NPL Site Narrative for Emmell's Septic Landfill

EMMELL'S SEPTIC LANDFILL
Galloway Township, New Jersey

Conditions at Proposal (April 23, 1999): The Emmell's Septic Landfill (Emmell's) site is an inactive site located on 38 acres in a rural residential area of Galloway Township, Atlantic County, New Jersey. It is bordered by Zurich Avenue to the north and woodlands to the south, east and west. The site is occupied by a vacant, fire-damaged, one story building and a garage. From 1967 to 1979, the site was operated as a septic and sewage sludge waste disposal facility. An April 1975 solid waste facility permit issued to Emmell's indicated that the site was to be used for the land application of septic and sewage sludge wastes. Violations of the permit noted that septic and sewage sludge wastes were being disposed of in trenches and lagoons. In addition to the permitted waste disposal operation, inspections at the site by officials from the State of New Jersey noted the presence of household garbage, tire piles, paint sludges, gas cylinders and construction/industrial wastes on the site.

From 1984 to 1988, ground water samples were collected from private residential drinking water supply wells in the vicinity of the site. Samples collected indicated the presence of organic hazardous substances. Based on the testing results, the Atlantic County Health Department recommended that the wells be closed. Subsequently, the contaminated drinking water wells were closed and deeper water supply replacement wells were drilled.

Ground water investigations were conducted at the site by both Galloway Township and the New Jersey Department of Environmental Protection (NJDEP) in 1996. The NJDEP drilled monitoring wells at three locations in March 1996. Consultants for the township installed seven monitoring wells across the site between June and October 1996. Subsequent sampling of the monitoring wells and chemical analysis of the samples documented the observed release to ground water of organic hazardous substances.

EPA completed a Site Activity Investigation of the Emmell's property in 1998. The Site Activity Investigation included the installation of monitoring wells and the collection of soil boring, test pit, and ground water samples. Chemical analysis of the samples indicated the presence of organic hazardous substances at levels significantly above background conditions in the subsurface soil. Additionally, waste materials (i.e., paint like materials, charred materials, and sludges) were observed in the subsurface. Analysis of the waste materials identified elevated levels of organic and inorganic hazardous substances. The analysis of the ground water samples collected documented an observed release to ground water of organic hazardous substances.

The organic hazardous substances detected in the ground water samples collected from the closed private residential supply wells were either the same or degraded products of the hazardous substances found in the soils and ground water at the Emmell's site. The closed supply wells are situated downgradient of the site.

The Emmell's site overlies the Cahansey Sand Aquifer. Within four miles of the site residents obtain their drinking water supply from private and public (i.e., municipal, school, etc.) well water sources. A total of

eight public water supply wells are currently operating within the target distance limit. No resource uses or wellhead protection areas have been identified within four miles.

Status (July 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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.