

Site: Former 3M/Dynacolor (3M) and GE/Black & Decker (GE) Sites

Local Public Health Agency (LPHA): Monroe County Department of Health

Funding Years: 2000-2001

Site Overview

The Monroe County Health Department addressed health concerns related to two New York State Department of Environmental Conservation (NYSDEC) inactive hazardous waste sites in the Village of Brockport near Rochester, New York. The sites, formally owned by 3M/Dynacolor and GE/Black & Decker, are situated along the Erie Canal, with residential properties bordering them. The sites contain a multitude of contaminants including cyanide and silver from photo processing; a high level of polychlorinated biphenyls (PCBs), most likely from electrical transformers; heavy metals from plating processes; and trichloroethylene (TCE), which was used as a solvent degreaser.

Paralleling the local public health agency (LPHA)'s environmental health education project was a lawsuit headed by the Masry and Vititoe Law Firm—which employs Erin Brockovich—against several of the potentially responsible parties, including 3M and GE. The LPHA formed close alliances with its concerned community and frequently used the press for transmitting project information to the public. The Monroe County Department of Health also developed a series of bimonthly informational newsletters sent to community members, the public library, various Town of Clarkson and Village of Brockport offices, and area physicians. The newsletters served as an effective question and answer forum for addressing the community members' health concerns.

Community Profile

The Village of Brockport, along the Erie Barge Canal, and the Town of Clarkson, north of Brockport, have a combined population of about 14,000 people. The population is predominantly English speaking, white, and middle- to low-income. It includes long-time residents in single-family homes, and students who attend the State University of New York (SUNY) Brockport.

The Village of Brockport has several churches, a senior living center, playgrounds, and its school district located in close proximity to the former GE and 3M sites. All residents in the affected area are on public water from Lake Ontario. Some residents have private wells; however, they do not fall within the affected area.

Contaminants

NYSDEC conducted stream sediment and soil sampling throughout the 1990's, which revealed **cyanide, lead, cadmium, silver, zinc, and polycyclic aromatic hydrocarbons (PAHs), a type of semi-volatile organic compound (SVOC)** around the former 3M/Dynacolor site. The New York State Department of Health (NYSDOH) collected water samples from sump pumps and basement floodwater in 1996, which detected **trichloroethylene (TCE), cis-1, 2-dichloroethylene**, other volatile organic compounds (VOCs), and cyanide in a groundwater plume that migrated from the former GE and Black & Decker site, under the Erie Barge Canal and under resident properties.

In addition, TCE was found in residential indoor air samples, overburden groundwater monitoring wells, and residential sump water of some properties north of the canal. **PCBs**, and SVOCs including PAHs, cyanide, zinc, and silver were detected in the surface soil samples and stream sediments of a tributary to Brockport Creek.

Long-time residents were concerned about potential past exposures, having previously played in Brockport Creek. Residents were also concerned with a decline in their property values, and about the possibility of 3M buying out residents' property, only to raze the houses and merely pave over the contaminants rather than removing the contaminated soils. Residents became concerned when State Health Department's tests revealed cyanide in the sump water and heavy metals in residential yards, as well as ground water contamination. Residents wanted to learn more about the findings and clean up efforts, but were frustrated about having been ignored in earlier years, and were consequently distrustful of state and local agencies.

Involvement and Role of the Local Public Health Agency

The Monroe County Department of Health first became involved with the former 3M and GE sites because the NYSDEC has an informal agreement to provide them with site information. This allows the local public health agency to have input at the planning/investigation and remediation stages.

In order to address community concerns the LPHA formed a consultation group (community advisory group) comprised of five area residents, an environmental consultant, the mayor, and state and local officials. The Monroe County Department of Health also strove to build community member trust by listening to their suggestions, incorporating their ideas in the needs assessment process, and responding to their concerns in a timely manner. This led to a two-pronged needs assessment, including a public meeting and a survey, with the community members guiding the efforts of the LPHA.

The LPHA conducted a door-to-door health awareness and opinion survey. Five hundred surveys were distributed to a targeted area determined by a community meeting. Ten volunteers working in pairs, including Monroe County Department of Health staff, SUNY Brockport students, and a SUNY Brockport professor, distributed the surveys, after a short training session. The survey results were summarized and distributed to all survey recipients at a public meeting. The LPHA also wrote a press release of the survey findings and notified the public of future educational activities.

During the public meeting, residents were randomly subdivided into groups (sorted according to the color of the Tootsie Pops that they had chosen when they entered the meeting). In small groups they listed their concerns on flip-chart paper, and then ranked their concerns as a collective group. This seemed to be a very effective system of eliciting constructive input.

Based upon these two methods of needs assessment, the health department determined that the community was most interested in learning more about:

- ?? Symptoms of exposure for each of the chemicals detected at the 3M and GE sites.
- ?? How they could protect themselves from exposure.
- ?? The types of medical monitoring available.

?? Clean-up methods for the sites.

The LPHA and the consultation group's educational efforts were achieved through the following means:

- ?? The development and distribution of a bimonthly newsletter.
- ?? An updated and organized repository of site information and ATSDR fact sheets at the public library.
- ?? A public availability session with local and state experts to address the community's questions and concerns.
- ?? A presentation of site-related information and environmental health materials to area physicians by the NYSDOH.

The LPHA notified the public of the newsletters and the availability session via announcements in the press. The press releases included background information about the grant, the goals of the project, and included quotes from LPHA staff and/or residents involved with the consultation group.

Through the LPHA's newsletters and in-person meetings with the community, state health and environmental officials were also able to convey important health information to residents, specifically that the tributary and polluted sediments were not hazardous as long as direct contact was avoided. Nevertheless, airborne contaminants from seepage into basements were still an unresolved health concern for residents. This information was relayed in the LPHA's newsletters and in-person meetings with the community.

A series of six bimonthly newsletters was prepared by the LPHA and reviewed by the consultation group, State Department of Environmental Conservation, and State Department of Health. Each newsletter contained a main article and a detailed focus on one of the site's contaminants. They also included several regular sections such as the "Community Corner", where the LPHA answered resident questions; "Information Sources", which listed reliable sources for environmental health information; "What's New" which contained updates about the site and remediation activities; a "Glossary of Terms" section; and "Who to Contact for Site Information". The newsletter was mailed to residents, industry, the Town and Village offices, the physician's office building, the public library, and other interested parties.

As a result of an evaluation of their education efforts, the LPHA found that the newsletters had successfully reached the community members with reliable, detailed and scientific information and in addressing their questions.

Lessons Learned

- ?? While the LPHA's collaboration with state agencies allowed each agency to become more familiar with the others' responsibilities, operations and capacities, it was a challenge to collaborate on the project because their roles and responsibilities in the cleanup process and public accountability were so different. In the future, the Monroe

County Department of Health would insure that there was buy-in from the other State agencies, rather than assuming their involvement in the process.

- ?? Shortly after the LPHA initiated its environmental health education project, the Masry and Vititoe law firm began investigation of the site's primary responsible parties to determine whether the corporations are liable for polluting the land and water bordering their sites. Due to the law firm's pending multimillion-dollar lawsuit and the extent of contamination, this site received significant media attention. This directed the focus of the community on the site investigation and remediation processes, which was not in the scope of the LPHA's environmental health education project, thus causing many community members to lose interest. Consequently, having more community members not directly affected by the site involved in the project, can reduce some of the focus on "seeking justice," and keep the project focused on health issues.
- ?? It is important to take time to forge relationships with community members and build trust by involving them in the process as much as possible and as early as possible. Also, it is important to determine what level of understanding the group has of the topic before beginning.
- ?? Trust can be lost if government agencies have scientists that do not know how to communicate to the layperson, thus undermining the information presented by alienating the community members. For example, at the consultation group meeting, when a toxicologist wanted to explain what is considered a toxic level of site-related contaminants, he brought up a study done with Rhesus monkeys. Residents were angered when they perceived that they were being compared to monkeys, which greatly undermined the information session. An LPHA could avoid this by proactively facilitating the meeting by asking for clarification or explaining areas of the speech, or by discussing communication strategies with the speakers ahead of time.

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