Site Review And Update

TOWER CHEMICAL COMPANY
CLERMONT, LAKE COUNTY, FLORIDA
CERCLIS NO. FLD004065545

SEPTEMBER 9, 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.
SITE REVIEW AND UPDATE

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CLERMONT, LAKE COUNTY, FLORIDA

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Prepared by

Florida Department of Health and Rehabilitative Services
Under a Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry
SUMMARY OF BACKGROUND AND HISTORY

The Tower Chemical Company National Priorities List site is approximately 3.5 miles east of the town of Clermont, Lake County, Florida (Figures 1 and 2). The site occupies two portions of land—a 14-acre area west of County Road 455 which includes the main facility and two waste disposal areas, and a 20-acre spray irrigation field approximately 2,000 feet west of the main facility (Figures 3 and 4). Tower Chemical Company manufactured and stored various pesticides at the site from 1957 to 1981. Tower discharged process wastewaters into an unlined percolation/evaporation pond and burned or buried solid chemical and other wastes on another portion of the site. Tower used the spray irrigation field for a short period in 1980 to dispose of process wastewater after the percolation pond overflowed following a heavy rain.

In 1980, the Florida Department of Environmental Regulation (FDER) ordered Tower to cease all discharges. Following a court order to the same effect, Tower ceased operations. In 1981, two new companies—a fishing lure manufacturer and a potting soil blending business—began operations on parts of the site. Both companies have since moved and the site is now abandoned.

FDER and contractors for the U.S. Environmental Protection Agency (EPA) analyzed groundwater, surface water, soil, sediment, and air samples on and within 0.75 mile of the site. These analyses showed that on-site soil, sediment, and surface water were contaminated with high levels of DDT, DDE, DDD, chlorobenzilate, and 1,2-dibromo-3-chloropropane (Nemagon). On-site shallow groundwater was contaminated with DDE, DDD, arsenic, lead, chromium, and several volatile organic compounds. Surface soils in the spray irrigation field were contaminated with low levels of DDT and DDE. Neither on-site air nor off-site drinking water wells were contaminated. Fish in off-site streams and ponds contained low levels of DDD and DDE.

In a 1986 public health assessment, the Agency for Toxic Substances and Disease Registry (ATSDR) concluded that the contaminated shallow groundwater could represent a public health threat if it migrated into the deep groundwater aquifer. ATSDR also concluded that abandoned process tanks on the site, which contained elevated levels of contaminants, were a health hazard. Because of a 1983 EPA emergency removal action, on-site soil, sediment, and surface water either were no longer health hazards or had been fenced. ATSDR recommended that the nearby population be protected during any remediation and that private drinking water wells be tested on a routine basis.

No community health concerns were identified in the ATSDR public health assessment and none have been reported recently by local health officials. However, concerns about the health effects of inhalation of fumes coming from the site and possible drinking
water contamination have been reported in the past. Air monitoring conducted by EPA contractors did not show any contaminants at levels of concern, and continued monitoring of private wells by EPA has not shown any contamination of local drinking water.

CURRENT SITE CONDITIONS

Bruce Tuovila of the Florida Department of Health and Rehabilitative Services (Florida HRS) visited the site on July 29, 1992, with Russell Melling of the Lake County Public Health Unit. The site is in a rural area on the west side of County Road 455, approximately 0.25 mile from State Road 50. At the time of their visit, approximately 60 people lived within one mile of the site. The entrance road was in disrepair and appeared to be used only by nearby residents. The facility was vacant and there was a locked gate at the entrance. Access was unrestricted, however, on the south side of the property where there was no fence. The buildings on the site were either damaged or decaying and might be a physical hazard to trespassers. No obvious signs of trespassing were observed.

Conclusions in the 1986 ATSDR public health assessment appeared to be supported by available information. Contamination of the surficial groundwater aquifer might migrate to the deeper aquifer and contaminate nearby private wells. However, these wells had not been contaminated.

CURRENT ISSUES

No community health concerns have been reported to local health officials recently. EPA has not implemented any of the remedial activities described in the record of decision. As a result, contamination of the soil and surficial aquifer remains. Physical hazards also remain at the site and there is still the possibility of future contamination of nearby drinking water wells.

CONCLUSIONS

Since this site has not been remediated, trespassers may still be exposed to contaminants, as well as physical hazards. It is also possible that nearby wells may become contaminated. Therefore, this site should receive further health evaluation.

RECOMMENDATIONS

Because of the need for further evaluation of the public health significance of current and future exposure to the hazards at this site, we recommend that a public health assessment addendum be conducted. However, this assessment is not a high priority because site remediation is not complete.

On-site air, groundwater, sediments, and soil have been adequately
characterized. We recommend the following actions:

1. Remove all physical hazards.

2. Restrict public access and post appropriate warning signs.

3. Continue monitoring local drinking water wells to ensure the timely discovery of any contamination.

4. During remediation activities, set up air sampling stations to monitor exposure of on-site workers or local residents to airborne contaminants.

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

Documents reviewed by Florida HRS for this summary are as follows:

1. NUS Corporation, Remedial Action Master Plan, Tower Chemical Site, Lake County, Florida, December 1983.

2. NUS Corporation, Remedial Investigation, Tower Chemical Company Site, Lake County, Florida, May 1986.


Preparer of the report: Bruce J. Tuovila, M.S.
Figure 1. Map Showing Location of Lake County
Figure 2. Map Showing Approximate Location of Tower Chemical Company
Figure 3: Tower Chemical Company Site
Figure 4. Tower Chemical Company Spray Irrigation Field