

New York State Department of Environmental Conservation

Spill Incidents - Overview

General Description

This dataset contains records of spills of petroleum and other hazardous materials. Under State law and regulations, spills that could pollute the lands or waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spill). Each spill record includes:

- Administrative information (DEC region and unique seven-digit spill number).
- Facility type.
- Spill date/time.
- Location.
- Contributing factor.
- Spill source and cause.
- Material(s) and material type spilled.
- Quantity spilled and recovered.
- Surface water bodies affected.
- Close date (cleanup activity finished and all paperwork completed).

Unfortunately, accidental releases of petroleum and/or other hazardous materials occur throughout New York State. Even small releases have the potential to endanger public health and contaminate groundwater, surface water, and soils.

Every year, DEC receives approximately 15,000 reports of confirmed or suspected releases to the environment. Approximately ninety percent of those releases involve petroleum products. The rest involve various hazardous materials, unknown materials, or other substances such as untreated sewage and cooking grease.

Environmental damage from such releases depends on the material spilled, the quantity spilled and the extent of contamination. Many of these reports are releases of small quantities, typically a few gallons that are contained and cleaned up quickly with little or no damage to the environment. In other instances, material releases may seep through the soil and eventually into the groundwater, which can make water supplies unsafe to drink. Vapors from spilled materials may also collect in houses and businesses, creating potential indoor air health concerns or fire/explosion hazards. Uncontained spills, especially those that impact surface water, can kill or injure plants, fish, and wildlife, and cause damage to their habitats.

Federal and State laws require prompt reporting of petroleum and other hazardous material releases to allow quick response. DEC responds to reports through the Spill Response Program.

Both immediate response and continued cleanup vary depending on the type of material spilled and the resulting impacts to the environment. Federal and State law require the spiller, or responsible party, to notify government agencies and to contain, clean up, and dispose of any spilled/contaminated material in order to correct any environmental damage. This cleanup is typically undertaken by a qualified contractor hired by the responsible party. Any delay in containing or recovering a release allows contaminants to spread and may result in more extensive damage and more expensive

cleanups. If the responsible party is unable or unwilling to do the necessary work, DEC will use its staff and contractors to complete the cleanup and seek to recover its costs from the responsible party. DEC can provide additional resources to local agencies during emergencies and will remain involved if continued cleanup of the environment is required. Continued cleanup is the responsibility of the spiller and is required if contamination and environmental damage remain after the initial containment and recovery. Continued cleanup may include determining the extent of contamination, selecting a cleanup technology, and completing remedial actions. DEC oversees the process to ensure the actions are protective of public safety, health and the environment pursuant to Article 12 Section 176 of the Navigation Law and regulations developed under Article 37 Section 105 of the ECL (i.e., 6NYCRR Parts 596-599).

Detailed spill response and reporting requirements, including specific law and regulatory citations can be found on DEC's public web site at: <http://www.dec.ny.gov/chemical/8692.html>.

Data Collection Methodology

Site location coordinates determined through various means, including mailing address, identification on a map, and the use of global positioning systems.

Statistical and Analytic Issues

Not applicable.

Limitations of Data Use

Data is entered from each spill incident as reported. NYSDEC is unable to field check and verify all reported information and therefore incomplete or inaccurate information may result. NYSDEC provides this data "as is." The burden for determining fitness for its use lies entirely with the user. All documentation provided is an integral part of the data set. The Data Overview document provides critical context to understanding and minimizing misinterpretation of the spill data and must accompany any reuse of this dataset.

General notes on data field limitations:

- Many of the data fields are not required, and are estimates used to capture additional information which may be useful for specific cases. Therefore, many fields for specific records are blank. NYSDEC revises data from time to time to reflect updated information or corrections.
- Many of the recorded large quantity spills are associated with combined sewer overflows, which are reported to the public under the DEC's "Sewage Discharge Reporting" program (see <http://www.dec.ny.gov/chemical/90321.html>). During periods of heavy rainfall or snowmelt, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, or other water bodies. These overflows may contain not only stormwater but also untreated human and industrial waste. Depending upon the nature of the event and the dilution of any industrial waste and toxic materials spilled into nearby water bodies, it may not be possible to recover any of the spill. Due to dilution and the physical limitations of what can be recovered, the amount recovered may show as "0."

- Multiple rows with the same spill number will occur for spills with multiple materials.
- The amount of contaminated soil or water can be combined with the spilled material causing the amount recorded as recovered to be larger than the amount spilled.
- The NYS Spill Fund began operating in 1978 but some spills in the dataset were known to have occurred prior to 1978. Many of these older dates are estimates.