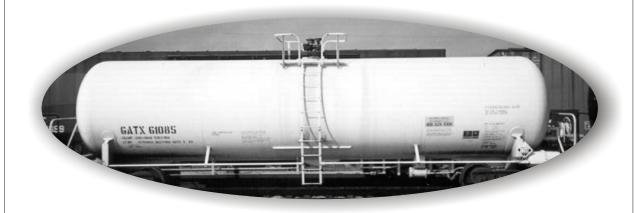
ILLINDIS COMMERCE COMMISSION



2006 ANNUAL REPORT ON ACCIDENTS/INCIDENTS

Involving Hazardous Materials on Railroads in Illinois



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- 1. RECOGNIZING AND IDENTIFYING HAZARDOUS MATERIAL
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- 6. TOP 125 HAZARDOUS COMMODITY MOVEMENTS BY TANK CAR

1. Introduction

This report has been prepared by the staff of the Illinois Commerce Commission's Railroad Safety Section in accordance with the provisions of 625 ILCS 5/18c-1204. The law directs the Commission to "prepare and distribute to the General Assembly ... a report on railway accidents in Illinois which involve hazardous materials." The law also provides that "the report shall include the location, substance involved, amounts involved, and the suspected reason for each accident, as well as the rail line and point of origin of the hazardous material involved in each accident."

Additionally, this report contains the following related information:

- Details regarding events where hazardous material was involved but no release occurred
- An overview of Commission activities relative to the transportation of hazardous materials by rail within the State
- Review of the transportation of nuclear and radioactive materials by rail within the State

2. BACKGROUND

Illinois is a key hub in the nation's transportation system. With a railroad network of approximately 7,200 miles, Illinois' rail system is the country's second largest. The Chicago and St Louis terminal switching districts are the two key points of interchange between eastern, western, northern, and southern rail systems and handle over 40,000 rail cars on a typical weekday.

According to the Association of American Railroads, approximately six percent of all rail traffic involves the movement of hazardous materials. In 2005 (latest year for which data is available), railroads in Illinois handled 513.7 million tons of total freight and 11.7 million carloads of freight which is first in the nation for carloads carried and second for total rail tonnage handled. Of this total, railroads in Illinois handled approximately 31 million tons (6 percent) of hazardous materials.

The U.S. Department of Transportation (USDOT) classifies approximately 3,500 substances as hazardous. Many of these substances, ranging from mild irritants to poisonous and radioactive materials, are routinely transported by rail through populous regions of the country and can have the potential to severely impact the environment and public health, if inadvertently released into the environment. Individual shipments can range in quantity from packages as small as a pint that may be carried inside a highway trailer or container on a flat car, to as much as 42,000 liquid gallons carried in a tank car.

The Association of American Railroads (AAR) Bureau of Explosives has identified approximately 125 hazardous materials comprising 88 percent of all hazardous

materials transported by railroad. Attachment 6 provides a list of the most commonly transported materials and the hazard class of each commodity.

Under federal law (49 CFR, Part 212) individual states are authorized to participate in the Railroad Hazardous Material Inspection Program administered by the USDOT. The program is under the supervision of the FRA. FRA certifies state inspectors so that they may have the same legal and administrative authority as federal inspectors in assuring the safe transport of hazardous material through inspection and investigation. The Commission employs two full-time federally certified inspectors responsible for all of Illinois.

Commission Hazardous Material ("HM") inspectors focus the majority of their effort in the field conducting inspections at railroad yards and the industrial facilities of shippers and consignees of hazardous materials. The inspectors are also responsible for maintaining inspection data, responding to complaints from rail employees and the public, and for providing information concerning the transport of hazardous material within Illinois to other state, regional and local agencies.

In 2006, Commission HM inspectors inspected 16,978 rail cars. Since 1981, when Commission HM inspectors found violations in 12 percent of all inspections, compliance has improved to the point that inspectors found violations in only 4.1 percent of all inspections in 2006.

The large increase in compliance observed since 1981, is due in part to Commission initiated conferences with rail carriers and shippers to educate and inform them of the complex and continually evolving regulations. The educational meetings and informational sessions are followed up with inspections by Commission staff to insure that the lessons learned from the education and information sessions, have been implemented by the shipper or rail carrier in their day-to-day activities.

3. Commission Hazardous Materials Safety Program

The Commission's Hazardous Materials Safety Program is comprised of four main components:

- Inspection of railroad equipment and shipper/consignee facilities
- The provision of technical assistance to shippers/consignees and rail carriers
- The inspection and transport of nuclear materials; and
- Education and outreach activities to shippers/consignees, rail carriers, emergency responders and the general public

3.1 Inspection of Rail Equipment and Shipper/Consignee Facilities

Four types of inspections are made by Commission inspectors: stationary railroad equipment such as tank cars at a yard or plant, railroad equipment in transit in the consist of a through or yard train known as a "roll-by" inspection; analysis of shipping papers and related documentation; and inspection of facilities that either ship or receive hazardous commodities.

3.1.1 Railroad Equipment

Hazardous material equipment inspections are performed on a stationary hazardous material rail car. Normally, this type of inspection occurs within a railroad yard or at the loading or unloading terminal within a shipper's facility. The inspection assures that the cars are affixed with the required placards identifying the hazardous commodities being transported. Attachment 1 provides examples of the various placards and the information they provide, which is of critical importance to emergency response personnel. Commission HM inspectors verify that the rail car's markings, stenciling, tank and valve test dates, and mechanical safety features, are in compliance with federal regulations.

3.1.2 Roll-By

A roll-by inspection involves monitoring an entire train while in motion. The location of loaded hazardous material cars, as well as those cars that have been unloaded, but that still contain residue of the commodity transported, are observed in relation to the locomotives, occupied cabooses, other hazardous material cars, and certain other types of cargo cars. Specific types of hazardous material cars are required to be spotted at particular locations within a train. Should Commission inspectors determine that cars are not correctly located within the train's consist, the inspector may require the rail carrier to stop the train and order the cars to be correctly placed.

Proper placement of hazardous material cars within a train's consist is of great importance to the train crew who could be severely injured if a derailment were to occur. For example, hazardous material cars containing liquefied petroleum gas (LPG), as well as other highly flammable commodities, may not be positioned next to the locomotive.

3.1.3 Documentation

Documentation inspections involve examining waybills and bills of lading to verify that the documents were completed correctly. Such inspections normally occur at the office of the shipper or consignee, or at the yard office of the rail carrier. The bill of lading is a document providing a description of the type and quantity of commodities being transported. Attachment 5 provides a sample bill of lading.

The bill of lading must include a 24-hour emergency response telephone number clearly visible, in order to facilitate the appropriate response by emergency providers in case of an accident or derailment. Inspectors examine the bill of lading to verify that the correct shipping name, hazard class, 4-digit commodity identification number, and weight are all present and correctly stated.

Emergency responders rely on the provision of this shipping information in the case of a spill or other type of incident concerning the shipment. Depending upon the particular substance being transported; incorrect or incomplete information, can result in injury or death to responders, rail employees and the public in the event of a derailment that could cause an inadvertent release.

3.1.4 Shipping Facilities

Shipping facility inspections are conducted at privately owned facilities. The purpose of the inspection is to assure that the requirements of Title 49 of the United States Code of Federal Regulations (CFR) are being complied with. All regulations of 49CFR must be complied with in order to permit the continued ability of the shipper or consignee to receive or ship hazardous materials.

3.2 Technical Assistance Program to Shippers, Consignees and Emergency Responders

Commission HM inspectors respond to railroad related collisions/incidents involving hazardous material. The Commission's role is to provide technical assistance to emergency response personnel. The assistance provided is that of determining if the documentation and information provided by the rail carrier or shipper to the emergency responder, is correct and adequate to permit the responder to safely handle the incident. Commission hazardous materials inspectors will also advise the emergency response team as to proper mitigation and clean up procedures and requirements. Commission hazardous materials inspectors assist in investigation of the incident in order to identify the cause, as well as any violations that may have contributed either directly, or indirectly in causing the incident. Commission hazardous materials inspectors are on-call 24-hours a day to respond to any incident.

3.3 Escort of Nuclear Material in Illinois

The movement of nuclear material in or through the State of Illinois by rail occurs infrequently. However, as spent nuclear fuel materials begin to move to a national repository, (Yucca Mountain in Nevada) more frequent shipments are expected. The current protocol for the shipment of nuclear material requires that the train be stopped and inspected prior to entering Illinois. Nuclear material shipments are escorted by Commission HM inspectors, as well as Commission track inspectors who verify that the rail line to be traveled is in suitable condition.

Radioactive material is probably the most controversial and least understood class of hazardous material being transported by rail in Illinois today. To date, there have been no incidents involving the transport of radioactive material, however widespread concern on the part of the public due to safety and security issues, warrant the careful planning and inspection of all radioactive shipments traveling over the Illinois rail network.

3.4 Education and Outreach Activities

According to 625 ILCS 5/18c-7404, Commission inspectors offer training for local law enforcement and emergency response personnel. The training is intended to acquaint participants with railroad car marking and placarding requirements and emergency response manuals and guide books. Fire departments are provided with instruction and training concerning tank car structure and damage assessment. Commission inspectors also make presentations on the interpretation and application of federal and state hazardous materials regulations to railroad company personnel. Since 1990, seventy-nine educational or training presentations on hazardous material safety have been made to approximately 1,700 persons affiliated with a variety of emergency planning and response teams.

4. Commission Hazardous Material Safety Program Activity in 2006

Summary of Inspections Conducted by Commission Inspectors: 2002 through 2006. (Source: FRA)

		Units	Defects	Defects
Year	Inspections	Inspected	Identified	Per Unit
2002	328	7,718	274	0.036
2003	424	9,641	248	0.026
2004	218	13,899	445	0.032
2005	240	14,551	492	0.034
2006	274	16,978	698	0.041
Total	1,484	62,787	2,157	0.034

5. SUMMARY

The nature of catastrophic incidents that can occur from hazardous material incidents is cause for prudent exercise of state and federal regulations and the necessity of having staff to assure compliance with all applicable regulations. Commission inspectors routinely discover minor violations and defects, and occasionally major violations or defects that if not corrected, could lead to serious incidents likely to result in loss of life and extensive damage to property.

6. Data Describing Accidents and/or Incidents in Illinois in 2006

Specific data required by 625 ILCS 5/18c-1204 is shown in tabular form on the following pages. The applicable section states: "The staff shall prepare and distribute to the General Assembly, in April of each year, a report on railway accidents in Illinois which involve hazardous material. The report shall include the location, substance involved, quantity involved, and the suspected reason for each accident. The report shall also reveal the rail line and point of origin of the hazardous material involved in each accident."

The remainder of this report provides three tables and a number of attachments.

Table A shows railroad derailments where hazardous material was being transported in the derailed railroad equipment and a hazardous material release occurred.

Table B shows railroad derailments where hazardous material was being transported in the train and the railroad equipment derailed, however, there was no release of any hazardous material.

Table C shows hazardous material releases from railroad equipment where no derailment was involved.

Summary of Hazardous Material Related Incidents: 2002 – 2006.

Type of Incident	2006	2005	2004	2003	2002
A. Hazardous Materials Physically Involved in Derailment and					
Hazardous Materials Release Occurred	6	11	16	4	13
B. Hazardous Materials Physically Involved in Derailment					
Where No Hazardous Materials Release Occurred	12	8	4	7	6
C. Hazardous Materials Released From Rail Cars Where No					
Derailment Occurred	95	53	57	73	73
Total	113	72	77	84	92

The location column in Tables A, B, and C indicates the county where the accident/incident occurred and the nearest identifiable location. Information for all three tables was obtained from reports filed by the railroad with the Commission, as well as from the USDOT's Research and Special Programs Administration.

Three categories of information not specifically asked for by the General Assembly have been added to make the report more useful. The first category is "Amount Released." This distinction is important in order to differentiate the "Amount Involved" required by the General Assembly, from the more significant quantity of "Amount Released." The "Amount Involved" is simply the quantity of commodity that was being transported; the "Amount Released" into the environment by accident is far more critical.

The second category added is the "Type of Equipment" involved. The final additional category is the date of the incident. In the tables, the railroad companies are identified by their FRA reporting marks; for example NS is the Norfolk Southern Railway. A listing of the complete names follows Table C.

TABLE AHazardous Materials Physically Involved In Derailment And Hazardous Materials Release Occurred

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Wood River Madison	UP	Diesel Fuel	Unknown	Derailment	2,000 gals.	50 gals.	E	1/6/06
Joliet Will	BNSF	Diesel Fuel	Unknown	Locomotive backed into other equipment and derailed	2,600 gals.	300 gals.	E	2/28/06
Venice Madison	UP	Diesel Fuel	Unknown	Derailment	4,000 gals.	2,000 gals.	E	5/24/06
E. St. Louis St. Clair	UP	Diesel Fuel	Unknown	Derailment	Unknown	1,800 gals.	E	6/19/06
St. Jacobs Madison	CSX	Hydrogen Peroxide	Pasadena, TX	Coupler cross key retaining pin missing	19,000 gals.	100 gals.	T (2)	6/27/06
E. St. Louis St. Clair	UP	Ammonium Nitrate Diesel Fuel	El Dorado, AR Unknown	Derailment	608,000 lbs. Unknown	198,000 lbs. < 100 gals.	CH (3) E	12/27/06

 $\mathsf{T} = \mathsf{Tank} \qquad \qquad \mathsf{E} = \mathsf{Engine} \qquad \qquad \mathsf{CH} = \mathsf{Covered} \; \mathsf{Hopper} \qquad \qquad \mathsf{R} = \mathsf{Refrigerated} \; \mathsf{Car} \qquad \qquad \mathsf{COFC} = \mathsf{Container} \; \mathsf{on} \; \mathsf{Flat} \; \mathsf{Car}$

TABLE BHazardous Materials Physically Involved In Derailment Where No Hazardous Materials Release Occurred

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Sullivan Moultrie	UP	Anhydrous Ammonia	Watseka, IL	Spread rail	Loads	None	T (3)	1/17/06
North Lake Cook	UP	Sulfuric Acid	Toronto, Ont	Wide gauge	Residue	None	Т	1/26/06
E. St. Louis St. Clair	UP	Alcohols. N.O.S.	Colwich, KS	Draw bar by-pass	Loads	None	T (2)	3/5/06
Franklin Park Cook	CN	Caustic Soda Ethanolamine	Plaquamines, LA	Broken rail	16,449 gals. 23,580 gals.	None	T T	3/6/06
St. John Perry	CN	Sulfuric Acid	Toronto, Ont	Broken rail	13,527 gals.	None	Т	3/15/06
Proviso Cook	UP	Alcohols, N.O.S.	Albert Lea, MN	Spread rail	30,080 gals.	None	Т	5/5/06
E. St. Louis St. Clair	UP	Anhydrous Ammonia	Coffeyville, KS	Coupler failure	Residues	None	T (2)	5/17/06
Chicago Cook	UP	Diesel Fuel	Unknown	Two trains sideswiped each other	Unknown	None	E	6/17/06
Elmhurst Cook	UP	Alcohols, N.O.S.	Jewell, IA	Derailment	Load	None	Т	7/4/06
Salem Marion	CN	Phosphoric Acid Hydrochloric Acid Methyl Methacrylate	Geismar, LA Norco, LA Woodstock, TN	Broken rail	All loads	None	T (4) T T	9/14/06
Chicago Cook	UP	Sulfuric Acid	Mississauga, ONT	Crew ran through switch	All loads	None	T (3)	10/27/06
Benton Franklin	UP	Alkylphenols	Freeport, TX	Derailment	179,000 lbs.	None	Т	12/4/06

T = Tank TOFC = Trailer on Flat Car

TABLE C

Hazardous Materials Released From Rail Cars Where No Derailment Occurred

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Springfield Sangamon	NS	Fuel Oil	Unknown	Engine of locomotive exploded	Unknown	1 gal.	E	1/7/06
Chicago Cook	CN	Heptanes	Lemont, IL	Two of six manway bolts loose	29,605 gals.	1 gal.	Т	1/9/06
Dupo St. Clair	UP	Chloroacetic Acid	Hahnville, LA	Partially open vapor valve and loose plug cap	16,049 gals.	2 ounces	Т	1/22/06
Urbana Champaign	CN	Hydrochloric Acid	St. Gabriel, LA	Safety vent disc deteriorated	20,137 gals.	2 quarts	Т	1/23/06
Chicago Cook	UP	Diesel Fuel	Parma, ID	Fuel line failure	Unknown	200 gals.	R	1/29/06
East Hazel Crest Cook	CN	Sodium Hydroxide, Solution	Kingsbury, IN	Vapor plug and housing cover both loose	Residue	1 ounce	Т	2/2/06
Melrose Park Cook	UP	Diesel Fuel	Unknown	Fuel line rupture	500 gals.	250 gals.	Е	2/2/06
Hodgkins Cook	BNSF	Toluene	Catlettsburg, KY	Bottom outlet valve partially open	25,127 gals.	10 gals.	Т	2/14/06
E. St. Louis St. Clair	UP	Ethyl Acrylate, Inhibited	Pasadena, TX	Packing nut loose	24,850 gals.	1 ounce	Т	2/17/06
Venice Madison	TRRA	Flammable Liquids, N.O.S.	Louisville, KY	Bottom polytote punctured by the top polytote	250 gals.	60 gals.	PT	2/23/06
Chicago Cook	CN	Coal Tar Distillates, Flammable	Beulah, ND	Bottom outlet flange and gasket pushed out and tore	29,055 gals.	2 gals.	Т	2/24/06
Riverdale Cook	CSX	Diesel Fuel	Unknown	Fuel line failure	Unknown	50 gals.	E	2/27/06

N.O.S. = Not Otherwise Specified T = Tank E = Engine TOFC = Trailer on Flat Car COFC = Container on Flat Car PT = Portable Tank PT = Portable Ta

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Palatine Cook	BRC	Styrene Monomer, Inhibited	Channelview, TX	Bottom outlet valve defective	Load	5 gals.	Т	3/3/06
Danville Vermilion	CSX	Diesel Fuel	Unknown	Previous spill	Unknown	Est. 50 gals.	Е	3/7/06
Chicago Cook	CN	Flammable Liquids, N.O.S.	Chicago, IL	Bottom outlet valve open	25 gals.	1 quart	Т	3/9/06
Chicago Cook	NS	Nitroanilines	Unknown	Hose came loose on top of car	Load	Approx. 2 gals.	Т	3/9/06
Bedford Park Cook	BRC	Ammonium Nitrate Fertilizer	Morris, IL	Car struck while being stuck in retarder unit	Load	4,000 lbs.	СН	3/12/06
Elwood Will	BNSF	Diesel Fuel	Unknown	Overfill	Est. 4,000 gals.	20 gals.	Е	3/19/06
Joliet Will	EJE	1-Hexene	Joffre, Can	Loose plug on sample valve	Load	1 gal.	Т	3/23/06
Hodgkins Cook	BNSF	Diesel Fuel	Unknown	Fuel tank leak	2,600 gals.	Minimal	Е	3/24/06
East Hazel Crest Cook	CN	Sodium Hydroxide, Solution	Niagara Falls, NY	Safety vent disc rupture	15,957 gals.	4 gals.	Т	3/27/06
Decatur Macon	NS	Diesel Fuel	Unknown	Fuel expansion	2,000 gals.	10 gals.	Е	4/2/06
Riverdale Cook	CSX	Molten Sulfur	Lemont, IL	Two of eight manway bolts loose	15,000 gals.	1 pint	Т	4/3/06
Schiller Park Cook	СР	Phosphoric Acid	Montreal, QB	Two totes were crushed under the top row	1,575 kilograms	10 gals.	COFC	4/12/06
Venice Madison	TRRA	Diesel Fuel	Unknown	Piece of rail punctured fuel tank	3,800 gals.	600 gals.	Е	4/16/06
E. St. Louis St. Clair	UP	Heptanes	Baytown, TX	Liquid valve blind flange loose	27,398 gals.	1 gal.	Т	4/24/06

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Schiller Park Cook	СР	Diesel Fuel	St. Laurent, QB	Fitting failure	150 gals.	100 gals.	TOFC	4/25/06
E. St. Louis St. Clair	UP	Hydrochloric Acid	E. St. Louis, IL	Blind flange loose	10 gals.	1 ounce	Т	5/9/06
Riverdale Cook	CSX	Diesel Fuel	Unknown	Shutoff failed	2,500 gals.	50 gals.	Е	5/14/06
Chicago Cook	NS	Alcohols, N.O.S.	Marcus, IA	Liquid valve stem retaining nut loose	188,550 lbs.	5 gals.	Т	5/19/06
Chicago Cook	BNSF	Diesel Fuel	Unknown	Fuel tank overfill	Unknown	50 gals.	Е	5/20/06
Chicago Cook	CN	Sodium Hydroxide, Solution	Niagara Falls, NY	Defective manway gasket	15,688 gals.	1 gal.	Т	5/24/06
Chicago Cook	BNSF	Diesel Fuel	Unknown	Operator error	3,000 gals.	50 gals.	Е	5/26/06
Buda Bureau	UP	Diesel Fuel	Unknown	Mechanical problem	Unknown	< 30 gals.	Е	6/1/06
Chicago Cook	BNSF	Ethanol	Muscatine, IA	Bottom outlet cap loose	41,300 lbs.	1 gal.	PT	6/1/06
Riverdale Cook	CSX	Environmentally Hazardous Substances, Liquid, N.O.S.	Mauldin, SC	All manway cover bolts loose	146,099 lbs.	2 gals.	Т	6/2/06
Urbana Champaign	CN	Petroleum Distillates, N.O.S.	Metairie, LA	Bottom outlet valve open and cap loose	50 gals.	2 quarts	Т	6/2/06
Chicago Cook	UP	Diesel Fuel	Unknown	Defective fuel line	Unknown	Minimal	Е	6/4/06
E. St. Louis St. Clair	KCS	Amines, Liquid, Corrosive, Flammable, N.O.S.	E. St. Louis, IL	Manway cover bolts loose	23,583 gals.	Approx. 50 gals.	Т	6/8/06
Cicero Cook	CN	Alcohols, N.O.S.	Denison, IA	Bottom outlet valve open and cap loose	29,275 gals.	1 gal.	Т	6/11/06

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Dupo	UP	Diesel Fuel	Unknown	Fuel tank overfill	Unknown	25 gals.	E	6/12/06
St. Clair								
Villa Grove Douglas	UP	Diesel Fuel	Unknown	Loose sight glass bracket	Unknown	15 gals.	E	6/13/06
E. St. Louis St. Clair	UP	Acetone	Seabrook, TX	Bottom outlet valve flange bolts loose	30,637 gals.	1 pint	Т	6/25/06
E. St. Louis St. Clair	ALS	Hydrochloric Acid	E. St. Louis, IL	Fitting broke after being bumped while unloading	20,000 gals.	800 gals.	Т	7/4/06
Galesburg Knox	BNSF	Hydrochloric Acid	Memphis, TN	Manway cover bolts loose	188,935 lbs.	1 gal.	Т	7/6/06
Dupo St. Clair	UP	Diesel Fuel	Unknown	Fuel line broken	Unknown	40 gals.	Е	7/9/06
Riverdale Cook	CSX	Environmentally Hazardous Substances, Liquid, N.O.S.	Waterloo, IA	Manway cover bolts loose	195,000 lbs.	10 lbs.	Т	7/9/06
Schiller Park Cook	СР	Trichloroethylene	Overseas	Improper blocking and bracing	10-55 gal. drums	30 gals.	COFC	7/10/06
Riverdale Cook	CSX	Hydrochloric Acid	Eldon, TX	Hole in tank at the sump	185,000 lbs.	200 gals.	Т	7/11/06
Venice Madison	TRRA	Alcohols, N.O.S.	Aurora, NE	Top valve loose	28,314 gals.	2 quarts	Т	7/13/06
Rochelle Ogle	UP	Diesel Fuel	Unknown	Fuel line leak	75 gals.	< 25 gals.	COFC	7/17/06
Galesburg Knox	BNSF	Diesel Fuel	Unknown	Sideswipe of rail cars	3,000 gals.	400 gals.	Е	7/17/06
E. St. Louis St. Clair	UP	Petroleum Distillates, N.O.S.	Baytown, TX	Defective valve	263,000 lbs.	1 ounce	Т	8/2/06
Melrose Park Cook	UP	Diesel Fuel	Unknown	Cracked fuel line	75 gals.	20 gals.	COFC	8/3/06

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
E. St. Louis St. Clair	UP	Diesel Fuel	Unknown	Bad order gauge	4,200 gals.	30 gals.	Е	8/5/06
Bedford Park Cook	CSX	Environmentally Hazardous Substances, Liquid, N.O.S.	Newark, NJ	Tank frame broke and sheared valve	23,650 kilograms	1 pint	PT	8/9/06
E. St. Louis St. Clair	UP	Chlorine	E. St. Louis, IL	Liquid valve partially open and cap corroded	15,333 gals.	1 gal.	Т	8/18/06
Elmhurst Cook	UP	Diesel Fuel	Unknown	Overflow of catch pan	Unknown	150 gals.	Е	8/24/06
Chicago Cook	NS	Diesel Fuel	Unknown	Expansion	Unknown	2 gals.	Е	8/25/06
Schiller Park Cook	СР	Paint	Overseas	Improper blocking and bracing	150 drums	20 gals.	COFC	9/1/06
Franklin Park Cook	СР	Diesel Fuel	Unknown	Engine sideswiped by rail car	4,000 gals.	25 gals.	Е	9/5/06
Urbana Champaign	CN	Diethyl Ether	Tuscola, IL	Vapor valve flange bolts loose	28,732 gals.	1 gal.	Т	9/7/06
East Hazel Crest Cook	CN	Alcohols, N.O.S.	Albert Lea, MN	Manway cover bolts loose	29,497 gals.	1 gal.	Т	9/8/06
E. St. Louis St. Clair	UP	Disulfide Oil Solution	Bayou Pierre, LA	Manway cover not secured	Residue	Vapor	Т	9/10/06
Chicago Cook	CN	Alcohols, N.O.S.	Huron, SD	Air connection valve loose and bad manway gasket	29,043 gals.	5 gals.	Т	9/18/06
Cahokia St. Clair	UP	Diesel Fuel	Unknown	Hole in fuel tank	Unknown	3 gals.	Е	9/18/06
Chicago Cook	CN	Alcohols, N.O.S.	Sewaren, NJ	Outlet valve loose and cap loose	500 gals.	10 gals.	Т	9/20/06
Roxana Madison	NS	Petroleum Distillates, N.O.S.	Roxana, IL	Bottom outlet valve defective	161,562 lbs.	1 cup	Т	9/21/06

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Chicago Cook	BRC	Alcohols, N.O.S.	Cleveland, OH	Bottom outlet valve open	Load	10 gals.	Т	9/21/06
Riverdale Cook	CSX	Diesel Fuel	Unknown	Fueling nozzle failed to shut off	2,690 gals.	Approx. 200 gals.	Е	10/2/06
Riverdale Cook	CSX	Liquefied Petroleum Gas	El Dorado, KS	Vapor valve open ¼ turn	33,978 gals.	1 gal.	Т	10/4/06
Riverdale Cook	IHB	Environmentally Hazardous Substances, Liquid, N.O.S.	Pasadena, TX	Manway cover bolts loose	151,649 lbs.	10 lbs.	Т	10/5/06
Chicago Cook	CN	Alcoholic Beverages	Atchison, KS	Manway cover bolts loose	28,749 gals.	5 gals.	Т	10/9/06
Calumet Cook	NS	Alcohols, N.O.S.	Sewaren, NJ	Bottom outlet valve defective	195,900 lbs.	1 gal.	Т	10/16/06
E. St. Louis St. Clair	UP	Diesel Fuel	Unknown	Overfilled	100 gals.	2 gals.	R	10/19/06
Streator LaSalle	BNSF	Diesel Fuel	Unknown	Puncture in fuel tank	3,000 gals.	1,000 gals.	E	10/21/06
Lake Bluff Lake	UP	Diesel Fuel	Unknown	Debris punctured fuel tank	3,500 gals.	< 200 gals.	Е	11/1/06
Decatur Macon	NS	Diesel Fuel	Unknown	Track not level	3,000 gals.	1 gal.	Е	11/1/06
Riverdale Cook	CSX	Diesel Fuel	Unknown	Fuel filter seal failure	Unknown	20 gals.	Е	11/1/06
Dupo St. Clair	UP	Diesel Fuel	Unknown	Broken fuel hose	Unknown	10-15 gals.	Е	11/7/06
Chicago Cook	CSX	Flammable Liquids, N.O.S.	Mount Pleasant, SC	Failure to block and brace	1 pint	1 pint	COFC	11/8/06
Franklin Park Cook	СР	Diesel Fuel	Unknown	Ruptured fuel hose	3,500 gals.	50 gals.	Е	11/11/06

Location	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amounts Involved	Amounts Released	Type of Equip.	Date
Cicero Cook	CN	Alcohols, N.O.S.	Ackley, IA	Manway cover bolts loose	29,095 gals.	1 gal.	Т	11/12/06
Rochelle Ogle	BNSF	Fuel Oil	Gillette, WY	Bottom outlet cap loose	Residue	1 pint	Т	11/26/06
Riverdale Cook	CSX	Isopropyl Acetate	Kingsport, TN	Valve and cap loose and packing gland nut loose	21,706 gals.	1 pint	Т	11/27/06
Dupo St. Clair	UP	Diesel Fuel	Unknown	Fuel fitting failure	Unknown	50 gals.	Е	11/27/06
Rockford Winnebago	CN	Diesel Fuel	Unknown	Debris placed on rail punctured fuel tank	4,000 gals.	700 gals.	Е	11/28/06
Chicago Cook	BRC	Flammable Liquids, N.O.S.	Pleasant Prairie, WI	Manway cover bolts loose	Load	1 ounce	Т	11/29/06
Riverdale Cook	CSX	Hydrochloric Acid	East Chicago, IN	Liquid eduction line bolts loose	Residue	1 lb.	Т	11/29/06
Schiller Park Cook	СР	N-Butyl Acetate Xylene	Wallingford, CT	Improper blocking and bracing	1-55 gal. drum	1 gal.	COFC	11/30/06
Decatur Macon	NS	Diesel Fuel	Unknown	Fuel tank struck by tow truck	2,800 gals.	< 1 gal.	Е	12/2/06
Chicago Cook	BRC	Corrosive Liquids, N.O.S.	Baltimore, MD	Loose closures	Load	1 ounce	Т	12/5/06
Franklin Park Cook	СР	Diesel Fuel	Unknown	Fuel filter failure	Unknown	400 gals.	Е	12/15/06
Chicago Cook	UP	Toluene	Omaha, NE	Tank cracked	6,300 gals.	< 20 gals.	PT	12/16/06
Elmhurst DuPage	UP	Diesel Fuel	Unknown	Broken fuel line	400 gals.	25 gals.	R	12/29/06

RAILROAD COMPANIES CITED IN THE PROCEEDING TABLES

ALS Alton and Southern Railroad Co.

BNSF The Burlington Northern and Santa Fe Railway Company

BRC Belt Railroad Company of Chicago

CN Canadian National CP Canadian Pacific

CSX CSX Transportation, Inc.

EJE Elgin, Joliet & Eastern Railway Co. IHB Indiana Harbor Belt Railroad Co.

KBSR Kankakee, Beaverville and Southern Railroad Company

KCS Kansas City Southern Railway Co.
NS Norfolk Southern Railway Company

TRRA Terminal Railroad Association of St. Louis

UP Union Pacific Railroad Company

LIST OF ATTACHMENTS

Attachment 1: Recognizing and Identifying Hazardous Materials

Attachment 2: Sample Waybill

Attachment 3: Sample Consist

Attachment 4: Emergency Response Information

Attachment 5: Sample Bill of Lading

Attachment 6: Top 125 Hazardous Commodity Movements by Tank Car Origination

RECOGNIZING AND IDENTIFYING HAZARDOUS MATERIALS

PLACARD AND LABEL NOTES

Placards are diamond shaped - 10% inches square. The placard provides recognition information in a number of ways:

- 1. the colored background;
- 2. the symbol at the top;
- 3. The United Nations hazard class number at the bottom; and
- 4. the hazard class wording or the identification number in the center.
 - - orange indicates explosive;
 - red indicates flammable;
 - green indicates nonflammable;
 - yellow indicates oxidizing material;
 - · white indicates poisonous material;
 - · white with vertical red stripes indicates flammable solid;
 - yellow over white indicates radioactive material; and
 - white over black indicates corrosive material.
 - b. Symbols:
 - the bursting ball symbol indicates explosive;
 - the flame symbol indicates flammable;
 - the slash W (W) indicates dangerous when wet;
 - the skull and crossbones indicates poisonous material;
 - the circle with the flame indicates oxidizing material;
 - the cylinder indicates nonflammable gas;
 - the propeller indicates radioactive:
 - the test tube/hand/metal symbol indicates corrosive; and
 - the word Empty indicates that the product has been removed, but a harmful residue may still be present.
 - c. United Nations Hazard Class Numbers:
 - 1 Explosives

 - 2 -- Gases
 3 -- Flammable Liquids
 - 4 --- Flammable Solids
 - 5 Oxidizing Substances
 - 6 Poisonous and Infectious Substances
 - 7 Radioactive Substances
 - 8 Corrosive Substances
 - 9 Miscellaneous Dangerous Substances
 - d. Hazard Class or Identification Number

Below are some examples of placards.













SAMPLE WAYBILL

Attachment 2 Page 1 of 2

RTMX 21065

T/C

#123456

03 06 01

St. Louis

MO.

1212 St. Louis, MO. 12 S. Street John Doe Inc.

John Doe Inc. Chicago, IL.

1/TC

Residue: Last Contained Acetone, 3, UN 1090, II, RQ (Acetone)

STCC 4908105

CHEMTREC EMERGENCY CONTACT 1-800-424-9300

SAMPLE WAYBILL

Attachment 2 Page 2 of 2

* *

GAPX 6075

#123457

03 06 01

St. Louis

MO.

T/C

1212 St. Louis, MO. 12 S. Street John Doe Inc.

John Doe Inc. Chicago, IL.

1/TC

Phenol, Molten, 6.1, UN 2312, II,RQ (Phenol)

20,000 GAL.

STCC 4921220

CHEMTREC EMERGENCY CONTACT 1-800-424-9300

ATTACHMENT 3

TRAIN/JOB CONDUCTOR	
NAME CATAGORY—SECONDARY MANIFEST TYPE—	THRU
ENGINE - IDENT HORSEPOWER LENGTH WEIGHT S	TATUS
6142 3000 69 200E	
1001 3000 74 200E	
ENG 1005 3000 74 200E	
TOTAL 9000 HP 217 FEET	00 TONS
	K CITY/STATE CONSIGNEE
BLOCK	APPRIOR TH
1 BJOX 278 LC4T 131 CORN 7MT018 214H NOTIFY SHIPPER IF DELAYED IF BA	MEMPHIS TN AD ORDERED NOTIFY SHIPPER
2 BJOX 109 LC4T 131 CORN 7MT018 214H	
	ND ORDERED NOTIFY SHIPPER
	MEMPHIS TN
	ORDERED NOTIFY SHIPPER
4 CRDX 7227 LC4T 131 CORN 7MT018 214H	MEMPHIS TN
NOTIFY SHIPPER IF DELAYED IF BA	O ORDERED NOTIFY SHIPPER
5 RTMX 21065 ET29 35 12ZA003 CR	CHICAGO IL
R50 SPEED RESTRICTED CAR	
1/ТК	
RESIDUE: LAST CO	ONTAINED
* ACETONE	
3	
EMERGENCY CONTACT: UN 1090 1-800-424-9300 II	
1-800-424-9300 II RQ (ACETONE)	•
HAZMAT STCC = 4	908105
6 GAPX 6075 LT19 36 POIS B 12ZA003 00 BRC R50 SPEED RESTRICTED CAR	CHICAGO IL
1/TC	•
**************************************	1
* 6.1	

EMERGENCY CONTACT:	1.6
1-800-424-9300 RQ (PHENOL)	
HAZMAT STCC =	4921220

EMERGENCY RESPONSE INFORMATION

POTENTIAL HAZARDS

EIRE OR EXPLOSION

- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a *P* may polymerize explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.

HEATOH

- Inhalation or contact with material may irritate or burn skin and eyes.
- · Fire may produce irritating, corrosive and/or toxic gases.
- · Vapors 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.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in ail
 directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

· Consider initial downwind evacuation for at least 300 meters (1000 feet).

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.

EMERGENCYRESPONSE

FIRE

CAUTION: All these products have a very low flash point; Use of water spray when fighting fire may be inefficient.

Small Fires

· Dry chemical, CO2, water spray or alcohol-resistant foam.

Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Use water spray or fog; do not use straight streams.
- · Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- 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.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spliled 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.

Large Spilis

- Dike far ahead of liquid spill for later disposal.
- · Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air.
 Call 911 or emergency medical service.
- · Apply 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.
- Wash skin with soap and water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and
- take precautions to protect themselves.

POTENTIAL HAZARDS

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- · Contact with molten substance may cause severe burns to skin and eyes.
- · Avoid any skin contact.
- · Effects of contact or inhalation may be delayed.
- · Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers
 explosion hazards.
- Those substances designated with a *P* may polymerize explosively when heated or involved in a fire.
- Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated.
- · Runoff may pollute waterways.
- · Substance may be transported in a molten form.

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.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · · Ventilate enclosed areas.

erotective chothing

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
 It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY;
 it is not effective in spill situations.

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, tail 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.

EMERGENCY RESPONSE

Small Fires

· Dry chemical, CO2 or water spray.

Large Fires

- Dry chemical, CO₂₁ alcohol-resistant foam or water spray.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks of Car/Trailer Loads

- 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.

SPILLU O RABEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- . DO NOT GET WATER INSIDE CONTAINERS.

FIRSTAID

- Move victim to fresh air.
 Call 911 or emergency medical service.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inheled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · 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.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- · Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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TOP 125 HAZARDOUS COMMODITY MOVEMENTS BY TANK CAR ORIGINATION

RANK	COMMODITY NAME	**HAZ CLASS
1	Freight All Kinds - Hazardous Materials	
2	Freight All Kinds - Hazardous Materials	
3	Sodium Hydroxide Solution	C
4	Petroleum Gases, Liquefied	CG
5	Sulfuric Acid	C
6	Elevated Temperature Liquid, N.O.S.	ORM
7	Ammonia, Anhydrous, Liquefied	CG
8	Chlorine	CG
9	Sultur, Molten	ORM
10	Sulfur, Molten	FS
11	Vinyl Chloride, Inhibited	CG
12	Propane	CG
13	Fuel Oil	FL
14	Denatured Alcohol	FL
15	Methanol	FL
16	Gasoline	FL
17	Phosphoric Acid	C
18	Hydrochloric Acid	С
19	Styrene Monomer, Inhibited	FL
20	Carbon Dioxide, Refrigerated Liquid	CG
21	Ammonium Nitrate	0
22	Gasoline	FL
23	Sodium Chiorate	0
24	Diesel Fuel	CL
25	Butane	CG
26	Petroleum Crude Oil	FL
27	Phenol, Molten	
28	Fuel Oil	FL
29	Butadienes, Inhibited	CG
30	Fuel Oil	CL
31	Ethylene Oxide	CG .
32	Methyl Tert Butyl Ether	FL
33	Fuel, Aviation, Turbine Engine	FL

RANK	COMMODITY NAME	THAZ CLASS
34	Isobutane	CG
35	Environ, Hazardous Substances, Liquid	ORM
36	Environ, Hazardous Substances, Liquid	ORM .
37	Environ. Hazardous Substances, Liquid	ORM
38	Propylene	.CG
39	Propylene Oxide	FL
40	Vinyl Acetate, Inhibited	FL
41	Environ. Hazardous Substances, Solid, N.O.S.	ORM
42	Environ. Hazardous Substances, Solid, N.O.S.	ORM
43	Petroleum Crude Oil	CL
44	Xylenes	FL
45	Other Regulated Substances, Liquid	ORM
46	Cyclohexane	. FL
47	Hydrogen Peroxide, Stabilized	0
48	Hexamethylenediamine, Solid	C
49	Acrylic Acid, Inhibited	C
50	Sulfuric Acid, Spent	c
51	Methyl Methacrylate Monomer, Inhibited	FL
52	Environ, Hazardous Substances, Solid, N.O.S.	ORM
53	Potassium Hydroxide, Solution	C
54	Toluene Diisocyanate	Р
55	Phosphoric Acid	C
56	Acetic Acid, Glacial	C
57	Formaldehyde Solutions	C
58	Butyl Acrylates, Inhibited	FL .
59	Environ. Hazardous Substances, Liquid, N.O.S.	ORM
60	Petroleum Distillates, N.O.S.	CL
61	Acetone	FL FL
62	Compounds, Cleaning Liquid	FL
63	Toluene	FL ·
64	Environ. Hazardous Substances, Solid, N.O.S.	ORM
65	Ammonium Nitrate Fertilizers	0
66	Ethanol	FL
67	White Asbestos	ORM
68	Elevated Temperature Liquid, N.O.S.	ORM

RANK	COMMODITY NAME	**HAZ CLASS
69	Liquefied Petroleum Gas	CG
70	Acrylonitrile, Inhibited	. FL
71	Liquefied Petroleum Gas	CG
72	Petroleum Distillates, N.O.S.	FL
73	Environ. Hazardous Substances, Liquid	ORM
74	Hazardous Waste, Solid, N.O.S.	ORM
75	Benzene	FL
76	Fuel Oil	FL
77	Ethylene Dichloride	FL
78	Hydrogen Flouride, Anhydrous	С
79	Liquefied Petroleum Gas	CG
80	Sulfer Dioxide	CG
81	Elevated Temperature Liquid, N.O.S.	ORM
82	Elevated Temperature Liquid, Flammable, N.O.S.	FL
83	Elevated Temperature Liquid, N.O.S.	ORM
84	Diesel Fuel	CL
85	Waste Flammable Liquids	FL
86	Other Regulated Substances, Liquid, N.O.S.	ORM
87	Isobutane	CG
88	Isopropanol	FL
89	Sodium Chlorate, Aqueous Solution	0
90	Other Regulated Substances, N.O.S.	ORM
91	Phosphorus, White, Dry	FS
92	Ferrous Chloride, Solution	c
93	Elevated Temperature Liquid, N.O.S.	ORM
94	Methanol	FL
95	Petroleum Distillates, N.O.S.	FL
96	Elevated Temperature Liquid, N.O.S.	ORM
97	Propylene	CG
98	Flammable Liquids, N.O.S.	FL
99	Environ, Hazardous Substances, Solid, N.O.S.	ÖRM
100	Butanols	FL
101	Nitric Acid	c
102	Polymeric Beads, Expandable	ORM
103	Combustible Liquids, N.O.S.	CL

RANK	COMMODITY NAME	**HAZ CLASS
104	Acetic Anhydride	l c
105	Fuel Oil	. CL
106	Liquefied Petroleum Gas	ce
107	Fuel Oil	CL
108	Butylene	CG
109	Ferric Chloride, Solution	C
110	Freight All Kinds - Hazardous Materials	
111	Acetaldehyde	FL
112	Other Regulated Substances, Liquid	ORM
113	Batteries, Wet, Filled with Acid	C
114	Maleic Anhydride	C
115	Hydrocarbons, Liquid, N.O.S.	FL
116	Sulfuric Acid, Furning	c
117	Ammonium Nitrate, Liquid	0
118	Methyl Chloride	CG
119	Alcoholic Beverages	FL
120	Elevated Temperature Liquid, N.O.S.	ORM
121	Combustible Liquid, N.O.S.	CL
122	Ethyl Acetate	FL
123	Ethyl Acrylate, Inhibited	FL
124	Kerosene	FL
125	Other Regulated Substances, Liquid, N.O.S.	ORM

**CG - Compressed Gas
FL - Flammable Liquid
FS - Flammable Solid
CL - Combustible Liquid
O - Oxidizer
P - Poison
C - Corrosive
ORM - Other Regulated Material