



New Jersey Department of Environmental Protection

*Glossary of Terms and Acronyms**

Aquifer: An underground layer of rock, sand, or gravel capable of storing water within cracks and pore spaces, or between grains. When water contained within an aquifer is of sufficient quantity and quality it can be tapped and used for drinking. The water contained in the aquifer is called *ground water*.

Cleanup: Remedial measures taken to address a release or potential release of hazardous substances that could affect public health or the environment. The term is often used interchangeably with Remedial Action, Interim Remedial Measure and Construction.

Downgradient: A downward slope that causes water to move toward lower elevations.

Ground Water: Subsurface water that fills pores between materials such as sand, soil or gravel.

Hydraulic Surcharging: The process of injecting additional water to increase the ground water flow (movement rate) in the shallow aquifer.

Infiltration Gallery: A structure consisting of perforated conduits in gravel that is designed to facilitate the transfer of water into an aquifer. It is also sometimes referred to as an infiltration bed.

In-Situ: Latin for “on site”, or “in place.”

Interim Remedial Measure (IRM): An action taken to stabilize a site until final cleanup measures can be implemented.

Lead Azide: An inorganic compound used in the manufacturing of explosives. Its formula is $Pb(N_3)_2$.

Metals: Elements such as mercury, chromium, cadmium, arsenic and lead. They may be harmful to living things at low concentrations and can accumulate in the food chain.

Migration: The movement of contaminants, gases, water or other liquids through porous and permeable subsurface soils or rock.

Monitor Well: Provides access to *ground water* to obtain information about site conditions, such as the nature and extent of ground water contamination, depth to ground water and direction of ground water flow.

New Jersey Pollutant Discharge Elimination System Program (NJPDDES): This program protects New Jersey's ground and surface water quality by ensuring the proper treatment and discharge of wastewater (and its residuals) and stormwater from various types of facilities and activities. The program issues permits that limit the mass and/or concentrations of pollutants that may be discharged into ground water, streams, rivers, and the ocean.

Organic: Relating to chemical compounds that contain carbon.

* This glossary consists of technical terms used by the New Jersey Department of Environmental Protection's (NJDEP) Site Remediation & Waste Management Program and the United States Environmental Protection Agency (USEPA). The terms and abbreviations in this glossary are defined in the context of hazardous waste management and apply to work performed at contaminated sites. These terms may have other meanings when used in other contexts.

Permit-by-Rule: Also referred to as a PBR, it is a document issued by NJDEP that authorizes a *responsible party* to move forward with a discharge or injection related to their *in-situ* remediation activities. It stipulates what will be injected, the volume to be injected, and establishes a monitoring schedule for the responsible party to follow.

Piezometer: A type of well whose primary purpose is to measure the depth to *ground water*.

Pilot Study: A small-scale experiment undertaken to decide how and whether to launch a full-scale project.

Plume: A mass of material, typically a pollutant, spreading from a source.

Potable Water: Water that is safe for drinking and cooking.

Reinjection: Process by which *ground water* that has been extracted and treated to remove contaminants is returned to the aquifer.

Remedial Action (RA): The implementation of a selected remedy. It often follows a Remedial Design.

Remedial Action Work Plan: A plan developed by a responsible party to conduct cleanup work at a contaminated site. It must meet criteria established by the *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E-6).

Remedial Investigation (RI): An in-depth study designed to gather data necessary to determine the nature and extent of contamination at a site and establish criteria for addressing it.

Resource Conservation and Recovery Act (RCRA): A federal statute that requires comprehensive regulation of hazardous waste generation, transport, treatment and disposal. New Jersey has been delegated responsibility for RCRA and has enacted a comprehensive body of regulations to administer the Act, including public hearings.

Responsible Party: An individual or company that contributed to the contamination at a site and is liable for the costs of response actions.

Sediment: The layer of soil and minerals at the bottom of surface waters such as streams, lakes and rivers.

Technical Requirements for Site Remediation: NJDEP's procedures for investigating and cleaning up a site. It is also referred to as the Tech Rule and is codified in N.J.A.C. 7:26.

Tetrachloroethene: Another name for perchloroethylene, or PCE. This chlorinated volatile organic compound is commonly used as a dry cleaning fluid and degreaser.

Trichloroethene: A chlorinated volatile organic compound used as a degreaser in industrial applications. It is also commonly referred to as TCE.

Vapor Intrusion: Occurs when gases from *VOC*-contaminated soil or ground water *migrate* upward, seep through cracks and holes in the foundations or slabs of buildings and accumulate in basements, crawl spaces and/or living areas.

Vapor Mitigation System: A device installed at a building that prevents organic vapors in the soil beneath a building from entering the structure and contaminating the indoor air. It ventilates the soil directly below the basement floor or slab and diverts the vapors away from the building. It is sometimes referred to as a subsurface depressurization system.

Volatile Organic Compounds (VOC): Carbon-containing chemicals that evaporate readily at room temperature. Examples of products that contain VOCs include gasoline, dry cleaning fluid and paint thinners.