

PRELIMINARY
Health
Assessment
for

WASATCH CHEMICAL (LOT 6)

SALT LAKE CITY, UTAH

SEPTEMBER 29, 1988

Agency for Toxic Substances and Disease Registry
U.S. Public Health Service

PRELIMINARY HEALTH ASSESSMENT
WASATCH CHEMICAL (LOT 6)
SALT LAKE CITY, UTAH
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Prepared by:
Office of Health Assessment
Agency for Toxic Substances and Disease Registry (ATSDR)

Background

The Wasatch Chemical (Lot 6) Site has been listed by the U.S. Environmental Protection Agency on the National Priorities List. This site is a former chemical processing and packaging plant. It is located in a heavily industrialized area. Residential areas are located within a one mile radius of the site. A cracked, brown-stained concrete vault is located in-ground on the site; all drums have been removed or repacked. Previous removal actions have occurred.

Environmental Contamination and Physical Hazards

To date, identified contaminants of concern on the site include aldrin, dieldrin, chlordane, pentachlorophenol, 2,4-dichlorophenoxyacetic acid (2,4-D), and 2,4,5-TP in soil. Sampling also showed furans and dioxins (but no TCDD); however, laboratory QA data led to rejection of the furan and dioxin data. No physical hazards were observed on site visit.

Potential Environmental and Human Exposure Pathways

Potential environmental pathways include contaminated groundwater, surface water, sediment, air, soil, and consumable plants and animals. Potential human exposure pathways include ingestion of contaminated groundwater, surface water, or sediment, or of plants or animals which have accumulated contaminants from the site; contaminated off-site soil (if present) ingestion by children; inhalation of contaminants volatilized from contaminated groundwater during household uses, of contaminants volatilized from the site, or of contaminants carried in re-entrained dust; and dermal contact with contaminated groundwater, surface water, sediment, or soil.

Demographics

The closest nearby residence is about 1/2 mile away. A population of 5600 live within 1 mile of the site. Although previously accessible to trespassers, the site is now secured.

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Evaluation and Discussion

There are private wells within a 1/4-mile radius of the site used for drinking, bathing, cooking, and other household purposes. Sampling data are not available for groundwater or private well water. Residential use of contaminated well water may lead to human exposures by above-listed exposure pathways. The nearest surface water (in the drainage ditch) is about 100 feet away. Data as early as January 1986 show sediment contamination in a drainage ditch adjacent to the site and surface water contamination. Therefore, surface water and sediment ingestion and dermal contact are potential human exposure pathways of concern.

The site is fenced and locked. On-site soil contamination has been confirmed by sampling. Sampling information for off-site soil is not available. Therefore, above-named human exposure pathways for soil are of potential concern. Additional information is needed to determine whether off-site soil contamination is present, its extent, and the potential for exposure by above-named pathways. No sampling information is available for air. The industrial character of the area around the site makes the possibility of hazardous human exposures resulting from contamination of consumable plants and animals much smaller. Also, further information is required to assess or rule out potential human exposures by other above-named pathways.

ATSDR has prepared or will prepare Toxicological Profiles on dieldrin/aldrin, pentachlorophenol, and p-dioxin. These profiles discuss currently available information regarding the toxicity of each of these compounds.

Conclusions and Recommendations

Based on the available information, this site is considered to be of potential public health concern because of the risk to human health caused by the possibility of exposure to hazardous substances via the above-named human exposure pathways. Potential human health hazards from contaminated well water should be ascertained by obtaining complete residential well water use information; and, if needed, ongoing residential well monitoring should be conducted to assure protection of nearby residents. Also, human health hazards resulting from surface water and sediment contamination should be fully characterized and further potentially harmful exposures precluded.

Reported contaminant levels in soil raise human health concerns with respect to identified soil exposure pathways. Sampling should be obtained to rule out or characterize any off-site soil contamination for which

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these exposure pathways might be important. If further potentially harmful exposures are identified, measures should be instituted to preclude further such exposures.

Further environmental characterization and sampling of the site and impacted off-site areas during the Remedial Investigation and Feasibility Study (RI/FS) should be designed to address adequately the environmental and human exposure pathways discussed above. When additional information and data become available, e.g., the completed RI/FS, such material will form the basis for further assessment by ATSDR at a later date.