

NPL Site Narrative for Middlesex Sampling Plant (USDOE)

MIDDLESEX SAMPLING PLANT (USDOE)

Middlesex, New Jersey

Conditions at Proposal (September 29, 1998): The Middlesex Sampling Plant (MSP) is located in the Borough of Middlesex, New Jersey. The site consists of three sources known as the Middlesex Municipal Landfill (MML) Pile, the Vicinity Property (VP) Pile, and Facility Soils. The MSP is situated within the Raritan River drainage basin and runoff from the site flows south into a series of ditches, streams and brooks.

The MSP was established in 1943 as part of the Manhattan Engineer District (MED) for sampling, storing and shipping radioactive ores. Over the years that operations were conducted at the MSP, the buildings and soils on the MSP and vicinity land parcels were contaminated with elevated levels of radioactive hazardous substances. In 1967, all activities at the MSP were terminated. In 1980 it was determined that the control of the contamination associated with the MSP would be managed under the U.S. Department of Energy (DOE) Formerly Utilized Sites Remedial Action Program (FUSRAP).

The MML Pile was filled with radioactive material excavated from the MML. The MML is a landfill owned by the Town of Middlesex and was primarily used for the disposal of municipal wastes. Radioactive wastes originating from the MSP were disposed of at the MML. The excavation of radioactive material from the MML was completed in 1986. The VP pile was filled with radioactive soil and material excavated from vicinity properties and a drainage ditch to the south of the MSP. The vicinity properties and the drainage ditch were contaminated from MSP operations. The VP was filled by 1981. The Facility Soils consist of soils situated on the MSP property that have become contaminated with radioactive hazardous substances from the MSP operation. A significant portion of the MSP is covered by contaminated soils that extend to depths of nearly five feet.

Beginning in 1980, investigation studies and environmental surveillance monitoring were conducted under FUSRAP to delineate the nature, extent, fate, and transport of contaminants. Numerous environmental samples have been collected from surface soil, soil boring, ground water, and surface water/sediment sampling locations situated across the MSP. The analytical results of the radiochemical and chemical testing completed at the MSP have indicated the presence of hazardous substances in soil, ground water, and surface water/sediment media across the site at levels significantly above background. The presence of radioactive hazardous substances in surface water samples collected downstream of the site document the actual contamination of wetlands and a sensitive environment.

Status (January 1999): EPA is considering various alternatives for this site.

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 [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.