

Rural Issues: Impact on Small Communities

MONITORING THE MANAGERS: A COMMUNITY ENTERPRISE

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INTRODUCTION

The Chemical Waste Management Citizens Monitoring Committee was chartered with the May 22, 1984, filing of the Consent Decree between the State of Ohio ex. rel Anthony J. Celebrezze, Jr., Attorney General of Ohio, plaintiff, and Chemical Waste Management, Inc., defendant.

The Committee consists of the Sandusky County Health Commissioner, Kenneth W. Kerick, M.P.H., who serves as chairman, two members of the Sandusky County Board of Health, three local citizens appointed by the chairman, and an Ohio EPA official.

Once officially constituted, the Committee was called together by Chairman Kerick to organize on June 28, 1984, at the Chemical Waste Management, Inc. facility in Vickery. That meeting included a review of Section 41 of the Consent Decree which outlines the general responsibilities of the Committee.

Those responsibilities dictated that Chemical Waste Management, Inc., shall hold a meeting of the Committee at the facility no more than once per month to answer questions and complaints about the operation of the facility, to provide an update on the activities taken pursuant to the Decree, and to give the Committee a tour to observe, firsthand, the activities taken to implement the Decree.

The Committee decided to meet on the third Thursday of each month and to mix the meeting format. Some meetings would be open, public meetings, while others would use both closed and open formats.

The Committee agreed to become as familiar and knowledgeable of the Consent Decree as possible. The next meeting and subsequent meetings, if needed, would focus on the provisions of the Consent Decree with both Chemical Waste Management, Inc., and Ohio EPA perspectives.

Secretarial needs for the Committee would be provided by the Board of Health, reimbursed by Chemical Waste Management, Inc. Settlement monies as well as reimbursement to Committee members were set at \$20 per meeting and 20¢ per mile for travel. This provision would exclude the Chairman and Ohio EPA representative.

COMMITTEE GOALS AND OBJECTIVES

The two primary goals of the Committee include the following:

1. To meet the requirements of the Consent Decree filed on May 22, 1984, in the Sandusky County Court of Common Pleas and, more importantly;

2. To provide a focal point in the community for the interaction of differing community interests with the industry, for the purposes of public information.

The scope of the Committee's function and responsibility was outlined in the Consent Decree; to expand activities beyond those mandates would be unauthorized. The Committee has no regulatory authority under the provisions of Section 41, and the Ohio EPA continues to be the permitting and regulatory entity.

With the focus on public information, the Committee agreed on the following objectives to meet its stated goals:

1. To become informed about the facility's activity or operations;

2. To provide a means of disseminating information to the public on the operation and status of the facility;

3. To provide a mechanism for citizens' concerns and complaints to be addressed;

4. To provide community input to Chemical Waste Management, Inc. personnel;

5. To assess the progress of the facility in meeting the conditions and dictates of the Consent Decree;

6. To report perceived discrepancies with the mandates of the Decree to Ohio EPA.

EVALUATION OF COMMITTEE'S PROGRESS IN MEETING ITS OBJECTIVES

To become informed about the facility's activities and operation: During the term of the Committee's existence, to date, much time and effort has been expended expanding each Committee member's level of knowledge regarding the Chemical Waste Management, Inc. site. Obviously, several Committee members had been intimately involved for several years, while others had only tangentially been exposed through media coverage or other community information sources. The meshing of the Committee members' knowledge and aptitudes would provide a stable foundation for the work of the Committee.

Initial meetings have involved an in-depth review of the facility's operation from the acceptance of waste materials, laboratory sampling, and analytical procedures to ultimate disposal in the deep wells. Meeting agenda items included a review of deep well technology, current monitoring procedures, environmental sampling, and interpretation of sample results. The Committee reviews copies of consultant reports as well as correspondence and/or other pertinent documents relative to the current and past operation of the facility.

To provide a means of disseminating information to the public on the operation and status of the facility: The Citizens Committee has used various tools to accomplish this objective. The Committee chairman has issued news releases following each meeting of the Committee. The chairman has been designated as the official spokesman for the Committee, and only he has made official announcements.

Committee members have responded to many citizens' calls as well as the news media. Periodic public meetings have been held and planned. The Committee sponsored one meeting to review the closure plan prior to the Ohio EPA public hearing and another is currently planned to review the Phase I activities of the closure plan with area residents.

Press conferences following committee meetings and open meetings to the media have been conducted off of the Chemical Waste Management, Inc. facility premises.

Monthly on-site meetings at the facility have not been open to the media or public at the request of Chemical Waste Management, Inc. officials.

To provide a mechanism for citizens' concerns and complaints to be addressed: Several citizens' concerns relating to such problems as truck traffic flow, air pollution and dust emissions, chemical fixation of the sludges, cloud emissions, animal and health effects, etc. have been brought to the Committee for discussion and action. The Committee has attempted to address all concerns as presented to them individually or collectively as Committee members. Probably the most significant concern that has been brought to the Committee's attention has been that of possible health effects, both acute and chronic, that may have resulted from either short- or long-term exposure to airborne releases from the facility.

To provide community input to Chemical Waste Management, Inc. personnel: The Committee serves to bring community concern and input to Chemical Waste Management, Inc. at each of its on-site meetings with the industry. These meetings allow for informal interaction with Chemical Waste Management, Inc. officials on differing problems. Committee members receive varying input from residents and bring these concerns to each of the meetings. The process has worked well in establishing an ongoing dialogue with the Committee and industry.

To assess the progress of the facility in meeting the conditions and dictates of the consent decree: At each regular monthly meeting of the Committee, regular progress reports are submitted to the Committee for review and discussion. These reports include activities related to the provisions of the Consent Decree. In addition, the Ohio EPA provides an update report from their perspective on the operation.

Copies of all generated reports, correspondence, etc. are received by the Committee chairman and disseminated to Committee members between meetings. Such reports include reported on-site spills, ground water monitoring and testing, air pollution and odor emissions, closure plan activities, inventory depletion and an operating report on the deep wells that indicates days of operation and volume injected. These reports and information enable the Committee to assess progress toward meeting the Consent Decree directives.

To report to the Ohio EPA perceived discrepancies with the mandates of the Decree: The release of a toxic cloud from Pond No. 7 was probably the most significant event since the formation of the Committee. Local residents called the members of the Committee immediately after the sighting. Committee members investigated the release and reported their findings to the Ohio EPA on the next business day. This release resulted in the September 19, 1984, Findings and Orders by the Ohio EPA Director, which temporarily closed the facility to any incoming wastes. A fine of \$40,000 was also levied against the industry for violating several hazardous waste laws and rules.

SUMMARY

In summary, much of the initial activity of the Citizens Monitoring Committee has been organizational and directed to increase each member's level of knowledge. To date, 16 meetings have been held over the past 11-month period. These meetings have been a mixed format with regular meetings on-site with Chemical Waste Management, Inc., officials and open public meetings scheduled in between.

The Committee's goals and objectives focus on meeting the requirements of the Consent Decree as well as providing an improved mechanism for public information. While the Committee initially took some public criticism for some of its activities, specifically the public versus private meeting issue, its credibility has improved and its mission is clear. The individual members of the Committee have done considerable work and taken up a most unpopular challenge.

SOUTHEAST MINNESOTA'S KARST TOPOGRAPHY LEADS TO GROUND WATER POLLUTION FROM NONPOINT SOURCES

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The same hilly topography and unique geology that contribute to southeastern Minnesota's scenic charm also make it particularly susceptible to ground water contamination.

A 1976 study found that 85 percent of the water wells in four southeastern counties of the State were already contaminated to some extent with nitrates or bacteria (Minn. Dep. Health, 1976). While surface water contamination is probably no greater here than elsewhere, in this region contaminants on the surface are much more likely to enter ground water supplies.

Three natural characteristics of the region explain the problem. First, limestone bedrock underlies the region. Called karst, this rock is riddled with cracks, caves, and fissures—like a giant sponge. The karst contains great quantities of ground water that flow quickly and freely through it. In some places, underground streams and rivers flow through the karst. Niagara Cave near Harmony even has an underground waterfall.

A second natural feature of the region—shallow soils—allows pollutants to enter the karst almost unrestrained. Elsewhere in Minnesota, contaminated surface water filters through thick layers of glacial soil and overburden, usually becoming purified before reaching ground water. But the glaciers skipped the southeast corner of the State. Here, the karst is covered by a shallow soil layer, where sinkholes, springs, and disappearing streams appear on the land surface.

The combination of shallow soil and fractured bedrock allows water on the surface to drain quickly into the ground. If that water is contaminated, the contaminants spread quickly through the karst.

When the glaciers skipped southeastern Minnesota, they also left a third feature: hilly terrain. While these hills contribute to the scenic beauty of the area, they can cause severe erosion when combined with careless farming practices. Runoff from farm fields can carry soil, pesticides, herbicides, and fertilizers into streams and ground water. Infiltration is also a pathway for agricultural chemicals to enter ground water.

Single sources of ground water pollution and sources involving particularly hazardous substances have received much attention from the media over the past few years. Leakage of hazardous waste from the Ironwood Landfill and the recent spill of 210,000 gallons of jet fuel from the pipeline near Owatonna are cases in point.

But most our ground water pollution comes from everyday activities, from practically every home and farm. In our area, we are experiencing ground water pollution from improperly managed animal feedlots, inadequate city sewage systems, home septic systems, illegally dumped garbage, and abandoned water wells.

Unfortunately, the situation is going to get worse before it gets better. Several southeastern Minnesota communities have had to shut down their city wells in recent years and drill new, deeper wells at great expense to taxpayers. In some cases, a high nitrate level in the water has triggered the problems; in other cases, seepage of industrial solvents into a city's water supply has caused a shutdown of the system.

Rural private water wells appear to be even harder hit. Voluntary testing of private water wells has been done by most counties in Minnesota at a minimal cost, and in several counties in the karst area these tests are showing 30–40 percent of private wells with nitrate and/or bacteria contamination above drinking water standards.

The Minnesota Project, a nonprofit organization devoted to rural community development, was encouraged by many different people to develop a project on the issue of ground water contamination. With the support of the Joyce Foundation and several local foundations, we are working to educate the public about the nature of our ground water problems and how to begin changing practices to reduce the pollution problem. We have developed a wide variety of educational materials, including brochures, a newspaper column carried by about 25 weekly newspapers, radio public service announcements, models for use in schools, and an aggressive public speaking and outreach program. In all of our messages, we have tried to emphasize what the average resident can do to minimize his or her contribution to pollution.

Working with eight counties in southeastern Minnesota that have voluntarily formed themselves into two ground water task forces, we developed a model ordinance for ground water protection. Starting with the theory that the Federal and State governments were unlikely to take care of this problem, the counties agreed that local government should take the lead in protecting ground water. Indeed, since land use issues were at the heart of most of the sources of pollution, it fell into the counties' traditional area of responsibility.

The model ordinance contains sections regulating dumping in sinkholes, water well construction and abandonment, individual sewage disposal systems, livestock waste, and erosion control. In some cases, Minnesota had fairly good State laws on the books, but everyone admitted that these laws were not being enforced at the local level. Therefore, the model ordinance gets the county into the act of enforcing certain laws. In every case, we were able to design enforcement processes that start on a very friendly discussion basis, and move through court orders and criminal sanctions only if the landowner is uncooperative. This model ordinance has been endorsed by the eight southeastern counties and is in the process of undergoing public hearings. Also, we have received requests for the ordinance from about 30 States.

The one area which we readily admit is not covered by the model ordinance is agricultural chemicals. In fact, evidence is mounting that indicates that this may be our biggest source of nitrate and chemical pollution. Direct leaching of agricultural chemicals into ground water is a subject that has not been well studied, and we would urge a much greater emphasis on that particular category of nonpoint source pollution.

Two points must be emphasized. First, nonpoint source pollution is a major contributor to ground water pollution, at least in certain areas of the United States, such as those with karst topography. Nonpoint source pollution is not simply a surface water issue.

Secondly, rural areas are just as likely, if not more likely, to suffer the consequences of nonpoint source pollution. When one considers the fact that most rural families have to depend on their own-untreated private water wells, the importance of ground water protection becomes even clearer.

Unfortunately, local governments are often ill equipped to deal with these issues. In Minnesota, we have found that if local governments will work together in harmony with State agencies and researchers, much can be accomplished at the local level.