

# Grand Street Mercury

## New Jersey

EPA ID#: NJ0001327733

### EPA REGION 2 Congressional District(s): 13

Hudson  
City of Hoboken

NPL LISTING HISTORY  
Proposed Date: 12/23/1996  
Final Date: 9/25/1997  
Deletion Date: 9/18/2007

## Site Description

The Grand Street Mercury site is located at 720 - 732 Grand Street, Hoboken, New Jersey. The site was comprised of two buildings and an asphalt-covered parking area. One of the buildings consisted of a 5-story former industrial building which was converted into 16 residential/studio spaces from 1993 to 1995. 15 of the 16 conversions were completed prior to identification of site wide mercury contamination. A 4-story adjoining townhouse was slated for residential conversion as well, but was never converted. The 5-story building was approximately 100 feet by 150 feet and was constructed of brick masonry with interior wooden structural and flooring components. The surrounding area is a mix of residential and commercial/industrial properties. Hoboken High School is located across the street to the northeast. More than 40,000 residents live within a 1-mile radius of the site. In January 1996, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a Public Health Advisory (PHA) that proclaimed "an imminent public health hazard is posed to residents" in the building, and recommended that the residents be dissociated from mercury exposure in the building.

The site was contaminated as a result of over 50 years of production of mercury vapor lamps and mercury connector switches. Free flowing liquid elemental mercury was observed between flooring layers throughout the former industrial building. Mercury vapors were detected throughout both buildings above health based concentrations. Mercury was also observed to have adsorbed to porous wood, brick, and tar surfaces throughout the former industrial building. Sampling results determined that 20 residents, five of which were children, possessed levels of mercury in their urine that might cause subtle neurological changes and renal tubule (kidney) effects. A site study determined that mercury was widespread and the building could not be remediated for residential use. EPA provided relocation (temporary then permanent) to affected residents. All residents vacated the building by January 11, 1996.

Site Responsibility: The site was addressed through Federal and potentially responsible party (PRP) actions.

## Threat and Contaminants

The buildings were contaminated with elevated concentrations of metallic mercury and mercury vapors. Soils were contaminated with mercury above residential health-based levels. Inhalation of or direct contact with mercury at the site posed a threat to human health.

## Cleanup Approach

The site was addressed in two phases: initial actions to protect human health and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

Initial Actions: A Removal Action was conducted to temporarily relocate the affected residents from the metallic mercury and mercury vapors, investigate the extent of mercury contamination at the site, provide 24-hour security, maintain the buildings to prevent exposure to the elements, and prevent further off-site migration of mercury. Two potentially responsible parties (PRPs) conducted building security and maintenance activities under a Unilateral Administrative Order (UAO) issued to them by EPA. One PRP was also responsible for demolishing the buildings and cleaning up residual soil contamination (see below) pursuant to a separate UAO.

Entire Site: EPA conducted investigations to determine the nature and extent of contamination at the site. EPA conducted a Baseline Human Health Risk Assessment in April 1997 which identified significant mercury vapor inhalation

exposure risk to both children and adults residing at the Site, as well as to potential future workers at the Site. The Risk Assessment also identified potential risk for adverse health effects to children in the event they are exposed to contaminated Site soil. Various cleanup alternatives were developed and analyzed in a July 1997 Focused Feasibility Study. In September 1997, EPA issued a Record of Decision (ROD) for the site which included: permanent relocation of residents from the site; demolition of the two contaminated buildings; sampling, excavation, and off-site disposal of contaminated soil at EPA-approved facilities; and, groundwater and off-site soil monitoring to assess potential impacts to groundwater attributable to the site. The ROD was modified in April 2003 through an Explanation of Significant Differences (ESD) explaining that the soil remedy had been changed to include removal and off-site disposal of all soils on the adjacent properties found to contain mercury at levels greater than 23 parts per million (ppm) and restoration of the adjacent properties to their pre-construction conditions. The soil remedy was modified again in July 2004 through another ESD to provide for additional soil excavation and off-site disposal. More specifically, subsurface soils at the site located below the water table, having an average mercury concentration of 520 ppm which could pose a potential risk to an on-site utility worker would be excavated and disposed off-site. A third ESD was issued in September 2005, indicating no action for the underlying groundwater would be needed since it was found to pose no risk to human health or the environment. The third ESD completed all planned remedial actions for the site.

## Cleanup Progress

Dissociating affected residents from the site and implementing measures to prevent further off-site mercury migration have mitigated the risks to residents and minimized the risks to neighbors of the site. The former residents of the Site have been permanently relocated under an Interagency Agreement (IAG) with the U.S. Army Corps of Engineers (COE). To date, all property interests at the Site have been acquired by the government, and all moves have been completed. In total, fifteen families and twenty-two businesses have been successfully relocated.

Two containers of waste material, one of which was determined to be RCRA hazardous waste, were removed from the Site in January 1998 and disposed of off-site. Demolition of the townhouse and former industrial building at the Site by the PRP began in March 2002, under EPA oversight, and was completed by the summer of 2003. Additional soil samples were collected in private yards in the vicinity of the Site in the summer 2001, the results of which indicated that four properties had elevated levels of mercury in soils. The PRP completed excavation and disposal of these soils at an appropriate off-site location. The properties were subsequently restored with clean fill. Remedial work on residual soil contamination on-site was initiated in September 2004 and completed in December 2004. Currently, all remedial construction work has been completed at the site and the property is cleaned to levels suitable for residential use. In addition to the seven existing groundwater monitoring wells located on and adjacent to the site, three new monitoring wells were installed in the footprint of the former industrial building in November 2004. Groundwater samples were collected from all ten monitoring wells in December 2004. Results from this sampling event showed that the groundwater underlying the site does not contain mercury at levels that would pose an unacceptable risk to human health or the environment. Therefore, no action is warranted for the groundwater. The remedy remains protective of human health and the environment, and complies with the federal and state requirements identified in the ROD. Since the issuance of the ROD in 1997, the residents of the former industrial buildings at the site have been permanently relocated, the former industrial buildings have been demolished, contaminated soils have been excavated, the excavations backfilled with clean soil and the debris disposed of at EPA-approved facilities. This completes all planned remedial actions for the site.

A Notice of Intent to Delete for the Grand Street Mercury Site was published in the Federal Register on June 28, 2007. The closing date for comments on the Notice of Intent to Delete was July 28, 2007. No comments were received by EPA on the proposed deletion during the public comment period. EPA's decision to propose the site for deletion is based on the successful implementation of the remedy which included demolition of the former industrial building and excavation and restoration of contaminated soils, thereby mitigating risks to human health and the environment. Therefore, the Grand Street Mercury Superfund Site was deleted from the NPL on September 18, 2007.

## Site Repositories

Hoboken Public Library 500 Park Avenue Hoboken, New Jersey 07030 Additional Links: Record of Decision Abstract