Site Review and Update: A Note of Explanation

The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.
SITE REVIEW AND UPDATE

PICKETVILLE ROAD LANDFILL

JACKSONVILLE, DUVAL COUNTY, FLORIDA

CERCLIS NO. FLD980556351

Prepared by:

The Office of Toxicology and Hazard Assessment
Florida Department of Health and Rehabilitative Services
Under Cooperative Agreement With
The Agency for Toxic Substances and Disease Registry
SUMMARY OF BACKGROUND AND HISTORY

The Picketville Road Landfill is at 5150 Picketville Road, about five miles northwest of downtown Jacksonville, Florida (Figure 1). This inactive landfill covers 52 acres in a mixed-use semi-rural area consisting of residences, commercial establishments, and light industry. The site is bounded on the north and northwest by Picketville Road, on the east and southeast by Little Sixmile Creek, and on the west and south west by unoccupied land (Figure 2).

From the mid 1940's to 1967 the site was excavated for sand. In 1968 the City of Jacksonville (City) leased the site for use as a municipal landfill. Initially, the City disposed of all types of wastes, but in 1971 it diverted residential garbage to other landfills and designated this site for disposal of hazardous and solid wastes. Waste deposited at the landfill included waste oil, liquid acid battery waste, battery casings, and polychlorinated biphenyls (PCBs). In 1977, the City ceased landfill operations, covered the site with a layer of soil, planted vegetation, and terminated their lease. Erosion and leaching into Little Sixmile Creek continued until the City added more soil and regraded the site in 1983.

The Environmental Protection Agency (EPA) proposed adding this site to the Superfund National Priorities List (NPL) in October 1981, and did so in September 1983. From 1986 through 1990, the potentially responsible parties (PRPs) conducted a remedial investigation/feasibility study and risk assessment. They found on-site ground water was contaminated with arsenic, lead, benzene, and pyrene. On-site soils were contaminated with heavy metals, volatile organic chemicals, and PCBs. Sediments in Sixmile Creek were also contaminated with heavy metals. In 1990, in response to concerns of nearby residents, the Duval County Public Health Unit sampled and analyzed 26 nearby "rock aquifer" drinking water wells. They did not detect any site-related contamination. In its 1990 record of decision (ROD), EPA selected the following site remedies:

1. restrict site access and future use.
2. monitor and restrict future use of the surficial aquifer ground water.
3. cover the landfill under state landfill closure rules.
4. abandon nearby "rock aquifer" drinking water wells.
5. extend municipal water supply to affected residents.
6. restore Little Sixmile Creek.

In 1988 the Agency for Toxic Substances and Disease Registry (ATSDR) assessed the public health threat of this site and issued a health assessment (HA). ATSDR identified arsenic, cadmium, lead, fluoranthene, and pyrene as the contaminants of concern. They also identified the following potential human exposure pathways: ingestion of contaminated soil, ground water, and biota; inhalation
of contaminated dusts or vapors; and dermal absorption of contaminants from soil, sediment, and surface water. Due to inconsistencies in the environmental data and the lack of quality assurance/quality control information, ATSDR was unable to determine the public health threat of this site. They recommended that EPA restrict site access, better characterize the extent of contamination, including methane gas migration, and monitor air quality during future remediation.

CURRENT SITE CONDITIONS

On February 3, 1992, and August 25, 1993, Randy Merchant of Florida Department of Health and Rehabilitative Services (HRS) visited this site. He observed the site was poorly fenced, adequately posted, and overgrown with vegetation. He observed a few homes west and northwest of the site, a cemetery north of the site, and two other landfills northeast of the site. Since the 1988 ATSDR HA, EPA and the PRPs have not performed any remediation but have restricted site access, better characterized the extent of contamination, and checked for methane gas migration. Current plans call for construction of a landfill cover including air monitoring as recommended by ATSDR.

The environmental data collected since the 1988 ATSDR HA indicate a potential public health threat from future use of ground water from the surficial aquifer. Restrictions on the use of ground water from the surficial aquifer, abandonment of nearby private drinking water wells, and extension of municipal water to this area should eliminate this potential exposure pathway.

CURRENT ISSUES

Contaminated dust blowing off site during construction of the landfill cover is the only concern Florida HRS has about the site.

Abandonment of the drinking water wells and extension of the municipal water supply to this area has eliminated the major community health concern.

CONCLUSIONS

Conclusions of the 1988 ATSDR HA were valid. Since then, the PRPs have restricted site access and better characterized the extent of contamination, including methane gas migration. They plan to control dust and to monitor air quality during construction of the landfill cover. Since there is no evidence of past completed human exposures and the threat of future potential exposure via contaminated ground water has been eliminated, there is currently no need for further public health evaluation at this site.
RECOMMENDATIONS

The recommendations in the 1988 HA have been implemented. To protect nearby residents, EPA should require the PRPs to control dust and to monitor the air quality during construction of the landfill cover. No further public health evaluation of this site is required.

Health Activities Recommendation Panel Recommendations:

The data and information developed in this Site Review and Update have been evaluated to determine if follow-up actions may be indicated. No further public health actions are indicated at this time.
DOCUMENTS REVIEWED

Florida HRS reviewed the following documents for this update:


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