

Site Review And Update

PRICE LANDFILL #1

PLEASANTVILLE, ATLANTIC COUNTY, NEW JERSEY

CERCLIS NO. NJD070281175

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REVISED

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia

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.

REVISED SITE REVIEW AND UPDATE

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Prepared by
The New Jersey Department of Health
Under a Cooperative Agreement with
The Agency for Toxic Substances and Disease Registry

SUMMARY OF BACKGROUND AND HISTORY

Price's Landfill is located near Mill Road in Egg Harbor Township, Atlantic County, New Jersey. The 26-acre former landfill accepted municipal solid waste from 1969 through 1976. Beginning in 1971, both drummed and bulk liquid wastes were also disposed in the landfill. These wastes included industrial chemicals, oil, grease, and septic tank/sewer wastes. Prior to 1969, a sand and gravel excavation operation was situated on the site.

In 1980, nearby residential wells were found to be contaminated with volatile organic compounds (VOCs). As a result, the Atlantic County Health Department (ACHD) provided bottled water to area residents. In 1981, 37 affected residences were connected to the New Jersey Water Company water system. In 1981, low levels of VOCs were detected in Atlantic City Municipal Utilities Authority (ACMUA) well field located within one mile from the site. In 1982, the New Jersey Department of Health (NJDOH) and the ACHD conducted a health survey of 50 households with private water supplies located downgradient of the site.

The U.S. Environmental Protection Agency (USEPA) completed an initial Remedial Investigation and Feasibility Study (RI/FS) in 1983 resulting in the relocation of the ACMUA well field. A second RI/FS was conducted in 1984 to consider additional site remedial alternatives. Monitoring data documented the presence of VOCs and metals in the underlying shallow groundwater system. Subsequent to the relocation of the ACMUA wellfield, carbon tetrachloride was detected in the distribution system in 1986. The 1986 USEPA Record of Decision for the final remedial action included the installation of a security fence and groundwater extraction wells, construction and operation of a groundwater pretreatment facility with discharge into the Atlantic County Utilities Authority (ACUA) Wastewater Treatment Plant, long-term groundwater monitoring, and construction of a landfill cap.

In June 1990, the NJDOH completed a health assessment for the community living near the site. The 1990 Health Assessment identified two completed exposure pathways: (1) past exposure of nearby residents to VOCs in private well water through ingestion, inhalation, and skin contact; and (2) past exposure of Atlantic City residents and tourists to VOCs in the ACMUA municipal water through ingestion, inhalation, and skin contact. Potential exposure pathways included: (1) present and future exposure of area residents and tourists to VOCs and metals in private well water and the ACMUA municipal water (relocated wells) through ingestion, inhalation, and skin contact; (2) past, present and future exposure of site trespassers and nearby residents to VOCs and metals in on-site soil through ingestion, inhalation, and skin contact; and (3) future exposure of local residents to VOCs and metals in Absecon Creek through ingestion, inhalation, and skin contact.

The 1990 NJDOH Health Assessment identified the following community health concerns: (1) the human health effects of exposure to site contaminants; (2) the impact of groundwater plume migration on private and municipal water supplies; (3) site-related odors; (4) illegal on-site dumping; (5) the proposed construction of a school near the site; and (6) the impact of proposed remedial actions on human health. NJDOH identified the following public health concerns in the 1990 Health Assessment: (1) an increased number of reported symptoms

including rashes, eye irritation, muscle pain and nausea in the potentially exposed population living near the site as compared to the unexposed population based on the 1983 NJDOH health survey; (2) an increased risk of cancer from past exposure to VOCs in private well water; and (3) the potential for on-site exposure to chemical and physical hazards.

In summary, NJDOH categorized the site in 1990 as a public health concern since humans were exposed in the past to VOCs in private well water at levels that may result in adverse health effects. In addition, the following conclusions were made: (1) additional information is needed to adequately assess the impact of the site on public health; (2) on-site exposure to chemical and physical hazards may be occurring; (3) the proposed school location may result in exposure to site contaminants in the future; and (4) the RI/FS risk assessment may have underestimated the risk of past exposure to VOCs in drinking water. The following recommendations were made: (1) obtain current information on area groundwater use; (2) obtain current information on the extent and movement of the groundwater plume; (3) perform soil, air, surface water and sediment sampling; (4) evaluate ACMUA municipal well monitoring data; (5) restrict site access; (6) assess the potential impact of the site on proposed school; (7) reevaluate the public health implications of the site; and (8) consider follow-up health activities.

CURRENT CONDITIONS OF SITE

On April 24, 1992, Ms. Laurie A. Pyrch of the NJDOH conducted a site visit of the Price's Landfill site and was accompanied by an ACHD Sanitary Inspector and the New Jersey Department of Environmental Protection and Energy (NJDEPE) Technical Coordinator. The site is not adequately fenced or posted. A partial fence with gate access exists along the western site boundary adjacent to a demolition business. Construction debris, including metal beams, wood, and old construction equipment, were observed on the western portion of the site, presumably the results of illegal dumping by the demolition company. The gate was open during the site visit. Household refuse, including tires and a mattress, was observed along the southern site perimeter along Mill Road.

Although the site is covered with moderate amounts of vegetation, including pine trees, shrubs, and tall grasses, large areas of exposed soil were observed throughout the site. A utility right-of-way transverses the site providing easy vehicle access into the northern portion of the site. Shot gun shells were observed suggesting that local hunters may be entering the site along the access road. Illegal dumping of household waste was evident throughout the northern section of the site further demonstrating site access.

Strong chemical odors were apparent on the northern portion of the site resulting in reports of headaches and dizziness among State and County field staff. As a result, staff immediately evacuated the site. Several businesses, including Atlantic Electric, are located to the north of the site along Fire Road. These facilities may be the source of, or may be contributing to, the observed odors. Numerous residences are located to the northeast of the site.

In October 1991, the ACHD conducted a field investigation to determine whether any private potable wells were being used downgradient of site. During the investigation, 18 potable wells were identified within 2 miles to the north of the site on Addison, Holly and Foreman Roads in the direction of the groundwater plume. Sampling of private wells in June 1992 showed no contamination of private wells at that time.

In summary, current site conditions generally do not appear to have changed from that reported during the 1990 site visit. Final remedial actions have not been initiated at the site. The presence of physical hazards, including household and construction debris, and shot gun shells demonstrates the need to restrict access to the site. The proposed landfill cap has not been installed. Surface soil samples are needed since site trespassers may be exposed to areas of contaminated soil. Strong chemical odors were observed during the site visit indicating the need for air monitoring along the northern perimeter of the site and downwind of the site.

Based on available information and current site conditions, the potential for exposure of Atlantic City residents and tourists to VOCs in drinking water from relocated ACMUA wells is unlikely. Although carbon tetrachloride (3 ppb) was detected in one distribution sample in 1986 at a level above the ATSDR Cancer Risk Evaluation Guide, a review of municipal well monitoring data (1986-1990) did not reveal any contamination at levels above health comparison values.

CURRENT ISSUES

Final remedial actions have not yet been initiated at the site. The remedial design phase for the groundwater treatment plant was halted in December 1990 when ACUA strengthened its discharge criteria. Discharge options for treated ground water are being reevaluated.

Past exposure of nearby residents to VOCs in private well water may result in an increased risk of cancer. Based on groundwater modeling, it is possible that the contamination plume may be impacting 18 additional private wells located within two miles of the site. Therefore, exposure of these residents to VOCs in private well water may have occurred in the past, may presently be occurring, or may occur in the future.

The site remains unfenced and unposted. ACHD has observed hunters on the site during a November 1991 site inspection. Evidence of site access was observed during the NJDOH site visit. Therefore, exposure of local residents to chemical and physical hazards may have occurred in the past, may presently be occurring, or may occur in the future.

Based on conversations with the ACHD, no community health concerns have been reported since municipal water supplies were provided to residents living near the site. During a November 1991 site inspection, ACHD staff noted site-related odors. As reported in the Atlantic City Press on April 14, 1992, Atlantic County legislators are currently seeking to intervene between the NJDEPE and ACUA to expedite the site remediation process.

CONCLUSIONS

1. A review of 1986-1990 municipal well monitoring data did not reveal any contamination at levels above health comparison values. Therefore, the potential for exposure of Atlantic City residents and tourists to VOCs in drinking water from relocated ACMUA wells is unlikely.
2. ACHD conducted a field investigation in October 1991 to obtain current information of area groundwater use. Private well sampling was performed for 18 residences in June 1992. Water samples from these wells did not detect the presence of site-related contaminants. However, exposure of these residents to VOCs in private well water may have occurred in the past.
3. The site of the proposed school has been relocated to an upgradient location.
4. A public health assessment addendum for the Price's Landfill site is needed to evaluate the past completed exposure pathways and the new data and information available since the 1990 Health Assessment.

RECOMMENDATIONS

The 1990 Health Assessment made several recommendations that have not been implemented by the appropriate regulatory agency. Based on the documents reviewed and current site conditions, the following 1990 recommendations should be implemented:

1. Collect on-site surface soil samples for metals.
2. Perform air monitoring for VOCs on the site and in areas downwind of the site.
3. Restrict site access.

In addition, the following recommendations are made based on the documents reviewed and current site conditions:

1. Perform further site evaluation through the public health assessment addendum process.
2. The data and information developed in the Site Review and Update have been evaluated to determine if follow-up actions may be indicated. Further site evaluation is needed to determine public health actions.

DOCUMENTS REVIEWED

1. NJDOH Health Survey of the Population Living Near the Price Landfill, July 1983.
2. USEPA Remedial Investigation and Feasibility Study, February 1985.
3. USEPA Record of Decision, September 1986.
4. ACMUA Municipal Well Monitoring Data, 1986-1990.
5. NJDOH Health Assessment, June 1990.
6. NJDEP Field Activities Report for Interim Environmental Monitoring, November 1989.
7. NJDEPE Draft Focus Feasibility Study, 1992.

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