

NPL Site Narrative for Grand Street Mercury

GRAND STREET MERCURY Hoboken, New Jersey

Conditions at Proposal (December 1996): The Grand Street Mercury site is located at 720 and 722-732 Grand Street, Hoboken, Hudson County, New Jersey. The site comprises two buildings, a former industrial building converted into 16 residential/studio spaces with the area of each space between 2,600 and 3,500 square feet and a four story townhouse also slated for residential renovation. The former industrial building is approximately 100 feet by 150 feet, five stories high and is constructed of brick and masonry with interior wooden structural and flooring systems. The townhouse is approximately 25 feet by 40 feet, four stories high and also constructed of brick and masonry with wooden structural and flooring systems. The surrounding area is a mix of residential/commercial and industrial properties. Hoboken High School is located across the street to the northeast. More than 40,000 residents live in a one-half mile radius from the site.

The Agency for Toxic Substances and Disease Registry (ATSDR), on January 22, 1996, issued a Public Health Advisory (PHA) that proclaimed "an imminent public health hazard is posed to residents of 722 Grand Street from past, current and potential future exposures via inhalation, direct dermal contact and possible ingestion of metallic (elemental) mercury and mercury vapor." In addition, the PHA states "the potential exists for mercury-contaminated possessions to be taken out of the building to continue to expose residents of 722 Grand Street, contaminate other areas and expose other members of the public." The PHA recommended that the residents be dissociated from mercury exposure in the 722 Grand Street building.

Elevated concentrations of mercury have been detected in urine samples from residents. Adverse health effects are associated with mercury levels greater than 20 µg/L (micrograms per liter). Mercury concentrations ranged from 3 to 102 µg/L, and 20 samples had mercury concentrations equal to or greater than 20 µg/L. The elevated concentrations of mercury detected in the residents may be associated with subtle neurological changes and renal tubule effects. A removal action was conducted to dissociate the affected residents from the metallic mercury and mercury vapors, prevent further off-site migration of mercury, and to assess the extent of the mercury contamination. All residents had vacated the building by January 11, 1996.

A mercury contamination study conducted at the site determined that mercury is widespread and remediation for residential use is highly unlikely (mercury has been observed in the floor boards within 13 of 16 residential units and concentrations of mercury absorbed into interior brick within common areas exceeds 9,100 parts per million). The site conditions are a result of a prolific production of mercury vapor lamps and mercury connector switches, over 55 years of operation, and absorption of mercury into the porous wood and brick comprising the building. The extent of mercury contamination coupled with an extremely low residential standard makes cleanup highly unlikely.

Status (September 1997): EPA completed a Focussed Feasibility Study in early July 1997, which included a technical engineering evaluation and risk assessment, and released a Proposed Plan for remedial

action at the Site inviting public comment on the preferred remedy. In mid July 1997, EPA conducted a public meeting to explain the remedial alternatives developed, provide rationale for selection of preferred alternative and answer questions. The preferred remedial alternative includes permanent relocation for the displaced site residents; demolition of the buildings; remediation of contaminated site soil; and groundwater investigations. PRPs assumed building maintenance and site security activities from EPA in August 1997. Dissociated residents of the Site remain in an ongoing EPA-administered temporary relocation program.

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.