2 Men
17 Product Residue
18 Extras

® DANA CONTAINER, INC.
CLEANING DIVISION
P.O. BOX 150
AVENEL, N.J. 07001
732-750-9100

☐ AVENEL ☑ LA PORTE
☐ BALTIMORE ☐ NITRO
☐ CHARLOTTE ☐ PAULSBORO
☐ DETROIT ☐ SUMMIT
☐ HAMMOND ☐ OTHER

1506262

PO #: _____

TRACTOR: _____

CUSTOMER: CES

TRAILER: 271 (type)

ADDRESS: _____

DROP-OFF DRIVER: _____

DATE: 12-23-08

SERVICES	PRODUCT HAULED	WORK ORDERED	WORK PERFORMED	TIME	RATE	CHARGE
Comp I:	Caustic	03	03			
Comp II:						
Comp III:						
Comp IV:						
Comp V:						
Pump:						
Hoses:						
Heel:						
Waste Treatment Surcharge:						

Sub-Total	$
Sales Tax	$
Total	$

Term. Sup. DMarch

P/U Driver: _____ DATE: _____

WORK CODE:

01 Steam & Dry
02 Rinse, Steam & Dry
03 Detergent Wash & Dry
04 Solvent Flush
05 Caustic Wash & Dry
06 Air Dry
07 Dry Bulk Trailer
08 External Trailer Wash
09 External Tractor Wash
10 Valve Pack
11 Steam Internally
12 Steam Coils
13 Pump w/Trailer
14 Pump w/out Trailer
15 Hoses
16 Hand Labor - 2 Men
17 Product Residue
18 Extras

SCALE TICKET

PPG

FINE CHEMICALS
LaPORTE, TEXAS

TICKET NO. 49838

05:47 pm 10/13/08
Weigh-In:
Stored ID#: 7005
12940 lb

CERTIFIED PUBLIC WEIGHER
LAPORTE, TEXAS

GROSS:

05:47 pm 10/13/08
Weigh-Out:
Recalled ID#: 7005
48240 lb Gross
12940 lb Tare
35300 lb Net

TARE:

1st shot → 35300 lb Net
10/13/08
D [illegible]
DU

NET:

CONSIGNEE: _____ CONSIGNEE ORDER NO. _____

DESTINATION: CITY _____ STATE _____

COMMODITY Mech 2 Waste SHIPPERS ORDER NO. _____

CARRIER CES TRAILER NO. # 7005

SEAL NOS.: _____

WEIGHER: _____ INBOUND _____ OUTBOUND Donny Usher

2 CUSTOMER COPY

SCALE TICKET

PPG

FINE CHEMICALS
LaPORTE, TEXAS

TICKET NO. 49838

05:47 pm 10/13/08
Weigh-In:
Stored ID#: 7005
12940 lb

CERTIFIED PUBLIC WEIGHER
LAPORTE, TEXAS

GROSS:

05:47 pm 10/13/08
Weigh-Out:
Recalled ID#: 7005
48240 lb Gross
12940 lb Tare
35300 lb Net

TARE:

NET:

1st shot 10/13/08 D Miller JU

CONSIGNEE: _____ CONSIGNEE ORDER NO. _____

DESTINATION: CITY _____ STATE _____

COMMODITY Mech 2 Waste SHIPPERS ORDER NO. _____

CARRIER CES TRAILER NO. # 7005

SEAL NOS.: _____

WEIGHER: _____ INBOUND _____ OUTBOUND Donny Usher

3 DRIVERS COPY

EPAHO004000494

SEABREEZE ENVIROMENTAL LANDFILL
REPUBLIC WASTE SERVICES OF TEXAS
P.O. BOX 567 ANGLETON, TX. 77516
(979)864-4442

Ticket: 581910
Date: 10/10/2008
Time In: 09:21:30
Time Out: 10:56:15

Truck: CES2
Customer: 1-96984/CES Enviromental Service
4904 Griggs Rd.
Houston, TX 77021-

Gross:	69660	lb	In	Scale 2
Tare:	51320	lb	Out	Manual Wt M
Net:	18340	lb		
Net Tons:	9.17		Cuyds:	12.00

Profile: 04-0064/NON HAZ SLUDGE TAI

Comment: MANIFEST 004252836JJK

Origin	Materials & Services	Quantity	Unit
NA/NON APP	100% of 0152/C1 SLUDGE WET-TON	9.17	Tons
NA/NON APP	FUELSUR/FUEL FEE	0.00	%

Driver: _____

Deputy Weighmaster: _____
CHRISTIAN WILEY

SEABREEZE ENVIROMENTAL LANDFILL
REPUBLIC WASTE SERVICES OF TEXAS
P.O. BOX 567 ANGLETON, TX. 77516
(979)864-4442

Ticket: 581910
Date: 10/10/2008
Time In: 09:21:30
Time Out: 10:56:15

Truck: CES2
Customer: 1-96984/CES Enviromental Service
4904 Griggs Rd.
Houston, TX 77021-

Gross: 69660 lb In Scale 2
Tare: 51320 lb Out Manual Wt M
Net: 18340 lb
Net Tons: 9.17 Cuyds: 12.00

Profile: 04-0064/NON HAZ SLUDGE TAI

Comment: MANIFEST 004252836JJK

Origin | Materials & Services | Quantity | Unit
NA/NON APP | 100% of 0152/C1 SLUDGE WET-TON | 9.17 | Tons
NA/NON APP | FUELSUR/FUEL FEE | 0.00 | %

Driver: _____

Deputy Weighmaster: _____
CHRISTIAN WILEY

KINDER MORGAN
LIQUIDS TERMINALS LLC

ORDER # 70912

12:54 08-25-2008
TRK ID: 33
33220 @ 1s

GROSS

TARE

NET

CUSTOMER ~~KM~~ Shell

COMMODITY ~~Rf 1 [illegible]~~ Shell Lubes

TANK NO. ~~[illegible]~~ Slop tank INBOUND _____ OUTBOUND ✓

TRANSPORT CO. CES TRACTOR/TRAILER NO. 298 / 233

WEIGHER IN SG

WEIGHER OUT _____

KINDER MORGAN
LIQUIDS TERMINALS LLC

ORDER # 70912

12:54 08-25-2008
TRK ID: 33
33220 G lb

GROSS

TARE

NET

13:54 08-25-2008
TRK ID: 33
44320 G lb
33220 T lb Manual
11100 N lb

CUSTOMER ~~KM~~ Shell

COMMODITY ~~Rf 1 bbl~~ Shell Lubes

TANK NO. ~~39~~ Slop tank INBOUND _____ OUTBOUND ✓

TRANSPORT CO. CES TRACTOR/TRAILER NO. 298 / 233

WEIGHER IN JS

WEIGHER OUT _____

profike 2517

71125

trl. D149

09:35AM 08/27/08
INBOUND
ID 149 WEIGHT 30340lb

02:08PM 08/29/08
OUTBOUND

ID	149
GROSS	41520lb
TARE	30340lb
NET	11180lb

(united)
Triple
149

SCALE TICKET

PPG

FINE CHEMICALS
LaPORTE, TEXAS

TICKET NO. 49226

CERTIFIED PUBLIC WEIGHER
LAPORTE, TEXAS

02:39PM 11AUG08
Weigh-In:
Stored ID#: 015817
14080 lb

GROSS:

02:39PM 11AUG08
Weigh-Out:
Recalled ID#: 015817
47300 lb Gross
14080 lb Tare
33220 lb Net

TARE:

NET:

CONSIGNEE: CES

CONSIGNEE ORDER NO. VERBAL 10-22

DESTINATION: CITY HOUSTON

STATE TX

COMMODITY 2-VAI WASTE

SHIPPERS ORDER NO. 3683240

CARRIER CES

TRAILER NO. 15817

SEAL NOS.:

WEIGHER: RL (INBOUND) RL (OUTBOUND)

2 CUSTOMER COPY

10#

WEIGHT TICKET TN 1049

ID # CES

CONF #: 64514

DATE: 8-27-08

MANIFEST #: 004245 JJK

TIME IN: here 10:30pm IN 703 8-26-08 Am

DRIVER: Wood

CUSTOMER: CES

POLLUTION CONTROL CN 5210
5485 TAYLOR DR
MEMPHIS, TN.

ID	10	GROSS	<35360> lb
VEHICLE	000000	TARE	<66100> lb (1)
TIME	7:57 AM	NET	<-30740> lb
DATE	08 27 08		

GROSS WEIGHT

VEHICLE TARE WEIGHT

CONTAINER TARE WEIGHT

CALCULATION:

NUMBER OF CONTAINERS	WEIGHT PER EMPTY CONTAINER	CONTAINER TARE

FINAL MATERIAL NET WEIGHT

TRUCK # 275

TRAILER # 247

SCALE MASTER: MC

POLLUTION CONTROL
5485 TAYFOR DR
MEMPHIS TN.

ID 10 GROSS <66100> lb (1)
VEHICLE 000000

TIME 7:03 AM
DATE 08 27 08

INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2450657

☐ IF REWEIGH CHECK HERE

FIRST TICKET # 0655

INTSCL

07:12:41 02/18/09 208739

COBRA. TRUCK. STOP

17141 I 10 EAST

CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)

FLEET COPY

10780 lb	33500 lb	34280 lb

Total Gross Weight 78560 lb

Re-Weigh $ 0.00 Weight Fee

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING

THE GROSS WEIGHT IS THE CERTIFIED WEIGHT

ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED

This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 2202 Trailer # 259

#1 Driver Code _____ P.O.# _____ Trip # _____

Company CES

Commodity _____

Weighmaster M6

Weighmaster License No _____

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EPAHO004000502

INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2450657

☐ IF REWEIGH CHECK HERE

FIRST TICKET # X

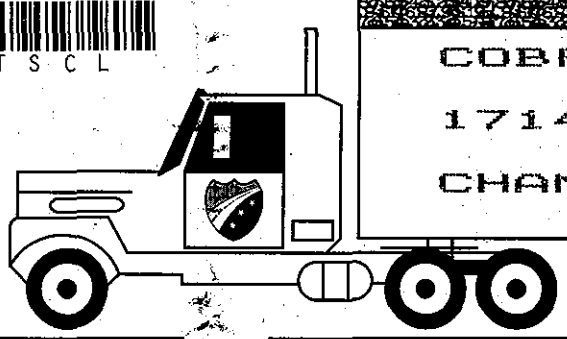
0655

INTSCL

COBRA TRUCK STOR
17141 I 10 EAST
CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)



DRIVER COPY

10780 lb	33500 lb	34280 lb

Total Gross Weight 78560 lb

Re-Weigh $ 0.00 Weight Fee

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING
THE GROSS WEIGHT IS THE CERTIFIED WEIGHT
ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED
This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and seated shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 2202 Trailer # 259

#1 Driver Code | P.O.# | Trip #

Company CES
Commodity
Weighmaster M6
Weighmaster License No.

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INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2450655

☐ IF REWEIGH CHECK HERE

FIRST TICKET # 0657

INTSCL

05:43:59 02/18/09 208737

COBRA. TRUCK. STOP

17141 I 10 EAST

CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)

FLEET COPY

9640 lb	14140 lb	9300 lb

Total Gross Weight 33080 lb

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING

THE GROSS WEIGHT IS THE CERTIFIED WEIGHT

ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED

This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Standard $ 8.00 Weight Fee

Tractor # 2002 Trailer # 259

#1 Driver Code | P.O.# | Trip #

Company CES

Commodity SZ

Weighmaster

Weighmaster License No

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INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2450655

☐ IF REWEIGH CHECK HERE

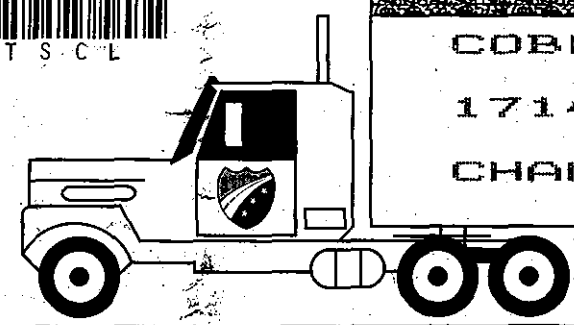
FIRST TICKET # ~~X~~ 0657

INTSCL

COBRA TRUCK STOP
17141 I 10 EAST
CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)



DRIVER COPY

9640 lb	14140 lb	9300 lb

Total Gross Weight 33080 lb

Standard $ 8.00 Weight Fee

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING

THE GROSS WEIGHT IS THE CERTIFIED WEIGHT

ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED

This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 2002 Trailer # 259

#1 Driver Code | P.O.# | Trip #

Company CES

Commodity SZ

Weighmaster _____

Weighmaster License No _____

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TK #977

TR# 7253

DATE 10-14-08 NO. **49084**

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

SCALE TICKET
15

10/14/2008 09:13:22 am

GROSS 68860 lb

DRIVER ON ☐ OFF ☑

WEIGHED BY

TK # 277

TR # 7253

DATE 10.14.05 NO. **49084**

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

SCALE TICKET
15

10/14/2005 09:13:22 am

GROSS 68860 lb

DRIVER ON ☐ OFF ☑

WEIGHED BY

Rhodia

LOADERS RECEIVING REPORT

018213

Vent _____ Number Waste

Gasket _____ Commodity 10-9-08

Truck or Car Number 284 / 238 Date unloaded 10-9-08

Received from Noltex 004252808 JJK

Gauge before unloading _____ inches, Gauge after unloading _____ inches, Temp _____ °F

Shell Dia. _____ inches Stenciled Capacity _____ Gals.

Dome Gauge or Shell Outage _____ inches _____ inches in dome @ _____ G.P.I. _____ Gals.

Shell Outage 59,380 ~~Gals.~~

Actual Loaded Gauge _____ inches Total Net Gals. 13,100 ~~Gals.~~

_____ x _____ x 8.33 = _____ x _____ % = 46,280

GRAVITY AT CAR GALLONS AS IS WT/LBS. ANALYSIS

Gross 76060

Tare 16680

Net 59,380

Gross - 17,940
Gross - 31040
Tare - 17,940
Net - 13100

Calculated by _____ Loader _____ Plant _____

Plant Code 0312003 Account Code _____

FORM PT012 61166

EPAHO004000508

* Load of crushed concrete *

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

SOUTHERN
CRUSHED CONCRETE

Ticket No.: **2004669**

UID: 1210945629

Griggs

Date: 5/16/2008 Time: 8:48:18AM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: *112965* *4904 GRIGGS*
P.O.: WAYLAND ST. PARKING L Job:
Product: 001 CRUSHED CONCRETE
Carrier: JDZ9 Vehicle: RB177 License No.:

Gross: 39.12 ~ Tare: 17.08 * Net: 22.04 ~
~ Manual Weight, * P.T.

Loads Today:	1	Qty Today	22.04 Ton
Order Loads:	1	Qty To Date:	22.04

Weighmaster: CHRIS ARSOLA

Delivery Instructions:
STEVE 281-433-7052
KMP*534 J
ASK FOR LAUREN

PUBLIC WEIGHER STATE OF TEXAS

Customer Signature:

COPY 2 CUSTOMER

NOTICE: The carrier/customer involved in the transportation or handling of materials covered by this document is an independent entity and shall not be deemed for any purpose to be an employee, agent, or representative of Southern Crushed Concrete (SCC). The carrier/customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to, such transportation or handling.

Carrier Signature: _____

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2007055**

UID: 1217524334

Griggs

Date: 7/31/2008 Time: 12:16:46PM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 112965 4904 GRIGGS
P.O.: WAYLAND ST. PARKING LOT Job: WAYLAND ST.
Product: 001 CRUSHED CONCRETE
Carrier: JED0 Vehicle: AB557 License No.:

Delivery Instructions:
STEVE 281-433-7052
KMP# 534 J
ask for lauren

Customer Signature:

PUBLIC WEIGHER STATE OF TEXAS

COPY 2 CUSTOMER

Gross: 40.78 Tare: 17.59 * Net: 23.19
* Predetermined Tare

Loads Today:	1	Qty Today	23.19 Ton
Order Loads:	4	Qty To Date:	91.28

Weighmaster: CHRIS ARSOLA

NOTICE: The carrier/customer involved in the transportation or handling of materials covered by this document is an independent entity and shall not be deemed for any purpose to be an employee, agent, or representative of Southern Crushed Concrete (SCC). The carrier/customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to, such transportation or handling.

Carrier Signature:

SOUTHERN
CRUSHED CONCRETE

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2007058**

UID: 1217526359

Griggs

Gross: 42.05 Tare: 17.59 * Net: 24.46
* Predetermined Tare

Date:	7/31/2008 Time: 12:51:29PM		
Customer:	JB8L CES ENVIRONMENTAL SERVICES,INC		
Order:	112965 4904 GRIGGS		
P.O.:	WAYLAND ST. PARKING LOT Job: WAYLAND ST.		
Product:	001 CRUSHED CONCRETE		
Carrier:	JED0 Vehicle: AB557 License No.:		

Loads Today:	2	Qty Today	47.65 Ton
Order Loads:	5	Qty To Date:	115.74

Weighmaster: CHRIS ARSOLA

Delivery Instructions:
STEVE 281-433-7052
KMP# 534 J
ask for lauren

Customer Signature: _____

PUBLIC WEIGHER STATE OF TEXAS

COPY 2 CUSTOMER

NOTICE: The carrier/customer involved in the transportation or handling of materials covered by this document is an independent entity and shall not be deemed for any purpose to be an employee, agent, or representative of Southern Crushed Concrete (SCC). The carrier/customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to, such transportation or handling.

Carrier Signature: _____

KMCO Carrier Arrival/Departure

Appt Time:_____ B/L-P/O #_____

SCALE 2
GROSS 29740 lb
Arrival Time: 11:40AM 08/07/2008

SCALE 2
GROSS 38340 lb
Departure Time: 12:49PM 08/07/2008

Demurrage/DT Comments:

Demurrage payments based on scheduled arrival time to departure time as recorded above

Driver Signature_____

KMCO Scale In/Scale Out

PRODUCT

CARRIER CES TRAILER # 36Y

Scale In: SCALE 2
ID 269
GROSS 29760 lb IN8JUNO

Scale Out: 08/07/2008 11:41AM
ID 269
Gross Weight:
GROSS 38360 lb
Tare Weight: 29760 lb RECALLED
NET 8600 lb
Net Weight:
08/07/2008 12:49PM

Driver On ☐ Off ☐ Weighed by:

182138

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

Bay area

07-31-08
08:12:27
10880 lb GROSS STEERING
14040 lb GROSS DRIVE
-0 lb GROSS TRAILER
24920 lb GROSS ALL AXLES

WORK ORDER #
CARRIER
COMMODITY
TRACTOR #
TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

State Certification of Weights and Measures

Ticket no.: 191595

A 1 Public Scales

727 McCarty Highway 90 (Beaumont Rd)
Phone 713-675-9500 P.O. Box 1261 Houston, Texas 77251

Time In: 15:34:51 Date In: 08/08/2008
Time Out 17:08:39 Date Out 08/09/2008

Certified

Trailer :260 Tractor :280
Payment Type: Charge
Customer: CES ENVIRONMENTAL SERVICES, INC.
Acct.No: 03185
From
To
Material
Total Charge 6.00
Weighmaster RS

Gross:	48720
Tare:	33240
Net:	15480
Tons:	7.74
Steer:	0
Drive:	0
Trailer:	0

Driver: _____

This is to certify that I have this day weighted the above described articles and that the weight and conditions set forth are true and correct.

Wood George
Certified Public Weigher

182172

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

South Coast Terminals

07-31-08
12:47:05

11760 lb GROSS STEERING

22800 lb GROSS DRIVE

-0 lb GROSS TRAILER

34560 lb GROSS ALL AXLES

WORK ORDER #

CARRIER

COMMODITY

TRACTOR #

TRAILER #

$-\frac{24920}{9640} = 1155\text{GAL}$

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

68683 (7/17)

68230 (7/17)

DATE 7/21/08 NO. 45971

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

ID 8177

GROSS 31740 lb INBOUND

07/21/2008 02:41PM

Cox

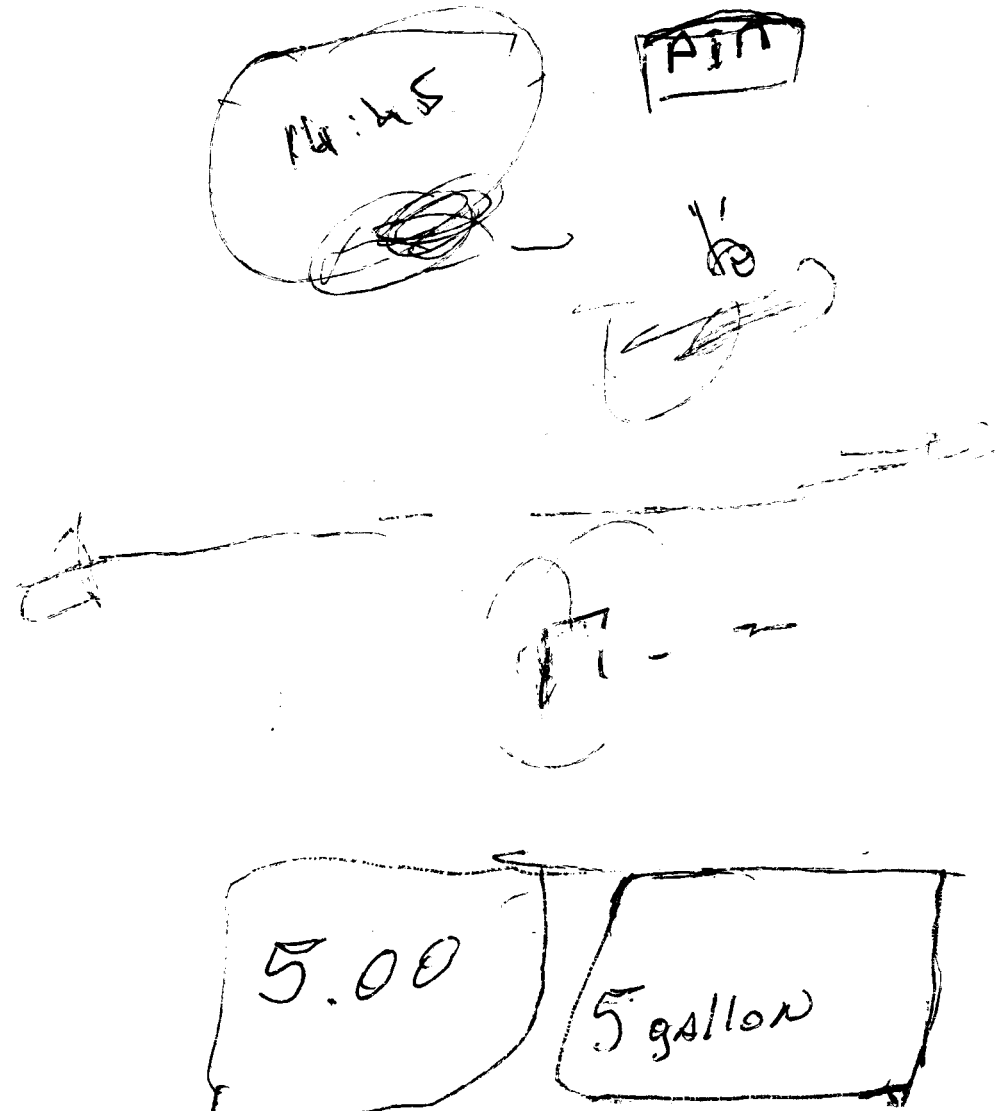
ID 8177

GROSS 75440 lb
TARE 31740 lb RECALLED
NET 43700 lb

07/21/2008 03:30PM

DRIVER ON ☐ OFF ☑

WEIGHED BY



67987
67396

EPAHO00400518

181621

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

07-23-08
08:46:00
10440 lb GROSS STEERING
14940 lb GROSS DRIVE
-20 lb GROSS TRAILER
25360 lb GROSS ALL AXLES

WORK ORDER #
CARRIER Bay Area
COMMODITY
TRACTOR #
TRAILER #

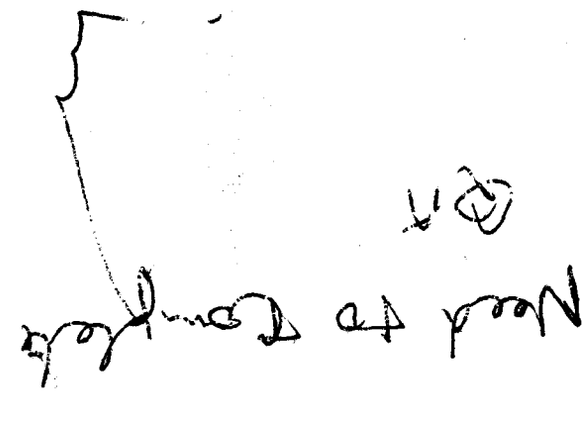
South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

67321

~~68428~~

68628 wastewater

68826 → Beehive wastewater



EPAHO004000520

MANIFEST REFERENCE NO. [illegible]

ENTERPRISE PRODUCTS OPERATING L.P.

MONT BELVIEU, TEXAS

TRUCK WITHDRAWAL TICKET

LOADED FROM [illegible]

W- 77623

CUSTOMER NAME	DATE	TIME
[illegible]	[illegible]	[illegible]
ADDRESS	**PLANT NAME**	**LOCATION**
[illegible]		

PRODUCT LIQUIFIED PETROLEUM GAS 2.1 UN 1075	% ON MIX B/P	V.P. @ ___ °F	WATER CAPACITY	% LOADED	GROSS GALLONS	GRAVITY @ 60°F	TEMP.	TEMP. FACTOR	NET GALLONS @ 60°F
Waste Water					41,480				

COMMENTS:

35,000 LT.W
76 480 HW
41 480 Net

DIRECT ALL INQUIRIES TO ENTERPRISE COMPANIES INC.
P.O. BOX 4324, HOUSTON, TEXAS 77210 (713-880-6500)

TRUCK NO. 190

TRAILER NO. 209

LBS. TO NET GALLONS CONVERSION

NET LBS. _____ ÷ (SP. GRAVITY _____ X 8.33718) = _____ NET GALS.

WITNESS

MALODORANT USED

TYPE N/A AMOUNT N/A

The above gallons received and material odorized. Liability and risk pass to purchaser upon delivery into tank trucks.

* This is to certify that the above named articles are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulation of Department of Transportation.

Flammable Compressed Gas ( )

Signature of Loader [signature]

PURCHASER'S AGENT [illegible]

CARRIER: [illegible]

EPC-415 (Rev. 7/99)

DISTRIBUTION COPY

EPAHO004000521

Load-n-Go
LAB RELEASE AUTHORIZATION

7-28-08 2215
DATE TIME

Lubrizol

RELEASING OFFICER

☐ 12801 BAY AREA BLVD. • PASADENA, TEXAS 77507
☑ P.O. BOX 158 • DEER PARK, TEXAS 77536

Weigh-Out:
ID#: 321
10:07 PM 07/28/08
63840 lb Gross
33100 lb Tare
30740 lb Net

DELIVERY NET WT.
Weigh-In:
ID#: 321
02:55 PM 07/28/08
33100 lb

COMPANY CES DRIVER Luis Resendez

TRUCK NO. 280 TRAILER 271 PICK-UP ✓ DELIVERY Ø

PRODUCT (E-6) organic skimmings DESTINATION CES-Houston, TX

COMPT. N/A LOADED BY: WWT

68897
(B/L NO.

N/A
TICKET NO.

DRIVER: ON ✓ OFF N/A

480705
CERTIFICATION NUMBER

Misty Daniels
CERTIFIED PUBLIC WEIGHER SIGNATURE

3012323 (2050 - GKM 12/2007)

EPAHO004000522

Champion Technologies

3130 FM 521
Fresno, Texas 77545
(281) 431-2561

DATE 7-29-08

CUSTOMER'S NAME Champion

ADDRESS

CITY STATE ZIP

PRODUCT NAME

DRIVER: ON OFF

ORDER # 31502 BILL OF LADING #

SHIPPER WEIGHER

TRUCK # 293 TRAILER # 271

REMARKS

P/u

White Copy – Bill of Lading Yellow Copy – Office Pink Copy – Shipper

07:30 TUE 29 2008
271 ID. NO.
31200 lb GR

09:31 TUE 29 2008
271 ID. NO.
80320 lb GR
31200 lb TR RECALLED
49120 lb NT

CES

SOUTHERN
CRUSHED CONCRETE

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2006798**

UID: 1215709572

Griggs

Date: 7/10/2008 Time: 12:06:53PM 29280

Customer: JB8L CES ENVIRONMENTAL SERVICES,INC

Order: 109898 WEIGH TRUCKS

P.O.: Job:

Product: 010 WEIGH TRUCK

Carrier: Vehicle: CES108 License No.:

Delivery Instructions:

Gross: 14.64 Tare: 0.01 * Net: 14.63 *
* Manual Weight

Loads Today:	3	Qty Today	3.00Load
Order Loads:	456	Qty To Date:	454.00

Weighmaster: CHRIS ARSOLA

NOTICE: The carrier/customer involved in the transportation or handling of materials covered by this document is an independent entity and shall not be deemed for any purpose to be an employee, agent, or representative of Southern Crushed Concrete (SCC). The carrier/customer shall save and hold SCC harmless from all liability, damages, loss, claims, demands and/or actions of any nature which arise out of or are related to, such transportation or handling.

PUBLIC WEIGHER STATE OF TEXAS

Customer Signature:

COPY 2 CUSTOMER

Carrier Signature:

SOUTHERN
CRUSHED CONCRETE

14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2006798**

UID: 1215709572

Griggs

Date: 7/10/2008 Time: 12:06:53PM

Customer: JB8L CES ENVIRONMENTAL SERVICES,INC

Order: 109898 WEIGH TRUCKS

P.O.: Job:

Product: 010 WEIGH TRUCK

Carrier: Vehicle: CES108 License No.:

Delivery Instructions:

Gross: 14.64 Tare: 0.01 * Net: 14.63 *
* Manual Weight

Loads Today:	3	Qty Today	3.00 Load
Order Loads:	456	Qty To Date:	454.00

Weighmaster: CHRIS ARSOLA

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PUBLIC WEIGHER STATE OF TEXAS

Customer Signature:

COPY 3 CARRIER

Carrier Signature:

WEIGHED ON A FAIRBANKS SCALE

DATE 7-10-08

CUSTOMERS NAME INTERCHEM / ONE SOURE

ADDRESS

COMMODITY WASTE WATER - NON-HAZ.

CARRIER ONE SOURCE

REMARKS TRK # LV 9101

2249 Yds

43680 lb GR 07-10-08 02:24 PM

25000 lb TA 07-10-08 01:56 PM

18680

LBS. GROSS

LBS. TARE – DRIVER ON _____ OFF ✓

LBS. NET @ _____ PER LB. PRICE _____

SHIPPER _____

WEIGHER _____

FAIRBANKS SCALE CAT. 96787

180635

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

07-09-08
08:00:22
11000 lb GROSS STEERING

14740 lb GROSS DRIVE

-0 lb GROSS TRAILER

25740 lb GROSS ALL AXLES

WORK ORDER #

CARRIER BAY AREA

COMMODITY MTY

TRACTOR #

TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

180942

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

07-10-08
14:26:48
12620 lb GROSS STEERING

28480 lb GROSS DRIVE

-0 lb GROSS TRAILER

41100 lb GROSS ALL AXLES

WORK ORDER #

CARRIER BAY AREA

COMMODITY Loaded

TRACTOR #

TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

180942

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

South Coast Terminals

67942

07-10-08
14:26:48
12620 lb GROSS STEERING

28480 lb GROSS DRIVE

-0 lb GROSS TRAILER

41100 lb GROSS ALL AXLES

WORK ORDER #
CARRIER BAY AREA
COMMODITY Loaded
TRACTOR #
TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

CERTIFICATE OF AUTHORITY
FOR
PUBLIC WEIGHER
OF
HARRIS COUNTY, TEXAS
CERTIFICATE NO. 10763

ALBEMARLE CORPORATION
2500 NORTH SOUTH ST.
PASADENA, TX 77503
(713) 740-1000

24120

WEIGH TICKET NO.
99699

05798

6-10-2008 8:40AM

78260 lb GROSS
28120 lb TARE
50140 lb NET

TRAILER OR CAR MARKS: _____
TRAILER OR CAR NUMBER: 1001
FLEET: Ti De Port
SEAL NO.: _____
STENCIL WEIGHT: _____
REMARKS: _____

CF3
WASTE WATER

CHECK STATUS:
- INBOUND CAR ☐
- STENCIL WEIGHT CHECK ☐
- #14/RIP TRACK RELEASE ☐
- CAR OVERWEIGHT ☐
- _____ AREA NOTIFIED
- ISO-TANK, WITH-CHASSIS ☐
- RETURN TRAILER ☐
- MFAC SUCK OUT ☐

Weigher's Signature

KMCO

Scale In/Scale Out

PRODUCT R1 Wash

CARRIER [illegible] TRAILER # 7253

Scale In:
SCALE 1
ID 7253
GROSS 29340 lb INBOUND

Scale Out:
07/07/2008 01:39PM
SCALE 1
ID 7253
Gross Weight:
GROSS 68240 lb
Tare Weight: 29340 lb RECALLED
NET 38900 lb
Net Weight:
07/07/2008 03:46PM

Driver On ☐ Off ☐ Weighed by:_____

KMCO

Carrier Arrival/Departure

Appt Time:_____ B/L-P/O #_____

Arrival Time: 07/07/2008 09:59AM
GROSS 00 lb
SCALE 2

Departure Time:

Demurrage/DT Comments:

[redacted]

Driver Signature_____

EPAHO004000530

DATE 6/27/08 NO. **45244**

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

ID 261

GROSS 30540 lb INBOUND

06/27/2008 12:58PM

ID 261

GROSS 68740 lb
TARE 30540 lb RECALLED
NET 38200 lb

06/27/2008 01:58PM

DRIVER ON ☐ OFF ☑

WEIGHED BY RBn

DATE 6/27/08 NO. **45254**

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

ID 258

GROSS 28940 lb INBOUND

06/27/2008 04:11PM

ID 258

GROSS 69340 lb
TARE 28940 lb RECALLED
NET 40400 lb

06/27/2008 05:03PM

DRIVER ON ☐ OFF ☑

WEIGHED BY

INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2216171

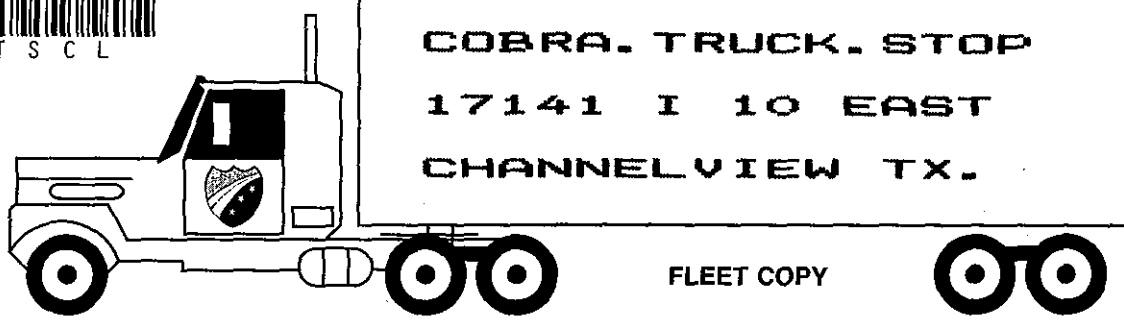
☐ IF REWEIGH CHECK HERE
FIRST TICKET #_____

INTSCL

23:43:22 06/26/08 199847
COBRA. TRUCK. STOP
17141 I 10 EAST
CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)



FLEET COPY

10560 lb	17960 lb	13380 lb

Total Gross Weight 41900 lb

Standard $ 8.00 Weight Fee

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING
THE GROSS WEIGHT IS THE CERTIFIED WEIGHT
ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED
This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facie evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 279 Trailer # 206

#1 Driver Code | P.O.# | Trip #

Company CES.
Commodity _____
Weighmaster ZP
Weighmaster License No

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EPAHO004000534

INTERSTATE SCALES

P.O. Box 6730, Evansville, IN 47719-0730
Ph. (812) 421-8212 Fax: (812) 421-8325
www.interstatescales.com

No. 2216171

☐ IF REWEIGH CHECK HERE

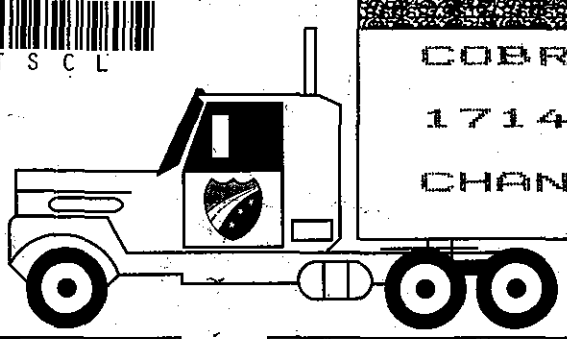
FIRST TICKET #_____

INTSCL

COBRA. TRUCK. STOP
17141 I 10 EAST
CHANNELVIEW TX.

SM

LICENSED PUBLIC WEIGHMASTER SEAL (IF APPLICABLE)



DRIVER COPY

10560 lb	17960 lb	13380 lb

Total Gross Weight 41900 lb

Standard $ 8.00 Weight Fee

☐ CHECK HERE IF DRIVER IS NOT IN TRUCK DURING WEIGHING
THE GROSS WEIGHT IS THE CERTIFIED WEIGHT
ENTIRE TRUCK MUST BE ON SCALE TO BE CERTIFIED AND GUARANTEED

This is to certify that the following described merchandise was weighed, counted or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facie evidence of the accuracy of the weight shown as prescribed by law.

Tractor # 279 Trailer # 206

#1 Driver Code | P.O.# | Trip #

Company CES.
Commodity _____
Weighmaster ZP.
Weighmaster License No. _____

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INTERSTATE
SCALES

Interstate Scales Guarantee

When you weigh on our certified scale and are shown to be legal, then receive an overweight fine, we will pay the ticket if our scale is found to be inaccurate. If our scale is found to be correct, we will appear in court with the driver of the truck as an expert witness.

IF YOU RECEIVE AN OVERWEIGHT FINE DO THE FOLLOWING:

1. You should post a bond and request a court date.
2. Immediately notify Interstate Scales of the citation and location of the scale you weighed on prior to the fine.
3. Send a copy of the weight ticket, citation, your name, company name, address and telephone number to Interstate Scales.

Note: The gross weight is the certified weight. The entire truck must be on the scale to be certified and guaranteed. Overweight permit loads are not guaranteed.

SOUTHERN
CRUSHED CONCRETE
14329 Chrisman Road
Houston, Texas 77039
(281) 987-8789
Fax (281) 987-8791
www.scctx.com

Ticket No.: **2006504**

UID: 1214481908

Griggs

Date: 6/26/2008 Time: 7:06:09AM
Customer: JB8L CES ENVIRONMENTAL SERVICES,INC
Order: 109898 WEIGH TRUCKS
P.O.: Job:
Product: 010 WEIGH TRUCK
Carrier: Vehicle: CES2646 License No.:

Delivery Instructions:
FULL 79.820 LBS
TRAILOR *143 Triad 3646

Customer Signature: C. R. Griggs

PUBLIC WEIGHER STATE OF TEXAS

COPY 3 CARRIER

Gross: 39.92 ~ Tare: 0.01 * Net: 39.91 ~
~ Manual Weight, * P.T.

Loads Today:	1	Qty Today	1.00 Load
Order Loads:	432	Qty To Date:	430.00

Weighmaster: ELISEO GARZA JR

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Carrier Signature: _____

177970

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

06-18-08
09:24:47
9960 lb GROSS STEERING

15100 lb GROSS DRIVE

20 lb GROSS TRAILER

25080 lb GROSS ALL AXLES

WORK ORDER #

CARRIER Bay Area

COMMODITY

TRACTOR #

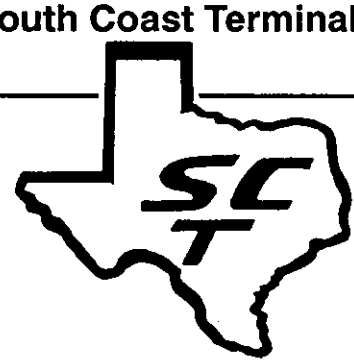
TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

178133

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage



06-19-08
13:45:30
10360 lb GROSS STEERING

23000 lb GROSS DRIVE

0 lb GROSS TRAILER

33360 lb GROSS ALL AXLES

WORK ORDER #

CARRIER BAY AREA

COMMODITY

TRACTOR #

TRAILER #

-25080 = 8280 = 992 GAL

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

~~13~~3637

HEXION™

Specialty Chemicals

DIBOLL, TEXAS 75941

LOAD OF Pond Water DRIVER

TO: Hexion FROM:

TRUCK I.D. TRAILER I.D. LT 791

TRUCK EMPTY → TARE

791 ID. NO.
27380 lb GR
02:25 PM 06/09/08

TRUCK FULL → GROSS

791 ID. NO.
70900 lb GR
27380 lb TR
RECALLED
43520 lb NT
01:32 PM 06/04/08

NET

EPAHO004000540

180395

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

BAY AREA

06-06-08
08:17:05
10680 lb GROSS STEERING
14320 lb GROSS DRIVE
-0 lb GROSS TRAILER
25000 lb GROSS ALL AXLES

WORK ORDER #
CARRIER
COMMODITY
TRACTOR #
TRAILER #

13080 LBS
15680 GA

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

177513

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

06-12-08
09:17:42
11200 lb GROSS STEERING

14320 lb GROSS DRIVE

-0 lb GROSS TRAILER

25520 lb GROSS ALL AXLES

WORK ORDER # 8

CARRIER BAY AREA

COMMODITY

TRACTOR #

TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

177573

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

06-12-08
15:20:52
12720 lb GROSS STEERING
25180 lb GROSS DRIVE
0 lb GROSS TRAILER
37900 lb GROSS ALL AXLES

WORK ORDER #
CARRIER BAY AREA
COMMODITY
TRACTOR #
TRAILER #

$\frac{-25520}{12380} = 1484$ GAL

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

CERTIFICATE OF AUTHORITY
FOR
PUBLIC WEIGHER
OF
HARRIS COUNTY, TEXAS
CERTIFICATE NO. 10763

ALBEMARLE CORPORATION
2500 NORTH SOUTH ST.
PASADENA, TX 77503
(713) 740-1000

WEIGH TICKET NO.
90608

5-14-2008 2:11PM

74620 lb GROSS
27600 lb TARE
47020 lb NET

TRAILER OR CAR MARKS: _____
TRAILER OR CAR NUMBER: 1001
FLEET: Tidepoint
SEAL NO.: _____
STENCIL WEIGHT: _____
REMARKS: _____
Ethyl

CHECK STATUS:
- INBOUND CAR ☐
- STENCIL WEIGHT CHECK ☐
- #14/RIP TRACK RELEASE ☐
- CAR OVERWEIGHT ☐
- _____ AREA NOTIFIED
- ISO-TANK, WITH-CHASSIS ☐
- RETURN TRAILER ☐
- MFAC SUCK OUT ☐

Weigher's Signature

DATE 4/12/08 NO. 44803

KMTEX
P.O. BOX 1421
2450 S. GULFWAY DRIVE
PORT ARTHUR, TEXAS 77640

ID 8177

GROSS 31740 lb INBOUND

06/12/2008 12:42PM

ID 8177

GROSS 79880 lb
TARE 31740 lb RECALLED
NET 48140 lb

06/12/2008 01:38PM

ID 8177

GROSS 76100 lb INBOUND

06/12/2008 02:05PM

DRIVER ON ☐ OFF ☑

WEIGHED BY R Burk

ROHM AND HAAS TEXAS INCORPORATED - SCALE TICKET

TICKET #	54486	ORDER	230
CARRIER	CES ENVIROMENTAL		
COMMODITY	99159 - HAZARDOUS WASTE		
TRACTOR	293	TRAILER	271

GROSS	32,069 KG	70,700 LBS
TARE	13,998 KG	30,860 LBS
NET	18,071 KG	39,840 LBS

"I HAVE NECESSARY SAFETY EQUIPMENT"

DRIVER _____ ***CARRIER***

DATE:	6/9/2008
WEIGH IN:	9:14 AM
WEIGH OUT:	9:14 AM

WAYBILL, B/L or LOAD NO.	1

RELEASED:

'08 JUN 9 AM 9:12

ROHM AND HAAS TEXAS INCORPORATED - SCALE TICKET

TICKET #	54486	ORDER	230
CARRIER	CES ENVIROMENTAL		
COMMODITY	99159 - HAZARDOUS WASTE		
TRACTOR	293	TRAILER	271

GROSS	32,069 KG	70,700 LBS
TARE	13,998 KG	30,860 LBS
NET	18,071 KG	39,840 LBS

"I HAVE NECESSARY SAFETY EQUIPMENT"

DRIVER _____ ***CARRIER***

DATE:	6/9/2008
WEIGH IN:	9:14 AM
WEIGH OUT:	9:14 AM

WAYBILL, B/L or LOAD NO.	1

RELEASED:

'08 JUN 9 AM 9:12

178650

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

06-30-08
08:21:43
10120 lb GROSS STEERING

15120 lb GROSS DRIVE

-0 lb GROSS TRAILER

25240 lb GROSS ALL AXLES

WORK ORDER #
CARRIER BAY AREA
COMMODITY
TRACTOR #
TRAILER #

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

178681

South Coast Terminals

Custom Chemical and Lubricant Services
Blending/Finishing/Packaging/Bulk Storage

06-30-08
15:06:18
10480 lb GROSS STEERING

21540 lb GROSS DRIVE

0 lb GROSS TRAILER

32020 lb GROSS ALL AXLES

WORK ORDER #

CARRIER

COMMODITY

TRACTOR #

TRAILER #

$-\frac{25240}{6780}$ LBS = 812 GAL

South Coast Terminals, Inc. • 7401 Wallisville Road • Houston, Texas 77020-3595 • Phone: 713/672-2401

13831

HEXION™

Specialty Chemicals

DIBOLL, TEXAS 75941

LOAD OF H2O DRIVER

TO: FROM:

TRUCK I.D. TRAILER I.D.

271 ID. NO.

TRUCK EMPTY → TARE 33720 lb GR

08:53 AM 06/26/09

TRUCK FULL → GROSS

271 ID. NO.

77780 lb GR

33720 lb TR

RECALLED

44060 lb NT

NET

10:20 AM 06/26/09

EPAHO004000550

SCALE TICKET

TICKET NO. 54209

FINE CHEMICALS
LaPORTE, TEXAS

CERTIFIED PUBLIC WEIGHER
LAPORTE, TEXAS

5th SHOT 6/22/08

08:40PM 22JUN08
Weigh-In:
Stored ID#: .0240
13880 lb

GROSS:

08:40PM 22JUN08
Weigh-Out:
Recalled ID#: .0240
50560 lb Gross
13880 lb Tare
36680 lb Net

TARE:

NET:

CONSIGNEE: CES

CONSIGNEE ORDER NO. Verbal 6/20

DESTINATION: CITY Houston

STATE TX

COMMODITY CDI Waste

SHIPPERS ORDER NO. 23916560

CARRIER

TRAILER NO. 7240

SEAL NOS.:

WEIGHER: EH (INBOUND) EH (OUTBOUND)

1 CUSTOMER SERVICE DEPT.

MANIFEST REFERENCE NO. C04251090

ENTERPRISE PRODUCTS OPERATING L.P.

MONT BELVIEU, TEXAS

LOADED FROM M/M

W- 74941

CUSTOMER NAME	DATE	TIME
CES	6-27-2008	@ 14
ADDRESS	**PLANT NAME**	**LOCATION**
Houston Texas	Enterprise BEF Unit	Mt Belvieu

PRODUCT LIQUIFIED PETROLEUM GAS 2.1 UN 1075	% ON MIX B/P	V.P. @ ___ °F	WATER CAPACITY	% LOADED	GROSS GALLONS	GRAVITY @ 60°F	TEMP.	TEMP. FACTOR	NET GALLONS @ 60°F
Caustic									
Hydroxide Sol									

COMMENTS:

32,240 in
67,180 out
34,940 tare

DIRECT ALL INQUIRIES TO ENTERPRISE COMPANIES INC.
P.O. BOX 4324, HOUSTON, TEXAS 77210 (713-880-6500)

TRUCK NO. 252

TRAILER NO. 232

LBS. TO NET GALLONS CONVERSION

NET LBS. _____ ÷ (SP. GRAVITY _____ X 8.33718) = _____ NET GALS.

WITNESS

MALODORANT USED

TYPE N/A AMOUNT N/A

The above gallons received and material odorized. Liability and risk pass to purchaser upon delivery into tank trucks.

* This is to certify that the above named articles are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulation of Department of Transportation.

PURCHASER'S AGENT

Flammable Compressed Gas ( )

Signature of Leader

CARRIER: CES

EPC-415 (Rev. 7/99)

CUSTOMER COPY

EPAHO004000552

1578

07/03/200805:12 Pr

72140 lb G

27780 lb T (MEM)

44360 lb N

Houston Water

(713)

1476

06/06/200807:18 AM

73500 lb G

28520 lb T (MEM)

44980 lb N

3

EPAHO004000554

Walter

2879

06/04/200803:51 PM

72600 lb G

29020 lb T (MEM)

43580 lb N

Targa Midstream Services L.P.
Transport Truck Weight Certificate
(For GNI/ RTS Transports)

Date: 9/10/08

Truck No. 282 Trailer No. 848

Loaded Weight 77057 LBS

Empty Weight 33045 LBS

Product Weight 44012 LBS

Truck Dock Operator [signature]

Authorized By: [signature]
Truck Dock Operator

Place Certified Scale Stamp below:

CERTIFIED SCALE