

E101 Agricultural Spills



Andy Stinchfield

On-Scene Coordinator

*Office of Land Quality, Emergency Response Section
Indiana Department of Environmental Management*

327 IAC 2-6.1 Spill Rule

Rule applies to:

- Containment.
- Response.
- Reporting.

For spills of:

- Hazardous substances.
- Extremely hazardous substances.
- Petroleum.
- Objectionable substances.



Spill Definition

"Spill" means any unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge or other loss of petroleum, hazardous substances, extremely hazardous substances, or objectionable substances. The term does not include releases to impermeable surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.





Containment, Response, Reporting

- Sec. 7. Any person who operates, controls, or maintains any mode of transportation or facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the state, do the following:
 1. Contain the spill, if possible, to prevent additional spilled material from entering the waters of the state.
 2. Undertake or cause others to undertake activities needed to accomplish a spill response.
 3. As soon as possible but within two hours of discovery, communicate a spill report to the Department of Environmental Management, Office of Environmental Response: 888-233-7745 (toll-free) or 317-233-7745.



Reportable Spills: Facility, Water, Soil

- Spills of hazardous substances or extremely hazardous substances when the amount spilled exceeds 100 pounds or the reportable quantity, whichever is less.
- Spills of petroleum when the amount spilled exceeds 55 gallons; or spills of petroleum of such quantity as to cause a sheen upon the waters.
- Spills of objectionable substances as defined in section 4(11) this rule.



Spills of Hazardous and Extremely Hazardous

- **Hazardous substance** has the meaning set forth in 42 USC 9601(14).
- **Extremely hazardous substance** means a substance identified pursuant to 42 USC 11002 and 11004 (40 CFR 355 Appendix A).
- **Reportable quantity** means the amount of hazardous substance or extremely hazardous substance that is required to be reported under federal law under 42 USC 9602(a) and (b) and 42 USC 9603(a) (40 CFR 302.4 or 40 CFR 355 Appendix A).



United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
(5104)

EPA 550-B-01-003
October 2001
www.epa.gov/ceppo



LIST OF LISTS



Consolidated List of Chemicals
Subject to the
Emergency Planning and
Community Right-To-Know Act
(EPCRA) and Section 112(r) of
the Clean Air Act

- EPCRA Section 302 Extremely Hazardous Substances
- CERCLA Hazardous Substances
- EPCRA Section 313 Toxic Chemicals
- CAA 112(r) Regulated Chemicals For Accidental Release Prevention

Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Reportable Quantity Example

- Release of 15 pounds of chlorine. The RQ for chlorine is 10 pounds.
Uses for Chlorine: Disinfectant for water purification, swimming pools.
- **Reporting required.**
- Spills of hazardous substances or extremely hazardous substances when the amount spilled exceeds 100 pounds or the reportable quantity, whichever is less.



Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Reportable Quantity Example

- Release of 200 pounds of ferric chloride. The RQ for ferric chloride is 1000 pounds.

Uses for Ferric Chloride: Treatment of sewage and industrial waste, water purification, feed additive, disinfectant.

- **Reporting required; did not exceed RQ but release greater than 100 pounds.**
- Spills of hazardous substances or extremely hazardous substances when the amount spilled exceeds 100 pounds or the reportable quantity, whichever is less.



Spills of Petroleum

- Spills of petroleum of such quantity as to cause a sheen upon the waters.
- Spills of petroleum when the amount spilled exceeds 55 gallons.



Spills of Objectionable Substances

- **Objectionable substances** means substances that are:
 - Of a quantity, and a type; and
 - Present for a duration and in a location; to damage waters of the state.



Release To Air/Atmosphere

- Report if exceeding RQ of hazardous or extremely hazardous substance.
- Report if immediate threat to human health and safety, animals, plants, or environment.





Exclusions

- Discharges or exceedances that are under... an applicable permit.
- Lawful applications, including dust suppressions and agriculture chemicals.
- The application of petroleum necessary for construction that does not damage waters of the state.
- Spills of less than 1 pound or 1 pint.
- Spills of integral operating fluids, in the use of motor vehicles or other equipment, the total volume of which is $<$ or $=$ to 55 gallons and which do not damage waters of the state.
- Oil sheens... from properly operating watercraft.
- Release of a substance... approved by state or fed on-scene coordinator.

Important Things To Look For

- Spills that threaten public health.
- Spills that enter water.
- Spills to soil.
- Spills that enter underground piping.



Spills That Threaten Public Health

- Greater chance for human contact.
- Need immediate attention.



Spills To Water

- Flowing/discharging vs. standing/contained.
- Live, stressed or dead animals and plants.
- Discoloration, chemical odors, etc.



Spills To Soil

- Soil type: sandy, clays, rocky, mixture.
- Subsurface drainage.
- Spills to soil may threaten water, surface, and subsurface.



Spills Into Underground Piping

- Storm sewers, check manholes, and outfall.
- Combined sewers, call wastewater utility.
- Sanitary sewers, call wastewater utility.
- Tile drains, check outfall.



Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Agriculture



Unknown

Start of an investigation.



Looks Suspicious!

Blue staining ag supplier, estimated 1.5 mile from tile outfall.



Something Blue Happened Here

Pooling of substance in gravel lot and in secondary containment of storage tanks.



Source

Blue dye was used to check tanks for leaks, when the blue dye water was released, it had residual ammonia with it.



Aerial Application of Fungicide



Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Conservation Club Lake

Booms in place for fuel spill, no visual signs of stressed or dying aquatic life, samples collected from lake, no contaminants found.



Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Happy Fourth of July!

Polly tanks containing liquid 28% fall off truck, in residential area, on busy road, start of holiday weekend.



Clean Up Begins

That's 28% nitrogen fertilizer on someone's front porch.

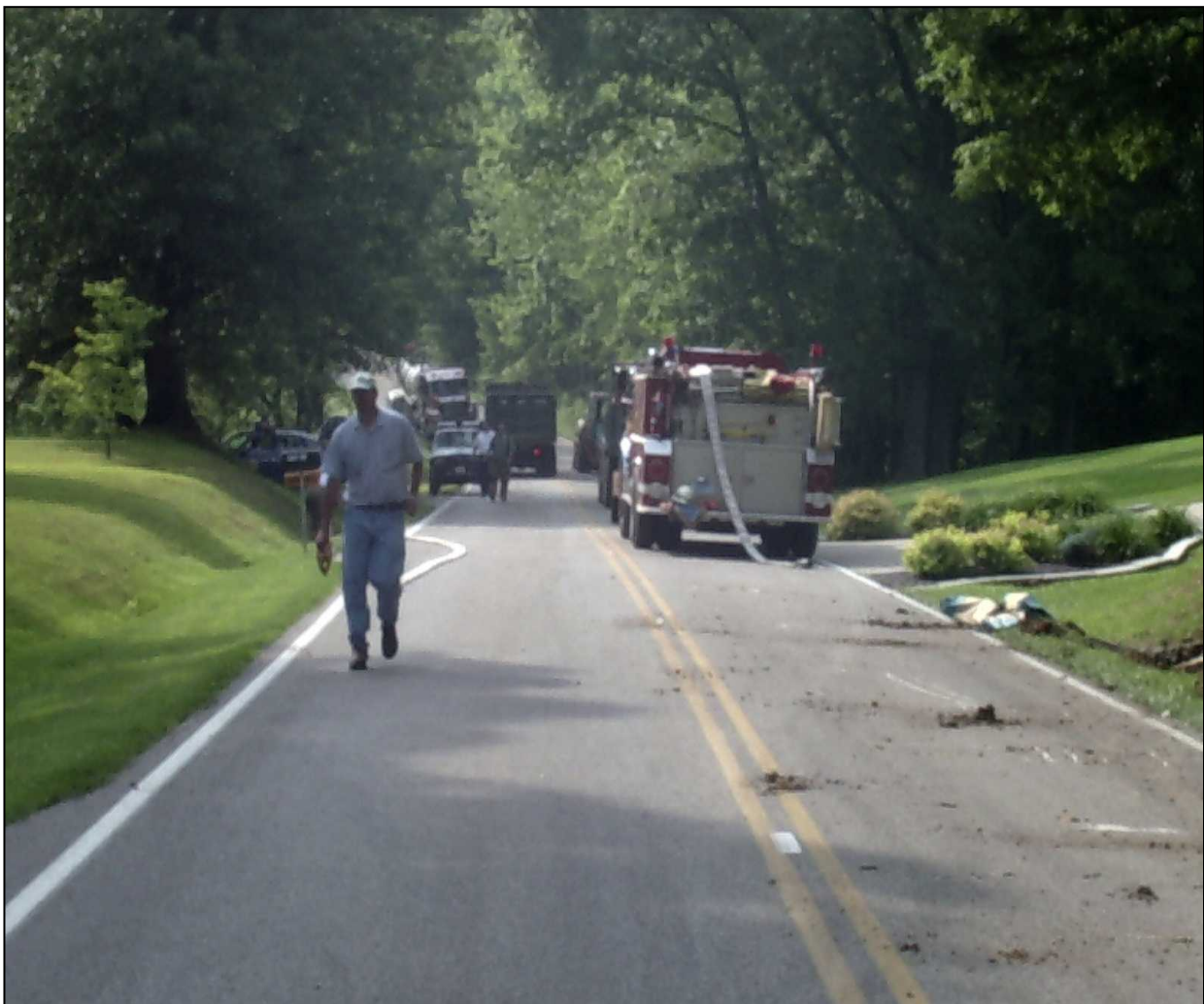


Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Clean Up Continues



Almost Done



Manure



Manure



Manure



Manure



Celebrating Thirty-Five Years of Protecting Hoosiers and Our Environment

Objectionable Substances





Questions?

Andy Stinchfield

Senior Environmental Manager

On Scene Coordinator, Emergency Response

IDEM Southwest Regional Office

114 South 7th Street, PO Box 128

Petersburg, Indiana 47567

Email cstinchf@idem.IN.gov

Toll-free 888-672-8323

24 Hour Spill Reporting 888-233-7745

