

NPL Site Narrative for Watson Johnson Landfill

WATSON JOHNSON LANDFILL Richland Township, Pennsylvania

Conditions at Proposal (June 14, 2001): The Watson Johnson Landfill site consists of a 32-acre inactive landfill located approximately 0.75 mile north of Quakertown in Richland Township, Bucks County, Pennsylvania. The landfill accepted waste from approximately 1936 until 1973 from all of Quakertown Borough, portions of Perkasio and Sellersville Boroughs and other Upper Bucks County areas. The exact types and quantities of wastes accepted at the landfill are not known. The landfill was never permitted to accept hazardous waste. The Waste Disposal Site Survey (Eckhardt Survey) that was completed by the U.S. Congress in 1979, however, indicated that W.R. Grace & Company disposed of a total of 3,200 tons of waste at the Watson Johnson Landfill from their Quakertown chemical facility from 1965 through 1968. According to this report, this waste was composed of various organic and inorganic compounds, resins, and elastomers. Further evidence of hazardous substances deposited at the site was provided during the drilling of monitoring wells at the landfill, when a drum containing low levels of tetrachloroethene (PCE) was discovered in the landfill 6 to 12 inches below the surface.

During the time the landfill was active, several ponds of leachate were located along its southern and western edges. In 1972 the owner of the landfill, Watson Johnson, pumped the leachate from one of these lagoons into a swamp adjacent to the landfill where it flowed into Tohickon Creek. This caused a significant fish kill (several hundred fish or more) to occur in Tohickon Creek on July 2, 1972. Investigations by the Bucks County Health Department and the Pennsylvania Fish Commission determined the pumping of leachate from the Watson Johnson Landfill was the cause of the fish kill. The Pennsylvania Department of Environmental Resources (PADER) issued an order to the Watson Johnson Landfill in 1973. This order determined that the site was an illegal solid waste disposal site that allowed leachate to discharge into surface waters of the Commonwealth; therefore, the site was ordered to immediately cease all operation.

EPA conducted field investigations at the site from 1998 through 1999. Samples were collected from on-site soils, adjacent wetlands, Tohickon Creek, and on-site ground water monitoring wells and nearby residential and municipal wells. Hazardous substances detected in the soils of the landfill include volatile organic compounds, semi-volatile organic compounds, polychlorinated biphenyls (PCBs), and metals. PCE and trichloroethene (TCE) were detected in an on-site monitoring well and a Quakertown Borough Municipal Well (the water from this municipal well is treated to remove the contamination prior to distribution). Elevated concentrations of metals and PCBs were detected in sediment samples collected from an adjacent wetland and an elevated level of mercury was detected downstream of the site in Tohickon Creek.

Immediately to the west of the Watson Johnson Landfill is a property which was formerly mined and then later used for waste tile disposal by the American Olean Tile company. This adjacent property may therefore be contaminated with metals and/or other hazardous substances. In the Hazard Ranking System (HRS) scoring for the Watson Johnson Landfill site, however, all of the hazardous substances documented to be in ground water and surface waters were detected in elevated levels in the soils of the Watson

Johnson Landfill. Therefore, the releases evaluated in the HRS scoring are at least partially attributable to the Watson Johnson Landfill site.

In June 2001, EPA initiated an additional, more comprehensive residential well sampling event. EPA is currently awaiting the results of this sampling.

Status (September 2001): 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.