

Health Consultation

SWOPE OIL AND CHEMICAL COMPANY
PENNSAUKEN, CAMDEN COUNTY, NEW JERSEY

CERCLIS NO. NJD041743220

SEPTEMBER 27, 1999

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 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. The Administrator of ATSDR shall use appropriate data, risks assessments, risk evaluations and studies available from the Administrator of EPA

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HEALTH CONSULTATION

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CERCLIS NO. NJD041743220

Prepared by:

Hazardous Site Health Evaluation Program
Consumer and Environmental Health Service
Division of Epidemiology, Environmental, and Occupational Health
New Jersey Department of Health and Senior Services
Under a Cooperative Agreement with
Agency for Toxic Substances and Disease Registry

Background and Statement of the Issues

Site History

The Swope Oil and Chemical Company site (SOCC) is located in a heavily industrialized area of Pennsaukin Township, Camden County, New Jersey (approximately 39.58.91 N, 75.02.04 W; refer to Figure 1). The site occupies approximately two acres and is bordered by rail lines, highways, and is adjacent to the Pennsaukin landfill, which is located to the immediate northwest.

The SOCC is the site of a former chemical reclamation facility which operated from 1965 through 1979. Materials present at the site included processing solvents, phosphate ester hydraulic fluids, paints and varnishes, oils, plasticizer and printing inks. Waste sludges and process liquids were discharged to an unlined lagoon. In addition, contaminated material was placed within a diked tank farm and in an exposed drum storage area. The soils and groundwater (both shallow and deep aquifer are contaminated. Prior to removal, surface soils contained polychlorinated biphenyls (PCBs) volatile organic compounds (VOCs) phthalates, and metals; the groundwater remains contaminated with VOCs. Subsurface soils (primarily contaminated with VOCs) continue to serve as a source of groundwater contamination. Approximately 17,000 people reside near (1 mile) of the SOCC site who depend upon municipal wells for their water supply; the closest well is located approximately 200 feet to the south of the site.

Reports indicate that discharges from the lagoon and on-site spills entered drainage ditches and storm sewers which in turn discharged into Pennsaukin Creek. In 1975, the SOCC was cited by the New Jersey Department of Environmental Protection (NJDEP) for operating without the proper permits. In 1979 the company closed operations after additional citations by the NJDEP. The site was placed on the National Priorities List in September 1983.

Remedial History

In 1984, the United States Environmental Protection Agency (USEPA) facilitated the removal of drummed wastes and the lagoon sludges (3,000 tons) and, constructed a temporary cap at the site, precluding surficial run-off. A Record of Decision (ROD) signed in 1985 has resulted in the excavation and off-site disposal of more than 24,000 tons of PCB contaminated soil, backfilling of excavations, removal of 70 tanks and their contents, and removal of septic structures and on-site buildings.

In 1991, the USEPA signed a ROD which selected soil vapor extraction as the remedy for subsurface soil contamination which continues to contribute to groundwater contamination. The soil vapor extraction system became operational in 1997 and has removed approximately 9,000 pounds of VOCs. In addition, a five year groundwater monitoring program was initiated in 1996, to determine whether additional groundwater remediation is necessary at the SOCC site.

Statement Of Issues

This site is being revisited to determine whether conclusions and recommendations from previous ATSDR/NJDHSS activity at the SOCC site remain valid in the context of present conditions at the site. In addition, this consultation will determine whether there are community concerns regarding the site which have not been addressed by previous ATSDR/NJDHSS activities at the SOCC site.

Discussion

Prior ATSDR/NJDHSS Activities

The ATSDR completed a Public Health Assessment (PHA) of the Swope Oil (and Chemical) Company site in April 1989. The PHA recommended: (1) proper training and equipment for remedial workers at the site, (2) the development of remedial alternatives for groundwater contamination, and (3) development of remedial alternatives for the nearby municipal supply well (referred to as "National Highway Well # 1) if and when it is placed back into service. These recommendations were satisfied as follows.

The training and provision of proper personal protective equipment for remedial workers is the responsibility of the contractor performing the remedial work at the site. Hazard evaluation is documented in the site safety plan for the remedial investigation, and approved by the USEPA. While the site safety plan was not specifically reviewed for the purposes of this consultation it is assumed that all site safety plans for superfund sites conform with the Occupational Health and Safety Administration (OSHA) Rule 29 CFR 1910.120 regarding clean-up operations at sites covered by the Resource Conservation and Recovery Act (1976) as amended.

The final remedy for remediation of groundwater contamination will be determined subsequent to the completion of the five year groundwater monitoring program, and is tentatively scheduled for FFY 2001.

The municipal supply well referred to in the PHA (actually a Merchantville - Pennsauken Water Commission well) was removed from service in May 1984. In 1984 the well supplied up to 1.3 million gallons per day and exhibited the following contaminants: TCE (<5 ppb), PCE (7-14 ppb), carbon tetrachloride (12-20 ppb), and 1,1,1-TCA (12-30 ppb). The well was equipped with air strippers and was re-activated in January 1989.

The ATSDR and the NJDHSS completed a Site Review and Update (SRU) for the SOCC site in September 1993. The SRU concluded that the municipal supply well was contaminated prior to installation of the treatment system, but that data were insufficient to determine the potential public health significance of past exposures. The SRU recommended that the well be considered as a candidate for exposure dose reconstruction by the ATSDR.

The NJDHSS is compiling maps of public water supply contamination on a regional basis across the State including the system of which this supply well is a part. These data are being utilized in a case control study of childhood brain cancer and childhood leukemia incidence. Thus, as past well contamination will be considered as part of a regional investigation, dose reconstruction for this individual well is no longer indicated.

Site Visit

The SOCC was visited by Jeff Winegar and James Pasqualo of the NJDHSS on August 31, 1999. Site conditions remained essentially unchanged from the June 1993 site visit conducted by the NJDHSS with the exception of the installation of the soil gas extraction system. The site is fenced and there was no obvious evidence of unauthorized entry.

Community Concerns

Based upon available information, there are no community concerns which have not been addressed regarding the SOCC site.

Conclusions

Based upon current conditions and available information regarding the Swope Oil and Chemical Company site, there currently exist no potential or completed human exposure pathways. The SOCC site is evaluated to presently represent no public health hazard.

There are no previously identified or current community health concerns associated with the SOCC site which have not been addressed.

There are no previous public health recommendations associated with the SOCC site which have not been addressed or that remain valid under present site conditions.

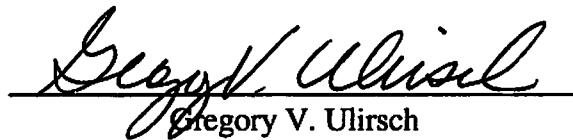
Recommendations

The ATSDR and/or the NJDHSS should review the final remedy for groundwater remediation at the SOCC site for public health significance when available.

The ATSDR and the NJDHSS will reevaluate the public health significance of the SOCC site as warranted. New environmental, toxicological, or health outcome data, or changes in the conditions at the SOCC site may determine the need for additional actions at the site by the ATSDR and the NJDHSS.

Certification

This health consultation was prepared by the New Jersey Department of Health and Senior Services (NJDHSS) under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the health consultation was begun.

A handwritten signature in cursive script, reading "Gregory V. Ulirsch", is written over a horizontal line.

Gregory V. Ulirsch
Technical Project Officer
Superfund Site Assessment Branch (SSAB)
Division of Health Assessment and Consultation (DHAC)
ATSDR

The Division of Health Assessment and Consultation, ATSDR, has reviewed this health consultation and concurs with its findings.

A handwritten signature in cursive script, reading "Richard Gillig", is written over a horizontal line.

Acting Chief, SSAB, DHAC

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Documents Reviewed

- 1) Agency for Toxic Substances and Disease Registry. Health Assessment for the Swope Oil Company, Pennsaukin Township, New Jersey. April 1989.
- 2) Agency for Toxic Substances and Disease Registry. Site Review and Update. Swope Oil and Chemical Company, Pennsaukin Township, Camden County, New Jersey. September 3 1993.
- 3) United States Environmental Protection Agency. NPL Fact Sheets; Swope Oil and Chemical Company. March 23, 1999.
- 4) New Jersey Department of Environmental Protection. Site Status Report; 1992.

Figure 1 - Swope Oil Site; general location.

