
NEWTOWN CREEK KEY ACRONYM LIST

Anchor

Anchor QEA, LLC

An environmental science and engineering consulting firm. They are the consultant for the Newtown Creek Group, currently completing field work as part of a multi year phased remedial investigation/feasibility study.

AOC

Administrative Order on Consent

A voluntary and enforceable agreement pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), signed by EPA and potentially responsible parties (PRPs), whereby the PRPs agree to perform and/or pay for some or all of the response costs involved in site cleanup.

BERA

Baseline Ecological Risk Assessment

A process to characterize the current and potential threats to human health and the environment that may be posed by contaminants migrating to groundwater or surface water; releasing to air; leaching through soil; remaining in the soil and bio-accumulating in the food chain.

BHHRA

Baseline Human Health Risk Assessment

The process to estimate the nature and probability of adverse health effects in humans who may be exposed to chemicals in contaminated environmental media, now or in the future.

CAG

Community Advisory Group

A group of representatives of relevant jurisdictions, community stakeholders, residents, and other institutional stakeholders with a stake in the Newtown Creek Superfund Site, with the goal of ensuring broad, diverse representation from communities with an interest in the Site.

CERCLA

Comprehensive Environmental Response, Compensation, and Liability Act

Provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

CM

Creek Mile

A measurement of the Newtown Creek, starting from the mouth of the Creek, every mile upstream is a Creek Mile.

COCs¹

Contaminants of Concern

COCs are contaminants which have been shown through analysis to be those that are likely to be causing risk to human health and the environment at a Superfund Site.

COPC

Contaminant Of Potential Concern

Contaminants which may or may not be causing risk or adverse effects to the plants and animals at a site.

CSOs

Combined Sewer Overflows

A combined sewer system collects rainwater runoff, domestic sewage, and industrial wastewater into one pipe. Normally, it can transport all of the wastewater to a treatment plant. Sometimes the amount of runoff exceeds the capacity of the system. When that happens, untreated stormwater and wastewater flows into nearby waterbodies. These events, called combined sewer overflows (CSOs), are subject to the National Pollutant Discharge Elimination System (NPDES) permitting program.

CSTAG

Contaminated Sediments Technical Advisory Group

CSTAG is comprised of EPA scientists, engineers and site managers with expertise in sediment site management and evaluation. CSTAG members are from EPA Regions, EPA's Office of Research and Development, EPA's Office of Superfund Remediation and Technology Innovation. The U.S. Army Corps of Engineers (USACE) Engineer Research and Development Center also participates.

CSTAG members provide unbiased technical advice and objectively evaluate site-specific information from a scientific and technical perspective. consults and advises on large, complex, or controversial contaminated sediments sites.

FS

Feasibility Study

A study of a hazardous waste site intended to:

1. evaluate alternative remedial actions from technical, environmental, and cost effectiveness perspectives;
2. recommend the cost-effective remedial action; and
3. prepare a conceptual design, a cost estimate for budgetary purposes, and a preliminary construction schedule.

ISS

In-Situ Solidification/Stabilization

In-Situ Solidification and In-Situ Stabilization (ISS) are methods used to treat contaminated soil or sediment. These processes mix treatment chemicals into the soil to reduce the movement and leaching of pollutants, strengthen the soil, and lower its permeability. While both methods aim to contain contaminants, they work differently. In-Situ Solidification binds pollutants into a solid block, trapping them in place. In-Situ Stabilization, on the other hand, uses chemical reactions to make it less likely for contaminants to escape into the environment.

LTCP

Long Term Control Plan

A plan developed by DEC and DEP to reduce combined sewer overflows using a hybrid green and gray infrastructure approach.

LTE or LTEM

Long-Term Equilibrium Model

The Long-Term Equilibrium (LTE) model is a tool used to assess environmental conditions and processes. Developed by the EPA, it relies on empirical data and will be updated with information gathered during predesign investigations and ongoing monitoring. The LTE model replaces the Contaminant Fate and Transport (CFT) model, offering greater transparency and easier updates. It works alongside hydrodynamic and sediment transport models to help understand processes affecting the area, ultimately streamlining decision-making for environmental management.

LTM

Long-Term Monitoring

Long-term monitoring (LTM) refers to the ongoing assessment of a site after a remedy has been selected and implemented. Its purpose is to evaluate how well the cleanup is working, such as how effectively it reduces groundwater contaminants or restores water quality. Once a site reaches the LTM phase, it is generally considered that the initial assessment is complete, and the monitoring system can be adjusted to meet the goals of the LTM program.

MGD

Million Gallons per Day

MS4

Multiple Separate Storm Sewer System

A publicly-owned conveyance or system of conveyances (including but not limited to streets, ditches, catch basins, curbs, gutters, and storm drains) that is designed or used for collecting or conveying stormwater and that discharges to surface waters of the State.

NAPL

Non-Aqueous Phase Liquid

Organic liquid contaminants characterized by their relative immiscibility with water. Common examples of NAPLs are petroleum products, coal tars, chlorinated solvents, and pesticides. NAPL is an example of a source material.

NCA

Newtown Creek Alliance

A community-based organization dedicated to restoring, revealing and revitalizing Newtown Creek. NCA works to restore community health, water quality, habitat, access, and vibrant commerce along Newtown Creek. Since 2002, the Alliance has served as a catalyst for effective community action.

NCG

Newtown Creek Group

The NCG is comprised of five companies: Phelps Dodge, Texaco, BP, National Grid, and ExxonMobil, who entered into an Administrative Settlement Agreement and Order on Consent with the City of New York and the EPA in 2011. The NCG agreed to perform the remedial investigation (RI) and feasibility study (FS) of Newtown Creek and its tributaries.

NCP

National Oil and Hazardous Substances Pollution Contingency Plan

More commonly called the National Contingency Plan, is the federal government's blueprint for responding to both oil spills and hazardous substance releases. The NCP is the result of efforts to develop a national response capability and promote coordination among the hierarchy of responders and contingency plans.

NPL

National Priorities List

An information resource that identifies sites that warrant cleanup. It is a list of the worst hazardous waste sites identified by Superfund. The list is largely based on the score a site receives from the Hazard Ranking System.

NRDA

Natural Resource Damage Assessment

The process of collecting, compiling and analyzing information, statistics or data to determine the extent of injuries to natural resources from hazardous substance releases or oil discharges, and to determine appropriate ways of restoring and compensating for those injuries.

NPL

National Priorities List

An information resource that identifies sites that warrant cleanup. It is a list of the worst hazardous waste sites identified by Superfund. The list is largely based on the score a site receives from the Hazard Ranking System.

NRDA

Natural Resource Damage Assessment

The process of collecting, compiling and analyzing information, statistics or data to determine the extent of injuries to natural resources from hazardous substance releases or oil discharges, and to determine appropriate ways of restoring and compensating for those injuries.

OU

Operable Unit

During cleanup, a site can be divided into a number of distinct areas depending on the complexity of the problems associated with the site. These areas called operable units may address geographic areas of a site, specific site problems, or areas where a specific action is required.

PDI

Pre-Design Investigation

PDI is a process that gathers essential information to support the remedial design of a superfund site. For the Newtown Creek Superfund Site, it involves additional sampling and data collection to better understand contaminant levels in sediments, porewater, and groundwater, as well as investigating the behavior of non-aqueous phase liquids (NAPL). This investigation helps determine design elements for dredging, capping, and shoreline stability, and guides decisions on any necessary upland controls. PDI will also be used to help develop the long-term evaluation monitoring program.

PDRC

Phelps Dodge Refining Corporation

A copper refinery, one of the members of the Newtown Creek Group, operated on the Creek from 1866 to 1983.

PRG

Preliminary Remediation Goals

PRG is the average concentration of a chemical in a specific area that is deemed acceptable to minimize health risks for individuals randomly exposed to that area. If the average concentration exceeds the PRG, some remediation is required to reduce it to the PRG or lower, but not all individual concentrations above the PRG need to be removed.

PRPs²

Potentially Responsible Parties

Any individual or company—including owners, operators, transporters or generators—potentially responsible for, or contributing to a spill or other contamination at a Superfund site. Whenever possible, through administrative and legal actions, EPA requires PRPs to clean up hazardous sites they have contaminated.

PTW

Principal Threat Waste

Principal threat wastes are source materials³ considered to be highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. They include liquids and other highly mobile materials (e.g., solvents) or materials having high concentrations of toxic compounds. No "threshold level" of toxicity/risk has been established to equate to "principal threat".

RD/RA

Remedial Design/Remedial Action

Detailed cleanup plans are developed and implemented during the remedial design/remedial action (RD/RA) stage. Remedial design includes development of engineering drawings and specifications for a site cleanup. Remedial action follows design, and involves the actual construction or implementation phase of site cleanup.

RI

Remedial Investigation

The mechanism for collecting data to characterize site conditions, determine the nature of the waste, assess risk to human health and the environment, and conduct treatability testing to evaluate the potential performance and cost of the treatment technologies that are being considered.

RI/FS

Remedial Investigation/Feasibility Study

This stage involves an evaluation of the nature and extent of contamination at a site and assessing potential threats to human health and the environment. This stage of the process also includes evaluation of the potential performance and cost of the treatment options identified for a site.

ROD

Record of Decision

The ROD explains which cleanup alternatives will be used at NPL sites. Leading up to the issuance of the ROD, the EPA recommends a preferred remedy and presents the cleanup plan in a document called a Proposed Plan for public comment. Following the public comment period, the EPA issues a final Record of Decision.

SMIA

Significant Maritime and Industrial Area

SMIA were designated in the 1992 Comprehensive Waterfront Plan to protect and encourage concentrated working waterfront uses. These six areas are characterized by clusters of industrial firms and water-dependent businesses.

SVOC

Semi-Volatile Organic Compound

SVOCs are more likely to be liquids or solids at lower temperatures. Some examples of products that include SVOCs are many pesticides, oil-based products, and fire retardants. SVOCs can deposit on outdoor surfaces.

TASC

Technical Assistance Services for Communities

TASC provides services through a national EPA contract to help communities better understand the science, regulations and policies of environmental issues and EPA actions. Under the TASC contract, a contractor provides scientists, engineers and other professionals to review and explain information to communities. The services are determined on a project-specific basis and provided at no cost to communities.

TDS

total dissolved solids

The amount of organic and inorganic materials, such as metals, mineral, salt, ions, dissolved in a particular volume of water.

VOCs

volatile organic compound

A group of chemicals that can readily transform into vapor (a gas) at lower temperatures. VOCs are more likely to be dispersed, and monitored for, in the air.

WRDA

Water Resources Development Act

A comprehensive legislative package that provides for the conservation and development of water and related resources. It authorizes the Secretary of the Army, through the Assistant Secretary of the Army for Civil Works, to conduct studies, construct projects and research activities that can lead to the improvement of rivers and harbors of the United States.

Appendix

¹COCs found at the Newtown Creek Superfund Site include:

- Total polycyclic aromatic hydrocarbons (TPAH(34))
- C19- C36 aliphatic hydrocarbons
- Total polychlorinated biphenyls (TPCBs)
- Total dioxins/furans
- Copper
- Lead

²As of March 5, 2025, EPA has issued notice of liability letters naming the following entities as Potentially Responsible Parties (PRPs):

- Phelps Dodge Refining Corporation, Texaco, Inc.
- BP Products North America Inc.
- The Brooklyn Union Gas Company d/b/a National Grid NY
- ExxonMobil Oil Corporation
- The City of New York
- Simsmetal East LLC
- Consolidated Edison Company of New York, Inc.
- National Railroad Passenger Corporation (AMTRAK)
- American Premier Underwriters, Inc.
- SWC Limited Partnership (formerly Connell Limited Partnership)
- The Long Island Railroad Company
- Motiva Enterprises, LLC
- Shell Oil Company
- Darling Ingredients Inc.
- Sunoco Entities: Sunoco, Inc. and Energy Transfer, LP

- Enviri (formerly Harsco Corporation)
- The Brink's Company
- ConocoPhillips
- Howmet Aerospace Inc.
- Pfizer Inc.
- Valvoline Inc.
- Waste Management of New York, LLC
- Cascades Holding US Inc.
- Republic Services, Inc. Entities: Browning-Ferris Industries of New York, Inc. and BFI Waste Systems of New Jersey, Inc.
- Honeywell International Inc.
- U.S. General Services Administration
- U.S. Department of Navy

³Source material is defined as material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to ground water, to surface water, to air, or acts as a source for direct exposure.

Examples of Source & Non-Source Materials

Source Materials

- Drummed wastes
- Contaminated soil and debris
- "Pools" of dense non-aqueous phase liquids (NAPLs) submerged beneath ground water or in fractured bedrock
- NAPL floating on ground water
- Contaminated sediments and sludges

Non-Source Materials

- Ground water
- Surface water
- Residuals resulting from treatment of site materials

Are you interested in joining the CAG? Fill out the application form:

www.newtowncreekcag.org/join-the-cag/

Learn more about the Newtown Creek Superfund Site and the Community Advisory Group:

www.newtowncreekcag.org

This acronym list is prepared by Newtown Creek Alliance. Learn more about their work:

www.newtowncreekalliance.org