State of Connecticut

Health Information on Hazardous Waste Sites

Solvents Recovery Services, New England, Inc.

The Solvents Recovery Services site is one of fifteen Superfund hazardous waste sites in Connecticut. The Connecticut Department of Health Services (DHS), in cooperation with the Agency for Toxic Substances and Disease Registry, is investigating the possibility that contamination at this site might result in adverse human health effects in the neighboring community. The document containing this assessment is referred to as a public health assessment and has been produced from environmental data provided by the Connecticut Department of Environmental Protection (DEP), the U.S. Environmental Protection Agency, and other groups involved with the management of this site; community health data; and concerns of the community. If you have specific concerns about the health implications of this site, please write or call Diane Aye or Kenny Foscue at the Connecticut Department of Public Health, Division of Environmental Epidemiology and Occupational Health, 410 Capitol Ave, Hartford, CT 06134-0308, (860) 509-7742.

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SITE SUMMARY

Solvents Recovery Service of New England, Inc. (SRSNE) is a U.S. Environmental Protection Agency (EPA) designated National Priorities List (NPL) site located in the town of Southington, Connecticut, in Hartford County. The 3.7-acre site is located 600 feet South of Lazy Lane. The Quinnipiac River is located approximately 500 feet to the east of the site (See Site Map).

History

SRSNE operated as a hazardous waste treatment and handling plant for primarily solvents from 1955 to March of 1991. Two public wells located to the south of SRSNE were found to be contaminated with volatile organic compounds (VOCs) in 1976 and 1979. VOCs were identified above background levels in the late l970's and the wells were taken out of service in 1979 and 1980. Additional exposures to nearby residents likely occurred due to the incineration of waste sludges on site from l966 until l974. In May of 1991, the facility was ordered to shut down operations permanently.

CONTAMINATION

* Ground water and soil, both on and off-site, have been contaminated with waste solvents and metals due to improper disposal practices. Various contaminants include VOCs, semi-volatile organic chemicals (SVOCs), pesticides, polychlorinated biphenyls (PCBs) and dioxin. The VOCs detected include: acetone, methyl ethyl ketone, 1,1,1-trichloroethane, trich-loroethylene, tetrachloroethylene, toluene, isopropanol, ethyl benzene, and 1,1 dich-loroethane. SVOCs consist primarily of phenols, phthalates, and naphthalenes.
Metals found in surface soil include chromium, lead, cadmium, and barium.

* SRSNE's disposal practices incuded disposing sludges in unlined lagoons, burning sludges in an open pit, and draining the lagoons. Spent solvents may have also been spilled during operations. These practices resulted in solvent discharge into the soils and groundwater. Contaminated groundwater and

stormwater runoff discharged into the Quinnipiac River.

* Two Southington public wells (# 4 and #6) were found to be contaminated with VOCs, and taken out of service in 1979 and 1980. In addition, one private well near the site was found to be contaminated.

HEALTH CONCERNS

■ A large portion of the population of Southington was exposed to a variety of site related contaminants for an unknown period of time, through drinking and showering with contaminated public well water (wells #4 and #6). In addition, public wells #2 and #5 were contaminated at times, though not by SRSNE. This exposure was stopped over l0 years ago by removing those wells from production. Continued monitoring has assured that the public water supply is currently safe.

■ Sixty-four private wells were sampled by the EPA in 1990 and subsequently re-sampled by the CT DEP. These results revealed two private wells with elevated levels of VOC's from contamination by non-site related sources. Residents using these wells have been connected to the public water supply.

■ A ground water recovery system and air stripper previously installed at the site were reducing VOCs from ground water but increasing their levels in ambient air.
Control devices on the new air stripper will prevent the release of VOCs into the air.

■ Because there was documentation that many Southington residents were exposed to site related contaminants via the town wells and community concern about these exposures, a number of health outcome data bases were evaluated. Given the limitations of epidemiological studies, it is not possible to state definitely that any rises in disease rates were caused by these exposures. A review of cancer incidence data indicates that there are slight eleva-tions in some age specific bladder cancers for the town of Southington between 1979-1988 (See cancer cluster study below). However, based on the available data, there is no difference in rates for birth defects or learning disabilities between Southington and the State of Connecticut. While there were increases in infant and perinatal mortality rates for Southington, as compared with towns surrounding Southington, or the State, between 1949- 1965, these rates are no longer elevated and in fact, remain lower than the two comparison populations in the State of Connecticut and nearby towns.

Cancer Cluster Study Results:

Because of citizen concern about the elevation in cancer cases, the DHS conducted an investigation of cancer occurrence in Southington. An initial review of cancer incidence in Southington from 1979 to 1988 revealed no overall town-wide elevation in cancer cases for bladder, brain, breast, leukemia, non-Hodgkin's lymphoma, testis, and all sites combined. However, there was an increase in bladder cancer rates in the 40 to 49 age group. To further investigate this increase, the DHS, in conjunction with the DEP, used a computerized Geographic Information System to map cases of bladder cancers in relation to the public wells. This method allowed investigation of cancer occurrence in areas believed to be exposed to contaminated water. A thirty percent increase in the number of bladder cases was identified in the areas within one mile of the contaminated town wells. From 1970 to 1989 it was expected that 48 cases of bladder cancer would have occurred, while 63 cases were diagnosed. This represents a increase in bladder cancer, but rules out a moderate or high elevation in cancer rates. Several factors make it not possible to directly link the exposure to contaminated water to these bladder cases. (1) Because sampling was only conducted for

the past few years (out of nearly two decades of exposure), only a limited period of drinking water sampling data was available for identifying chemicals of concern. (2) The contaminants found in the town wells during the limited sampling period have not been conclusively linked to bladder cancer. (3) Precise information about the exposures to contaminated drinking water is not available. (4) Precise data about other cancer risks (such as occupation or smoking) is also not available. On the other hand, this study does not prove that these cancers are not a result of exposure to contaminated drinking water.

HEALTH ACTION PLANS AND STATUS

1. The CT DHS will provide environmental health education for local public health officials, the local medical community and to local citizens.

2. The CT DHS in conjunction with ATSDR will evaluate the need for appropriate follow-up health study activities.

3. The CT DHS will ensure monitoring of municipal water supply wells near the site to determine and document whether or not the water quality in these wells is affected by site-related contaminants.

In addition, other State and Federal agencies have agreed to take the following actions:

4. The CT DEP will ensure that private water supply wells near the SRSNE site are monitored to determine whether they are affected by site contaminants.

5. The CT DEP will ensure that Best Available Control Technology (BACT) is installed to eliminate emissions of volatile organic compounds (VOCs) generated from the on-site ground water recovery/treatment system.

6. As part of the Phase III Remedial Investigation and Feasibility Study, the United States Environmental Protection Agency (USEPA) will conduct investigations to characterize the groundwater in the operations area, former Cianci property, and the town well field property to estimate the migration pathways of contaminants from the site.

7. The USEPA is evaluating options to reduce the concentrations of contaminated soils beneath the operations area which is the source of groundwater contamination.

INFORMATION SOURCES

HEALTH: If you have health concerns related to the site, please contact your physician. Explain your situation and what you may have been exposed to. Your physician may contact the Southington Health Department or the Connecticut Department of Health Services with any questions.

Southington Health Department
Town Hall
93 Main St.
Southington, CT 06489
276-6277

CT Department of Public Health
Environmental Epidemiology and
Occupational Health Section
410 Capitol Avenue, MS# 11CHA
Hartford, CT 06134-0308
(860) 509-7742

Agency for Toxic Substances and Disease
Registry, Region I
JFK Federal Building
Boston, MA 02203
(617) 223-5566

WATER QUALITY: If you have concerns about the quality of water around the Old Southington Landfill site, contact the Southington Health Department or the Department of Environmental Protection, Bureau of Water Management.
Groundwater Section
79 Elm St.
Hartford, CT 06106
(860) 424-3705

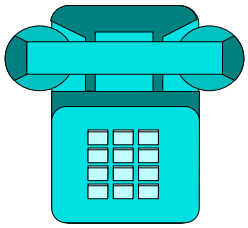
PUBLIC WATER SUPPLY: If you are interested in connecting to a public water supply, contact the Southington Water Department.

Southington Water Department
65 High St.
Southington, CT 06489
628-5593

SUPERFUND: Information regarding the federal Superfund process may be obtained from:

U.S. Environmental Protection Agency
JFK Federal Building (RPA)
Boston, MA 02203
(617) 565-3419

(Prepared by the State of Connecticut Department of Public Heath, Environmental Epidemiology and Occupational Health. This factsheet is funded in part by funds from the Comprehensive Environmental Response, Compensation, and Liability Act trust fund through a cooperative agreement with the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services.)



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