

**Pepco Benning Road Facility
Remedial Investigation and Feasibility Study (RI/FS) Project
Glossary of Key Terms**

Term	Definition/Description
Aquifer	An underground formation consisting of materials such as sand, gravel, and soil that can store and supply groundwater to wells and springs. <i>Also see Groundwater.</i>
Background Levels	Concentrations of contaminants expected to occur similarly over a wide area as a result of natural processes or non-point source pollution such as storm water runoff.
Benthic Macroinvertebrates	Small animals lacking a backbone that live among stones, logs, sediments and aquatic plants on the bottom of streams, rivers and lakes.
Closed-Circuit Television (CCTV)	The use of video cameras to transmit a signal to a specific place on a limited set of monitors.
Cooling Tower	A structure that helps remove heat from water used as a coolant in electric power generating plants.
Cove	A cove within the Waterside Investigation Area of the Anacostia River into which outfalls from Pepco's Benning Road facility and other nearby sites discharge.
Dioxins and Furans, referred as Dioxins	Any of a family of compounds known chemically as dibenzo-p-dioxins and furans. These are generally products of incomplete combustion, although natural occurrence of some dioxins has been reported.
Ecological Risk Assessment (ERA)	Application of EPA-approved quantitative and qualitative framework to assess risks to ecological populations. <i>Also see Risk.</i>
Electrical Resistivity Imaging (ERI)	A technology used to identify gross contamination and soil conditions underground without drilling. It uses a low voltage current to scan the subsurface.
Exposure	Contact over a period of time between a human or ecological receptor and contamination in environmental media through inhalation, ingestion, dermal contact, etc.
Feasibility Study (FS)	The process of evaluating cleanup options based on technical, environmental, cost, regulatory and community acceptance considerations to identify the most cost-effective remedy that adequately protects human health and the environment.
Groundwater	Water that fills voids between subsurface materials such as sand or gravel which may be a source of fresh water accessed through wells and springs. <i>Also see Aquifer.</i>
Human Health Risk Assessment (HHRA)	Application of EPA-approved quantitative and qualitative framework to assess risks to human populations. <i>Also see Risk.</i>
Low Effects Level	Contaminant concentration below which no effects are expected in the majority of ecological populations.
Metals	Relatively dense elements (such as Copper, Lead, Zinc) appearing in the environment some of which can be toxic. Metals may be present in the environment naturally and as a result of human activity.
Methyl tert-butyl ether (MTBE)	A gasoline additive often found in groundwater near gas stations where gasoline has been spilled or leaked.
Non-Hazardous	Material not posing significant danger or potential harm to human health or the environment. A waste is considered non-hazardous if certain physical and chemical characteristics of the waste are below regulatory thresholds.
Operational Area	An area of the Site selected for investigation during the RI due to current or former operations with a potential to cause contamination.
Stormwater Outfall	A pipe or other conveyance where stormwater runoff from a facility is discharged into a surface water body such as Anacostia River.
Polycyclic Aromatic Hydrocarbon (PAH)	Chemical compounds that are present in some petroleum products, coal, and tar deposits, or are produced as byproducts of fuel burning. Some are also naturally occurring.
Perchloroethylene (PCE)	A chemical that is commonly used as dry cleaning fluid and a solvent.

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Polychlorinated Biphenyl (PCB)	A group of manmade chemicals used in many different industries and products, including electrical equipment, prior to being banned in the US in 1979. Certain mixtures of PCBs are referred to as Aroclors.
Parts per Billion (PPB)	A unit of concentration used to express the levels of contaminants at a site as one part of contaminant to a billion parts of the environmental medium. This is synonymous with a microgram of contaminant in a kilogram of soil or a liter of water.
Parts per Million (PPM)	A unit of concentration used to express the levels of contaminants at a site as one part of contaminant to a million parts of the environmental medium. This is synonymous with a milligram of contaminant in a kilogram of soil or a liter of water.
Pesticides	Manmade chemicals used for insect and pest control.
Pore Water	Water contained within the pore space of soil or sediment. Pore water measurements are often used to determine the availability of chemicals for uptake by microorganisms in sediment.
Probable Effects Level	Contaminant concentration above which harmful effects are expected to occur frequently in an ecological population.
Project Screening Level (PSL) or Screening Value	A contaminant concentration selected from a variety of sources to determine whether environmental data collected at a site warrants further evaluation. Screening values are not meant to be cleanup levels, but rather are selected to provide a benchmark for evaluating the soil, sediment, surface water, and groundwater data.
Record of Decision (ROD)	A public document that identifies and explains the basis for remedial actions selected to address Site risks. The ROD is based on information and technical analysis generated by the RI/FS, consideration of public comments and community concerns.
Remedial Investigation (RI)	An in-depth study to gather data necessary to determine the types and distribution of contamination at a site and assess risks from the contamination.
Remedial Investigation/Feasibility Study (RI/FS) Work Plan	A document containing a comprehensive description of the work to be performed for an RI/FS, including objectives for sampling, sampling locations, sample collection methods, analytical methods, data management and quality assurance/quality control procedures.
Risk	A measure of the probability of adverse effects to human health and/or the environment as a result of contamination in the environmental media at a site.
Semi-volatile Organic Compound (SVOC)	A class of organic compounds including PAHs that do not evaporate readily at ambient temperatures.
Surface Soil	The uppermost layer of soil at a site, typically the top 6-12 inches.
Surface Water	Bodies of water that are naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.)
Target Area	An area of the Site selected for investigation during the RI due to known or potential contamination from former cleanups or operations.
Treatability Study	Targeted environmental sampling and bench-scale or pilot-scale testing of cleanup options to evaluate the effectiveness of cleanup options during a Feasibility Study.
Vapor Intrusion	A process by which vapors from volatile organic compounds in soil or groundwater migrate into indoor spaces.
Volatile Organic Compounds (VOCs)	A class of organic compounds that evaporate readily at ambient temperatures. Examples are gasoline, dry cleaning fluid and paint thinners.