

LIBERTY VIEW LANDFILL
SUPERFUND COMMUNITY RELATIONS
CASE STUDY¹

"In the long run? Let me ask you this: what would you do to protect your children? Whatever is necessary."

--Ben Archer, Liberty View Councilman

Introduction

As the site manager for the Liberty View Landfill, Jack Green is preparing for an informal briefing next week. The briefing has been planned by the community relations coordinator in response to requests from local citizens and officials to discuss the site's status. The state has held one public meeting at Liberty View, presenting an overview of the remedial investigation/feasibility study (RI/FS). It was followed the next day by a public session on technical issues. Both were held six months ago, in July 1984, just after Green joined the South Carolina Department of Environmental Resources (DER). Green's predecessor and the community relations chief also met with a citizen's group in November of 1983 to discuss the scope of work and the procedures leading up to selection of a contractor.

Green inherited the Liberty View project, a state-lead site, in the early implementation stage of the RI/FS. Even though the scope of work had been developed and the contractor had been selected by the time Green was assigned the site, he feels that as the site manager, he is the "constant" at the site.

DER scheduled the upcoming briefing after receiving many letters from residents of the Liberty View Landfill area. Most correspondence since Green came on board has been from local officials and a core group of residents who

¹This case study has been developed from an investigation of events that occurred at a hazardous substance release site. The true names and locations have been disguised for the purpose of this case study.

This state case study was prepared for the Superfund Community Relations Training Program and is the product of the combined efforts of ICF Incorporated, EPA's Office of Emergency and Remedial Response, and an EPA Headquarters/State Office Workgroup. ICF Incorporated performed the work on this case study under contract to EPA pursuant to Work Assignment No. 25 under Contract No. 68-01-6872.

Daphne Gemmill, EPA Superfund Community Relations Coordinator, served as Project Officer. Stephen Thomas, Director of the Graduate Program in Health Policy and Management at the Harvard School of Public Health and Anne H. Fenn of EPA's Superfund Community Relations Office researched the case and provided valuable assistance during the case development and review. The case development and review assistance of the regional and state community relations coordinators and of the citizens is gratefully acknowledged. Sharon Pamepinto of ICF Incorporated researched the case and was the primary case study author.

call themselves SOLVE (Save Our Liberty View Environment). Green knows the citizens have taken an active interest in the site for quite some time. They were instrumental in forcing the sanitary landfill's closure in 1981 and then in having it included on the National Priorities List (NPL) in 1982. These people had forced action to be taken and now expected more of it from DER.

From Green's perspective, both technical and community relations activities are running smoothly. The state technical coordinator closely monitors on-site work, and Green receives monthly reports from the contractor outlining the technical progress. Green senses that Liberty View Landfill is considered a model site by the DER in terms of community relations.

The South Carolina DER community relations chief, Anna Windsor, is committed to involving the local community in remedial actions, and that conviction is apparent in her work. Before going to work for the state, Windsor was active in the South Carolina League of Women Voters and as an environmentalist in the community. She knows that part of her job is to sensitize her colleagues to community concerns, especially since there are differences in awareness and sensitivity among DER staff. Windsor and her staff try to ensure that public comments are plugged into each step of the decision-making process before final decisions are made. "I tell people there's never been a public participation program like the community relations program for Superfund sites. It is much more intensive than other such activities. Because hazardous waste sites are often literally in people's backyards, fears and concerns are evoked which do not arise from other more distant environmental problems. Because we interface with those outside the DER, special efforts must be made to include us in internal meetings as well, so we are knowledgeable and thus more effective."

Windsor has assigned each of her community relations coordinators to work with four site managers. Because of the scarce resources in the DER, each community relations coordinator handles about 30 sites. Community interviews are not usually performed before the development of site-specific community relations plans. On-site interviews were not conducted at Liberty View Landfill. Windsor has established a minimum number of public meetings for each site. (See Attachment A for standard community relations plan.) According to Windsor, on-site interviewing is not always feasible "because of staffing constraints and the large number of sites in the state."

Green relies on the community relations staff to handle newspaper and public inquiries concerning his 10 sites. Questions about Liberty View Landfill are especially frequent, which Green attributes to the fact that citizens of the two affected towns, Liberty View and Carmody Park, have been actively involved with site proceedings for many years and continue to be very well informed. Residents in both towns had been helpful and cooperative in supplying DER with site history and their own sampling data. Of course, they are anxious for faster action in the ongoing RI/FS, but such impatience is understandable and is apparent at many other hazardous waste sites as well.

Green's immediate boss, Leo Tufts, a site management section chief, will also be at the briefing in Liberty View. As one of two section chiefs, Tufts oversees six site managers. He is detailed from an EPA Regional Office. In

his thoughts about Liberty View, Tufts takes a cautious approach: "Maybe it's just a badly operated landfill. You can't tell from the initial sampling. It belongs on the NPL if only so we can investigate. The community, by the way, has made it easy for us to get information." Looking ahead, Tufts pointed out that "it's hard to communicate the results of risk assessments, and the EPA has been unwilling to put any cleanup standards down on paper.

The head of South Carolina's Hazardous Site Remediation Administration, Stephen Garrett, believes in the value of community involvement and pays close attention to the work of his community relations staff. He has decided to attend next week's briefing in Liberty View. A former professor of microbiology, Garrett clearly enjoys the challenges of public management and is determined to make the state program work. He makes a point of taking direct responsibility when serious tensions surface, and he is a forceful and clear speaker. "If there's bad news, (local people) are going to hear it sooner or later," Garrett observed, "and it might as well be from me. What have I learned in this job? I've learned to be less personally defensive."

One of Green's first steps in preparing for the upcoming public meeting is to review closely the history of community involvement and government response actions at the site.

Fishkill Prompts State Investigation

DER's Waste Management Division began regulating sanitary landfills in late 1972. The Liberty View facility was considered an exceptionally well-run landfill and was licensed by the state for disposal of municipal and industrial wastes, plus septage and sewage sludge. The owner of the landfill in 1972, Andy Thompson, was an active member of the Liberty View community. He had served as mayor of Liberty View borough, and his family had lived in the area for years. Most townspeople were unaware of the dump's existence, and those who did know about it considered it a "mom-and-pop" operation performing a public service for their community.

The Liberty View Landfill covers a 200 acre tract of land in a partially wooded, rural-residential area. The eastern third of the landfill, the older section, is located in the town of Liberty View. The remaining two-thirds are in the town of Carmody Park. Three sides of the landfill are bordered by private homes and small farms. To the west is a 50-acre hardwood wetland which is the headwaters for Shelby Brook and the Calvert Watershed. West of the wetland is a popular recreational state park. About 12,000 people within a three-mile radius of the landfill rely solely on ground water for their potable water source.

The first sign of problems with the landfill came in 1973. Fish were found dead in Shelby Brook, a frequently used local fishing spot. The brook flows past Liberty View Landfill. The DER initiated geologic-hydrologic testing of the area on the recommendation of its Wildlife Division, which initially investigated the fishkill. Shelby Brook failed to meet state standards for color, phenols, coliform count, iron and turbidity. Geologic subsurface conditions and the nature of the overburden beneath the unlined

landfill itself were such that it was "reasonable to state that landfill leachate reaches the ground water," according to a 1973 DER memo describing the situation.

The DER ordered Thompson to install observation wells on site, but he resisted. He argued that no existing regulations required such wells nor was any other landfill owner in the state facing a similar demand. In the meantime, Thompson had installed a state-of-the-art leachate collection and recirculation system, the first of its kind in the state. With the innovative system in place, DER pressure subsided. The Waste Management Division inspections continued on a regular basis, about three to four times per year, with no serious violations reported. Citizens occasionally complained to the Carmody Park Board of Health about trash blowing from the site. The Board of Health consulted its attorney to find out how much authority it had to act on the problem. The attorney advised the board that it had no power because the state had preempted all local jurisdiction over sanitary landfills. (Later, the board discovered it had been misadvised; the town could have taken some action.) The state, in turn, advised town officials that the dump was monitored frequently and was operating according to state safety standards. Thompson himself diligently helped to calm local fears by responding to citizen concerns. For example, according to one town official, Thompson would send a man out to pick up trash along the residential road leading to the dump, thus maintaining the image of "a small, good-neighbor operation." So, with DER assurances and Thompson's efforts, concerned citizens relaxed somewhat about Liberty View Landfill, regarding it perhaps as a nuisance, but not as a public health problem.

Trucks and Fire Provoke Local Questions

Public interest in the site was aroused once again five years later in September 1978 when Thompson sold the landfill to Sanitation Associates, Inc. (SAI). What once was described as a "nice, quiet, small-town landfill" now was owned by a large, unknown corporation. Growing numbers of trucks began to snarl local traffic on the small country roads. The number of trash trucks travelling through Liberty View and up residential Hillside Road increased dramatically. Homeowners were bothered by litter falling from the trucks, and the dump's new owner was not as community-conscious as Thompson had been.

SAI was a subsidiary of a firm that was designing a large solid waste incinerator in an adjacent state. The company planned to transport the residue from the plant to Liberty View Landfill. The new owner described the residue, according to one resident, as "inert powder, dust, fairy dust; it doesn't hurt anybody."

The "fairy dust" never arrived at the dump. The incinerator technology was untested and never worked properly. The company, though, had contracted to accept municipal wastes from many towns, some over a hundred miles away. Solid waste from at least four neighboring states was brought to Liberty View. Hillside Road residents watched trucks stencilled with "Keep Atlanta Clean" logos lumber by their homes to dump trash nearby.

A fire at the landfill in January 1979 aroused some citizens into investigating the site on their own. A recently elected Liberty View councilman, Ben Archer, was called by policemen to witness the fire. A printer, he had moved to the countryside of Liberty View to escape the city and its problems. He ran for councilman after organizing a local softball league and other community activities. Dealing with a landfill fire that was supposedly caused by exploding aerosol cans did not mesh with his picture of gracious country living. Still, being an inquisitive and energetic person, he pressured the town council to investigate the landfill. Archer's words were wasted on that forum. The council had dealt with a citizen in 1974 who insisted the landfill was polluting potable water supplies. The man finally moved, but the council gave Archer the same answer it had given five years earlier. The DER's 1973 memo regarding possible groundwater contamination lay forgotten in the Board of Health file. Council members were secure in the earlier information that DER gave them that Liberty View was the best-run landfill in the state. Said Archer, "Who was I? After all, we had these Doctors of Garbage saying not to worry."

Through his questioning and search for information, Archer found an ally. David Edmonds, the director of the Calvert Watershed Association, shared Archer's concern and had some knowledge of water quality issues. The Calvert Watershed Association is a private organization dedicated to protecting the waters of the Calvert Watershed. Its membership is mainly composed of owners of large estates throughout the area. Many members were quite influential, so the association turned out to be a valuable asset in the ensuing effort.

Archer and Edmonds together began to educate themselves about landfills and their potential effects on surface and ground water. More specifically, they looked into the history of Liberty View. They learned that the observation wells finally installed by Thompson in 1977 at DER request were monitored by the landfill operator and not by DER. They learned that from the 1940s, when Liberty View Landfill opened, until 1972, hazardous substances could have been dumped into the landfill, that there was no monitoring of what was currently being dumped into the landfill, and that the site was particularly inappropriate for a landfill because the bedrock beneath it was fractured. Because the landfill was unlined, leachate percolated down through the soil into the bedrock's tiny crevices, which meant that the contamination might be carried in any direction. An isolated plume of contamination could not be traced with certainty. Archer and Edmonds also learned that the site affected a population much greater than the 12,000 living in Liberty View and Carmody Park. The landfill sat at the headwaters of the Calvert Watershed, which ultimately supplies water to over a million people.

In the summer of 1979, The Daily Chronicle, a local paper, printed a letter from Archer and Edmonds detailing their fears: "When we began this study, we believed we would find a minor discomfort, nothing more than an eyesore. But what we found was a cancer that threatens the life of our entire community. Years of neglect, confusion, and bureaucratic red tape have resulted in the de facto deregulation of a supposedly regulated landfill."

Throughout 1979 and 1980, most residents were becoming more aware of the landfill, partly because of a general consciousness-raising from the media

coverage of Love Canal. Still, they were not yet particularly concerned. The town governments, however, became more involved. The Liberty View Board of Health began testing private wells and found in some levels of arsenic and iron above the federal standards for safe drinking water. The Liberty View town council also filed a civil complaint against Sanitation Associates, Inc., seeking to stop construction of a new access road to the dump that would accommodate larger trucks. Superior Court Judge Paul Rogers issued a restraining order in favor of Liberty View's town council. In the meantime, Carmody Park's town council appointed their "garbage group" to investigate complaints about noise and trucks and to respond to concerns about health effects from the site. The Waste Management Division of DER cited the Liberty View Landfill in late 1979 for violating state regulations by exceeding the maximum allowable width of operating face, providing inadequate daily cover, and excavating previously deposited refuse.

Citizens Organize

The town councils of Liberty View and Carmody Park called a joint informational meeting in December of 1980 on the future of Liberty View Landfill. About 100 citizens attended. Another Sanitation Associates, Inc. landfill located only 15 miles away was almost filled to capacity. Townspeople of Liberty View and Carmody Park feared Liberty View Landfill would be the new destination for waste previously routed there. Too many trucks and too much trash were already coming to their small community. In addition to the nuisance of the landfill, it increasingly appeared to be a health hazard. The townspeople had had enough.

After the meeting, a group of women whose houses were along Hillside Road in Liberty View met at the home of Nancy Decker to organize. They felt a small, well-organized group could successfully fight a landfill operation regulated by a large state agency "involved in mismanagement on a grand scale." Their goal was to stop the trucks. They felt the means to that end would be to have DER enforce the law prohibiting contamination of ground water by a sanitary landfill. DER already had sufficient proof of contamination, as far as the citizens were concerned, dating as far back as the 1973 state geologist's memo. If DER would simply enforce that prohibition, they reasoned, Liberty View Landfill could continue its operation safely on a smaller scale with fewer trucks. It did not take long, though, for the women to understand the threat to public health posed by the landfill. Initially motivated to curtail truck traffic, their goal quickly shifted to protecting their water supply.

In order to maximize their political effectiveness, these women named themselves SOLVE (Save Our Liberty View Environment) and sought the help of an attorney to incorporate. They wanted to avoid being labelled as "a bunch of housewives clenching fists at garbage trucks." They were homeowners concerned about their health and their children's health. Their property values were beginning to suffer. Their taxes were high because they had no industry in the county to offset the burden, yet they had the wastes of industry being dumped down their street. Relying on the Calvert Watershed Association for technical background, the group, led by the "founding mothers", began to

educate itself on the problems associated with landfills and on the history of Liberty View. They began reading medical and toxicological journals. To increase their visibility, they enlisted support of local influential people. Their resolve was clear. According to Archer, once the president of SOLVE himself, "if you saw these women on a dark street, you wouldn't be scared, but in a public meeting they can rip you apart."

Concerns Rise with Increases in Truck Traffic

Only a month later, residents' fears were confirmed. Wastes were diverted from the other SAI landfill 15 miles away. All trucks were rerouted to Liberty View, which was ordered by a superior court judge to take an additional 1,000 tons of garbage daily. Citizens estimated that several hundred garbage trucks travelled residential Hillside Road each day. In the month prior to the closure of the other landfill, SAI employees began clearing trees at Liberty View Landfill to prepare for filling in the wetlands west of the dump. The landfill property covered almost 200 acres, but only 90 were being used for dumping at that time. Of the remaining acreage, about 70 percent was wetland and the rest was bordered by wetlands on all sides. To make space for the increased dumping, SAI needed the wetlands area.

Citizens, town officials, and environmental groups filed protests with the DER. SOLVE sent "zillions" of letters to state and federal officials and distributed paragraphs for residents to use in writing their own letters. Lists of the addresses of state and federal officials were widely circulated along with the Western Union toll-free phone number for sending public opinion messages to legislators. The towns of Liberty View and Carmody Park immediately sought an injunction to prevent continued clearing on the wetland. On February 23, 1981, Superior Court Judge Paul Rogers issued a temporary restraining order that prevented clearing of the wetlands for two weeks. On March 5, attorneys for both towns were back in court reporting that SAI was continuing their wetlands operations in violation of the injunction. When the initial order expired on March 9, Judge Rogers allowed clearing of 10 acres, but prohibited further action without court instruction. The entire state was facing a crunch in landfill space, and Rogers was forced to weigh dumping in the wetlands against running out of space for waste disposal.

The Liberty View town council, the Calvert Watershed Association, and a group of citizens enlisted the aid of DER, the U.S. Environmental Protection Agency (EPA), and the U.S. Department of the Interior through a series of letters and telephone calls. Although local efforts to prevent clearing of the wetlands were motivated by sincere environmental concern, Edmonds and Archer also recognized the effect that "another regulatory hoop to jump through" would have on SAI. An investment firm owned by a Watershed Association member had performed a financial search on SAI and interpreted their findings; so the two men realized that SAI's financial position was precarious. Absorbing the burden of further regulation would be difficult for SAI.

In response to the local outcry, DER issued an order on March 19, 1981, disallowing dumping in the wetlands until SAI submitted a revised design

showing use of clean fill in the wetlands and installation of leachate collection systems, impermeable barriers, and additional monitoring wells that would provide for secure disposal. EPA cited SAI for violating Section 301(a) of the Clean Water Act, ordered them to cease wetlands activities, and required them to obtain a Clean Water Act Section 404 permit. Also, the Department of the Interior's Fish and Wildlife Service had notified the Liberty View town council that the wetland was classified in the National Wetlands Inventory as one of the most water-abundant, forested wetlands in the state. These orders and determinations provided the basis for Judge Rogers' March 23 decision reversing his March 9 ruling and ordering that clearing of the wetland portion of the property be halted. No restrictions, however, were placed on continued disposal of municipal waste at the operating portions of the landfill.

In the midst of this battle, SOLVE held its first public meeting on January 31, 1981. Nearly 200 people from both towns attended. Bill Matheson, a resident of a town about 75 miles away who believed his daughter had died from drinking water contaminated by another landfill, delivered an emotional speech. He advised the crowd, "If you are ignored when using normal channels, use abnormal ones. Use a massive phone campaign or advertisements in the paper. Let them know you will not go away." Edmonds, the Calvert Watershed Association director, followed Matheson's speech with information on the amount of out-of-state trash coming to Liberty Park. The meeting closed with a showing of the ABC News documentary, "The Killing Ground," detailing events at Love Canal and several other hazardous waste sites. The townspeople's attentions were now riveted on Liberty View as a potentially serious public health threat.

Locally Funded Water Testing Begins

In response to the citizen action, an anonymous Calvert Watershed Association member donated a challenge grant of \$6,000 to be matched by each town for funding sampling at eleven sites around the landfill. The town councils of Liberty View and Carmody Park quickly appropriated their matching amounts. Said Archer, "With the watershed association, we had the first families who couldn't go public, but they were there when we needed them." The director of the DER Waste Management Division offered to provide expertise for designing the testing program, manpower and equipment to assist in gathering samples, and tests for confirmation of findings, if necessary. Sampling began in late February 1981 and was completed within two months.

The samples were tested for 127 characteristics and chemicals, as recommended by DER, at a state-certified lab. Results released on May 11, 1981, revealed the presence of 16 known and 10 unknown volatile organics, all in concentrations that exceeded state and federal standards for potable water. One heavy metal also tested above the state standard. Migration of chemicals to private wells was not yet detectable because testing was only done at the landfill. The Waste Management Division's site manager agreed to take four residential well samples. Test results were expected in June.

Test Results Stimulate Citizen Protest

SOLVE held a well-attended meeting in May to inform residents of the landfill test results and of the possible effects of the contaminants on human health. "As a political thing, we tried not to go after the landfill as such, but groundwater quality like good, concerned citizens," said one member. At SOLVE's meeting, Peter Williams, the new director of the Calvert Watershed Association, distributed a hand out entitled "Descriptions, Health Effects and Toxicity of Selected Substances Found at Liberty View". He had accessed an on-line chemical database for much of his information. Through his consultations with DER on the testing program, Williams had earned the respect of DER staff. He shared residents' concerns and had further interests in protecting the environment. With his easy-going manner, he was able to serve as an articulate and effective voice expressing local interests. Still awaiting results from the sampling of residential wells, many of the people who had relied on such wells switched to drinking bottled water. Newspaper headlines accurately expressed the fear and anger induced in many residents by the test results. "Cancer-Causing Agents Identified Through Landfill Well Tests." "Groundwater Tests Show Carcinogens May be Creeping Into Wells." "Tired of Being Dumped On." "Fight on to Shut Liberty View."

In order to vent their frustration in a controlled and politically strategic way and "send a message to DER," about 200 peaceful protesters gathered in late May to stop trucks from going to the landfill. Councilman Archer described the protest as a "planned media event." The protesters' goal was to draw DER attention to the landfill. They invited newspaper photographers and planned the pictures for maximum effect. After stopping enough trucks to fill the background, they arranged protesting families in front of the cameras, carefully placing young children in the foreground. An elderly wheelchair-bound woman was pictured holding a placard in front of a truck. The marchers wanted the dump closed. They said they were concerned about their water supplies and that "to see 400 garbage trucks going past your house every day gets depressing." Parents and children armed with hand-made placards reading "Caution: Flammable Water," "Keep My Water Clean," and "Hey DER, how about a glass of water?" stopped a dozen trucks in only 15 minutes. Not wanting the protest to erupt into violence, SOLVE and town officials gave prior notice to hauling companies that their trucks might be stopped for a short time. Drivers were given coffee and donuts by SOLVE while they waited. Said one councilman, "We're going to give them (DER) the chance to make a few right decisions."

Citizens Fund Own Testing

By the time the first results from the Watershed Association and DER testing began to be released, SOLVE was ready to respond with a voluntary testing program. The first results, showing one well contaminated by dichloroethylene, trichloroethane, and manganese, were evidence enough for SOLVE that contaminants had migrated to other private wells from the landfill. Whether these substances existed in levels greater than the safe drinking water standards was uncertain. SOLVE, in conjunction with the local board of health, organized testing of tap water samples by a state-certified lab for 20 volatile organic pollutants.

One hundred and one residents from both towns paid 50 dollars each to have their drinking water tested. Results were returned in two days and compiled by SOLVE. Forty-one percent of the 101 samples showed evidence of contamination. Among the toxic substances found in the artesian wells were trichloroethane, dichloroethane, tetrachloroethylene, chloroform, and toluene. Calvert Watershed Association director Williams consulted DER and the U.S. EPA, and both suggested that for residents with tainted wells, the "prudent course of action" would be to use bottled water until more extensive testing was performed. As a follow-up to its initial tests at the landfill and with the remaining fund money, the Calvert Watershed Association planned to perform complete tests on five residential wells at a cost of \$1,000 each. With the evidence they were gathering at their own expense, citizens were hoping to mount a case that was convincing enough to have the DER close Liberty View.

Residents' Protests Intensify

As a result of the residential well scan, publicity intensified. Three television news crews from a nearby city were notified by SOLVE in mid-July of the outcome of the tests. Two SOLVE members appeared on the evening news. One person was interviewed while holding her two-year old son and running her kitchen faucet. Another appeared with heavily travelled Hillside Road in the background. In fact, by July, finding someone in either town who did not express support for the citizens' group would have been difficult.

SOLVE did not lose its momentum after the well scan. It now included over 250 members. Some were investigating the possibility of compiling a health history survey that could be legally defensible evidence for closing the dump. Others were circulating the addresses of county and state officials along with form letters demanding a court injunction to restrain the operation of the landfill until it was proven not to be a source of contamination. "Innocent until proven guilty is not the right approach for a landfill," said Williams. Green ribbons made from plastic garbage bags distributed by SOLVE fluttered from mailboxes, trees, and telephone poles in both towns, so that residents could show their support for protecting the environment and safely closing the landfill. The green ribbons eventually covered the community as other residents asked questions about them, learned more about the landfill, and hung ribbons themselves. The Daily Chronicle printed a picture of two women who were wearing T-shirts imprinted with the SOLVE logo and tying a huge ribbon around a tree while a garbage truck approached.

With all the publicity and activity, citizens in Liberty View and Carmody Park were becoming increasingly aware of the financial burden imposed by the landfill. Their property was being devalued because of its proximity to the dump. New homes along Hillside Road stood unsold for over a year. A woman who bought a house in Carmody Park without knowing the house was near the landfill, sued the realtor for not informing her, received an out-of-court settlement, and moved to another part of town. Homes in both towns are generally on two- to five-acre lots and at one time sold for up to \$200,000. One homeowner and Carmody Park councilman half-jokingly said, "We certainly think we'll be able to sell our house for what we paid for it in 1962."

Two women living near the dump began circulating petitions for reducing property taxes that were to be presented to the county board of taxation. As one petitioner told the local newspaper, "We feel we have to do something. We pay enormous taxes and have this situation with trucks, traffic, and the potential water problems that have contributed to our inability to sell our houses." Property values of four Hillside Road homes had recently been reassessed downward because of water problems.

DER Investigations Move Forward

State and federal officials were also acting on the Liberty View situation during the summer of 1981. DER inspectors cited SAI three times for failure to control littering, for improper grading, and for insufficient thickness of daily cover at Liberty View Landfill. In addition, DER reported that the leachate collection system was not operating. Citizens expressed little surprise; some noted it had not operated since 1979. DER and the Calvert Watershed Association continued to test for volatile organics in those private residential wells where SOLVE's tap water scan had shown the highest levels of contamination.

State- and federal-elected officials were responsive to citizen concerns. As it was a state election year, state politicians were especially receptive to the citizens' complaints. A candidate for the state house proclaimed, "You have a right to clean water. If the DER doesn't want to be a plaintiff, it can be a defendant." In the early summer of 1981, citizens had contacted their U.S. Congressman, George Cohan, requesting his assistance in obtaining EPA involvement at the landfill. Cohan sought EPA intervention and at his request, the DER Commissioner reconsidered her previous decision not to ask for EPA aid. At the end of July, EPA contractors visited the Liberty View Landfill and met with local and DER officials. EPA agreed to review existing technical data, including the SOLVE scan, but pointed out that those private tests would not withstand courtroom scrutiny.

The results of the second set of joint DER and Watershed Association tests were released near the end of the summer. The list of substances found had grown "longer than a child's Christmas list," according to The Daily Chronicle. Three of the four residential wells tested by the state were found to be clean of lead, but one well contained 45 times more than the state standard. The SOLVE scan of 101 wells had positively identified 11 substances: tetrachloroethylene, chloroform, toluene, 1,1,1-trichloroethane, trichloroethylene, 1,1-dichloroethane, methylene chloride, ethylbenzene, benzene, trichlorofluoromethane, and trans 1,2-dichloroethylene. Five other chemicals and many unknown substances were also found in the SOLVE scan. The unknowns appeared in quantities ranging from 1 to 100 PPB in 26 percent of wells tested; often they were the only substances found. SOLVE spent days color-coding a map of the area surrounding the dump in an effort to trace a pattern of contamination so that residents could see the evidence of this underground threat. Williams of the Watershed Association summarized the outcome of the DER and Watershed Association tests and of the SOLVE scan, "The data are clear, something strange is going on on that hill (Hillside Road), something nature didn't put there."

Landfill Closes

At the end of August 1981, SAI petitioned the county Board of Public Utilities for a rate increase from \$1.05 to \$3.39 per cubic yard, plus an additional \$1 per cubic yard to be placed into escrow for the eventual closure of Liberty View. A request filed earlier by SAI for an exclusive franchise for the solid waste district was withdrawn. Public agencies refused to support it, and SAI wanted to avoid a rejection of their rate hike proposal. Local citizens and officials offered little opposition to the increase, but the Carmody Park attorney testified at the first hearing that "If the landfill continues to operate, the environmental safety of the residents must be assured." Liberty View town officials earlier in the year had investigated the feasibility of enacting an ordinance which would have required SAI to post an indemnity bond to ensure the availability of financing for securing the landfill when it closed. On the advice of the town attorney, the ordinance was not introduced.

Before the next rate-hike hearing in September 1981, DER announced Liberty View would be closed within six months. The decision surprised the county government which had been petitioning the DER's Waste Management Division for an extension of the landfill's operating life since Liberty View was the only active facility left in the county. "The DER took a hardline attitude after finding high levels of groundwater contamination in the landfill operation," an anonymous DER source told a newspaper. DER's order was released a few days after the newspaper article appeared. The order required SAI to submit a revised engineering design including a plan for proper closure and groundwater monitoring, to cease acceptance of all waste upon filling to permitted elevations, allowing no expansion, and to ensure that the revised design met the standards prescribed by the state Solid Waste Management Act.

SAI filed for bankruptcy one month after the DER order. The potential costs associated with the stringent DER order combined with the failure of the firm's incineration plant emptied the SAI coffers. The court appointed an attorney from a nearby city to keep the landfill open while the state arranged for rerouting of the garbage dumped at Liberty View. Estimates of the amount of waste being disposed there ranged from 1200 to 3000 tons per day.

Local officials arranged to post 24-hour surveillance at the site until it was either closed or transferred to more competent hands. They feared illegal dumping while the attorney ran the operation. "All he is interested in is making money to pay off the creditors," claimed one official. "This situation is very frightening," said Watershed Association director Williams.

Finally, on November 10, 1981, the U.S. District Judge signed an order closing Liberty View. The attorney refused to keep the landfill in operation without immunity from responsibility for closure, which DER would not grant. It was the first landfill in the state to close while still legally having the capacity to accept additional wastes. DER was added to the list of creditors against SAI to receive funds for cleanup of the site. Newspapers printed estimates of \$5 million to properly close the site. While SOLVE members and residents of Hillside Road felt their efforts had been rewarded and welcomed

the news, they still were drinking bottled water and were concerned about leachate that continued to flow from the closed, but improperly secured landfill.

Citizen Activism Declines

Except for a few officials and SOLVE members, Liberty View area residents felt the problem of the landfill subsided when the trucks ceased their daily deliveries. "When the garbage trucks stopped, there was a tremendous deflation of energy," Williams recalled. "It would have been easy for this to get lost. But you'd keep asking questions. The expertise on the other side would make things hard. But we put the burden of proof on them, just like a local land use case. In the early days, it was easy to get people to defer to authority around here. Now toxic chemicals are much more salient. Maybe folks in charge don't know. The climate of opinion is different, and it moved fast. Being on the wrong side of this issue got risky, and the town council turned around." Liberty View Landfill was cited by DER in December 1981, while reclamation activities continued, for failure to limit the size of the working face, to control littering, and to apply adequate cover. In May 1982, the dump was again cited by DER for failure to control litter and to apply final cover. Leachate continued to threaten area drinking water and recreational waterways in the state park south of the dump. Nonetheless, the enemy was invisible and no longer driving through town.

During the summer of 1982, a New Hampshire-based company donated 12 water filtration systems to SOLVE, which distributed them to the homes most seriously affected by contamination. DER's Water Resources Division tested those homes after installation to ensure that the drinking water was safe. DER continued monitoring the test wells and performed more thorough geologic surveying in order to establish the priority of Liberty View's cleanup in the state.

In 1982, DER asked the town governments to submit information on the landfill so it could be considered for placement on the National Priorities List (NPL), which was established under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act). The towns, with the help of SOLVE, learned how to most effectively complete the Mitre ranking form. Using data gathered in the locally sponsored testing, town officials filled out the form. DER reviewed the data and applied to have the landfill placed on the CERCLA NPL. In December 1982, the landfill was listed on the CERCLA NPL. According to one councilman, citizens felt that "EPA had more money than God" and were jubilant to have the site eligible for federal Superfund monies. EPA's contractor developed a Remedial Action Master Plan for Liberty View in 1983. The year ended with the signing of a cooperative agreement between the state and EPA for \$550,000 for a state-lead remedial investigation/feasibility study.

The core group of townspeople who had been interested in the site from the start expressed their desire to have continued input into the process and also to receive regular information updates. The town governments, at the suggestion of active citizens, formed the Inter-Community Coordinating

Committee (ICCC), which had three members including a representative from both town councils and of interested citizens. The ICCC was organized to act as a central information point both for DER's benefit and for all affected parties. DER assured them they would be consulted and kept up-to-date. DER allowed the ICCC to review and comment on the Request For Proposal for the remedial investigation and feasibility study so the committee could shape the plans for the site. Although the ICCC was not allowed to have input on the selection of the contractor, as it had desired, public opinion of DER's choice of contractor was favorable. One ICCC member understood, however, that DER had suggested that the ICCC could review the contractors before selection, and she was disappointed at how the situation had been handled.

When DER initiated a public meeting in July 1984, those who had been most involved in fighting the landfill breathed a sigh of relief. DER "came with their own plan, their own program, with what they were going to do for us," said one town official. Local reaction was extremely positive. Citizens were pleased that DER was taking the initiative and showing that the "squeaky wheel gets the oil principle" no longer appeared to be the rule for their site.

Local Residents Question DER

Six months later, residents once again are frustrated. "We're out of it, we don't know what is going on. We can't find out without writing nasty letters," one town official complains. According to citizens and local officials, DER had failed to maintain regular contact with anyone locally. The ICCC, which was formed for the purpose of communication with DER, has not functioned as members hoped it would. A simple phone call about developments at the site to let people know if DER was on schedule would have been sufficient, say some citizens. However, DER Community Relations Chief Windsor had encouraged citizens to call DER when they wanted input, "since they are one of many such sites, and it is easier for them to initiate calls on their one site... They never called DER during that time period." Word circulated among townspeople that quality assurance problems were holding up progress, but the study process was still taking too long. SOLVE again organized their letter-writing chain in November and contacted DER with questions on the site's status and requests for a meeting. DER responded by scheduling a meeting in early 1985.

Citizens are cynical once again. "We were happy to take a backseat and let DER work, but now we are finding we are back in the same position as before we were on Superfund," claims the Carmody Park town administrator. She wants DER to commit to giving monthly updates on the landfill to both town governments. Without information on the progress of the RI/FS, concerned citizens feel helpless. They can exert no pressure on DER without understanding what is happening in the cleanup process. Perhaps DER is making progress without local involvement, but the community's experience to date makes them skeptical.

Archer wants a commitment to action. Without some prodding from citizens, he fears delays will prevent timely completion of the investigation. "The RI/FS is a waste of time. Everything you need to know is known. The \$500,000

is a joke, and the consultants are getting rich. The landfill closed in 1981, and this is 1985. The DER doesn't realize how easy we can be ... just put a bulldozer up there and do something and we'd be happy. Control the leachate that you can see. Initiate some interim measure, then study."

Archer and Williams worry about the nearby state park. Shelby Brook "looks like spaghetti sauce from a distance," says Williams. The previous summer, Williams watched children sitting in the brook making beards on their faces with the orange foam. He fears that water quality in the state park has deteriorated so quickly since the last summer that the park might have to be closed for the upcoming summer. He wants some assurance that the water quality of the brook will be examined by DER and remedial action taken immediately, if necessary. Observes one particularly disheartened official, "Nothing happens unless you make it happen politically or legally. [This site] never would have been listed, never would have been closed, never would have been studied, never would have been studied to be closed" without local political pressure.

The director of the Calvert Watershed Association sums up local sentiment by claiming, "This is not a state-lead, this is not a federal-lead. This is a citizen-lead site."

Green's Next Step

Understanding that the citizens' first interest at the following week's briefing will be a progress report, Green summarizes for himself the field activities since the July 1984 public meeting. The DER contractor has installed all monitoring wells and begun preliminary sampling. The geophysical work has been completed. Over the course of the RI/FS, the budget has grown from \$550,000 to around \$700,000 because of modifications in the field work and laboratory requirements. Sampling of the monitoring wells will soon begin, as will sampling of surface water and leachate. Potable-well tests will commence at approximately 25 homes as soon as preliminary test results are received. Test pits will be drilled in the landfill itself, and air quality monitoring will be performed up- and down-wind of the site.

There has been delay at some points, but other parts of the investigation proceeded, so the schedule has been affected. Initially, the contractor had problems finding an insurance company willing to underwrite the on-site work. Later, quality assurance/quality control laboratory problems occurred and are still continuing. After the Liberty View contracts were signed, DER introduced more stringent data reporting procedures to meet EPA requirements. Modifying the RI/FS plan to comply with the new procedures continues to involve the time and expense of negotiating with the contractor and implementing the new requirements. Still, the project is at most a few months behind schedule. The DER still expects to have remedial alternatives ready for presentation in the early fall of 1985.

Green, Garrett, Windsor, and the contractor will present all of this information to the citizens at the upcoming briefing. Given the depth of citizen involvement and the present status of DER credibility, though, Green

wonders what approach he should take at the briefing; what should be his next step? He also wonders what lessons could be drawn from the long history of community involvement.

- What steps can he or Windsor take to reestablish DER's contact and good relations with the citizens and local officials?
- Should he pay special attention to the information requests of a well-informed and active community?
- Should community contact constitute a larger part of his daily activities?

A COMMUNITY RELATIONS PROGRAM AT SUPERFUND HAZARDOUS WASTE SITES

SOUTH CAROLINA DEPARTMENT OF ENVIRONMENTAL RESOURCES
DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE REMEDIATION ADMINISTRATION

As part of the federal/state program of cleanup of hazardous waste sites, a Community Relations Program is conducted to receive local input and to advise local residents and officials about the planned remedial actions at the three major stages of the cleanup: (1) remedial investigation/feasibility study, (2) engineering design, and (3) removal/treatment/construction. Local briefings and public meetings are conducted with elected officials and residents and generally take place at:

- 1) The commencement of a remedial investigation so that local concerns can be addressed early in the process.
- 2) The completion of a feasibility study to discuss the alternative courses of remedial action. There is a 30-day comment period after public presentation of the alternatives.
- 3) The engineering design stage to carry out the mandates of the selected remedial alternative. (Fact sheets only, as necessary.)
- 4) The commencement of the removal/treatment/construction stage to advise of the expected physical remedial action. (Fact sheets only, as necessary.)
- 5) The completion of the remedial action.

In addition to the formal activities outlined above, there is generally informal communication with local officials and residents during these phases of the cleanup. Depending upon whether the South Carolina Department of Environmental Resources (DER) or the U.S. Environmental Protection Agency (EPA) has the lead in remedial action at a site, community relations activity is conducted by the relevant state or federal agency.

In South Carolina at DER, the Community Relations Program is conducted by Anna Windsor, Community Relations Program Manager (803) 123-4567.

ATTACHMENT B
MAJOR ACTORS IN THE CASE STUDY

South Carolina Department of Environmental Resources

Jack Green, Site Manager at the Liberty View site since July 1984

Anna Windsor, Community Relations Chief

Stephen Garrett, Hazardous Site Remediation Administrator

Leo Tufts, Hazardous Site Management Section Chief

Community Participants

SOLVE (Save Our Liberty View Environment), citizens' group

Ben Archer, Liberty View councilman and SOLVE member

David Edmonds, Director of Calvert Watershed Association through January 1981

Nancy Decker, Founder of SOLVE

Peter Williams, Director of Calvert Watershed Association since February 1981

Potentially Responsible Parties

Andy Thompson, Liberty View Landfill owner through September 1978

Sanitation Associates, Inc., Liberty View Landfill owner from September 1978 through September 1981 bankruptcy

Others

Paul Rogers, Superior Court Judge

George Conan, U.S. Congressman

DEPARTMENT OF ENVIRONMENTAL RESOURCES

