

NPL Site Narrative for Diamond Head Oil Refinery Div.

DIAMOND HEAD OIL REFINERY DIV. Kearny, New Jersey

Conditions at Proposal (July 27, 2000): The Diamond Head Oil Refinery Div. (Diamond Head) site is located at 1401 Harrison Ave. in Kearny, Hudson County, New Jersey. Currently, the site is inactive and consists of undeveloped land that is bordered by Harrison Avenue to the north, entrance ramp M of Interstate 280 (I-280) to the east, I-280 to the south, and Campbell Distribution Foundry to the west. The site is comprised of wetland areas and drainage ditches, a small wetland/pond, a vegetated landfill area along the western border of the site, and the remnants of the former Diamond Head Oil Refinery on the eastern portion of the site. The abandoned refinery portion of the site contains various construction debris, including foundations of the former on-site building and two former aboveground storage tanks. The refinery is currently owned by the Hudson Meadows Urban Land Development Corporation (HMULDC). A portion of the site is owned by HMULDC.

The Diamond Head Oil Refinery Div. was in operation from February 1, 1946 to early 1979. The facility operated under several company names including PSC Resources, Inc., Ag-Met Oil Service, Inc., and Newtown Refining Corporation. All of these companies were owned by Mr. Robert Mahler. In January 1985, Newtown Refining Corporation sold the property to Mimi Urban Development Corporation, which changed its name to Hudson Meadows Urban Land Development Corporation.

During facility operations, two aboveground storage tanks and possibly underground pits were used to store oily wastes. These wastes were intermittently discharged directly to adjacent properties, including the wetland area to the south of the site, creating an oil lake. The New Jersey Department of Transportation (NJDOT) acquired the property south of the refinery on March 6, 1968. In 1977, NJDOT began construction of I-280 and was reported to have removed 9 million gallons of oil-contaminated water and 200,000 to 250,000 cubic yards of oily sludge from the lake. The material was reportedly transported to Newtown Refining Corporation's facility on Long Island to be recycled; however, there are no reports stating that this recycling process occurred. It is also reported that during the construction of I-280, an underground lake of oil-contaminated ground water was found extending from the eastern limits of the NJDOT right-of-way to Frank's Creek on the west. It is reported that, prior to abandoning the refinery, Diamond Head cleaned out the two aboveground tanks; however, there is no known documentation of this activity. From the close of operations in 1979 until 1982, the abandoned refinery was not completely fenced. During this time, it was reported that dumping of waste oils and other debris took place on site. Refinement International Co. hired Eastern Chemical Co. to clean up the refinery in May 1982. In order to do so, the material in the tanks was analyzed and found to contain polychlorinated biphenyls (PCBs) at a concentration of 206 parts per million (ppm). Subsequent analyses revealed the presence of PCBs at concentrations over 3,100 ppm. Approximately 7,500 gallons of material were pumped out of the tanks and disposed off site by a Resource Conservation and Recovery Act (RCRA) permitted Treatment, Storage, and Disposal Facility (TSDF) by Resource Technology Service. Environmental Transport also removed 27 tons of contaminated soil in May 1982.

Background information indicates that previous investigations have been conducted at the Diamond Head Oil Refinery Div. site. These investigations include a sampling event conducted by the New Jersey Department of Environmental Protection (NJDEP), an Environmental Site Characterization conducted by Killam Associates, and a Site Inspection conducted by the U.S. Environmental Protection Agency (EPA) Region II Field Investigation Team (FIT). During these investigations, ground water, surface water/sediment, surface/subsurface soil, liquid waste and solid waste samples were collected. Analytical results of these samples indicated the presence of volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals.

In December 1999 EPA conducted an Expanded Site Inspection (ESI) at the Diamond Head Oil Refinery Div. site. During the ESI, EPA collected surface/subsurface soil and ground water samples from 20 borings advanced throughout the site. EPA also collected sediment samples from the on-site wetland/pond area as well as from the wetland area extending along the southern perimeter of the site. Analytical results indicated the presence of VOCs, SVOCs, pesticides, PCBs, and metals. An observed release to surface water is documented by chemical analyses of sediment samples collected from wetlands along the southern and western boundaries of the site. Level II concentration of lead and zinc are documented to 0.19 mile of wetland frontage located along the southern perimeter of the site.

Status (September 2002): 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.