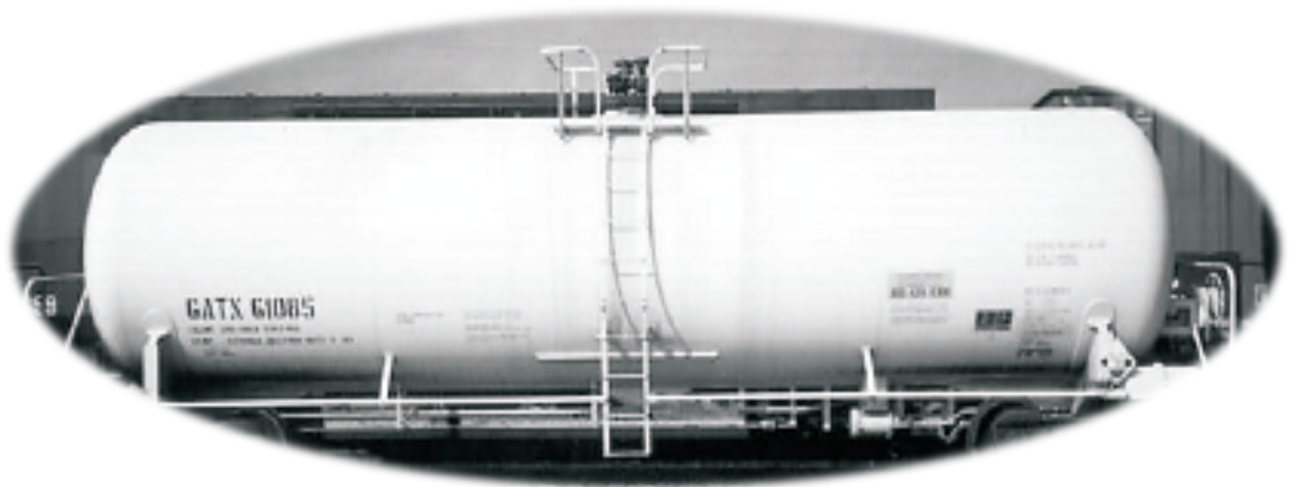


Illinois Commerce Commission

2024 Annual Report on Accidents/Incidents Involving Hazardous Materials on Railroads in Illinois





STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

527 East Capitol Avenue
Springfield, Illinois 62701

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March 13, 2025

The Honorable Don Harmon
Senate President

The Honorable John Curran
Senate Republican Leader

The Honorable Emanuel "Chris" Welch
House Speaker

The Honorable Tony McCombie
House Republican Leader

Dear Honorable Members of the Legislative Leadership,

The Illinois Commerce Commission submits the attached report in compliance with 625 ILCS, Section 5/18c-1204, which directs the Commission to *"prepare and distribute to the General Assembly.....a report on railway accidents in Illinois which involve hazardous materials."*

As required by Illinois law, this report includes the location, substance involved, amounts involved, and the suspected reason for each accident. The report also provides the rail line and point of origin of the hazardous material involved in each accident.

Additionally, the report contains the following related information:

- Details regarding events where hazardous material was involved, but no release occurred;
- An overview of ICC activities relative to the transportation of hazardous materials by rail within the state; and,
- A history of the railroad hazardous materials program.

Should you have questions, or need clarification about any of the information presented, please contact Sarah Ryan, Director of Governmental Affairs, at (217) 785-2449.

Sincerely,

A handwritten signature in black ink that reads "Douglas P. Scott".

Douglas P. Scott
Chairman

Table of Contents

<u>Section</u>	<u>Page</u>
1.0 Introduction	1
2.0 Background	1
3.0 Commission Hazardous Materials Safety Inspection Program	2
3.1 Inspection of Rail Equipment and Shipper/Consignee Facilities	2
3.1.1 Railroad Equipment	2
3.1.2 Roll-By	3
3.1.3 Documentation	3
3.1.4 Shipping Facilities	4
3.2 Technical Assistance Program to Interested Parties	5
3.3 Low-Level Radioactive Material & Escort of High-Level Nuclear Material in Illinois	5
3.4 Education and Outreach Activities	5
4.0 Commission Hazardous Material Program Activity in 2024	6
5.0 Data Describing Accidents/Incidents in Illinois in 2024	6
A. Derailments That Resulted in Hazardous Material Release	7
B. Derailments in Which No Hazardous Material Was Released	8
C. Hazardous Materials Released, But No Derailment Occurred	9
D. List of Railroads Cited in Preceding Tables	11
List of Appendices	11
References	11
<u>Appendices</u>	
1. Top 50 HM Commodities in the United States	12
2. How to Recognize and identify Hazardous Material	13
3. Emergency Response Information (ERG)	15
4. Sample Waybill	19
5. Sample Bill of Lading	21
6. Sample Train Consist	22
7. FRA and PHMSA Data Sources	23

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 7,300 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 30,000 rail cars on a typical weekday.

According to the Association of American Railroads (AAR), approximately 7.9 percent of all rail traffic involved the movement of hazardous materials⁽¹⁾. Analysis of Illinois hazardous materials shipping data indicates Illinois has a slightly higher percentage of traffic comprised of hazardous materials at 11.1% of Illinois rail traffic. Based upon available data from 2022 and 2023, railroads in Illinois originated 132.4 million tons of total freight and 4,001,700 carloads of freight⁽²⁾. Of this total, HM shippers in Illinois originated approximately 14.7 million tons of hazardous materials (or 444,189 carloads).

The U.S. Department of Transportation (USDOT) classifies approximately 3,500 substances as hazardous⁽³⁾. 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. Appendix 1 provides a list of the top 50 HM commodities shipped in the United States.

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 two full-time federally certified Hazardous Material inspector positions responsible for all of Illinois.

The ICC Hazardous Material (HM) inspectors, in cooperation with FRA inspectors, focus the majority of their efforts 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 2024, the ICC HM inspectors inspected 6,671 rail cars. Since 1981, when three ICC HM inspectors found violations in 12 percent of all inspections, compliance has improved to the point that inspectors found violations in only 0.02 percent of all inspections in 2024.

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 ICC HM 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. Appendix 2 provides examples of

the various placards and the information they provide, which is of critical importance to emergency response personnel. Appendix 3 provides response information from the USDOT Emergency Response Guide (ERG). The ICC 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, 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 inspectors determine that cars are not correctly located within the train's consist, they 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. Appendix 4 provides a sample Waybill; Appendix 5 provides a sample Bill of Lading and Appendix 6 provides a sample train consist.

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 inspectors 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.

3.2 Technical Assistance Program to Shippers, Consignees and Emergency Responders

ICC 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. The ICC HM inspectors will also monitor the emergency response team as to proper mitigation and clean up procedures and requirements. The ICC HM 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.

3.3 Low-Level Radioactive Material & Escort of High-Level 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 inspectors, as well as the ICC 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. Widespread concern on the part of the public due to safety and security issues, warrant the careful planning and inspection of all high-level radioactive material shipments traveling over the Illinois rail network. Since 1998 when annual reporting was first required, there have been no incidents involving the transport of high-level radioactive material. For low-level radioactive waste there was an incident in 2020 and one other in 2022 as documented in the associated annual reports. For any event involving radioactive material, the Illinois Emergency Management Agency's Nuclear and Radiation Safety Team is lead in monitoring the response and clean-up with ICC Inspectors supporting.

3.4 Education and Outreach Activities

According to 625 ILCS 5/18c-7404, ICC inspectors facilitate 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 inspectors also educate railroad company personnel and shippers on the interpretation and application of federal and state hazardous materials regulations.

4. ILLINOIS COMMERCE COMMISSION HAZARDOUS MATERIAL SAFETY INSPECTION PROGRAM ACTIVITY 2021 TO 2024

Summary of **STATE** Inspections Conducted by ICC HM Inspectors: 2021 through 2024. (Source: ICC)

Year	ICC Staff Inspections	Units Inspected	Defects Identified	Defects per Unit	Staff (Full - Time)
2021	304	11,884	96	0.008	2.0
2022	272	8,549	110	0.013	2.0
2023	281	9,004	73	0.008	2.0
2024	243	6,671	123	0.018	1.7
Total	1,100	36,108	402	0.011	

5. DATA DESCRIBING ACCIDENTS AND/OR INCIDENTS IN ILLINOIS IN 2024

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 four tables and several Appendices.

2021 – 2024 Summary Table

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 Table: Summary of Hazardous Material Related Incidents: 2021 – 2024.

Type of Incident	2021	2022	2023	2024
A. Hazardous Materials Physically Involved in Derailment and Hazardous Materials Release Occurred	4	5	2	4
B. Hazardous Materials Physically Involved in Derailment Where No Hazardous Materials Release Occurred	31	29	30	31
C. Hazardous Materials Released From Rail Cars Where No Derailment Occurred	29	49	31	45
Total	64	83	63	80

Information was obtained for the table above and Tables A, B and C from reports filed by the railroads with the Illinois Emergency Management Agency (IEMA) and Commission. These reports were then cross referenced with monthly data reports available from the Pipeline and Hazardous Material Safety Administration (PHMSA) identifying where leaks occurred. Federal Railroad Administration (FRA) monthly reports were also reviewed. Appendix 7 provides further discussion on the reporting requirements, along with IEMA, FRA, and PHMSA data sources.

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 Where 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
Baylis	Pike	NS	Diesel	Baylis, IL	Accident with train	Unknown	30 gals.	Saddle tank	1/17/2024
Riverdale	Cook	CSX	Diesel	Riverdale, IL	Unknown derailment	Unknown	1000 gals.	Locomotive	3/11/2024
Matteson	Cook	CN	Liquefied Petroleum Gas	Port Allen, TX	Puncture from derailment	Unknown	1 gas gal.	Tank car	6/27/2024
Matteson	Cook	CN	Liquefied Petroleum Gas	Port Allen, TX	Puncture from derailment	Unknown	10 gas gal.	Tank car	6/27/2024

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
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Unknown derailment	Unknown	None	Locomotive	1/10/2024
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Broken rail	Unknown	None	Locomotive	1/13/2024
Dolton	Cook	UP	Diesel Fuel	Dolton, IL	Unknown derailment	Unknown	None	Locomotive	1/13/2024
Rockford	Winnebago	UP	Diesel Fuel	Rockford, IL	Excessive ice on rail	Unknown	None	Locomotive	1/16/2024
Fox Lake	Lake	Metra	Diesel Fuel	Fox Lake, IL	Unlocked switch	Unknown	None	Locomotive	1/20/2024
East St. Louis	St. Clair	UP	Sodium Hydroxide	Plaquemine, LA	Unknown derailment	Unknown	None	2 Tank cars	1/24/2024
Melrose Park	Cook	UP	Diesel Fuel	Melrose Park, IL	Unknown derailment	Unknown	None	Locomotive	1/29/2024
Belvidere	Boone	UP	Diesel Fuel	Belvidere, IL	Split rail	Unknown	None	2 Locomotives	1/31/2024
Naperville	DuPage	BNSF	Diesel Fuel	Naperville, IL	Unknown derailment	Unknown	None	2 Locomotives	2/20/2024
East St. Louis	St. Clair	UP	Sulfuric Acid	Unknown	Unknown derailment	Unknown	None	Tank car	2/23/2024
Crystal Lake	McHenry	Metra	Diesel Fuel	Crystal Lake, IL	Unknown derailment	Unknown	None	Locomotive	2/24/2024
Riverdale	Cook	CSX	Hydrocarbons	Alberta Canada	Unknown derailment	Residue tank car	None	Tank car	3/2/2024
Rochelle	Ogle	UP	Diesel Fuel	Rochelle, IL	Unknown derailment	Unknown	None	Locomotive	3/4/2024
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Unknown derailment	Unknown	None	Locomotive	3/8/2024
East St. Louis	St. Clair	ALS	Diesel Fuel	East St. Louis, IL	Track design	Unknown	None	Locomotive	3/30/2024
Melrose Park	Cook	UP	Diesel Fuel	Melrose Park, IL	Obstruction of switch point	Unknown	None	Locomotive	4/28/2024
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Unknown derailment	Unknown	None	Locomotive	6/4/2024
Decatur	Macon	CN	Diesel Fuel	Decatur, IL	Operator error	Unknown	None	Locomotive	6/10/2024
Dolton	Cook	UP	Diesel Fuel	Dolton, IL	Misaligned switch	Unknown	None	Locomotive	6/20/2024
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Unknown derailment	Unknown	None	Locomotive	6/24/2024
Dixon	Lee	UP	Diesel Fuel	Dixon, IL	Unknown derailment	Unknown	None	Locomotive	6/25/2024
East St. Louis	St. Clair	ALS	Diesel Fuel	East St. Louis, IL	Track design	Unknown	None	Tank car	7/2/2024
Melrose Park	Cook	UP	Diesel Fuel	Melrose Park, IL	Unknown derailment	Unknown	None	Tank car	7/6/2024
Chicago	Cook	UP	Diesel Fuel	Chicago, IL	Unknown derailment	Unknown	None	Locomotive	7/10/2024
Sauget	St. Clair	UP	Sulfuric Acid	Unknkown	Unknown derailment	Unknown	None	Tank car	7/12/2024
Berkeley	Cook	UP	Diesel Fuel	Berkeley, IL	Unknown derailment	Unknown	None	Locomotive	8/12/2024
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Locomotive ran over derail device	Unknown	None	Locomotive	9/26/2024
Chicago	Cook	Metra	Diesel Fuel	Chicago, IL	Locomotive ran over derail device	Unknown	None	Locomotive	11/1/2024
Bartonville	Peoria	UP	Diesel Fuel	Bartonville, IL	Vandalism	Unknown	None	Locomotive	11/18/2024
Chicago	Cook	Metra	Diesel Fuel	Chicago, IL	Misaligned switch	Unknown	None	2 Locomotives	12/2/2024
Dupo	St. Clair	UP	Diesel Fuel	Dupo, IL	Unknown derailment	Unknown	None	2 Locomotives	12/26/2024

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
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Leaking fuel filter on locomotive	Unknown	100 gals.	Locomotive	1/10/2024
Dupo	St. Clair	UP	Battery Acid	Dupo, IL	Unknown	Unknown	1 gal.	2800 Battery	1/17/2024
Woodland	Iroquois	UP	Diesel Fuel	Woodland, IL	Fire	2,000 gals.	2,000 gals.	Locomotive	1/19/2024
Cordova	Rock Island	CPKC	Combustible Liquid, N.O.S.	Deer Park, IL	Bottom outlet valve and manway less than tool tight	29,923 gals.	.5 gal.	Tank car	2/6/2024
Franklin Park	Cook	CPKC	Diesel Fuel	Franklin Park, IL	Train/Vehicle collision	Unknown	Excess of 5 gal.	Locomotive	2/8/2024
Normal	McLean	NS	Diesel Fuel	Normal, IL	Engine failure	Unknown	50 gals.	Locomotive	2/12/2024
Centreville	St. Clair	UP	Liquefied Petroleum Gas	Port Arthur, TX	Liquid and vapor valves in open position	Unknown	1 gal.	4 Tank cars	3/6/2024
Centreville	St. Clair	UP	Liquefied Petroleum Gas	Port Arthur, TX	Liquid and vapor valves in open position	Unknown	1 gal.	Tank car	3/7/2024
Dupo	St. Clair	UP	Liquefied Petroleum Gas	Port Arthur, TX	Liquid and vapor valves in open position	Unknown	1 gal.	Tank car	3/12/2024
Pekin	Tazewell	CN	Diesel Fuel	Pekin, IL	Broken fuel line	Unknown	20 gals.	Locomotive	3/19/2024
Northlake	Cook	UP	Corrosive Liquid	Compton, CA	Improper handling/loading	5 gals.	1 gal.	2 Jerricans	3/26/2024
Chicago	Cook	BNSF	Diesel Fuel	Chicago, IL	During fueling diesel was released	Unknown	50 gals.	Fuel tank	3/30/2024
Dupo	St. Clair	UP	Sulfurized Isobutylene	Unknown	Unknown	Unknown	2 1/2 gals.	Intermodal container	4/4/2024
Galesburg	Knox	BNSF	Diesel Fuel	Galesburg, IL	Mechanical failure	2500 gals.	100 gals.	Locomotive	4/11/2024
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Power assembly failure	Unknown	50 gals.	Locomotive	4/24/2024
Chicago	Cook	NS	Diesel Fuel	Unknown	Equipment malfunction	Unknown	20 gals.	Refrigerator container	4/28/2024
Hodgkins	Cook	BNSF	Heptanes	Borger, TX	Manway gasket deteriorated	28,770 gals.	1 gal.	Tank car	4/30/2024
Bedford Park	Cook	CSX	Diesel Fuel	Bedford Park, IL	Fuel pump hose failure	Unknown	20 gals.	Locomotive	5/13/2024
Chester	Randolph	UP	Sodium Hydroxide, Solution	Nekoosa, WI	Frangible disc ruptured	201,500 lbs.	10 gals.	Tank car	5/13/2024
East St. Louis	St. Clair	UP	Hydrochloric Acid	East St. Louis, IL	Liquid line flange bolts loose	100 gals.	2 gals.	Tank car	5/19/2024
Joliet	Will	UP	Diesel Fuel	Joliet, IL	Railcar collided with locomotive	5,000 gals.	500 gals.	Locomotive	5/19/2024
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Engine failure	Unknown	100 gals.	Locomotive	6/20/2024
Riverside	Cook	CSX	Diesel Fuel	Riverside, IL	Over fill of fuel tank	Unknown	50 gals.	Locomotive	6/22/2024
Rock Falls	Whiteside	UP	Diesel Fuel	Whiteside, IL	Unknown	Unknown	1000 gals.	Rail grinder	7/1/2024
Chicago	Cook	NS	Adhesives (Flammable)	Austell, GA	Inadequate blocking and bracing of lading	35 lbs.	5 gals.	Steel drum	7/7/2024
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Hose ruptured	Unknown	50 gals.	Locomotive	7/7/2024
Sauget	St. Clair	CPKC	Ammonia Anhydrous	Roodhouse, IL	Vapor valve and vapor plug less than tool tight	33,960 gals.	Minimal	Tank car	7/17/2024
Melrose Park	Cook	UP	Sulfuric Acid, Spent	Omaha, NE	Open fill hole port	11,088 gals.	50 gals.	Tank car	7/17/2024
East St. Louis	St. Clair	UP	Diesel Fuel	East St. Louis, IL	Over fill of fuel tank	Unknown	100 gals.	Locomotive	7/26/2024
Joliet	Will	UP	Resin Solution, Flammable	Seattle, WA	Inadequate blocking and bracing of lading	55 gals.	1 gal.	Steel drum	8/5/2024
Galesburg	Knox	BNSF	Diesel Fuel	Galesburg, IL	Over fill from a fuel truck to locomotive	Unknown	70 gals.	Locomotive	8/14/2024

City	County	Railroad Involved	Substance Involved	Point of Origin	Suspected Reason for Incident	Amount Involved	Amount Released	Type of Equipment	Date
Melrose Park	Cook	UP	Diesel Fuel	Melrose Park, IL	Unknown	Unknown	80 gals.	Drum	9/18/2024
Channahon	Will	N/A	Styrene Monomer	Seabrook, TX	Inhibitor depletion	Unknown	500 lbs.	Tank car	9/21/2024
Joliet	Will	UP	Amines, Liquid, Corrosive	Frisco, TX	Inadequate blocking and bracing of lading	53 gals.	1 gal.	Steel drum	10/3/2024
Northlake	Cook	UP	Diesel Fuel	Northlake, IL	Cover broke	Unknown	75 gals.	Locomotive	10/3/2024
Cicero	Cook	BNSF	Hydraulic Fluid	Cicero, IL	Equipment malfunction	Unknown	50 gals.	Intermodal crane	10/11/2024
East St. Louis	St. Clair	UP	Butadienes, Stabilized	Houston, TX	Liquid valve bolts less than tool tight	Unknown	10 gals.	Tank car	10/15/2024
East St. Louis	St. Clair	UP	Propylene	Houston, TX	Liquid valve loose	Unknown	1 gal.	Tank car	10/15/2024
Northlake	Cook	UP	Benzyl Benzoate	Dublin, OH	Improper blocking and bracing	55 gals.	25 gals.	Steel drum	10/19/2024
Chicago	Cook	CSX	Diesel Fuel	Chicago, IL	Unknown	Unknown	30 gals.	Intermodal container	11/2/2024
Elwood	Will	BNSF	Diesel Fuel	Elwood, IL	Unknown	4,000 gals.	150 gals.	Locomotive	11/6/2024
Franklin Park	Cook	CPKC	Diesel Fuel	Franklin Park, IL	Overfill	Unknown	5 gals.	Locomotive	11/8/2024
Joliet	Will	UP	Organic Peroxide	San Bernardino, CA	Improper blocking and bracing	55 gals.	5 gals.	Plastic drum	11/8/2024
Collinsville	Madison	CSX	Diesel Fuel	Collinsville, IL	Sump was pull	Unknown	Unknown	Locomotive	11/20/2024
Chicago	Cook	BNSF	Diesel Fuel	Chicago, IL	Fuel truck pulled away before removing hose	Unknown	Unknown	Above ground storage tank	12/4/2024

Table D. list of Railroad Companies Cited In The Preceding Tables.

Railroad		Reports
ALS	Alton & Southern Railroad	2
BNSF	BNSF Railway	8
CN	Canadian National Railway	4
CPKC	CPKC Railway	4
CSX	CSX Transportation	6
Metra	Northeast Illinois Commuter Rail Corp.	4
N/A	Not Railroad	1
NS	Norfolk Southern Railway	4
UP	Union Pacific Railroad	47
Total		80

List of Appendices.

- Appendix 1: Top 50 Hazardous Commodities
- Appendix 2: Recognizing and Identifying Hazardous Materials
- Appendix 3: Emergency Response Guide Information
- Appendix 4: Sample Waybill
- Appendix 5: Sample Bill of Lading
- Appendix 6: Sample Train Consist
- Appendix 7: FRA and PHMSA Data Sources

References.

1. Association of American Railroads; *Freight Railroads Move America Safely*. Washington, D.C., February 2023. <https://www.aar.org/wp-content/uploads/2020/08/AAR-Safety-Fact-Sheet.pdf> Retrieved January 21, 2025.
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Appendix 1: Top 50 HM Commodities in the United States

Rank	Commodity Name	Class	Rank	Commodity Name	Class
1	ALCOHOLS, N.O.S.	3	26	FLAMMABLE LIQUIDS, N.O.S.	3
2	PETROLEUM CRUDE OIL	3	27	PHENOL, MOLTEN	6.1
3	PETROLEUM GASES, LIQUEFIED	2.1	28	ETHANOL	3
4	SODIUM HYDROXIDE SOLUTION	8	29	ETHYLENE OXIDE	2.3
5	ELEVATED TEMPERATURE LIQUID, N.O.S.	9	30	BUTADIENES, STABILIZED	2.1
6	SULFURIC ACID	8	31	PROPYLENE	2.1
7	DIESEL FUEL	3	32	BUTANE	2.1
8	PROPANE	2.1	33	PROPYLENE	2.1
9	HYDROCHLORIC ACID	8	34	DIESEL FUEL	CL
10	SULFUR, MOLTEN	9	35	XYLENES	3
11	CHLORINE	2.3	36	POTASSIUM HYDROXIDE, SOLUTION	8
12	SULFUR, MOLTEN	4.1	37	BENZENE	3
13	PHOSPHORIC ACID SOLUTION	8	38	PETROLEUM CRUDE OIL	CL
14	GASOLINE	3	39	BUTANE	2.1
15	VINYL CHLORIDE, STABILIZED	2.1	40	ELEVATED TEMPERATURE LIQUID, N.O.S.	9
16	AMMONIA, ANHYDROUS	2.3	41	OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.	9
17	FLAMMABLE LIQUIDS, N.O.S.	3	42	HYDROGEN PEROXIDE, STABILIZED	5.1
18	METHANOL	3	43	AMMONIUM NITRATE, LIQUID	5.1
19	AMMONIA, ANHYDROUS	2.2	44	FUEL OIL	CL
20	FUEL, AVIATION, TURBINE ENGINE	3	45	FUEL OIL	CL
21	GASOLINE	3	46	SULFURIC ACID, SPENT	8
22	CARBON DIOXIDE, REFRIGERATED LIQUID	2.2	47	NON-ODORIZED LIQUEFIED PETROLEUM GAS	2.1
23	STYRENE MONOMER, STABILIZED	3	48	ELEVATED TEMPERATURE LIQUID, N.O.S.	9
24	GASOLINE	3	49	DIESEL FUEL	3
25	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.	9	50	VINYL ACETATE, STABILIZED	3

Source:

Association of American Railroads; Bureau of Explosives
Annual Report of Hazardous Materials Transported by Rail: 2012
Published August 2013; Report BOE 12-1-R

Code	Hazard Class
2.1	Flammable Gases
2.2	Non-Flammable Gases
2.3	Poison Gases
3	Flammable Liquids (CL) Combustible Liquids
4.1	Flammable Solids
5.1	Oxidizing Materials
6.1	Poisonous Materials
8	Corrosive Materials
9	Misc. Hazardous Materials

Appendix 2: Recognizing and Identifying Hazardous Material

Recognizing and Identifying Hazardous materials – Placards and Label Notes. Placards are diamond shaped – 10 ³/₄ 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 Nation's hazard class number at the bottom; and
4. The hazard class wording or the identification number in the center.
 - a. Color:
 - i. Orange indicates explosive
 - ii. Red indicates flammable
 - iii. Green indicates nonflammable
 - iv. Yellow indicates oxidizing material
 - v. White indicates poisonous material
 - vi. White with vertical red stripes indicates flammable solid
 - vii. Yellow over white indicates radioactive material
 - viii. White over black indicates corrosive material

- b. Symbols:
 - i. The bursting ball symbol indicates explosive
 - ii. The flame symbol indicates flammable
 - iii. The slashed W indicates dangerous when wet
 - iv. The skull and crossbones indicates poisonous material
 - v. The circle with the flame indicates oxidizing material
 - vi. The cylinder indicates nonflammable gas
 - vii. The propeller indicates radioactive
 - viii. The test tube/hand/metal symbol indicates corrosive
 - ix. The word Empty indicates product has been removed, but a residue may remain

- c. United Nations Hazard Class Numbers:
 - i. Explosives
 - ii. Gases
 - iii. Flammable Liquids
 - iv. Flammable Solids
 - v. Oxidizing Substances
 - vi. Poisonous and Infectious Substances
 - vii. Radioactive Substances
 - viii. Corrosive Substances
 - ix. Miscellaneous Dangerous Substances

- d. Nine Classes of Hazardous Material – Identification Number: Examples below.

Nine Classes of Hazardous Materials

Class 1: Explosives

Divisions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6



Class 6: Poison (Toxic) and Poison Inhalation Hazard

Class 2: Gases

Divisions: 2.1, 2.2, 2.3



Class 7: Radioactive

Class 3: Flammable Liquid and Combustible Liquid



Class 8: Corrosive

Class 4: Flammable Solid, Spontaneously Combustible, and Dangerous When Wet

Divisions 4.1, 4.2, 4.3



Class 9: Miscellaneous

Class 5: Oxidizer and Organic Peroxide

Divisions 5.1, 5.2



Dangerous

Revised 06/06

Federal Motor Carrier Safety Administration

U.S. Department of Transportation
www.fmcsa.dot.gov

Class 1 - Explosives	
Division 1.1	Explosives which have a mass explosion hazard
Division 1.2	Explosives which have a projection hazard but not a mass explosion hazard
Division 1.3	Explosives which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard
Division 1.4	Explosives which present no significant hazard
Division 1.5	Very insensitive explosives with a mass explosion hazard
Division 1.6	Extremely insensitive articles which do not have a mass explosion hazard
Class 2 - Gases	
Division 2.1	Flammable gases
Division 2.2	Non-flammable, non-toxic* gases
Division 2.3	Toxic* gases
Class 3 - Flammable liquids (and Combustible liquids [U.S.])	
Class 4 - Flammable solids; Substances liable to spontaneous combustion; Substances which, on contact with water, emit flammable gases	
Division 4.1	Flammable solids, self-reactive substances and solid desensitized explosives
Division 4.2	Substances liable to spontaneous combustion
Division 4.3	Substances which in contact with water emit flammable gases
Class 5 - Oxidizing substances and Organic peroxides	
Division 5.1	Oxidizing substances
Division 5.2	Organic peroxides
Class 6 - Toxic* substances and Infectious substances	
Division 6.1	Toxic* substances
Division 6.2	Infectious substances
Class 7 - Radioactive materials	
Class 8 - Corrosive substances	
Class 9 - Miscellaneous hazardous materials/dangerous goods and articles	

Appendix 3: Emergency Response Information
[\(https://www.phmsa.dot.gov/hazmat/erg/erg2020-english/\)](https://www.phmsa.dot.gov/hazmat/erg/erg2020-english/)

SUGGESTED OPERATIONS SHOULD ONLY BE PERFORMED BY ADEQUATELY TRAINED AND EQUIPPED PERSONNEL

HOW TO USE THE ORANGE GUIDES

1

	GUIDE 117 GASES - TOXIC - FLAMMABLE (EXTREME HAZARD)	GUIDE 117 GASES - TOXIC - FLAMMABLE (EXTREME HAZARD)
2	<p>POTENTIAL HAZARDS</p> <p>HEALTH</p> <ul style="list-style-type: none"> TOXIC: Extremely flammable. May be fatal if inhaled or absorbed through skin. Initial odor may be irritating or foetid but may disappear over time of smell. Contact with gas or liquid gas may cause frost, severe injury and/or death. Fire will produce irritating, corrosive and/or toxic gases. Flashed from fire control or liquid water may cause environmental contamination. <p>FIRE OR EXPLOSION</p> <ul style="list-style-type: none"> These materials are extremely flammable. May form explosive mixtures with air. May be ignited by heat, sparks or flames. vapors from liquefied gas are HEAVILY heavier than air and spread along ground. vapors may travel to source of ignition and flash back. These substances decomposed with a (?) may polymerize explosively when heated or trapped in a fire. Flashed may contain fire or explosion hazard. Cylinders exposed to fire may vent and release toxic and flammable gas through pressure relief devices. Containers may explode when heated. Refrigerated cylinders may leak. <p>PUBLIC SAFETY</p> <ul style="list-style-type: none"> CALL 911. If you call emergency response telephone number on shipping paper if shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. Nonconfined gas may vent. Stay upwind, uphill and/or up-slope. Many gases are heavier than air and will spread along the ground and collect in low or confined areas (basements, basements, tanks, etc.). Visible cloud space before entering, but only if properly trained and equipped. <p>PROTECTIVE CLOTHING</p> <ul style="list-style-type: none"> Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer when there is NO MSDS or PPE. Structural firefighting protective clothing provides thermal protection but only limited chemical protection. <p>EVACUATION</p> <p>Immediate precautionary measure</p> <ul style="list-style-type: none"> Isolate spill or leak area for at least 100 meters (300 feet) in all directions. <p>Spill</p> <ul style="list-style-type: none"> See Table 1: Initial Isolation and Protective Action Distances. <p>Fire</p> <ul style="list-style-type: none"> If tank, rail car or tank truck is involved in fire, ISOLATE for 1000 meters (1 mile) in all directions; also, consider initial evacuation for 1000 meters (1 mile) in all directions. <p>+ In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please consult the shipping paper under the IATA Program Section (page 30).</p>	<p>EMERGENCY RESPONSE</p> <p>FIRE</p> <p>DO NOT ATTEMPT TO EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.</p> <p>Small Fire</p> <ul style="list-style-type: none"> Dry chemical, CO₂, water spray or regular foam. <p>Large Fire</p> <ul style="list-style-type: none"> Water spray, fog or regular foam. If it can be done safely, move undamaged containers away from the area around the fire. Damaged cylinders should be handled only by specialists. <p>Fire Involving Tanks</p> <ul style="list-style-type: none"> Fight fire from maximum distance or use contained reader stream, drychem or monitor nozzle. Containers with floating quantities of water will self-vent after fire is out. Do not direct water at source of leak or safety devices, bring fire under control. Withdraw immediately in case of being forced from venting safety devices or deterioration of tank. ALWAYS stay away from tanks engulfed in fire. <p>SPILL OR LEAK</p> <p>CALL 911. If you call emergency response telephone number on shipping paper if shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.</p> <ul style="list-style-type: none"> All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop work if you cannot do it without risk. Use water spray to reduce vapors or shield vapor cloud until it can be safely dispersed. Do not direct water at spill or source of leak. If possible, turn leaking containers so that gas escapes rather than liquid. Prevent entry into basements, sewers, basements or confined areas. Isolate area until gas has dispersed. Consider igniting spill or leak to eliminate toxic gas concerns. <p>FIRST AID</p> <ul style="list-style-type: none"> Call 911 for emergency medical services. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Move victim to fresh air if it can be done safely. Give artificial respiration if victim is not breathing. Do not perform mouth-to-mouth resuscitation if victim is pregnant or inhaled the substance; wash face and mouth before giving artificial respiration. Use 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. In case of contact with liquefied gas, flush heated parts with lukewarm water. In case of frostbite, immediately moist affected skin for as long as possible with cold water. Do not remove clothing if it adheres to skin. Keep victim calm and warm. Keep victim under observation. Effects of contact or inhalation may be delayed.

4

1 GUIDE NUMBER AND TITLE

- The guide title identifies the general hazards associated with the materials in this Guide.

2 POTENTIAL HAZARDS

- Emergency responders should consult this section first!
- Describes the material hazard in terms of **FIRE OR EXPLOSION** and **HEALTH** effects upon exposure.
- The primary potential hazard is listed first.
- Allows the responders to make decisions to protect the emergency response team, and the surrounding population.


Page 156

ERG 2020

SUGGESTED OPERATIONS SHOULD ONLY BE PERFORMED BY ADEQUATELY TRAINED AND EQUIPPED PERSONNEL

3

PUBLIC SAFETY

- This section is divided into three subsections:
 - › **General Information:** describes initial precautionary measures to be taken by those first on the scene.
 - › **PROTECTIVE CLOTHING:** provides general guidance on personal protective equipment requirements including respiratory protection. The protective clothing information is general and correct selection is situation dependent, after considering the physical and chemical properties of the material, weather conditions, spill versus fire, topography, etc.
 - › **EVACUATION:** suggests protective distances for immediate precautionary measures defined for small and large spills, including suggested guidance for conditions where fire is present or likely (potential fragmentation hazard).
 - The term “isolate” indicates a zone of no entry that applies to the public and first responders who are not equipped, trained, and prepared to mitigate the incident.
 - The term “evacuate” indicates people should be removed from inside this zone, if it can be done safely. If removal is too risky, sheltering-in-place can also be considered in this zone. Evacuation aims to protect as many people as possible, and applies mainly to the public.
- Materials highlighted in green in the yellow-bordered and blue-bordered pages direct the reader to consult Table 1, detailing specific response distances for toxic inhalation hazard materials, water-reactive materials and chemical warfare agents (green-bordered pages).
 -  If a Canadian flag appears in this section, and the incident is located in Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product.

4

EMERGENCY RESPONSE

- This section is divided into three subsections:
 - › **FIRE:** provides extinguishing procedures for **Small Fire, Large Fire, and/or Fire Involving Tanks or Car/Trailer Loads**
 - › **SPILL OR LEAK:** includes general recommendations, and may describe the response procedure for **Small Spill and Large Spill**
 - › **FIRST AID:** provides general guidance prior to seeking expert medical care.

GUIDE EXPLOSIVES* - DIVISION 1.1, 1.2, 1.3 OR 1.5

112

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **MAY EXPLODE AND THROW FRAGMENTS 1600 METERS (1 MILE) OR MORE IF FIRE REACHES CARGO.**
- For information on "Compatibility Group" letters, refer to Glossary section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- **CALL 911. Then call emergency response telephone number on shipping paper.** If shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Ventilate closed spaces before entering, but only if properly trained and equipped.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing provides thermal protection **but only limited chemical protection.**

EVACUATION

Immediate precautionary measure

- Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions.

Large Spill

- **Consider initial evacuation for 800 meters (1/2 mile) in all directions.**

Fire

- If rail car or trailer is involved in a fire, **ISOLATE** for 1600 meters (1 mile) in all directions; also, initiate evacuation including emergency responders for 1600 meters (1 mile) in all directions.



In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please consult the shipping paper and/or the ERAP Program Section (page 390).

*** FOR INFORMATION ON "COMPATIBILITY GROUP" LETTERS, REFER TO THE GLOSSARY SECTION.**

EMERGENCY RESPONSE

FIRE

CARGO Fire

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 1600 meters (1 mile) in all directions and let burn.
- **Do not move cargo or vehicle if cargo has been exposed to heat.**

TIRE or VEHICLE Fire

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned master stream devices or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by, at a safe distance, with extinguisher ready for possible re-ignition.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames) from immediate area.
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- **DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 METERS (330 FEET) OF ELECTRIC DETONATORS.**
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Call 911 or emergency medical service.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Move victim to fresh air if it can be done safely.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

*** FOR INFORMATION ON "COMPATIBILITY GROUP" LETTERS, REFER TO THE GLOSSARY SECTION.**

Appendix 4: Sample Waybill

Sangamon Railroad Waybill - Page 1

Shipment Information

Equipment Id UTLX999999
Car Kind T12
Load/Empty Empty
Commodity 4935240
Rail Origin City Name, IL
Rail Destination City Name, IA

Billing Information

Waybill Number 123456
Waybill Date 1/1/26
Receipt Time 1/1/26 12:00 PM
Waybill Type Single Shipment Billing
Equipment Use Rail Car
Bill of Lading Number NS
Payment Non Revenue
Movement Authority 9XYZ
Sender Id XXZZ

Customer Information

Consignee GOOD BUSINESS
600 ROUTE 99
ANYWHERE, USA
Shipper OTHER BUSINESS
100 MAIN STREET
ANYWHERE ELSE, USA

Weight Information

1 Car
Tare Weight 60000 lbs

Additional Reference Identification

BM – Bill of Lading Number: NS

Price Documents

Rate Authority UPC 57054.006
Tariff And Item Number 1 RR1
Tariff And Item Number 2 RR2

Route Information

Carrier Junction
RR1 WTSKA, IL
RR2

Lading Description

1/T

RESIDUE: LAST CONTAINED
UN1824

SODIUM HYDROXIDE SOLUTION
EMERGENCY CONTACT: 8
8004249300 PG II
RQ (SODIUM HYDROXIDE)
TN=CAUSTIC SODA SOLUTION
SHIPPER CONTACT
CCN214237
HAZMAT STCC = 4935240
PLACARDED CORROSIVE
SODIUM HYDROXIDE

Shipment Special Condition Information

MC – Corrosive Residue

Sangamon Railroad Waybill - Page 2

Historic Movement Events

Event	Location	Local Time	RR / Train ID
Release from Industry	City, State	8/30 10:35	RR1/L1234
Apply Waybill		8/30 10:39	
Release from Industry	City, State	9/4 16:18	RR1/L9999
Train Departure	City, State	9/4 16:23	RR1/L9999
Train Departure	City, State	9/6 10:36	RR1/L8888
Train Arrival	City, State	9/6 11:33	RR1/L8888
Train Departure	City, State	9/8 9:13	RR1/L8888
Release from Industry	City, State	9/8 10:59	ZZZZ
Interchange Receipt	City, State	9/8 12:46	RR1/L7777
Interchange Receipt	City, State	9/9 11:59	RR1/L7777
Train Departure	City, State	9/9 12:21	RR2/L1234
Train Arrival	City, State	9/9 14:38	RR2/L1234

Appendix 5: Sample Bill of Lading

*****DANGEROUS*****				Shippers BOL No 00999999	Revision 1
FOR EMERGENCY CONTACT IN U.S. CALL CCN214237 800-424-9300					
Car No: UTLX 999999		Bill Type: REVENUE		Ship Date: 1/1/2026	
Destination: LAND, IN		Origin: MANIA, LA			
Routing: RR1-WTSKA-RR		Switching Info:			
Care Of/ShipTo INDIANA CHEMICALS 9999 US 99 WEST LAND, IN 99999			Shipper LOUISIANA SHIPPER 0 LA HWY 99 MANIA, LA 99999		
Consignee INDIANA CHEMICALS 9999 US 99 WEST LAND, IN 99999			Freight Charges SHIPPER P.O. BOX 9999 SON, SC 99999		
Lessee:		Sect 7: NO		Freight: PREPAID Fob: ORIGIN Rule-11: Y	
Reference No ORDER NO - 99999999 CUSTOMER NUMBER - 9999 LOT NUMBER - 9999999999 PURCHASE ORDER NUMBER - 99999 DRY SHORT TONS - 51.115					
RR Contract: RR999, UPC57054.006 Product: CAUSTIC SODA SOLUTION 50% STCC Code: 4935240 <u>HAZMAT Information</u> UN1824// SODIUM HYDROXIDE SOLUTION//B//PGII RQ (SODIUM HYDROXIDE) Placards: CORROSIVE					
No. Of Packages: 1-RAILCAR		Seal No's: SHN433125			
Car Capacity	Loaded - LB = <u>ORIGIN</u> WEIGHTS			CERTIFIED OR TARIFF WEIGHT (SUBJECT TO CORRECTION) 199,300	
	GROSS WT 260,600	TARE WT 61,300	NET WT 199,300		
Comments: 19214					

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SIGNATURE _____

Appendix 6: Sample Train Consist

Train/Job	Conductor				
Name	Category – Secondary Manifest Type-Thru				
Engine – Ident	Horsepower	Length	Weight Status		
6142	3000	69	200E		
1001	3000	74	200E		
1005	3000	74	200E		
Total	9000 HP	217 Feet	600 Tons		
Train/Job	SEQ Equipment ID	KND	GWT	COMDTY	CITY/STATE CONSIGNEE
BLOCK					
1	BJOX 278	LC4T	131	Corn	Memphis, TN
2	BJOX 109	LC4T	131	Corn	Memphis, TN
3	BJOX 110	LC4T	131	Corn	Memphis, TN
4	CRDX 7227	LC4T	131	Corn	Memphis, TN
5	RTMX 21065	ET29	35		Chicago, IL
R50 SPEED RESTRICTED CAR					

* Hazardous Materials *					

1/TC					
Residue: Last Contained					
UN 1090					
Acetone					
3//PG II					
RQ (Acetone)					
Emergency Contact: Chemtrec 1-800-424-9300					
STCC 4908105					
6	GAPX 6075	LT19	38	POIS B	Chicago, IL.
R50 SPEED RESTRICTED CAR					

* Hazardous Materials *					

1/TC					
UN 2312					
Phenol, Molten					
6.1//PG II					
RQ (Phenol)					
Emergency Contact: Chemtrec 1-800-424-9300					
STCC 4921220					

Appendix 7: FRA and PHMSA Data Sources

Railroads must make an immediate telephonic report for certain incidents to the National Response Center ([NRC](#)), which is staffed 24/7 by the U.S. Coast Guard. The NRC notifies the Federal Railroad Administration (FRA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), and the National Transportation Safety Board (NTSB), and other federal agencies (see regulation links below). By application, the NRC also provides “*real-time incident notifications for state agencies that have a regulatory/enforcement or response authority for environmental, railroad, or maritime security incidents*”. This includes IEMA and ICC.

Per [92 IL Adm Code 1515.10\(c\)](#), “*telephonic reports submitted to the FRA shall also be submitted to Illinois Emergency Management Agency (IEMA) by calling (217) 782-7860 day or night.*” IEMA in turn contacts the ICC Rail Safety Section via email, or phone outside of business hours, dependent upon the incident.

FRA

[49 CFR 225.9 Telephonic reports of certain accidents/incidents and other events.](#)

[49 CFR 225.11 Reporting of accidents/incidents.](#)

[Rail Equipment Accident/Incident Data \(Form 54\) | Department of Transportation - Data Portal](#)

PHMSA

[49 CFR 171.15 Immediate notice of certain hazardous materials incidents.](#)

[49 CFR 171.16 Detailed hazardous materials incident reports.](#)

[Incident Statistics | PHMSA \(dot.gov\)](#)

Railroads are required to submit detailed written reports (generally within 30 to 60 days) for the incidents requiring immediate calls to NRC, as well as incidents meeting other regulatory thresholds. The reporting requirements for each agency, and the publicly available databases vary. The tables on the following pages are drawn from FRA and PHMSA databases showing the number of reported hazardous material incidents, releases, community impacts, and damage costs in 2023. Incidents can result in a range of releases from a few ounces of diesel fuel up to an entire tank car. The PHMSA reported incidents are included within Tables A and C of this report. The FRA table identifies where incidents included damage to hazmat cars. These incidents may not be submitted to NRC or IEMA, and there are typically more reports submitted to IEMA overall - most involving diesel fuel and locomotives.

IEMA Dispatch	(217) 782-7860
NRC Hotline	(800) 424-8802 or (800) 424-0201

Through one of the same telephone numbers (800-424-0201), the National Response Center (NRC) also receives notifications of rail accidents for the National Transportation Safety Board ([49 CFR part 840](#)) and the Research and Special Programs Administration of the U.S. Department of Transportation (Hazardous Materials Regulations, [49 CFR 171.15](#)). FRA Locomotive Safety Standards require certain locomotive accidents to be reported by telephone to the NRC at the same toll-free number (800-424-0201). [49 CFR 229.17](#).

PHMSA Table: 2024 Rail Incidents Involving Hazardous Materials

Date Of Incident	Incident Time	Incident County	Incident City	Railroad	Quantity Released	Unit Of Measure	Identification Number	Commodity Long Name	Class	Total Damages	Causes of Failure	Evac?	Incident Result
2/6/2024	5:00 PM	Rock island	Cordova	CPKC-Soo	0.0470	LGA	NA1993	COMBUSTIBLE LIQUID, N.O.S.	2	\$10,000	Defective Component or Device; Loose Closure, Component, or Device	No	Spillage
3/6/2024	9:00 AM	St Clair	Centreville	UP	0.1337	GCF	UN1075	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	2.1	\$0	Improper Preparation for Transportation	No	Vapor(Gas) Dispersion
3/7/2024	9:30 AM	St Clair	Centreville	UP	0.1337	GCF	UN1075	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	2.1	\$0	Improper Preparation for Transportation	No	Vapor(Gas) Dispersion
3/12/2024	9:35 AM	St Clair	Dupo	UP	0.1337	GCF	UN1075	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	2.1	\$0	Improper Preparation for Transportation	No	Vapor(Gas) Dispersion
3/26/2024	9:37 PM	Cook	Northlake	UP	1.0	LGA	UN3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	\$7,100	Impact with Sharp or Protruding Object (e.g., nails)	No	Spillage
4/30/2024	11:42 AM	Cook	Hodgkins	BNSF	1.0	LGA	UN1206	HEPTANES	3	\$1,510	Improper Preparation for Transportation	No	Spillage
5/13/2024	7:13 AM	Randolph	Chester	UP	10.0	LGA	UN1824	SODIUM HYDROXIDE, SOLUTION	8	\$0	Over-pressurized	No	Spillage
5/19/2024	2:25 AM	St Clair	East St Louis	UP	0.0156	LGA	UN1789	HYDROCHLORIC ACID	8	\$0	Inadequate Preparation for Transportation	No	Spillage
6/27/2024	10:50 AM	Cook	Matteson	CN-WC	1.3368	GCF	UN1075	PETROLEUM GASES, LIQUEFIED OR LIQUEFIED PETROLEUM GAS	2.1	\$767,744	Derailment	Yes	Vapor(Gas) Dispersion
7/7/2024	6:30 PM	Cook	Chicago	NS	5.0	LGA	UN1133	ADHESIVES, CONTAINING A FLAMMABLE LIQUID	3	\$5,500	Inadequate Blocking and Bracing	No	Spillage
7/17/2024	9:10 PM	Cook	Melrose Park	UP	50.0	LGA	UN1832	SULFURIC ACID, SPENT	8	\$10,000	Human Error	No	Spillage
7/17/2024	9:25 AM	St Clair	Sauget	CPKC-KCS	0.0017	GCF	UN1005	AMMONIA ANHYDROUS	2.2	\$10,000	Inadequate Preparation for Transportation; Loose Closure, Component, or Device	No	Vapor(Gas) Dispersion
8/5/2024	9:19 AM	Will	Joliet	UP	1.0	LGA	UN1866	RESIN SOLUTION, FLAMMABLE	3	\$1,600	Inadequate Blocking and Bracing	No	Spillage
10/3/2024	6:53 PM	Will	Joliet	UP	1.0	LGA	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. OR POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	\$0	Inadequate Blocking and Bracing	No	Spillage
10/15/2024	7:20 AM	St Clair	East St Louis	UP	1.3368	GCF	UN1010	BUTADIENES, STABILIZED OR BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED CONTAINING MORE THAN 40% BUTADIENES	2.1	\$0	Improper Preparation for Transportation	No	Vapor(Gas) Dispersion
10/19/2024	3:30 PM	Cook	Northlake	UP	25.0	LGA	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.	9	\$7,000	Inadequate Blocking and Bracing	No	Spillage
11/8/2024	2:18 PM	Will	Joliet	UP	5.0	LGA	UN3109	ORGANIC PEROXIDE TYPE F, LIQUID	5.2	\$12,000	Inadequate Blocking and Bracing	No	Spillage

FRA Table: 2024 Rail Incidents Involving Hazardous Materials

Date	Time	RR	Accident Type	Hazmat Cars in Consist	Hazmat Cars Damaged	Hazmat Released Cars	Persons Evacuated	City	County Name	Equipment Type	Train Speed	Gross Tonnage	Train Length	Crew	Total Damage Cost	Primary Accident Cause	Total Persons Killed	Total Persons Injured	Narrative
1/24/2024	9:26 AM	ALS	Derailment	3	3	0	0	EAST ST LOUIS	ST CLAIR	Yard/switching	8	7,954	6,986	2	\$47,093	Power switch failure	0	0	YAS102-24 ON THE M376-24 COMING OFF 5 PER 4 LEAD LINED TO CROSSOVER AT THE 7/8 SWITCH TO GET ON EASTTRACK TO SHOVE BACK FOR 2 LEAD. THE SWITCH LINED UNDERNEATH THE TRAIN AFTER APPROX 80 CARS HAD PASSED THROUGH THE SWITCH. DERAIL OCCURRED 10 CARS FROM THE REAR. DERAILING 4 CARS. CAUSE DETERMINED ONSITE FOR SIGNAL.
3/30/2024	12:00 PM	ALS	Derailment	6	3	0	0	EAST ST LOUIS	ST CLAIR	Freight Train	10	13,401	9,325	2	\$48,035	Engineering design or construction	0	0	YAS102-30 WAS DEPARTING ALS GATEWAY YARD OFF OF 1 LEAD WITH PERMISSION FOR CAHOKIA IND LEAD TO GO TOTRRA VIA OIL WORKS. SIGNAL AT TA004 WAS DARK AND CREW STOPPED TO NOTIFY TRRA WEST BELT DISPATCHER.ONCE CREW WAS INFORMED THAT IT WAS OK, THEY BEGANTO PULL TRAIN AGAIN THEY DERAILED 4 CARS ON THEIRTRAIN. **TRRA MAINTAINS TRACK. TRRA TRACK DAMAGE = \$17,642**
6/27/2024	10:50 AM	WC	Derailment	51	20	2	300	MATTESON	COOK	Freight Train	21	11,468	9,099	3	\$2,034,252	Buffing or slack action excessive, train handling	0	2	X39691-26 EXPERIENCED AN EMERGENCY BRAKE APPLICATION. AFTER REPORTING EMERGENCY APPLICATION TO RTC,CONDUCTOR PROCEEDED TO WALK THE TRAIN AND DISCOVERED 6 UPRIGHT DERAILED CARS ATTACHED TO HEADEND CONSIST, AND THE FOLLOWING 19 CARS DERAILED BEHIND THE SEPARATED PORTION OF THEIR TRAIN. UPON REVIEW OFTHE LOCOMOTIVE DOWNLOAD, IT WAS DISCOVERED THAT THE ENGINEER DID NOT USE PROPER FORWARD PLANNING.
7/2/2024	9:30 PM	ALS	Derailment	13	1	0	0	EAST ST LOUIS	ST CLAIR	Yard/switching	4	3,092	4,466	2	\$16,094	Failure to comply with restricted speed or its equivalent not in connection with a block or interloc	0	0	THE YAS224-02 POKED OUT OF 905 EAST END TO SHOVE TRAIN ON 903 TRACK AND UNKNOWNINGLY RAN THROUGH THESWITCH. THE CHURCH INDUSTRIAL LEAD SWITCH WAS PREVIOUSLY RUN THROUGH WHEN THE CREW CAME BACK AND DERAILED 16 CARS WHILE SHOIVING WEST.
7/6/2024	1:36 AM	UP	Other impacts	11	2	0	0	MELROSE PARK	COOK	Freight Train	7	8,441	5,417	2	\$241,393	Shoving movement, man on or at leading end of movement, failure to control	1	0	MCBCH-05, WHILE SHOIVING WEST ON THE CITY LEAD STRUCK THE MPRNL-06, RESULTING IN TWO CARS DERAILING (HKRX173030 AND GATX64416) AND A FATALITY.