NATIONAL PRIORITIES LIST (NPL)

****Proposed NPL Site****

September 2021

MEEKER AVENUE PLUME | Brooklyn, New York
Kings County

Site Location:

The Meeker Avenue Plume (MAP) site is in the Greenpoint/East Williamsburg area of Brooklyn (Kings County), New York and spans several city blocks. The Brooklyn-Queens Expressway (BQE) roughly bisects the site in a west-southwest to east-northeast direction.

Site History:

The MAP site was discovered during the investigation and remediation of an adjacent petroleum plume, when chlorinated volatile organic compounds (CVOC) were found in subsurface soil and groundwater outside of the petroleum spill area. In attempting to identify the nature and extent of the CVOC contamination, the New York State Department of Environmental Conservation (NYSDEC) conducted several subsurface and vapor intrusion investigations since 2007. These investigations, consisting of soil, nonaqueous phase liquid (NAPL), groundwater, soil gas, subslab soil vapor, and indoor air sampling, found CVOC contamination in the subsurface and indoor air of occupied residential and commercial structures above the plume. The extent of groundwater and subsurface vapor contamination associated with the MAP site and the subsequent impacts to indoor air have not been fully delineated. Multiple possible source areas have been and continue to be identified and investigated.

Site Contamination/Contaminants:

The MAP site consists of subsurface CVOC contamination that has entered indoor air. The contaminants most frequently detected are tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), and vinyl chloride in groundwater and indoor air at concentrations exceeding risk-based criteria.

Potential Impacts on Surrounding Community/Environment:

Current land use at the site is a mixture of residential, commercial, and industrial uses. The contaminant plume underlies a multitude of residences and workplaces. Hundreds of residents and workers are exposed to the indoor air contamination that results from vapor intrusion into the structures. Contaminated groundwater in the underlying aquifer flows east-northeast and possibly discharges to Newtown Creek, an arm of the New York-New Jersey Harbor Estuary.

Response Activities (to date):

NYSDEC has conducted several investigations to evaluate and mitigate vapor intrusion to which residents and workers are exposed. NYSDEC has installed mitigation systems in homes and businesses where site contaminants exceed risk-based criteria, and the state continues to investigate the site.

Need for NPL Listing:

The state of New York referred the site to the EPA because groundwater and indoor air contaminated with CVOCs require cleanup to protect human health and the environment. Other federal and state cleanup programs were evaluated but are not viable at this time. NPL listing has been determined to be the most effective approach for cleanup. The EPA received a letter of support for placing the site to the NPL from the state.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at https://www.atsdr.cdc.gov/toxfaqs/index.asp or by telephone at 1-800-CDC-INFO or 1-800-232-4636.