

# ILLINOIS COMMERCE COMMISSION



## 2014 ANNUAL REPORT ON ACCIDENTS/INCIDENTS Involving Hazardous Materials on Railroads in Illinois



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## **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 Illinois Commerce Commission (ICC) 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 7,400 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 (AAR), in 2012, approximately seven percent of all rail traffic involved the movement of hazardous materials<sup>(1)</sup>. In 2012 (latest year for which data is available), railroads in Illinois handled 503.1 million tons of total freight and 11.975 million carloads of freight which is first in the nation for carloads carried and third for total rail tonnage handled<sup>(2)</sup>. Of this total, railroads in Illinois handled approximately 35.217 million tons of hazardous materials.

The U.S. Department of Transportation (USDOT) classifies approximately 3,500 substances as hazardous<sup>(3)</sup>. 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.

[<sup>1,2,3</sup>Note: See page 12 for References]

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 Federal Railroad Administration (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 ICC currently has one full-time federally certified Hazardous Material inspector position responsible for all of Illinois.

The ICC Hazardous Material (HM) inspector focuses the majority of his effort in the field conducting inspections at railroad yards and the industrial facilities of shippers and consignees of hazardous materials. The inspector is 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 2014, the ICC HM inspector inspected 10,186 rail cars. Since 1981, when 3 ICC HM inspectors found violations in 12 percent of all inspections, compliance has improved to the point that inspectors found violations in only 2.0 percent of all inspections in 2014.

The large increase in compliance observed since 1981, is due in part to ICC-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 ICC 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. ILLINOIS COMMERCE COMMISSION HAZARDOUS MATERIALS SAFETY PROGRAM***

The ICC'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 escort 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 the ICC HM inspector: 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. The ICC HM inspector verifies 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 the ICC HM inspector 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. The ICC HM inspector examines 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 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**

The ICC HM inspector responds 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. The ICC HM inspector will also advise the emergency response team as to proper mitigation and clean up procedures and requirements. The ICC HM inspector assists 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. The ICC HM inspector is 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. The current protocol for the shipment of nuclear material requires that the train be stopped and inspected prior to entering Illinois. When they do occur, nuclear material shipments will be escorted by the ICC HM inspector, as well as the 1 ICC track inspector, who verifies 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, ICC 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. The ICC HM inspector also makes presentations on the interpretation and application of federal and state hazardous materials regulations to railroad company personnel. Since 1990, over 100 educational or training presentations on hazardous material safety have been made to over 2,000 persons affiliated with a variety of emergency planning and response teams.

## 4. ILLINOIS COMMERCE COMMISSION HAZARDOUS MATERIAL SAFETY PROGRAM ACTIVITY IN 2014

Summary of Inspections Conducted by ICC HM Inspectors: 2004 through 2014. (Source: FRA)

Year	Inspections	Units Inspected	Defects Identified	Defects per Unit
2004	218	13,899	445	0.032
2005	240	14,551	492	0.034
2006	274	16,978	698	0.041
2007	259	16,828	470	0.028
2008	282	17,177	360	0.021
2009	255	16,011	293	0.018
2010	249	15,743	269	0.017
2011	259	15,779	257	0.016
2012	264	16,720	215	0.013
2013	148	11,005	208	0.019
2014	142	10,186	201	0.020
<b>Total</b>	<b>3,014</b>	<b>174,518</b>	<b>4,156</b>	<b>0.024</b>

[Note: Inspection Numbers reflect 2 ICC HM Inspectors 2004-2012; 1 ICC HM Inspector in 2013-2014]

## 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. ICC 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 2014

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: 2004 – 2014.

Type of Incident	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
A. Hazardous Materials Physically Involved in Derailment and Hazardous Materials Release Occurred	16	11	6	7	7	5	3	8	4	5	2
B. Hazardous Materials Physically Involved in Derailment Where No Hazardous Materials Release Occurred	4	8	12	10	4	5	20	10	13	23	36
C. Hazardous Materials Released From Rail Cars Where No Derailment Occurred	57	53	95	81	65	25	80	60	74	82	84
<b>Total</b>	<b>77</b>	<b>72</b>	<b>113</b>	<b>98</b>	<b>76</b>	<b>35</b>	<b>103</b>	<b>78</b>	<b>91</b>	<b>110</b>	<b>122</b>

Information for Tables A, B and C was obtained from reports filed by the railroad with the Commission, as well as from the USDOT's Research and Innovative Technology Administration.

Three categories of information contained in this report not specifically required by law 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 is provided in Table D.

Table A. Hazardous Materials Physically Involved in a Derailment and a Hazardous Materials Release Occurred.

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Dolton	Cook	UP	Diesel Fuel	Dolton, IL	Broken Rail	700 gals.	500 gals.	Locomotive (3)	3/5/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Locomotive ran over a derail	500 gals.	2 Gals.	Locomotive	11/9/2014

Table B. Hazardous Materials Physically Involved in a Derailment Where No Hazardous Materials Release Occurred.

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Gurnee	Lake	UP	Diesel Fuel	Northlake, IL	Derailment	2,000 gals.	None	Locomotive	1/7/2014
Northlake	Cook	UP	Molten Phenol	Blue Island, IL	Derailed during humping operations	23,464 gals.	None	Tank Car	1/7/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Retention tank overflowed	1,500 gals.	None	Locomotive	1/15/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Derailment	2,000 gals.	None	Locomotive	1/21/2014
Bushnell	McDonough	BNSF	Diesel Fuel	Lincoln, NE	Derailment	4,900 gals.	None	Locomotive	1/23/2014
Dolton	Cook	UP	Diesel Fuel	Dolton, IL	Locomotive kicked a switch and derailed	2,000 gals.	None	Locomotive	2/1/2014
Northlake	Cook	UP	Asphalt	Montreal, ON	Side swiped and derailed	Load	None	Tank Car	2/6/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Rolled over a derail device	2,000 gals.	None	Locomotive	2/7/2014
Woodland	Iroquois	UP	Diesel Fuel	Dolton, IL	Derailment	1,000 gals.	None	Locomotive	2/7/2014
East St. Louis	St. Clair	UP	Liquefied Petroleum Gas	St. John, NE	Side swiped	Residue	None	Tank Car	2/8/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Derailment	1,000 gals.	None	Locomotive	2/14/2014
Cutler	Perry	UP	Diesel Fuel	Bush, IL	Derailment	1,000 gals.	None	Locomotive	2/21/2014
Bloomington	McLean	UP	Diesel Fuel	Bloomington, IL	Derailment	800 gals.	None	Locomotive	3/3/2014
Dolton	Cook	UP	Sulfuric Acid	Canada	Broken Switch	Load	None	Tank Car	3/6/2014
Northlake	Cook	UP	Asphalt	Wichita, KS	Car went over a switch	Load	None	Tank Car	3/16/2014
Crystal Lake	McHenry	UP	Diesel Fuel	Crystal Lake, IL	Derailment	1,000 gals.	None	Locomotive	3/29/2014
Williamsfield	Peoria	BNSF	Carbon Dioxide	Chicago, IL	Excessive wind	570 lbs.	None	Container	4/28/2014
Rochelle	Ogle	BNSF	Diesel Fuel	Rochelle, IL	Derailment	500 gals.	None	Locomotive	5/9/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Track related derailment	500 gals.	None	Locomotive	6/8/2014
Sterling	Whiteside	UP	Diesel Fuel	Sterling, IL	Heat kinked the rail	2,000 gals.	None	Locomotive	6/28/2014
Pontiac	Livingston	UP	Diesel Fuel	Bloomington, IL	Went over a derail device	1,000 gals.	None	Locomotive	6/30/2014
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Went over a derail device	1,000 gals.	None	Locomotive	7/2/2014
Dolton	Cook	UP	Hydrochloric Acid	Chicago, IL	Derailment	Load	None	Tank Car	7/6/2014
DeKalb	DeKalb	UP	Diesel Fuel	Northlake, IL	Wide gauge	2,000 gals.	None	Locomotive (2)	7/15/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Derailment	800 gals.	None	Locomotive	7/22/2014
West Chicago	DuPage	UP	Diesel Fuel	West Chicago, IL	Track related derailment	1,500 gals.	None	Locomotive (2)	9/27/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Derailment	800 gals.	None	Locomotive	10/5/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Derailment	500 gals.	None	Locomotive	10/9/2014
Rochelle	Ogle	UP	Diesel Fuel	Rochelle, IL	Derailment	700 gals.	None	Locomotive	10/10/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Wide gauge	800 gals.	None	Locomotive	10/21/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Derailment	600 gals.	None	Locomotive	11/6/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Track defect	700 gals.	None	Locomotive	11/25/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Derailment	2,000 gals.	None	Locomotive (3)	11/30/2014
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Ran over a derail device	1,000 gals.	None	Locomotive	12/5/2014
Joliet	Will	CN	Diesel Fuel	Joliet, IL	Rear end train collision	Unknown	None	Locomotive (2)	12/13/2014
			Petroleum Crude Oil	Unknown		Loads	None	Tank Car (2)	
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Ran over a derail device	1,200 gals.	None	Locomotive	12/18/2014

Table C. Hazardous Materials Released From Rail Cars Where No Derailment Occurred.

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Bedford Park	Cook	CSX	Diesel Fuel	Jacksonville, FL	Defective fuel line	150 gals.	30 gals.	Refrigerated Car	1/8/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Fuel expanded in the tank	1,500 gals.	< 1 gal.	Locomotive	1/13/2014
East St. Louis	St. Clair	UP	Petroleum Crude Oil	Blair, NE	Loose manway cover bolts	179,801 lbs.	< 5 gals.	Tank Car	1/26/2014
Sadorus	Champaign	NS	Diesel Fuel	Decatur, IL	Ruptured fuel line	4,000 gals.	25 gals.	Locomotive	2/18/2014
Salem	Marion	UP	Diesel Fuel	Salem, IL	Deteriorated fuel pipe	2,000 gals.	500 gals.	Locomotive	2/19/2014
East St. Louis	St. Clair	UP	Petroleum Crude Oil	Tioga, ND	Liquid valve packing gland was loose	Load	3 gals.	Tank Car	2/25/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Cracked weld on the fuel tank	150 gals.	< 1 gal.	Locomotive	3/10/2014
Riverdale	Cook	CSX	Alcohols, N.O.S.	Shell Rock, IA	Defective vapor valve plug	30,000 gals.	< 1 gal.	Tank Car	3/17/2014
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Fuel leaked when fueling locomotive	3,000 gals.	Minimal	Locomotive	3/17/2014
Northlake	Cook	UP	Hydrocarbons, Liquid, N.O.S.	Redwater, TX	Loose closure	Load	¼ gal.	Tank Car	3/18/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Dragging equipment punctured hole in fuel tank	1,100 gals.	300 gals.	Locomotive	3/20/2014
Bedford Park	Cook	CSX	Diesel Fuel	Elizabeth, NJ	Defective fuel line	Unknown	60 gals.	Refrigerated Car	3/22/2014
Galesburg	Knox	BNSF	Petroleum Crude Oil	Stanley, ND	Bottom outlet valve packing stem loose	30,250 gals.	¼ gal.	Tank Car	3/23/2014
Sidney	Champaign	UP	Diesel Fuel	Salem, IL	Damaged site glass	1,000 gals.	5 gals.	Locomotive	3/27/2014
Galesburg	Knox	BNSF	Diesel Fuel	Galesburg, IL	Mechanical failure	4,900 gals.	50 gals.	Locomotive	3/28/2014
Salem	Marion	UP	Diesel Fuel	Salem, IL	Blown seal on fuel filter	1,000 gals.	300 gals.	Locomotive	3/30/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Fuel filter gasket failure	1,000 gals.	½ gal.	Locomotive	4/1/2014
Bedford Park	Cook	CSX	Diesel Fuel	Bedford Park, IL	Mechanical failure	5,000 gals.	2 gals.	Locomotive	4/5/2014
Northlake	Cook	UP	Organometallic Substance, Liquid, Water Reactive, Flammable	Hodgkins, IL	Improper blocking and bracing	Load	< 1 gal.	Portable Tank	4/7/2014
Joliet	Will	CN	Liquefied Petroleum Gas	Baytown, TX	Liquid valve loose	Load	1 gal.	Tank Car	4/17/2014
Venice	Madison	TRRA	Diesel Fuel	Venice, IL	Broken site glass on fuel tank	2,500 gals.	50 gals.	Locomotive	4/18/2014
Chicago	Cook	CSX	Diesel Fuel	Chicago, IL	Fuel line malfunction	4,500 gals.	1,900 gals.	Locomotive	4/30/2014
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Fuel site glass failure	1,500 gals.	10 gals.	Locomotive	5/1/2014
Chicago	Cook	NS	Diesel Fuel	Chicago, IL	Ruptured fuel tank	4,900 gals.	800 gals.	Locomotive	5/1/2014
Dolton	Cook	UP	Methanol	Deer Park, TX	Loose liquid line flange	Load	30 gals.	Tank Car	5/3/2014
Franklin Park	Cook	CP	Alcohols, N.O.S.	Unknown	Bottom outlet valve defective and pad weld leak	30,080 gals.	1 gal.	Tank Car	5/8/2014
Riverdale	Cook	CSX	Petroleum Crude Oil	Trenton, ND	Defective manway cover gasket	30,140 gals.	2 gals.	Tank Car	5/12/2014
Riverdale	Cook	CSX	Petroleum Crude Oil	Houston, TX	Defective manway gasket	30,140 gals.	1 gal.	Tank Car	5/14/2014
Galesburg	Knox	BNSF	Alcohols, N.O.S.	Aberdeen, SD	Vacuum relief valve stuck open	Load	Vapor	Tank Car	5/15/2014
Salem	Marion	UP	Diesel Fuel	Salem, IL	Mechanical failure	1,000 gals.	2 gals.	Locomotive	5/16/2014
East St. Louis	St. Clair	CSX	Diesel Fuel	Richland, WA	Crack in weld seam in fuel tank	300 gals.	10 gals.	Refrigerated Car	5/24/2014

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Bush	Williamson	UP	Diesel Fuel	Bush, IL	Mechanical failure	500 gals.	10 gals.	Locomotive	5/27/2014
Saint Peter	Fayette	UP	Diesel Fuel	Salem, IL	Mechanical failure	800 gals.	1 quart	Locomotive	6/3/2014
Washington Park	St. Clair	CSX	Diesel Fuel	Washington Park, IL	Leak in the engine compartment	500 gals.	25 gals.	Locomotive	6/7/2014
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Fuel tank punctured from trailer collapse	1,000 gals.	30 gals.	Refrigerated Car	6/9/2014
Wadsworth	Lake	CP	Diesel Fuel	Franklin Park, IL	Broken fuel line	4,800 gals.	10 gals.	Locomotive	6/16/2014
Chicago	Cook	UP	Diethylenetriamine	Los Angeles, CA	Improper blocking and bracing	55 gals.	2 gals.	Container	6/17/2014
Chicago	Cook	BNSF	Diesel Fuel	Chicago, IL	Fueling error	5,300 gals.	1,000 gals.	Locomotive	6/17/2014
Centralia	Marion	NS	Diesel Fuel	Centralia, IL	Fuel filter site glass had a bad seal	4,500 gals.	2 gals.	Locomotive	6/18/2014
Rochelle	Ogle	UP	Diesel Fuel	Chicago, IL	Leaked fuel from the refrigerator unit	300 gals.	1 gal.	Refrigerated Car	6/24/2014
Northlake	Cook	UP	Diesel Fuel	Unknown	Truck backed into a COFC causing the leak	Load	50 gals.	Container	6/28/2014
Dupo	St. Clair	UP	Diesel Fuel	Dupo, IL	Unknown	300 gals.	3 ounces	Locomotive	7/2/2014
East St. Louis	St. Clair	CSX	Diesel Fuel	Shelly, ID.	Unknown	300 gals.	4 gals.	Refrigerated Car	7/6/2014
Riverdale	Cook	CSX	Gasoline	Moundsville, WV	Defective manway cover gasket	20,000 gals.	1 gal.	Tank Car	7/11/2014
Dupo	St. Clair	UP	Sodium Hydroxide	Taiwan	Bag was punctured	50 lbs.	< 1 gal.	Container	7/23/2014
Chicago	Cook	NS	Diesel Fuel	Chicago, IL	Loose coupling	200 gals.	2 gals.	Trailer	7/28/2014
Markham	Cook	CN	Hydrochloric Acid	Geismar, LA	Pressure plate bolts loose	20,484 gals.	12 gals.	Tank Car	8/1/2014
Cicero	Cook	BNSF	Resin Solution, Flammable	Tacoma, WA	Fill hole closure cap was loose	251 gals.	1 gal.	Container	8/9/2014
Chicago	Cook	CN	Environmentally Hazardous Substances, Liquid, N.O.S.	Port Neches, TX	Manway cover bolts loose	23,620 gals.	10 gals.	Tank Car	8/16/2014
Granite City	Madison	NS	Diesel Fuel	Granite City, IL	Heat expansion caused fuel to leak	4,000 gals.	2 gals.	Locomotive	8/21/2014
Venice	Madison	TRRA	Petroleum Distillates, N.O.S.	Porkato, OH	Tank car was overloaded	30,055 gals.	50 gals.	Tank Car	8/23/2014
Bensenville	Cook	CP	Diesel Fuel	Lisle, IL	Hole in the fuel line	200 gals.	15 gals.	Refrigerated Car	8/26/2014
East St. Louis	St. Clair	CSX	Hazardous Waste, Solid, N.O.S.	Kimball, NE	Puncture in the container	33,000 lbs.	1 gal.	Container	8/26/2014
East St. Louis	St. Clair	UP	Petroleum Crude Oil	El Dorado, AR.	No manway gasket under manway cover	Residue	¼ gal.	Tank Car	8/26/2014
Chicago	Cook	NS	Diesel Fuel	Chicago, IL	Ruptured injector seal	4,000 gals.	1 gal.	Locomotive	9/4/2014
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Mechanical failure	300 gals.	20 gals.	Refrigerated Car	9/5/2014
Bedford Park	Cook	CSX	Diesel Fuel	Bedford Park, IL	Broken fuel line on refrigerated trailer	50 gals.	5 gals.	Refrigerated Car	9/13/2014
Kinmundy	Marion	UP	Diesel Fuel	Salem, IL	Engine malfunction	2,000 gals.	100 gals.	Locomotive	9/13/2014
East St. Louis	St. Clair	UP	Petroleum Crude Oil	El Dorado, AR.	Defective vacuum relief valve	Residue	Vapor	Tank Car	9/16/2014
Villa Grove	Douglas	UP	Diesel Fuel	Villa Grove, IL	Broken site glass	1,000 gals.	2 gals.	Locomotive	9/19/2014
Northlake	Cook	UP	Diesel Fuel	Chicago, IL	Damaged fuel line	500 gals.	75 gals.	Refrigerated Car	9/26/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Overfill	2,000 gals.	5 gals.	Locomotive	9/26/2014

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Champaign	Champaign	CN	Methyl Acrylate, Stabilized	Deer Park, TX	Vapor valve not secured	23,538 gals.	¼ gal.	Tank Car	9/29/2014
Decatur	Macon	NS	Alcohols, N.O.S.	Decatur, IL	Leaking bottom outlet valve	28,999 gals.	1 gal.	Tank Car	10/5/2014
Rochelle	Ogle	UP	Diesel Fuel	Rochelle, IL	Ruptured fuel line	2,500 gals.	2 gals.	Locomotive	10/11/2014
Chicago	Cook	CSX	Diesel Fuel	Chicago, IL	Fuel line failure	2,000 gals.	5 gals.	Locomotive	10/13/2014
Danville	Vermilion	CSX	Diesel Fuel	Danville, IL	Mechanical failure in the engine compartment	4,890 gals.	15 gals.	Locomotive	10/17/2014
Dupo	St. Clair	UP	Diesel Fuel	Dupo, IL	Defective fuel tank	1,000 gals.	100 gals.	Locomotive	10/26/2014
Northlake	Cook	UP	Petroleum Crude Oil	Bruderheim, AB	Bad O-ring in vacuum relief valve	176,213 lbs.	1 pint	Tank Car	10/27/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Nozzle came out of fuel tank w hen fueling	2,000 gals.	< 7 gals.	Locomotive	11/4/2014
East St. Louis	St. Clair	CSX	Hazardous Waste, Solid, N.O.S.	Kimball, NE	Hole in the container	Load	1 lb.	Container	11/5/2014
East St. Louis	St. Clair	UP	Ethyl Acrylate, Stabilized	Taft, LA	Sample valve release	Load	Vapor	Tank Car	11/7/2014
Decatur	Macon	NS	Petroleum Crude Oil	Unknown	Manway gasket cracked	30,000 gals.	2 quarts	Tank Car	11/10/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Retention tank overflowed	500 gals.	15 gals.	Locomotive	11/12/2014
East St. Louis	St. Clair	CSX	Hazardous Waste, Solid, N.O.S.	Kimball, NE	Defective door seal	Load	½ lb.	Container	11/15/2014
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Leaking fuel system	200 gals.	5 gals.	Locomotive	11/21/2014
Joliet	Will	UP	Diesel Fuel	Industry, CA	Unknown	100 gals.	Minimal	Refrigerated Car	12/7/2014
Northlake	Cook	UP	Diesel Fuel	Glencoe, MN	Malfunction of fuel filter	200 gals.	10 gals.	Refrigerated Car	12/12/2014
Northlake	Cook	UP	Flammable Liquids, N.O.S.	Brooklyn, OR	Cracked tote	200 gals.	5 gals.	Container	12/18/2014
Riverdale	Cook	CSX	Pentanols	Pasadena, TX	Bottom outlet valve not secured	26,825 gals.	1 gal.	Tank Car	12/19/2014
Chicago	Cook	CSX	Petroleum Crude Oil	Bismarck, ND	Bottom outlet valve not secured	30,150 gals.	5 gals.	Tank Car	12/23/2014
Bedford Park	Cook	CSX	Diesel Fuel	Bedford Park, IL	Trailer legs collapsed and hit the ground puncturing fuel tank	200 gals.	15 gals.	Trailer	12/23/2014
Decatur	Macon	NS	Diesel Fuel	Decatur, IL	Locomotive fuel tank overflowed	4,000 gals.	15 gals.	Locomotive	12/27/2014
Decatur	Macon	NS	Environmentally Hazardous Substances, N.O.S.	Decatur, IL	Defective manway gasket	24,763 gals.	.03125 gal.	Tank Car	12/28/2014

Table D. Railroad Companies Cited in the Preceding Tables.

BNSF	BNSF Railway Company
CN	Canadian National Railway Company
CP	Canadian Pacific Railway
CSX	CSX Transportation, Inc.
NS	Norfolk Southern Railway Company
TRRA	Terminal Railway 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

References.

1. Association of American Railroads; *Railroads: Moving America Safely*. Washington, D.C., May 2014.  
<https://www.aar.org/BackgroundPapers/Railroads%20Moving%20America%20Safely.pdf> Retrieved February 9, 2015.
2. Association of American Railroads. *State Rankings*. Washington, D.C., July 2014.  
[https://www.aar.org/Style%20Library/railroads\\_and\\_states/dist/data/pdf/State%20Rankings.pdf](https://www.aar.org/Style%20Library/railroads_and_states/dist/data/pdf/State%20Rankings.pdf) Retrieved February 9, 2015.
3. Pipeline and Hazardous Materials Safety Administration. *2008 Emergency Response Guidebook*. U.S. Department of Transportation, Washington, D.C., Revised February 2009.

## RECOGNIZING AND IDENTIFYING HAZARDOUS MATERIALS

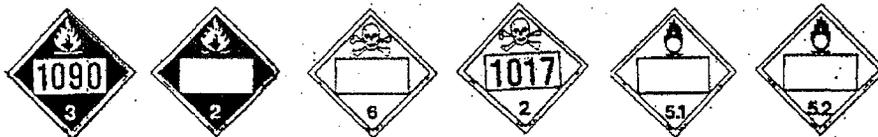
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### PLACARD AND LABEL NOTES

Placards are diamond shaped — 10¾ 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.
  - a. Color:
    - 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

T/C

#123457

03 06 01

St. Louis

MO.

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

John Doe Inc.  
Chicago, IL.

i/TC

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

20,000 GAL.

STCC 4921220

CHEMTREC EMERGENCY CONTACT 1-800-424-9300

SAMPLE CONSIST

ATTACHMENT 3

TRAIN/JOB NAME	CONDUCTOR	CATAGORY—SECONDARY MANIFEST	TYPE—THRU	ENGINE - IDENT	HORSEPOWER	LENGTH	WEIGHT	STATUS
				6142	3000	69	200E	
				1001	3000	74	200E	
ENG	1005				3000	74	200E	
TOTAL		9000 HP				217 FEET	600 TONS	

TRAIN/JOB	SEQ	EQPMT	ID	KND	GWT	COMDTY	DESTN	ZTS/CARR	NXBLK	CITY/STATE	CONSIGNEE
BLOCK -											
1	BJOX	278	LC4T	131	CORN	7MT018			214H	MEMPHIS TN	
						NOTIFY SHIPPER IF DELAYED				IF BAD ORDERED NOTIFY SHIPPER	
2	BJOX	109	LC4T	131	CORN	7MT018			214H	MEMPHIS TN	
						NOTIFY SHIPPER IF DELAYED				IF BAD ORDERED NOTIFY SHIPPER	
3	BJOX	110	LC4T	131	CORN	7MT018			214H	MEMPHIS TN	
						NOTIFY SHIPPER IF DELAYED				IF BAD ORDERED NOTIFY SHIPPER	
4	CRDX	7227	LC4T	131	CORN	7MT018			214H	MEMPHIS TN	
						NOTIFY SHIPPER IF DELAYED				IF BAD ORDERED NOTIFY SHIPPER	
5	RTMX	21065	ET29	35			12ZA003 CR			CHICAGO IL	
						R50 SPEED RESTRICTED CAR					

1/TK

\*\*\*\*\*

RESIDUE: LAST CONTAINED

\*

ACETONE

\*\*\*\*\*

3

EMERGENCY CONTACT:

UN 1090

1-800-424-9300

II

RQ (ACETONE)  
HAZMAT STCC = 4908105

6 GAPX 6075 LT19 38 POIS B 12ZA003 00 BRC CHICAGO IL

R50 SPEED RESTRICTED CAR

1/TC

\*\*\*\*\*

PHENOL, MOLTEN

\*

6.1

\*\*\*\*\*

UN 2312

EMERGENCY CONTACT:

II

1-800-424-9300

RQ (PHENOL)  
HAZMAT STCC = 4921220

EMERGENCY RESPONSE INFORMATION

**POTENTIAL HAZARDS**

**FIRE 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.

**HEALTH**

- 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 all 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.

## EMERGENCY RESPONSE

### 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, CO<sub>2</sub>, 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 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.

#### Large Spills

- 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**

#### **TOXICITY**

- 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.

#### **PROTECTIVE CLOTHING**

- 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, 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.

## EMERGENCY RESPONSE

### FIRE

#### Small Fires

- Dry chemical, CO<sub>2</sub> or water spray.

#### Large Fires

- Dry chemical, CO<sub>2</sub>, 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 or 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.

### SPILL/ROPSACK

- 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.

### FIRST AID

- 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 inhaled 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.

\*\*\*\*\* STRAIGHT BILL OF LADING — SHORT FORM — Original — Not Negotiable

Attachment 5  
Page 1 of 2

RECEIVED, subject to the conditions and liability thereon in effect on the date of the issue by the carrier of the property described in the Original Bill of Lading.									
CUST. NUMBER	S.D. NUMBER	CAR OR TRAILER INITIAL AND NUMBER	DATE SHIPPED	MC DD EE	ROUTE CODE	SHIP. PLT.			
5	7	RTMX 21065	8		5	1	<p>The property described below, in apparent good order, except as noted hereon and condition of the face of packages unknown, received, assigned, and delivered as indicated below, which said carrier (the vessel herein being understood throughout this contract as meaning any person or corporation in possession of the property under the contract agreed to carry to the usual place of destination, if on its route, otherwise to deliver to another carrier on the route to said destination.</p> <p>If it is mutually agreed, as to each carrier of all or any of said property and at any position at said route to destination, and as to each party 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 Domestic Bill of Lading and to (1) the Official, Seaman, Women and other Freight Classifications in effect on the date hereof, if this is a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.</p> <p>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.</p>		
NET WEIGHT	GROSS WEIGHT	NO. OF UNIT	UNIT CODE	PROD. CODE	PROD. PLT.				
8	8	4	3	3	2				
CONSIGNEE John Doe, Inc.			DESTINATION Chicago, IL		STATE OF Cook		COUNTY OF		
FROM Permanent Postoffice Address of Shipper John Doe, Inc. St. Louis, MO			AY						
ROUTE ABC Railroad			DELIVERING CARRIER ABC		AGENT ABC		PER		
NO. PKGS.	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS					WEIGHT (Sub. to Cert.)	RATE		
1 T/C	Residue: Last Contained Acetone 3 UN 1090 II RQ ( Acetone ) EMERGENCY CONTACT 1-800-424-9300 HAZ MAT STCC = 4908105					Residue			
This shipment is correctly described: <b>CORRECT WEIGHT IS</b> LBS. subject to verification by the Eastern, Southern or Western Weighing and Inspection Bureau, whichever applicable, 18943 John Doe, Inc. SHIPPER									
PURCHASE ORDER NO.			SEAL NUMBERS			THE TOTAL WEIGHT OF THE PALLETS USED ON THE SHIPMENT IS SHOWN ABOVE.			TRANSPORTATION FREE PER ABOVE
						THIS CAR LEASED TO: John Doe, Inc.			LIGHT-TARE WEIGHT IS
IF CHARGES ARE TO BE PREPAID, WRITE OR STAMP HERE "TO BE PREPAID"			Subject to section 7 of any condition of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignee, the consignee shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.				SHIPPER John Doe, Inc.		
Prepaid			SIGNATURE OF CONSIGNOR				PER		

PLANT COPY

\*\*\*\*\*  
 \* \* \* \* \* STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable Attachment 5  
 \* \* \* \* \* Page 2 of 2  
 \*\*\*\*\*

RECEIVED, subject to the conditions and lawful load limits in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading.									
CUST. NUMBER 3	S.D. NUMBER 7	CAR OR TRAILER INITIAL AND NUMBER 15	DATE SHIPPED 8	MC DO DD EE	ROUTE CODE 6	SHP. PLT. 1	the property described herein, in apparent good order, except as noted hereon 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 destination.		
NET WEIGHT 8		GROSS WEIGHT 8	NO. OF UNIT 4	UNIT CODE 3	PROD. CODE 3	PROD. PLT. 2	try at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination.		
CONSIGNEE John Doe, Inc.							DESTINATION Chicago, IL	STATE OF Cook	COUNTY OF Cook
FROM Permanent Postoffice Address of Shipper John Doe, Inc. St. Louis, MO							AT		
ROUTE ABC Railroad				DELIVERING CARRIER ABC	AGENT ABC				
NO. PKGS.	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS					WEIGHT (Sub. to Corr.)	RATE		
1 T/C	Phenol, Molten 6.1 UN 2312 II RQ ( Phenol )  EMERGENCY CONTACT 1-800-424-9300  HAZ MAT STCC = 4921220					20,000 Gals.			
This shipment is correctly described: CORRECT WEIGHT IS LBS. subject to verification by the Eastern, Southern or Western Weighing and Inspection Bureau, whichever applicable, 18943			THE TOTAL WEIGHT OF THE PALLETS USED ON THE SHIPMENT IS SHOWN ABOVE.			TRANSPORTATION FREE PER ABOVE			
PURCHASE ORDER NO.			SEAL NUMBERS		THIS CAR LEASED TO: John Doe, Inc.		LIGHT-TARE WEIGHT IS		
IF CHARGES ARE TO BE PREPAID, WRITE OR STAMP HERE "TO BE PREPAID"  Prepaid			Subject to section 7 of conditions of applicable bill of lading, 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.			SHIPPER John Doe, Inc. PER			
SIGNATURE OF CONSIGNEE									

PLANT COPY