

Site Review And Update

KRYSOWATY FARM

HILLSBOROUGH TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

CERCLIS NO. NJD980529838

AUGUST 25, 1992

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

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.

SUMMARY OF BACKGROUND AND HISTORY

The Krysowaty Farm site is on a 42-acre tract of land in Hillsborough Township, Somerset County, New Jersey, near the village of Three Bridges. Disposal of chemical waste was reported to have taken place at the site between 1965 and 1970. Drums, bulk waste, and refuse were dumped in a "semi-perennial" stream channel (ravine) that drains into the South Branch of the Raritan River (1).

Between 1977 and 1979, residents near the site reported several medical complaints (e.g., contact dermatitis, dizziness, nausea during bathing, miscarriages, neurologic disorders) related to quality of well water. All complaints were made independently to the township's health department; residents had no prior knowledge of the disposal site. In Fall 1980, the New Jersey Department of Environmental Protection (NJDEP) and the Hillsborough Health Department conducted extensive residential well sampling in the area; analysis of the samples found no inorganic or organic contaminants above detectable limits, and levels were within safe drinking water standards (2). However, after the presence of waste and evidence of groundwater contamination were verified, the Township of Hillsborough issued a drinking water advisory to discourage use of private well water for drinking, cooking, and bathing. As a precautionary measure, and until additional data could be collected, the township established a temporary alternative supply of water (bottled) for 12 residences along Three Bridges Road (1).

During July 1981, the Township of Hillsborough retained a private clean-up firm and excavated 20-30 drums under the supervision of NJDEP. In 1983, the Environmental Protection Agency (EPA) initiated a remedial investigation and feasibility study (RI/FS). Analysis of residential well samples and deep groundwater samples taken during the 12-month study showed no contamination, but the report indicated that area groundwater could become contaminated in the future. In June 1984, EPA issued a record of decision (ROD) for the site that included the following selected remedy (1):

- Excavate and remove waste disposal areas;
- Transport waste to and dispose of it at an approved hazardous waste disposal facility;
- Provide permanent alternative water supply for potentially affected residences;
- Seal potentially affected potable wells;
- Monitor on-site wells semi-annually (for five years), for elevations of groundwater contaminants and for 129 priority pollutants; and,

- Monitor the marsh area for 129 priority pollutants to determine if future actions are necessary.

Provision of a permanent alternative water supply (i.e., municipal water line) was completed in October 1985. Excavation of the waste was completed in January 1986 (2). EPA removed the site from the National Priorities List on February 22, 1989.

On June 16, 1986, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a health consultation. The consultation reviewed residual soil sampling data (i.e., soil samples taken after remediation was completed). Residual soil samples indicated the presence of cyanide, polynuclear aromatic hydrocarbons, toluene, and ethylbenzene. The health consultation concluded that the data forwarded did not provide sufficient information for ATSDR to respond to EPA (3). On September 24, 1986, ATSDR issued a health assessment of the site. It concluded that remedial efforts had mitigated the potential health threat previously posed by contaminated soils, and that contaminated groundwater and surface waters (seeps) remained potential environmental pathways. Toluene and carbon tetrachloride, two contaminants of potential concern in groundwater and surface water before site remediation, also were identified in the health assessment. The health assessment recommended that institutional controls be placed on land encompassing the remediated zone, and that the groundwater monitoring program be expanded to include the ephemeral spring (seep) (4). Neither the health consultation nor the health assessment included a health conclusion category related to the site as a whole.

Past public health and community health concerns pertained to the possible exposure of people to contaminated groundwater through their use of residential wells. Although no contaminants were found in the residential well water samples, the pathway was considered of concern because of reports by area residents of various ailments and adverse health outcomes.

CURRENT SITE CONDITIONS

On March 23, 1992, a site visit was conducted by Gregory Ulirsch and Arthur Block of ATSDR and James Pasqualo of the New Jersey Department of Public Health. Representatives of EPA and NJDEP also were present. The following observations were made and information was obtained during the site visit:

- Site access is through a chain-link fence in a relatively remote area off a main road;
- There is no evidence that the site was once a waste disposal area;

- Since 1987, NJDEP has sampled, semi-annually, seven monitoring and six residential wells;
- Representatives of NJDEP indicated that the groundwater and surface water monitoring results did not find contaminants.

Conditions at the site have not changed since ATSDR issued its health assessment. The recommendation in the health assessment for institutional controls on land near the site does not appear to be necessary, following review of the results of residual soil, groundwater, and surface water sampling; in addition, the nearest residences have been provided with an alternative water supply.

CURRENT ISSUES

At this time, there are no apparent public health concerns. Following past remedial activities by EPA, monitoring results show no site-related contaminants in the environmental media at levels of public health concern. Lingering questions remain about past reports of ailments and adverse health effects by residents whose wells may have been contaminated. However, because monitoring results have not detected contamination in residential wells, and because most of the residents who were exposed no longer live near the site, this public health concern will be very difficult to evaluate. No other community health concerns have been expressed (5).

CONCLUSIONS

Following review of the environmental monitoring data, community health concerns, and remedial actions performed at the Krysowaty Farm site, ATSDR has determined that no further action is needed at the site at this time.

The recommendation in the 1986 health assessment for institutional controls on the land near the site does not appear to be necessary following the results of residual soil, groundwater, and surface water sampling; in addition, the nearest residences have been provided with an alternative water supply.

The recommendation in the 1986 health assessment that the groundwater monitoring program be expanded to include the ephemeral spring (seep) was carried out by EPA and NJDEP.

RECOMMENDATIONS

No further action (i.e., public health assessment or health consultation) at the Krysowaty Farm site is indicated at this time.

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

1. Environmental Protection Agency. Record of Decision for the Krysowaty Farm, Hillsborough, New Jersey. Washington, DC: U.S. Environmental Protection Agency, June 20, 1984; EPA Report Number EPA/ROD/RO2-84/005.
2. NUS Corporation. Community Relations Report for the Krysowaty Farm Site, Hillborough Township, New Jersey. Pittsburgh, PA: NUS Corporation, August 1986; EPA Work Assignment Number 106-2L31.
3. Agency for Toxic Substances and Disease Registry. Memo on Assessment of Residual Soil Sampling Data. Atlanta, GA: Office of Health Assessment, June 1, 1986.
4. Agency for Toxic Substances and Disease Registry. Health Assessment for Krysowaty Farm Site, Hillsborough, New Jersey. Atlanta, GA: Office of Health Assessment, September 24, 1986.
5. Personal Communication, Dr. Glenn Belnay, Health Officer, Hillborough Township Health Department, July 17, 1992.