

SWRf/Asbestos 0789

KERR-McGEE CHEMICAL CORPORATION
INTERNAL CORRESPONDENCE

TO S. W. Beckstead

DATE July 13, 1982

FROM O. D. Laursen

SUBJECT Trip Report-Southwestern Refining
Company, Inc.

On 8 and 9 July, 1982, S. W. Beckstead, Kerr-McGee Chemical Corporation, and the undersigned, visited the Southwestern Refining Company, Inc. at Corpus Christi, TX. We departed Kerr-McGee Center at mid-day on the 7th of July and returned to Oklahoma City on July 9, 1982; this itinerary enabled us to devote about a day and a half to the study of the company's operations, with emphasis on the shipment of hazardous materials, substances and wastes.

We contacted the following key personnel:

Burnell Brown - General Manager
Don Oakes - V.P. Engineering and Technical Services
Roger Clark - Environmental Control Manager
Jim Moody - Operations Supervisor
Joe Roper - Laboratory Supervisor
Bob Ratliff - Terminal Supervisor
Johnny Kalenda - Terminal Supervisor
Dick Watson - Environmental Control Technician
Gene Palmer - Laboratory Technician

We held an in-briefing with company officials on the morning of July 8th and discussed our activities and purpose with the company General Manager in the afternoon of the same day. The tour of facilities was conducted by various supervisors and operating personnel depending on the area of interest. We examined the following operations by questioning of personnel, study of documents, and direct observation:

Pipeline Operations
Shipping Operations (Main IN and OUT Points)
Hazardous Waste Disposal and Shipping
Warehouse Shipping
Laboratory Sample Shipping

We learned that the company ships a large number of hazardous materials (bulk and samples), and several hazardous wastes. Samples of pertinent documentation were obtained for further study and are attached to this report. Company officials also offered other written materials, including a complete listing of all materials shipped by mode of transport, to be forwarded to this office at a later date.

The following chart depicts the mode of transport, shipping place, type of material shipped and whether it is shipped into or out of the plant (our primary concern being outgoing shipments):

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<u>MODE</u>	<u>PLACE</u>	<u>IN</u>	<u>OUT</u>
I LABORATORY:			
Motor Freight (Alamo Express, Southwestern Motor Transport, UPS).	Main Laboratory (Samples)	Radioactive device (Fe 55) used for Sulfur determination.	Jet fuel; Nickel soap (catalyst); Alkylate; Platformate; No. 6 oil; Spent alky lime; Cumene; Solvent 100; Gasoline; Benzene; Toluene; Xylene;
Air Freight (Federal Express, Emery - European destinations).		Laboratory chemicals	Slurry oil; Light Cycle oil; Kerosene; Butane; Propane; Isobutane; Diesel fuel; Dimate (naphtha); Raffinate (naphtha); No. 4 oil; Crude oil; Weak caustic; Radioactive device (Fe 55) used for Sulph detection.
NOTE: Most Laboratory shipments go by air express.		Product samples, catalysts.	
		Waste samples	
		Waste water samples (treatment facility).	
II WAREHOUSE:			
Federal Express (air) Cargo Tank	Warehouse Production Unit (see item IV).		Spent catalyst samples; Spent caustic (paperwork only).
III WASTES:			
Closed-trailer motor freight, capacitors, transformers or drums, per P & L instructions this office.	PCB collection point(s).		Polychlorinated biphenyls (PCB's).
Cargo Tanks (contract carrier) to Chemical Waste Management or Texas Ecologists for disposal.	Production Units		Hydrofluoric alkylation waste (spent lime liquid slurry).
Cargo Tank (common carrier) to Southwestern Ref. Co. land farm.	Oily sludge pits near waste water treatment facility.		Oily wastes (mixed) consisting of: DAF float; API separator sludge; heat exchange bundle cleaning sludge; slop oil emulsion solids.

<u>MODE</u>	<u>PLACE</u>	<u>IN</u>	<u>OUT</u>
NOTE: The above four refiner wastes are indexed and regulated by EPA (per RCRA in 40 CFR 261.32), as separate entities.			
Cargo Truck; Packaged in polyethylene bags; company truck used to ship to Texas Ecologists.	Near No. 1 Terminal		Waste asbestos
Cargo Tank	No. 3 Terminal		Dilute sulfuric acid solution
Cargo Tank (Tank Car could be used later).	No. 3 Terminal (Near Tank 4-1).		Spent caustic solution (Dimersol).
V <u>BULK (SURFACE):</u> Cargo Tank	No. 2 Plant		Spent caustic solution (Merichem) (with cresylic acid).
Cargo Tank	Near Tanks 5-3 and 5-4.	No. 4 fuel oil	
Cargo Tank	No. 3 Terminal	Anti - Icer	
Tank Car	Rail car rack	Lead tetraethyl	
Cargo Tank	Gasoline Truck loading rack and vicinity.	Propane Isobutane	Gasoline Diesel Propane Isobutane
Cargo Tank	Texas Crude Gathering System	Crude oil	
Cargo Tank	No. 1 Terminal		Light Cycle Oil (fuel oil).
Cargo Truck	Waste water treatment facility.	Alum; Strong caustic.	
V <u>BULK (VESSEL):</u> Barge	Barge dock		Xylene Benzene Toluene Crude oil Solvent 100 Gasoline
Ship	Ship dock		Xylene Benzene

MODEPLACEINOUT

Toluene
Crude Oil
Solvent 100
Gasoline
No. 2 oil
Jet fuel
No. 6 oil
Diesel fuel

The following significant factors were either observed or related to us by refinery officials:

- (1) Southwestern Refining Company, Inc. conducts no pipeline operations except intra-plant. Coastal States Refining Company picks up custody at the property line and is responsible for pipeline transport from there to the next outlet.
- (2) Southwestern operates a hazardous wastes land farm about 20 miles southwest of the refinery. The site is 120 acres in area, with three 20-acre cells currently in use. Two of these are active for farming and the third is used as an evaporation reservoir. Generally, the farm is used for oily wastes. All wastes that cannot be farmed at this facility are disposed of by use of professional waste management companies.
- (3) It was understood that a Texas Department of Water Resources (TDWR) hazardous waste manifest was in use to satisfy both state and federal (EPA) shipping requirements (sample attached to this report).
- (4) Portable tanks and tank cars (rail) were not in use for bulk shipments. The rail car rack for loading out Dimersol caustic was ready for operation but not in use.
- (5) Operators at the various loadout points check shipments to varying degrees (e.g. cursory to detailed checklist). However, routine checks of cargo tanks loading gasoline and diesel fuel are not made to determine if DOT specifications are being met. Two vehicles from major petroleum companies were observed loading these fuels, but a proper DOT specification number could not be located on either. One of the vehicles only had three of the required four hazard warning placards displayed. It was not evident that the company was actively engaged in offering correct placards to deficient carriers.
- (6) Bills of lading from Triangle Refineries Inc. were still reflecting improper wording for diesel fuel in the description column (should be "Fuel oil, diesel, Combustible liquid, NA1993", instead of "Diesel fuel, . . . NA1993"); also there was no signature block included for the certification statement displayed on the form. Both of these errors were recently pointed-out to KMRC officials so Triangle could correct the forms.
- (7) The refinery laboratory was well-equipped to run DOT-required tests on flammables and combustibles not specifically provided for in the DOT hazardous materials tables, to insure their proper classification and handling according to law (e.g. tests for flash point, vapor pressure, viscosity, etc.).

Study continues on the above and other KMRC problem areas already identified, in order to develop a thorough understanding of refinery and terminal operations so this office can render better and more comprehensive assistance to KMRC.

Attachments:

- TAB A - Chemical Locations (IN shipments)
- TAB B - Sample Bill of Lading
- TAB C - Hazardous Waste Manifest (TDWR)
- TAB D - Procedure - HW Manifesting
- TAB E - Procedure - HW Packaging and Labeling

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CHEMICAL LOCATIONS

BACK WAREHOUSE

- ✓ ANTI-FREEZE/COOLANT (41-020003)
- CHEMOLUBE H HYDRAULIC FLUID (41-107001)
- ✓ ETHYLENE DICHLORIDE (41-080001)
- ✓ MONOETHANOLAMINE (41-144001)
- UNIVOLT N-61

CHEMICAL WAREHOUSE

- ✓ AMMONIUM POLYSULFIDE
- BETZ AFS (5 GAL.)
- BETZ FOAM-TRCL 144 (5 GAL.)
- ✓ CVCO₃
- ✓ COREXIT 202
- COREXIT 303
- COREXIT 7327 (27-080001)
- CORROGEN CATALYZED SODIUM SULFITE (41-092005)
- FUNGICIDE F-16
- LIGHT WATER 3% CONCENTRATE
- LIQUIMINE VI
- NALCO 7715
- OCTAFILM T-3
- PETROMEEN OS-16
- PETROMEEN 775
- SLIMICIDE C-30
- TRETOLITE KONTOL
- VARI CHEM PYROCAT SWF

HYDROBON SLAB

- XH-600 CYL. OIL (1764) (41-163009)
- EE-120 AVIATION OIL (41-163011)
- 1835C PAWNEE OIL (41-163001)
- 1848E PAWNEE OIL (41-163003)
- DEXRON II AUTOMATIC TRANSMISSION FLUID (41-163008)
- SAE 30 MOTOR OIL (41-163006)
- ECONOLITH NO. 2 (41-100002)
- SAE 10W/40 MOTOR OIL (41-163014)
- 1812 PAWNEE OIL (41-163002)
- VIS CIRCULATING OIL 68 (41-163013)
- 1854 OIL FOR AMARILLO GEAR (41-163004)
- 85-140 MULTI-LUBE GEAR OIL (41-163015)
- 3-30W-SHD K-M OIL (41-163005)
- CASTOR OIL (41-163012)
- 150AW GULF HARMONY (41-163010)

LEAD HOUSE OR DYE HOUSE

- ETHYL GASOLINE ADDITIVE 108
- ✓ ISOCTANE
- METAL DEACTIVATOR
- OIL SOLUBLE DYE - RED
- OIL SOLUBLE DYE - ORANGE
- OIL SOLUBLE DYE - YELLOW
- PETROMEEN DM-775
- PETROMEEN EB-911

MAIN WAREHOUSE

- ANTIFOAM DB-100 (41-018001)
- ✓ CHLOROTHENE NU (OR VG) (41-04000)
- COMBUSTION PROMOTER (41-044001)
- CCX-77 CHAIN & CABLE CONDITION
- DEGREASER XL-98 (41-064001)
- FOAM, DOW CORNING 200 FLUID
- FOAM LIQUID CONCENTRATE (41-092001)
- ✓ LITHIUM CHROMATE INHIBITED
- OAKITE 19 (41-160001)
- ✓ SODIUM NITRITE (41-208001)
- THERMINOL 66 (41-220001)
- OAKITE 204 (41-160003)

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TAB A

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Agent's No. _____

at CORPUS CHRISTI, TEXAS

19

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading 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.

(Mail or street address of consignee—For purposes of notification only)

Destination HOUSTON

State

County

Route : TRANSPORT COMPANY OF TEXAS

Delivery

Address 1914 HADEN ROAD

Car or

Vehicle Initials

No.

(To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Received \$_____ to apply in prepayment charges on the properly prescribed hereon.

THIS IS A TRIP LEASED CAR YES NO

Agent or Cashier.

Per _____
(The signature here ac
edges only the amount pr

Charges Advanced:

*If the shipment moves between two ports by a carrier by water, the law requires the bill of lading shall state whether it is "carrier's or shipper's weight". NOTE the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation, in accordance with the applicable regulations of the Department of Transportation. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____.

XXXX SOUTHWESTERN REFINING COMPANY

1A 153979

TAB B

INVOICE COPY

SWRf/Asbestos 0796

Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711



JUL 1 1982

Ticket No. 0060171

TEXAS WASTE SHIPPING-CONTROL TICKET

(Please Type or Print Clearly)

ENGINEER'S IG

A 2855

(Satisfies TDWR, TDH and U.S. EPA requirements for hazardous or class I waste manifest)

PART I: To be completed by Generator (see reverse side for instructions)

TDWR/TDH Registration No. 30033

Company Name SOUTHWESTERN REFINING Co. INC.

Business Address P.O. Box 9217 CC TEXAS 78411

EPA Gen. # TX00066447376

Address From Which Shipment Originates:

1700 NUGGETS BAY BLVD.

Emergency Phone A/C 736-8843

DESTINATION:

TDWR/TDH Permit No. 39012

Primary TSD Facility Name CHEMICAL WASTE MANAGEMENT

Business Address P.O. Box 9563 P.A. TEXAS 77640

EPA TSD Fac. # TX00000838896

Destination (Site) Address HWY 73 WEST OF TAYLOR BAYOU BRIDGE

Phone A/C 736-2821

Alternate TSD Facility Name

TDWR/TDH Permit No. 39012

Business Address

EPA TSD Fac. #

Destination (Site) Address

Phone A/C

1. TEXAS WASTE CODE	2. QUANTITY	UNITS	3. DOT WASTE NO.	4. DOT HAZ CLASS	5. (a) DOT DESCRIPTION; (b) TYPE AND NUMBER OF CONTAINERS
149650	4620	1034	UN 1760	02	Waste Corrosive Liquid, n.o.s. (Calcium Hydroxide) Corrosive Material, UN1760
		1234			
		1234			
		1234			
		1234			
		1234			
		1234			
		1234			
		1234			
		1234			

Circle one: (1) tons (2) gallons (3) cubic yards (4) drums (55 gal.)

Special Instructions: PFP 18336
P.O. # SA 6379

6-18-82

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 DOT, TDWR, and TDH. Department of Transportation and the EPA.

Michael A. James
Signature of Authorized Agent (Generator)

PART II: To be completed by the Transporter/Driver (see reverse side for instructions)

TDWR/TDH Trans. No. 39012

Carrier Name FRENCH LIMITED

Business Address P.O. Box 1306 ROBERTSON, TX. 78380

EPA Trans. No. TX00066447376

Phone Number A/C 512 382-6515

6-18-82

I certify (or declare) that the materials in the quantities described above are received by me for shipment to the above named destination.

Babity
Signature of Authorized Agent

PART III: To be completed by Treatment, Storage and Disposal (TSD)

TDWR/TDH Permit No. 315012

Facility Owner/Operator (see reverse side for instructions)

TSD Facility Name CWM P.A.

EPA TSD Fac. # TX00000838896

Phone Number

Site Address

TSD Facility Owner/Operator Comments: 1A 153980

6/18/82

Date Received

John K. J. [Signature]
Signature of Authorized Agent

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 AND EPA.

Yellow - Transporter

Green - Generator's First Copy

SWRf/Asbestos 0797

MANIFESTING

II.

SWRI/Asbestos 0798

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TAB D

MANIFESTING

A. General Requirements:

1. Southwestern Refining Co., Inc. when transporting or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest before transporting the waste off-site.
2. Southwestern Refining Co., Inc. must designate on the manifest one facility which is permitted to handle the waste described on the manifest.
3. Southwestern Refining Co., Inc. may also designate on the manifest one alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary designated facility.
4. If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, Southwestern Refining Co., Inc. must either designate another facility or instruct the transporter to return the waste.

B. Required Information:

1. A manifest document number.
2. Southwestern Refining Co., Inc. mailing address (P. O. Box 9217, Corpus Christi, Texas 78408) and EPA identification number (Refinery is TXD066447376 and the Landfarm is TXD000807859).

Also phone number.

1A 153982

3. The name and EPA identification number of each transporter.
4. The name, address and EPA identification number of the designated facility and an alternate facility if any.
5. The description of the waste or wastes required by regulations of the U. S. Department of Transportation in 49 CFR 172.101, 172.202 and 172.203.
6. The total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle.
7. The following certification must appear on the manifest:

"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 and the EPA."
8. The manifest consists of at least the number of copies which will provide the generator (Southwestern Refining Co., Inc.), each transporter and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator (Southwestern Refining Co., Inc.)

C. Use Of The Manifest:

1. Southwestern Refining Co., Inc. authorized representative must sign the manifest certification by hand.
2. Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest.
3. Retain one copy for record keeping.

4. Southwestern Refining Co., Inc. must give the transporter the remaining copies of the manifest.
5. For shipment of hazardous waste within the United States solely by railroad or solely by water (bulk shipments only), Southwestern Refining Co., Inc. must send three copies of the manifest dated and signed in accordance with Part 1 of this section to the owner or operator of the designated facility. [Copies of the manifest are not required for each transporter.] *applies to water (bulk) only.*

D. Record Keeping:

1. Southwestern Refining Co., Inc. must keep a copy of each manifest signed in accordance under Section C (Use of the manifest) for three years or until Southwestern Refining Co., Inc. receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter, i.e. - refers to shipment by railroad or solely by water.
2. Southwestern Refining Co., Inc. must keep a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report (March 1).
 - a.) Annual Report:
 1. Do for hazardous waste shipped off-site.
 2. Use EPA forms 8700-13 and 8700-13A according to the instructions on the form.
 3. Send to the Regional Administrator for the Region in which Southwestern Refining Co., Inc. is located.
 4. This will be sent no later than March 1 for the preceding calendar year.

b.) Exception Reporting:

1. If Southwestern Refining Co., Inc. has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter must contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.
2. Southwestern Refining Co., Inc. must submit an Exception Report to the EPA Regional Administrator for the Region in which Southwestern Refining Co., Inc. is located if these have not been received, a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter.
3. The report must include: a.) a legible copy of the manifest for which Southwestern Refining Co., Inc. does not have confirmation of delivery, b.) a cover letter signed by Southwestern Refining Co., Inc. authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

PACKAGING AND LABELING REQUIREMENTS/PETROLEUM REFINING WASTES

III

SWRf/Asbestos 0803

1A 153986

TAB E

*on orange panels & placards. The
were probably written before Jan 1,*

PACKAGING AND LABELING REQUIREMENTS/PETROLEUM REFINING WASTES

The packaging, labeling, marking, placarding, and shipping paper requirements for the Petroleum Refining wastes that Southwestern Refining Company, Inc. has specified are as follows:

1. The following wastes will be shipped as a mixture:

- are they
reported
separately
and by
quantity, or
as a mixture,
on the Annual
Report?
(assume mixture
or mixture, by
DOT hazard class)*
- K048 - Dissolved air flotation (DAF) float from Pet. Ref. Ind.
 - K049 - Slop oil emulsion solids.
 - K051 - API separator sludge.
 - K052 - Tank bottoms (lead).
 - K050 - Heat exchanger bundle cleaning sludge.
 - F001 - Spent halogenated solvents used in degreasing.
 - F002 - Spent halogenated solvents.
 - F003 - Spent non-halogenated solvents.
 - F005 - Spent non-halogenated solvents.

I. DOT Requirements

- A. Package - No DOT specification packaging required. A DOT specification MC 312 Tank will be acceptable. (Appendix A)
- B. Labeling - No DOT labeling required.
- X C. Marking - No DOT marking required. *(Out of date - needs NA 1993 ID #
orange panel or continued
w/ placard)*
- D. Placarding - The cargo tank must be placarded with a "combustible" placard.
- E. Shipping papers - The description and classification for the shipping papers is as follows: "Waste combustible liquid, n.o.s., (combustible liquid, NA 1993)"
Upper case (report not required)

II. Manifest requirements - The manifest must contain all of the following information:

- A. A manifest document number.
- B. The generators name, mailing address, telephone number and EPA identification number (Southwestern Refining Co., Inc., P. O. Box 9217, Corpus Christi, Texas 78408. Tel No. 512 884-8863 and EPA I.D. No. is TXD066447376).
- C. The name and EPA identification number of the designated facility.
- D. The description of the waste - "Waste combustible liquid, n.o.s., (Combustible liquid, NA 1993)"
report not required

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E. Total quantity.

F. The following certification must appear on the manifest:

"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 and the EPA".

G. DOT hazard class code - 01.

2. Spent Dimersol Caustic

I. DOT requirements:

A. Package - DOT specification MC 312 cargo tank.

B. Labeling - No DOT labeling required.

C. Marking - No DOT marking required. (*Make ID# on orange panels or combined w/ placard*).

D. Placarding - The cargo tank must be placarded on 4 sides with a "corrosive" placard.

E. Shipping papers - The description and classification for the shipping papers is as follows: "Waste corrosive liquid, n.o.s., corrosive material, UN 1760"

II. Manifest requirements - The manifest must contain all of the following information:

A. A manifest document number.

B. The generators name, mailing address, telephone number and EPA identification number.

C. The name and EPA identification number of the designated facility.

D. The description of the waste - "Waste corrosive liquid, n.o.s., Corrosive material, UN 1760"

E. Total quantity.

F. The following certification must appear on the manifest:

"This is to certify that the above named materials are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA".

G. DOT hazard ^{class} code - 02.

incomplete

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3. Spent Alkylation Lime

I. DOT Requirements:

- A. Package - DOT specification MC 312 cargo tanks.
- B. Labeling - No DOT labeling required.
- C. Marking - No DOT marking required. *(needs ID on orange panels on cabinet w/ placard)*
- D. Placarding - The cargo tank must be placarded with a "Corrosive" placard.
- E. Shipping papers - The description and classification for the shipping papers is as follows: "Waste corrosive liquid, n.o.s., Corrosive material, UN 1760".

II. Manifest Requirements - The manifest must contain all of the following information:

- A. A manifest document number.
- B. The generators name, mailing address, telephone number and EPA identification number.
- C. The name and EPA identification number of the designated facility.
- D. The description of the waste - "Waste corrosive liquid, n.o.s., corrosive material, UN 1760".
- E. Total quantity.
- F. The following certification must appear on the manifest:

"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 for the Department of Transportation and the EPA". *of*

- G. DOT hazard class code - 02.

4. Ethylaluminum dichloride (EADC)

I. DOT Requirements

- A. Package - Place the material in a metal can made of at least 28 gauge electro-coated tin plate. Close by positive means. Metal can not to exceed 1 gallon, and openings of can are not to exceed 1 inch. Put 12 one-gallon cans in a DOT 17C, 55 gallon drum, 4 cans per tier, 3 tiers high. Each tier must be separated with a tin plate separator. Cushion can with vermiculite.

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- B. Labeling - The outside of the drum must be labeled with a "Flammable liquid" label. A product label with precautionary information should be put on the outside of the drum. The information would include the following:

Ethylaluminum Dichloride

WARNING

Keep away from heat, sparks and open flame

Keep container closed

Use with adequate ventilation

- C. Marking - The outside of the drum must be marked "Waste pyrophoric liquid, n.o.s." The drum must also be marked "THIS END UP" to indicate upward position of the inside packagings. The letters must be at least 2 inches high. The outside of the drum must be marked with the following information:

"HAZARDOUS WASTE - Federal Law Prohibits
Improper Disposal. If found, contact the
nearest police or public safety authority
or the U. S. Environmental Protection Agency.
Generator's Name and Address _____

Manifest Document Number _____

- D. Placarding - The motor vehicle must be placarded on 4 sides with a "Flammable liquid" placard if the aggregate gross weight of the material exceeds 1,000 pounds. *(to include ID # on orange panels or control w/ placard)*.
- E. Shipping papers - The description and classification for the shipping papers is as follows: "Waste pyrophoric liquid, n.o.s., Flammable liquid, UN 2845"

II. Manifest Requirements - The manifest must contain all of the following information:

- A. A manifest document number.
- B. The generators name, mailing address, telephone number and EPA identification number.
- C. The name and EPA identification number of the designated facility.
- D. The description of the waste - "Waste pyrophoric liquid, n.o.s., Flammable liquid UN 2845"
- E. Total quantity.
- F. The following certification must appear on the manifest:

"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 and the EPA"

1A 153990

G. DOT hazard class code - 07.

SWRf/Asbestos 0808

1A 153991

APPENDIX A

Definition of MC 312 Tank

*Partial design
spec.*

Design pressure shall not be less than the pressure used for unloading. If unloading pressure exceeds 15 psig build in accordance with ASME code. Line tanks if material hauled is not compatible with tank material or provide corrosion allowance for 10 years of normal service. Relief "devices" to be capable of limiting over-pressure to 1.5 times design pressure. "If air inlet devices are provided a relief valve shall have adequate capacity to limit tank pressure to 130 percent of design pressure at max inlet flow." Outlet valves at top must be as "close as practical" to outlet nozzle. Bottom outlets must have emergency valves capable of being operated from a min of 10' away. If the liquid is "corrosive with solids in suspension in sufficient quantity that settling may form a layer of solid material that may interfere with sealing of the valve seat" the bottom remote emergency valve is not required.