

## Cleanups Using the Statewide Health Standard

## **Explanation**

Anyone who proposes or is required to clean up a site under the Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2) must select one or a combination of the following environmental remediation standards: background, statewide health, and site-specific. A site may also be remediated to special industrial area requirements.

Under the Statewide health standard, the regulations in Chapter 250 establish a list of cleanup levels for certain contaminants. These medium-specific concentrations (MSCs) are the concentrations of contaminants in soil or groundwater for residential and non-residential exposures. The standard may be met by using treatment and removal technologies. The following criteria were used to establish MSCs:

- The concentration of contaminants in groundwater used for drinking or agriculture must meet current drinking water requirements where available. These are maximum contaminant levels (MCLs) or health advisory levels (HALs). For contaminants with no established MCL or HAL, the Department of Environmental Protection (DEP) developed a standard that protects people from ingestion and inhalation risks.
- For residential standards, the concentration of a contaminant in soil must be protective of direct contact with
  the soil up to a depth of 15 feet from the surface. Additionally, contaminants left in the soil must not result in
  excessive contamination of groundwater as determined by one of three methods. Residential standards are
  designed to protect sensitive individuals, such as children, who may be exposed to the contamination for
  extended periods of time.
- For nonresidential standards, the concentration of a contaminant in soil must be protective of direct contact with the soil up to a 15-foot depth. Here, different exposure assumptions, such as limited time of contact with the soil, different activities, and healthy worker population (no children), are used to reflect soil exposure in the workplace. Groundwater must be protected using the same criteria as for residential standards.
- Any needed discharge into surface water or outdoor air occurring during remediation or after attainment of the Statewide health standard shall be in compliance with the regulations applicable to the discharge.
- Specific criteria apply when establishing MSCs for soil and groundwater where no MCLs or HALs are
  established. These criteria were used for establishing the MSC for the ingestion and inhalation of
  groundwater, soils, volatiles, and particulates. The concentrations were calculated using reasonable exposure
  pathway assumptions and exposure factors for residential and nonresidential land use. Calculations were
  based on the following levels of risk:
  - For carcinogens, the MSC is the concentration that represents an excess lifetime cancer target risk of one in 100,000.
  - For systemic toxicants, the MSC is the concentration that would not result in appreciable risk of deleterious effects due to direct ingestion or inhalation by human populations. (Systemic toxicants are materials that produce non-cancer toxic effects in humans.)

Final certification that a site meets the Statewide health standard must be documented as follows:

- Attainment of the applicable MSC must be demonstrated by collecting and analyzing samples from the
  environmental medium of concern, which may include soil and groundwater. An assessment of the vapor
  intrusion exposure pathway and the potential for certain ecological impacts is also required.
- A final report documenting attainment of the Statewide health standard must be submitted to DEP.
- An environmental covenant under the Uniform Environmental Covenants Act may be needed in certain instances.

## **Procedures**

When remediating to the Statewide health standard, the following procedures must be followed to notify DEP and the public about the cleanup:

- A **notice of intent to remediate** must be sent to DEP. DEP will publish an acknowledgment of receipt in the *Pennsylvania Bulletin*.
- A copy of the notice of intent must be sent to the municipality where the site is located. A summary of the notice must be published in a local newspaper.
- **Notice of submission of the final report** demonstrating attainment of the Statewide health standard must be sent to the municipality, published in a local newspaper, and published in the *Pennsylvania Bulletin*.
- DEP will review the final report within 60 days. If DEP does not approve the report or respond with a notice of deficiency within 60 days, the final report shall be deemed approved.

## **Contact Information**

For information concerning this initiative and the Pennsylvania Land Recycling Program, call 717-783-1566 or visit <a href="www.dep.pa.gov">www.dep.pa.gov</a>, under Businesses > Land > Land Recycling. Questions and comments should be sent to <a href="mailto:landrecyling@pa.gov">landrecyling@pa.gov</a>.

Environmental Cleanup Programs	
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Counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia	Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming
South-central Regional Office 909 Elmerton Ave. Harrisburg, PA 17110-8200 Phone: 717-705-4705 Fax: 717-705-4830	North-central Regional Office 208 West Third St., Suite 101 Williamsport, PA 17701-6448 Phone: 570-321-6525 Fax: 570-327-3420
Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York	Counties: Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union
Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222-4725 Phone: 412-442-4091 Fax: 412-442-4328	Northwest Regional Office 230 Chestnut St. Meadville, PA 16335-3481 Phone: 814-332-6648 Fax: 814-332-6121
Counties: Allegheny, Beaver, Cambria, Fayette, Greene, Somerset, Washington, and Westmoreland	Counties: Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, Lawrence, McKean, Mercer, Venango, and Warren