

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Cleanup and Brownfields

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TITLE: Policy for Coordinating Immediate Responses and Final Remediation of Releases of Regulated Substances

EFFECTIVE DATE: January 3, 2015

AUTHORITY: The Clean Streams Law (35 P.S. §§ 691.1 – 691.1001), the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), the Hazardous Sites Cleanup Act (35 P.S. §§ 6020.101 – 6020.1305), the Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101 – 6026.908), the Air Pollution Control Act (35 P.S. §§ 4001 – 4106), the Infectious and Chemotherapeutic Waste Law (35 P.S. §§ 6019.1 – 6019.6), and the Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101 – 6021.2104).

POLICY: This policy summarizes how the Department of Environmental Protection (DEP) oversees immediate responses and final remediation of releases of regulated substances.

PURPOSE: The purpose of the policy is to facilitate the consistent investigation of and the response to releases of regulated substances in accordance with the Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101 – 6026.908, “Act 2”).

APPLICABILITY: This policy applies to DEP personnel who oversee and to persons who implement responses to releases of regulated substances under the scope of this guidance document.

DISCLAIMER: The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give these rules that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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Scope

This policy applies to releases of regulated substances as those terms are defined in Act 2. This policy does not apply to the following:

- The handling, use and disposal of regulated substances authorized under a Pennsylvania or federal environmental statute, regulation or permit.
- A release to surface waters or to sediments if the release does not affect soil or groundwater.
- The attainment of air quality standards under a Pennsylvania or federal environmental statute, regulation or permit.
- The possession and decommissioning of radiological compounds authorized under Pennsylvania and federal statutes, regulations and permits.
- Mining activities authorized under a Pennsylvania mining statute, regulation or permit, except a release of a regulated substance at a mine site that is under the authority of the Solid Waste Management Act.
- A release from a storage tank that is regulated under the authority of the Storage Tank and Spill Prevention Act.
- A release of a regulated substance that is addressed under the guidance document *“Addressing Spills and Releases at Oil and Gas Well Sites or Access Roads,”* Number 800-5000-001.

Program Coordination and Act 2 Authority

DEP personnel are expected to evaluate and oversee remediation of releases of regulated substances within the scope of this guidance in a consistent manner, regardless of which DEP program is assigned. An initial investigation of a release of a regulated substance may be assigned to DEP field operations staff in various programs, as needed. Reports submitted pursuant to the procedures of Act 2 need to be reviewed by Environmental Cleanup and Brownfields staff that have the expertise in applying Act 2. Environmental Cleanup and Brownfields staff will, as needed, provide technical assistance and direction concerning the requirements of Act 2.

The remediation standards established under Act 2 apply to the remediation of a release of a regulated substance under the following laws (35 P.S. § 6026.106):

- Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003).
- Clean Streams Law (35 P.S. §§ 691.1 – 691.1001).
- Air Pollution Control Act (35 P.S. §§ 4001 – 4106).
- Infectious and Chemotherapeutic Waste Law (35 P.S. §§ 6019.1 – 6019.6).
- Hazardous Sites Cleanup Act (35 P.S. §§ 6020.101 – 6020.1305).
- Storage Tank and Spill Prevention Act (35 P.S. §§ 6021.101 – 6021.2104).

Act 2 remediation standards apply to all soil and groundwater contamination from the release of regulated substances. The standards address the applicable human health and ecological exposure pathways associated with the soil and groundwater contamination. Act 2 standards address the remediation of groundwater discharges to surface water and emissions of regulated substances from soil to air.

Disposal of municipal, residual and hazardous wastes must comply with the Solid Waste Management Act and the regulations promulgated under that Act. However, the Act 2 remediation standards apply to the soil and groundwater impacted by regulated substances released from wastes and from waste disposed of prior to September 7, 1980, according to *25 Pa. Code* § 250.9.

A release of a regulated substance directly into surface water or stream sediments, and into air, must comply with other applicable laws and regulations and should comply with applicable guidance documents.

Immediate Responses to a Release of a Regulated Substance and Act 2 Authority

Section 307 of Act 2 provides that the remediation standards established for final remediation do not prevent or impede immediate responses. Although the final remediation of a release of a regulated substance must comply with Act 2, the final remediation will not be prejudiced by a mitigation measure undertaken during the immediate response.

An immediate response is an initial action to mitigate or reduce the immediate threat to the public health or environment. Immediate responses as referenced in Act 2 include emergency responses and interim responses. The difference between an emergency response and an interim response for the purposes of Act 2 relates to the urgency of the situation and the time frame for the response. Mitigation measures may include, but are not limited to, the following:

- Limiting public access to the release area.
- Containing the released material to prevent immediate migration into uncontaminated areas.
- Installing drainage controls to prevent runoff.
- Stabilization and maintenance of containment structures.
- Actions to prevent the further migration of regulated substances, including removal and disposal.
- On-site treatment.

Other state and federal laws and regulations and local ordinances require actions which are not addressed under this guidance. For example, reporting requirements to protect drinking water sources and coordination requirements with emergency response authorities.

DEP staff are expected to encourage responsible persons to proceed with final remediation of soil and groundwater as soon as possible after mitigation measures are implemented, particularly when hazardous substances are released. In some instances, the immediate response may achieve the final remediation when the immediate response includes removal of the released material and contaminated soil.

Final Remediation of a Release of a Regulated Substance within Soil and Groundwater

Final remediation means that either one or a combination of the remediation standards under Act 2 has been attained.

Act 2 and the regulations issued in *25 Pa. Code* Chapter 250 provide for the calculation of Statewide health standard Medium-Specific Concentrations (MSCs) and site-specific standard numeric values for regulated substances in soil and groundwater that are protective of human health and ecological

receptors. The methods and criteria for those calculations are based on established risk assessment principles for substances that are actual or suspected carcinogens and systemic toxicants as defined in Act 2 and the regulations. Statewide health standard MSCs are also established under *25 Pa. Code* § 250.310 for certain substances.

A substance that does not have carcinogenic or systemic toxicological data listed in the sources in *25 Pa. Code* § 250.605 can still impact groundwater or surface water and be a pollutant as defined under the Clean Streams Law, or it may be a constituent in waste regulated under the Solid Waste Management Act. If no MSC is available under the Statewide health standard, final remediation for these substances can only be achieved through background or site-specific standards.

Attaining a Remediation Standard During an Immediate Response

In some cases, immediate responses may meet an Act 2 remediation standard. *25 Pa. Code* § 250.707(b) provides procedures that result in a final remediation for addressing a release of a regulated substance in soils using the Statewide health standard, as follows:

- For a release of a petroleum product where a site characterization has not been performed and where contaminated soil is immediately excavated that is guided by direct reading field instruments, remediators may demonstrate attainment of the Statewide health standard in soil after excavation by conducting a biased sampling procedure provided under *25 Pa. Code* § 250.707(b)(1)(iii)(B). The relief of liability would be limited to the remediated area.
- For a release of a non-petroleum regulated substance where excavation of contaminated soil is immediately undertaken, a remediator may demonstrate attainment of the Statewide health standard in soil after excavation by conducting random sampling and using the simplified 75% 10X statistical test provided under *25 Pa. Code* § 250.707(b)(1)(i). The relief of liability would be limited to the remediated area.

Under the Statewide health and background standards, the normally required Notice of Intent to Remediate, municipal notices, and newspaper notices are not required if the remediator submits the final report demonstrating attainment of the Statewide health or background standard within 90 days of the release. 35 P.S. §§ 6026.302(e)(4) and 303(h)(4). In most cases involving a small release the remediator can promptly excavate the contaminated soil, sample to demonstrate attainment, and submit the final report within 90 days.

The remediator should submit incident reports, disposal documentation or analytical reports pertaining to the immediate response to DEP. DEP staff should not consider these documents to be reports that demonstrate compliance with an Act 2 standard. DEP may send a letter to the remediator to acknowledge receipt of documents related to an immediate response and to encourage the remediator to conduct a final remediation under Act 2. However, DEP staff should not respond to the remediator indicating the remediator has met, attained or complied with an Act 2 standard.

Liability Relief Under Act 2

Act 2 provides relief of liability when a remediator complies with all applicable provisions of a remediation standard or combination of standards, including applicable notice and review procedures.

Compliance and Enforcement

DEP encourages responsible persons to voluntarily conduct a final remediation of a release of a regulated substance under Act 2. In some cases DEP may be satisfied with mitigation measures without reaching final remediation under Act 2. An example would be when spills of milk or vegetable oil are adequately removed to prevent any impacts on surface water.

Enforcement action may be appropriate under the Solid Waste Management Act, the Clean Streams Law and/or the Hazardous Sites Cleanup Act to require responsible persons to conduct a final remediation in accordance with Act 2. The assigned field operations program manager (in consultation with other program managers and the Regional Director as appropriate) should make the decision whether or when to proceed with enforcement action, based on many factors, including, but not limited to, the nature and extent of the contamination and the degree of threat to the public health and environment.

DEP will use applicable guidance and forms when pursuing compliance and engaging in enforcement action.

Civil Penalties and Cost Recovery

A release of a regulated substance may violate provisions of multiple statutes, such as the Solid Waste Management Act, the Hazardous Sites Cleanup Act, and the Clean Streams Law. Monies DEP collects as a result of civil penalty assessments or cost recovery actions involving multiple statutes should be apportioned and deposited to the funds identified in the underlying statutes. Factors to be considered in the apportionment include, but are not limited to, the following:

- Type of substance released.
- Extent of media contaminated.
- Program resources utilized.

DEP Management and Tracking Procedures

Report of Release

A responsible person reports a release to DEP according to established laws, regulations, guidance and forms. Third parties or complainants may also report a release. DEP staff documenting a report not required under statutes or regulations (such as a third-party report or a complaint) should include, at a minimum, the following information:

- Name and Location Information.
 - Name and contact information of individual making the report.
 - Site address.
 - Site municipality and county.
 - Name, address and telephone number of property owner.
- Evidence of a Release.
 - Source and cause of the release (witnesses to the release).
 - Location and extent of the release.
 - Location and extent of visual soil impacts.
 - Free product in groundwater or surface water (e.g. sheen on well water, sumps, surface water).

- Odors present indoors and/or outdoors.
- Odors present in well water supply, sumps, surface water, etc.
- Evaluation of Potential Impacts.
 - Proximity to surface water bodies, storm drains, floor drains, sumps, public or private water supplies, septic systems, structures, utility lines, sinkholes, subsurface mines, etc.
- Actions Taken or Planned by the Responsible Person.
 - Note any containment measures or corrective actions taken or planned.
 - Name and contact information of contractor or consultant (if available).

Documentation and Report Tracking

DEP staff must record each incident and response in eFACTS or the DEP's Complaint Tracking System (CTS) in accordance with all applicable policies and guidance.

Conducting Site Visits

In many cases, a site visit will be necessary to verify whether a release has occurred, to determine the extent or severity of a release, or to evaluate the threats posed by a release. DEP staff should conduct site visits in accordance with all applicable DEP health and safety plans, policies and procedures. Site visits should be coordinated with other programs and agencies as appropriate, such as local emergency management, local health department, codes enforcement officers, or fire marshal.

DEP staff should document the site visit in a site inspection report according to DEP guidance. Relevant information may include the following:

- Inspection summary.
- Persons in attendance.
- Location and date of release.
- Source and cause of release.
- Quantity and type of pollutant released.
- Media impacted (for example: soil, groundwater, surface water, indoor air).
- Description of the extent of the release.
- Receptors impacted or potentially impacted by the release.
- Applicable sections of Pennsylvania law or regulation that were violated.
- Site sketch.
- Photographs of release area and any impacts to receptors.
- Sample collection (if applicable).
 - GPS location information.
 - Results of any air monitoring conducted.
 - Field instrumentation measurements.
- Assessment of actual and potential impacts.
 - Soils.
 - Groundwater.
 - Surface Water.
 - Air.
- Measures taken by responsible party to contain or remediate the release.
- Actions DEP or other agencies have taken to contain or remediate the release.
- Contact information for responsible parties, property owner(s), remediators, consultants, and contractors.