# CHEMICAL CONTAMINATION IN FENCELINE COMMUNITIES

# Addyston, Ohio: The Plastics Plant Next Door By Steve Lerner

Bernard "Buzz" Bowman, Jr. is proud of his antiques collection. He has 3,000 antique toy cars and trucks on shelves in his basement in Addyston, Ohio. But this is just the tip of the iceberg. His yard is full of dozens of old-fashioned gasoline pumps and stashed in his basement is a lovingly restored doctor's one-horse sleigh, upholstered in crushed red velvet and sporting a black convertible canopy that snaps into place with well-oiled precision. "We're on the map," he says, pointing out a designation of his museum on a local tourist map. He also has a write-up in a book that features attractions along Route 50, the winding River Road that snakes through this West Side factory town located on the banks of the Ohio River 12 miles from downtown Cincinnati on the Ohio/Kentucky state line.

Addyston, population 1,200, is also on the map because of toxics problems that state officials and residents say come from the 130-acre Lanxess Corp. plastics plant (formerly owned by Monsanto and Bayer) built across the street from the elementary school and just a few blocks



Lanxess Plant, Addyston, OH

from the Bowman residence. In December, 2005, the school was closed after elevated levels of butadiene and acrylonitrile were discovered by monitoring equipment installed on the roof of the building. "This is cancer valley," asserts Buzz Bowman, whose wife, Carol Bowman, died recently of lymphoma. Her oncologist described her lymphoma as "an environmental cancer" but refused to speculate as to whether or not it might have been caused by living next to a plastics plant all her life. This infuriated Buzz's daughter, Lynn Bowman, 52: "Do they think we are stupid? My mother died of an environmental cancer and we live right across from a chemical plant. In years to come they will find out that it was caused by the plant," she predicts. "The air pollution had a lot to do with it. It killed my mother," she charges. "It is amazing what big corporations get away with," she adds. Before she died Carol Bowman – known locally as the "candy lady" for the fudge she baked – joined other residents in



Bernard and Lynn Bowman Photo: Steve Lerner

protesting chemical releases from the plant. She said the protests came too late to prevent her illness but perhaps they would save others, her daughter recalls.

Sitting on the couch in her living room, with a box of Kleenex handy, Lynn Bowman describes what it is like to live next to a plant that put out 224,000 pounds of toxic chemicals including butadiene, styrene, and acrylonitrile in 2005; and legally released 1.6 million pounds of particulates and toxic chemicals including 813,000 pounds of sulfur dioxide, 370,000 pounds of nitrogen oxide, 102,000 pounds of volatile organic compounds, and 233,000 pounds of particulates in 2003.<sup>1</sup> "The smell bothers me. I get allergies and I can't breathe through my nose. On bad days it just about

chokes you. It burns my eyes and nose and I get frequent nose bleeds. But then when we go for a trip and get out of town it clears up until we come back," Lynn Bowman notes. Releases from the plant tend to be most intense at night when she gets off work late from a job she holds in town, Bowman reports.

"They think we are a bunch of ignorant hillbillies," Bowman says with anger rising in her voice. "Well, don't let this blond hair fool you. I'm no fool. I know what is going on here. The smell from the plant makes us

sick. It gives me a headache every day of my life," she adds. Bowman says she has to keep the windows of the house closed because of the air pollution from the plant: "It keeps us from going out sometimes." And periodically there is a white dust that covers her car or a kind of plastic sap that is hard to scrape off.

Ironically, when an inspector from the Environmental Protection Agency visited the Bowman home it was not to discuss air pollution coming from the Lanxess plant. Instead the regulator wanted to know if Buzz Bowman's antique gas pumps were connected to underground gas storage tanks. When Bowman demonstrated that the gas pumps were antiques and connected to nothing he suggested that the regulator could more profitably use his time looking into the source of the odors coming from the Lanxess plant across the road.

The Bowmans are not alone in worrying about health effects from the plant. "This is a lovely community that is being poisoned," observes Betsy Eckert, 64, whose family has lived since the 1820s a few miles from the plant in Sayler Park.<sup>2</sup> Eckert, the Bowmans, and a number of other residents joined together to form the West Side Action Group to force Lanxess to appoint a new plant manager, invest in pollution control technology, and reduce emissions from the plant.

#### **Ohio Citizen Action**

Ruth Breech, 26, an organizer for Ohio Citizen Action, says she wants to make public the "dirty little secrets" about how industrial polluters cause health problems in adjacent "fenceline" communities such as Addyston. A tenacious, high-energy community activist, Breech wants to "tell the untold story" of the people who suffer in silence in these communities where it is not common practice to speak out about the odors coming from the plant. Addyston is a largely white, working-class company town where 97 percent of the tax revenues come from the Lanxess plant, she explains, and most residents have family members or friends who work at the plant. Speaking out against Lanxess is seen as threatening to local jobs: "It is a culture where it is not accepted to rock the boat," Breech observes.

Ohio Citizen Action, an environmental watchdog organization with 100,000 dues-paying members, targeted Addyston and the Lanxess plant for a citizen anti-pollution and good neighbor campaign because there was an unusually high incidence of asthma and cancer in the community right across the street from a plastics plant that was emitting large quantities of cancercausing chemicals, Breech explains. Lanxess was also the source of more accidental releases than other companies its size and was one of the top five plants in the county in terms of the toxicity of the chemicals it used and the proximity of the residents to the plant, she says. "I wanted to see the community get its act together and demand that the company not dump a large volume of chemicals only to tell residents five days later that they had been gassed," Breech continues.



Ruth Breech of Ohio Citizen Action
Photo: Ohio Citizen Action

By chance, Breech knew the Bowmans since she was a girl growing up in Cincinnati where her father was the place kicker for the Cincinnati Bengals. In September, 2004, Breech began to visit Addyston two to three times a week with a cadre of canvassers ringing doorbells and asking residents what it was like living in such close proximity with the plastics plant. The canvassers heard about the persistent odors from the plant, the dust that collected on their cars, and the large number of illnesses in the neighborhood. For most residents it was the first time anyone had asked them about whether or not the odors from the plant were bothering them and it got them talking among themselves. Collecting the stories permitted Breech to "put a human face" on the impact of the plant's pollution on local residents, she observes.

# **Accidents Ignite Citizen Concern**

Three accidental releases from the Lanxess plant in late 2004 and early 2005 spurred Addyston residents to organize a protest against the odors and chemicals coming from the plant. The first of these occurred on October 2-4, 2004, during the town's Octoberfest when residents held an annual barbecue at the school playground across from the plant. The accidental release was composed of 1.200 pounds of acrylonitrile, a substance classified by the U.S. Environmental Protection Agency as a "probable" cancer causing agent. Laboratory experiments show that rats exposed to the chemical have an increased incidence of tumors. Short-term effects include headaches, nausea, nervous irritability, and kidney irritation. Poisoning that occurs through longer term exposure causes "limb weakness, labored and irregular breathing, dizziness, impaired judgment, cvanosis, nausea, collapse and convulsions." 3



School Playground Across from the Lanxess Plant Photo: Steve Lerner

In addition to the release of acrylonitrile, 34 pounds of butadiene and 387 pounds of styrene were also released. Company officials explain that it escaped from tiny cracks in a duct that normally conducts the gas to an incinerator within the plant. Lanxess officials reported the release to the Hamilton County Department of Environmental Services, as required by law; they did not, however, tell residents about the release. It wasn't until late November that Breech found a reference to the accident in public records and alerted town officials. A previous leak of 371 pounds of acrylonitrile over a five-minute period in June, 1999 sickened two employees and resulted in a civil county fine of \$37,500.

Jean Owens, an Addyston resident who lives across Route 50 from the plant on Sekitan Street describes acrylonitrile as having a sweet smell. "It just turns me inside out," she told a reporter. "It's like I can't breathe and I can't move. I do move but I'm just moving like someone who has something really wrong, like cerebral palsy, or something like that...It's just a horrible feeling." <sup>6</sup>

Ken Perica, the plant director of health and safety assured local citizens that their safety was not endangered by the release. He said that the chemical release, which occurred over a 49-hour period, would have been very dilute by the time it escaped from the plant. He also noted that 10 employees working near the leak showed no ill effects. But Perica's assurances were overshadowed by a second accidental release that occurred on December 15, 2004, when Addyston residents were told that they had been exposed to 700 pounds of acrylonitrile, the "probable" cancer causing agent, as a result of a worker error. Once again, the plant manager at the time, Bill Ward, said that air samples showed no "problem with the gas leaving our plant." However, Peter Sturtevant, an enforcement officer with the county, suggested that the gas might have carried over the company fenceline without tripping the air monitoring sensors. This time Lanxess officials promptly notified the town mayor and other public officials of the release.<sup>7</sup>

A third release two months later on February 23, 2005, received major coverage in the local press and suggested a problematic pattern of releases from the plant. This time the unintentional release was comprised of 750 pounds of butadiene. The company is required to report releases of 10 or more pounds of the substance which is known as an extremely toxic, cancer-causing gas. "Obviously, that's not acceptable," observed Jay Richey, Lanxess vice president and general manager for North America. Richey promised that policies and practices at the plant would be reviewed promptly. Company officials noted that none of their workers had been made ill by the release and suggested that the wind was blowing away from Addyston at the time of the release. "These unintended releases did not expose our employees or anyone in the community to harmful levels of chemicals," he asserted. An Ohio Department of Health study, which used computer modeling and company data, agreed that the three releases did not pose a significant health risk to nearby neighbors. Only the December 15th release "rose to the level of potentially causing headaches, sore throat, or watery eyes," the report suggested.

However, Ruth Breech, at Ohio Citizen Action, argued that the study was suspect because it relied on company data. "These accidents are so consistent that everyone needs to be more proactive" to prevent future releases, she commented. "The Lanxess Plastics Plant in Addyston has chronic, serious problems, including 107 accidents in 2004," Breech wrote in a guest column for a local newspaper. Breech views the series of accidents at Lanxess as dangerous to the local residents. "I definitely believe there is wrongdoing that is going on here, and it needs to be changed," she told a TV reporter. "If the company can't operate responsibly then they should not be permitted to operate at all," she asserts. But Breech is not trying to close the plant. "We want them to stay here. We don't want them to shut down. That is not our intention. We are here to clean them up. We want them to be good neighbors for a very long time," she says. "I

Mike Kramer, environmental enforcement supervisor at the Hamilton County Department of Environmental Services also sees the series of accidents at Lanxess as constituting a problem: "I think there is a legitimate concern for air quality," he said. "We feel it is a serious enough issue that we're going to make sure the experts...determine if there were any health impacts," he continues. Kramer went on to say that it was unusual to have three accidents in a row such as those experienced at Lanxess and that it worried him. 15 He officially notified the company that it had violated state air pollution laws in three incidents since October. 16

On March 9, 2005, Lanxess officials reported an additional accidental release of 170 pounds of volatile organic compounds (VOCs); and four days later conceded that 99 more pounds of VOCs were released. Acrylonitrile, butadiene and styrene are all VOCs, notes Breech, and could have been among the chemicals released on either of these two days. Furthermore, VOCs, when mixed with sunlight and heat create ground level smog that can cause lung irritation and they are considered a health hazard.<sup>17</sup>

# **Media Coverage**

One of the first reporters to latch onto the Lanxess pollution story and stick with it was Hagit Limor, 46, a veteran TV journalist who had worked in Tampa, Florida and Asheville, North Carolina prior to moving to Cincinnati in 1994. With 13 years under her belt as a reporter for WCPO's Channel 9 and with five years as the anchor on the I-Team, Limor knew enough about the area's industrial history that she could see that the series of accidents at Lanxess deserved in-depth, serial reports. Limor had known Lanxess in an earlier corporate incarnation as Monsanto, she explains. "Usually no one is around long enough as a reporter that they can see a pattern of violations, Limor observes, but her longevity on the beat allowed her to detect a problematic pattern with the Addyston plant.

Arguing forcefully with her producers that the story deserved major coverage, Limor put together a six and a half minute segment on the releases, which was promoted heavily before it aired, and then followed it up with a dozen shorter pieces as the story unfolded. This kept the Lanxess story front and center in the Cincinnati metropolitan area. Dan Klepal, a reporter for The Cincinnati Enquirer, also assiduously covered the story from the beginning.

"Most Americans expect that the government will protect them from chemical releases [such as those at Lanxess]," Limor said over lunch in Cincinnati. "But what emerged as I did these stories was that **government officials do not lead on these issues but rather need to be led," observes Limor.** "It has been left up to grassroots groups and the media to shine a light on chemical pollution problems. As a result, a lot of corporations that are responsible for a lot of pollution are flying under the radar...and that leaves the population at risk," she says.

At the thirtieth anniversary of Ohio Citizen Action, Richard Challis, 63, presented an award to Limor for the reporting she aired on pollution escaping from the Lanxess plant. Challis, who has lived for the past 25 years with his wife Emily in a house 11 miles from the plant across the river in the town of Erlanger, Kentucky, describes himself as exquisitely allergic to butadiene, one of the chemicals used at Lanxess. When butadiene is emitted by the plant and drifts across the river to his house, Challis experiences acute respiratory distress: "It is like a seizure. I'm rolling around on the floor gasping for breath unable to breathe," he says. His wife has kept a careful log of these allergic episodes and has documented 12,000

incidents over the past quarter century. Over the past year, Emily Challis has compared the log she keeps with those of other residents who keep odor logs in Addyston and found that they track closely.

Challis notes that his allergic attacks don't take place on July 4th, when the plant closes down, providing further evidence to him that Lanxess is the source of his problem. "I don't think I have patriotic allergies," he observes. The worst time for Challis is from midnight to 4:30 in the morning when he believe the plant emits the most butadiene. Unable to sleep during those hours, Challis has taken the second shift at the airport where he works so that he can sleep in the late morning. On a recent vacation to Europe, Challis found that his



Richard Challis congratulating Hagit Limor Photo: Ohio Citizen Action

allergies disappeared: "It was wonderful to sleep through the night," he adds.



Richard Challis & Ruth Breech at OCA 30<sup>th</sup> Anniversary

Photo: Ohio Citizen Action

"There are 400 people working at Lanxess but it is not worth keeping those jobs if they are poisoning thousands of people," Challis says. "The amount of asthma in kids in Addyston is astronomical and the amount of cancer is horrible," he continues. Challis believes that the Lanxess plant is "poisoning the air." Even the trees are dying, he notes. Since the plastics plant began operations in 1952 the population of Addyston has plummeted from 1,600 to 982 today, he continues. Many people have gotten sick and moved out, he charges.

Challis says he has recently noticed some improvements in the air since they installed new valves at the plant. "But do I think the plant will ever be a safe plant? No I do not...People are dying from this slowly," he concludes.

#### **Elevated Cancer Rates Detected**

With nasty odors in the air and heavy media coverage of accidental releases from Lanxess, many Addyston residents began to voice their concerns about the impact on their health from this local source of pollution. Some of them began to speculate that cancer rates in town were elevated. Nancy Scott, a 48-year resident of the town said that her mother, mother-in-law, brother, uncle and grandfather – all Addyston residents – also had cancer. "You go up and down these streets and just about every house has experienced it. I don't want to see anybody lose their job at Lanxess, but I don't think they have been honest with us," she told a reporter. Sue Lloyd, 63, a breast cancer survivor who has lived with her husband in Addyston three blocks from the plant for 40 years had similar concerns. "I've worried about it [cancer] every time since I smelled this odor," she observes. Lloyd includes in the Addyston cancer list herself, her next door neighbor, two people two-doors down from her home, two residents in the house behind her, friends at the plant, and many others.

But these anecdotal reports of a cancer cluster had no scientific standing until a study was done at the request of the Hamilton County General Health District and the Ohio Environmental Protection Agency (OEPA) in 2005. The study indicated that "people who inhaled fumes for decades from the plant have a 50 percent greater risk of developing cancer," than the population at large. Among the chemicals of concern are acrylonitrile and 1, 3 butadiene. Both chemicals are used by Lanxess and are linked to cancer in humans.<sup>19</sup> Lung cancer and leukemia would be the most common forms of cancer cause by the chemicals released from Lanxess, notes Paul Koval, air pollution toxicologist at OEPA.<sup>20</sup>

This information hit close to home, Lloyd says. "When you know so many people who have had it [cancer], it's just distressing," she observes. Lloyd describes the effects of the pollution from Lanxess as follows: "It would burn my nostrils and my eyes would tear and my throat would get very raw from it. It would just take your breath away," says Sue Lloyd about her reaction to emissions from Lanxess.<sup>21</sup>

Then on May 25, 2006, over 100 residents, crowded into a VFW hall in Addyston where they were told that cancer rates in their community were 76 percent higher than expected in the general population. This estimate came out of an Ohio Department of Health Study which found that 55 residents in town were diagnosed with cancer from 1996 to 2003 compared with an expected rate of 31.2 cases. Lung cancers were 4 times higher than expected rates, and mouth and colorectal cancers three to four times above normal. Health commissioner Tim Ingram described the Addyston cancer rate as troubling. "This study does not rule in Lanxess [as the cause of the additional cancers], and it does not rule it out," Ingram observed. He called for follow-up studies.<sup>22</sup>

Officials at Lanxess, however, deny that their plant is the cause of elevated levels of cancer in the community. Sandy Marshall, Lanxess plant manager, argues that concentrations of chemicals emitted from Lanxess are hundreds of times lower than those associated with cancer development; and that while butadiene can cause cancer if inhaled continuously over a number of years, the study found none of the cancers associated with the chemical were "statistically significant." <sup>23</sup>

Reacting to community health concerns and community sampling data about the impact of emissions from Lanxess, the Hamilton County Department of Environmental Services installed air monitoring equipment on the roof of the Meredith Hitchens Elementary School located across the street from the plant.<sup>24</sup> The installation of the rooftop monitor came after citizen air monitoring showed serious problems. On May 6, 2005, an air sample collected by local resident Cheryl Siefert, found 87 ppb of butadiene in the air in her backyard. Ruth Breech described the reading as "extremely high" and urged the installation of more sophisticated monitors that continuously take samples. Lanxess officials questioned the accuracy of the sample.<sup>25</sup>

Addyston residents also got help monitoring their air from Hilton Kelley, executive director of the Community In-power Development Association from Port Arthur. Texas. Kelley, who grew up in a public housing complex in Port Arthur immediately adjacent to a huge Motiva refinery, has been organizing residents to force the refinery to install the best available pollution control technologies to reduce pollution on the predominantly low-income, African-American, Westside of the city. As a result of a Sierra Club lawsuit over the violation of air quality standards in the Beaumont/Port Arthur, Texas area, Kelley received \$750,000 to buy two CEREX laser air monitoring units that, when hooked up to a computer could provide immediate readouts of toxins in the air in the parts per billion. He has put this equipment to use not just in Port Arthur but also in a number of other fenceline communities such as Addyston.



Photo: Ohio Citizen Action

One sample Kelley captured in Addyston on May 6, 2005, detected 85 ppb of butadiene in the air. Butadiene causes reproductive and developmental disorders as well as producing eye, nose, and throat irritation. In high doses it can affect the central nervous system; and it also has been shown to cause cancer in laboratory animals. Mike Kramer, permits and enforcement supervisor for the Hamilton County Department of Environmental Services, described that sample as well above the level that causes physical irritation. At 1,000 ppb the chemical can cause nervous system damage and unconsciousness. Kramer faults inefficient flaring as possibly the source of a considerable amount of pollution that escapes the Lanxess plant. Flaring is a process by which chemicals are released up the stack and then ignited, he explains. This process is supposed to be 99 percent effective but because the wind blows the gasses

around when they come out of the chimney it can be as little as 20 percent effective. Kramer notes that monitors find spikes in the amount of pollutants detected after a dump and flare cycle.

Some residents near the plant are so concerned that they have taken on the job of doing their own air monitoring with air sampling "buckets" made from 5 gallon plastic buckets, plastic liners, and sealed lids with a small air pump to create a vacuum. These citizen air sampling devices cost about \$150 to produce, notes Denny Larson, director of Global Community Monitor, who introduced their use to the region. The buckets are in use in 30 communities around the country and a dozen other locations around the world, Larson explains. They have been useful in proving that air is polluted in fenceline communities adjacent to heavily-polluting industries.<sup>27</sup> Ohio Citizen Action landed a \$7,500 grant to ensure that air samples taken by residents could be processed by an independent California laboratory.



Lynn Bowman & Betsy **Eckert of the Westside Bucket Brigade** Photo: Ohio Citizen Action

#### **School Closed**

On December 6, 2005, Three Rivers School District officials closed the Meredith Hitchens elementary school attended by 370 preschool to first grade students. Their decision was made after hearing the results of the Ohio Environmental Protection Agency's (OEPA) seven month monitoring of air quality in Addyston, across the street from the Lanxess plastics plant. "These air pollution levels of these two compounds [acrylonitrile and butadiene] on the school were higher than we consider acceptable



Meredith Hitchins School closed due to high levels of toxins

Photo: Steve Lerner

for public health," Ohio EPA toxicologist Paul Koval told Channel 9 News.<sup>28</sup> Koval went on to say that the concentrations of chemicals detected on the roof of the school posed a higher than normal risk of cancer for one out of every 200 residents of Addyston over a period of 30 to 70 years. This rate is a far higher level of risk than the one in 10,000 level that the agency deems acceptable. OEPA also ordered Lanxess to reduce emissions of acrylonitrile and butadiene and carry out a planned \$2.5 million environmental improvements scheme. "All along we have said whatever recommendations were made by the EPA, we would follow them," observed Rhonda Bohannon, superintendent of the Three Rivers School District. "Today they said they were concerned. We will definitely get our kids out of there." she said.29

For Jennifer Janzen, a mother who pulled her children out of school because they complained of headaches, this was a moment of vindication. Janzen had tried to approach school officials about health

concerns related to emissions from Lanxess but had been rebuffed. When she took her children out of school they were listed as absentees and some neighbors thought that she was just trying to stir up trouble, Ruth Breech recalls. But with the school being closed Janzen suddenly appeared more prescient than hypochondriacal.

The question of whether or not to close the school split residents in the communities surrounding the Lanxess plant. "I'm elated," said Sue Wullenweber, who lives near the plant and has a son at the school. "We need to think about the safety of our children...I guess they have gotten the proof that our children aren't safe...(that) there's a true, real concern here, and we aren't crazy," she added. 30 "They should keep Hitchens closed," agreed Charity Hollin, whose six



Basketball court at the Meredith Hitchins School across from the Lanxess Plant

Photo: Steve Lerner

year-old daughter Madison complained of headaches and stomach pains after beginning kindergarten classes at the school, her mother reports.<sup>31</sup>

But many Addyston residents were against the decision arguing that it didn't make sense to close the school but leave children and pregnant mothers living in the town across from the plant. Since the school closed the playground next to it remains open and kids continue to play in it. "What sense does that make?" asks Lynn Bowman. Other residents are glad the school is closed arguing that many of the standards for chemical exposure are for full-grown adults and that children with lower body weights and less well developed immune systems are more susceptible to ill effects from chemical exposures. Complicating the school closure debate is the economic divide between modest-income residents of Addyston and their wealthier neighbors in the communities uphill, some of whom live in large, expensive homes overlooking the river. Some residents of Addyston suspect that the wealthier folks living in surrounding neighborhoods were using pollution problems from the plant as an excuse to ensure that their children would no longer be sent to the low-income school in Addyston.

### **Industry Perspective**

On the other side of the fenceline, people who work at Lanxess argue that the plant does not constitute a threat to the health of its neighbors or workers and that they are making significant progress in reducing odors that come from the plant and accidental releases of chemicals.

Those who work at Lanxess see the plant as an integral part of the community. The plant was founded in 1891 as a factory town to supply workers for industrialist Matthew Addy's pipe foundry. It subsequently became a plastics plant and was purchased by Monsanto in 1951 and subsequently by Bayer in 1996. It currently makes plastic pellets which are sold to companies that melt and mold them into dashboards, telephone headsets, blenders and refrigerator liners. The company has 410 employees and a \$32 million payroll. In 2004 Bayer spun off Lanxess as a subsidiary.

Tim Bentner, 43, a big-shouldered man wearing a yellow hard-hat has worked at Lanxess for 20 years and his father and brother have worked there longer. He is convinced the plant is not causing illness in the community. Bentner grew up in Addyston, attended school there, and now lives in the nearby neighborhood of North Bend where he can see the plant from his second story window. After working at the plant all these years and living next to it he argues that **if anyone were made sick by the chemicals it should have been him.** 

"If anything happens at the plant we are seen as guilty before being proved innocent," he complains. The media has not done a good job of reporting the story about the plant, he continues. Reporters mention the high cancer rate but they fail to point out that the cancers that are the highest are not ones associated with exposure to the chemicals used at the plant. They also don't report that cigarette smoking is three times the average in town. Bentner believes the operation of the plant is safe enough that he continues to work there and would urge his kids to work there when they come of age. It is only a very small minority of people in the surrounding communities who are concerned about health effects from the plant, he argues.

Yes, there have been three accidents that community members have every right to be angry about, he acknowledges. But the vast majority of 102 malfunctions reported last year are minor technical difficulties that the company is required by law to report but constitute no threat to the public. Ohio Citizen Action has misrepresented the facts, used scare tactics, and created am unwarranted sense of panic in town, he adds. OCA's campaign has been successful at challenging plant managers to do a better job and it has hastened the purchase and installation of pollution control technologies, Bentner concedes, and that was a good thing. "But they have left the community with bitter resentment about the plant and people no longer trust the facility" and that is unwarranted, he asserts.

Duane Day, the Lanxess manager whose job it is to track the company's environmental compliance with state and federal regulations also has problems with Ohio Citizen Action's campaign to clean up the plant. "The campaign took a negative approach and they were not clear what they wanted," he observes. First they focused on odor problems, then dust, then water contamination, then they were worried about

upsets [accidents], and then they wanted a cancer study. The campaign never seemed to have clear priorities and whenever the company would begin to respond they would shift to another issue, he adds.

One of the biggest issues for residents was the odors coming from the plant. In response, Lanxess invested \$300,000 to improve its sewer treatment plant and reduced the odors by 90 percent, Day points out. As for the three accidental releases that received so much media attention, Day says that while they were not a cause of health problems in the community it was not acceptable for the company to argue that these malfunctions were just a cost of doing business. "We recognized that there was room for improvement," Day observes. As a result the company committed \$1.5 million for new equipment to improve the efficiency of flaring and improve the thermal oxidizer unit. The company had already spent \$300,000 to replace some giant valves, he explains.

The company is also reaching out to the community and going door to door talking with residents. "A high percentage of people are OK with us. Only a few had negative comments," Days reports. They also have improved their complaint process so that when residents call to complain about an odor, Lanxess sends someone out to talk to the resident and attempt to capture information immediately in order to investigate.



Kay Rowland, Lanxess Human Resources Coordinator Photo: Steve Lerner

"I struggle with the accusations that Lanxess is making people sick," says Kay Rowland, 53, Lanxess Human Resource Coordinator, who started work at the plant in 1980 at the age of 26 and lives a seven minute, 2.5 mile drive away from work in Miami Township. "I'm here at ground zero and I have always felt safe working here," continues Rowland who observes that many Lanxess employees have parents, grandparents, aunts and uncles who have worked at the plant. Rowland is also not convinced that many of the cancers in Addyston should be attributed to chemical releases from the plant. As an example she cites the case of her father-in-law who died of cancer in 2002 and lived across the street from the plant. "He will be counted as one of the 52 cancer cases but he both drank and smoked for years prior to his death, she points out. "I don't

agree that it is all about Lanxess," she says. There may be other factors as well that explain the increased cancer rates, Rowland points out. A lot of people who live in town are in older houses where radon may be a problem, she observes. Then there are multiple other industrial operations such as Kaiser Chemicals and Cinergy that are putting out pollutants.

Rowland thinks that the complaints about the plant have been "blown out of proportion." Sure, sometimes the smell from the plant is annoying: "I don't like the sour egg smell but we are getting rid of that." She is particularly incensed about the Ohio Citizen Action campaign to change the management of the plant that successfully mounted a petition drive to force into early retirement her former boss, plant manager Bill Ward. "He was a decent man and did what he could for the community," Rowland recalls tearfully. His retirement party was like the receiving line at a funeral, she recalls.

The new plant manager, Sandy Marshall arrived in July, 2005, and immediately tried to set a new tone with residents. His message to residents was that the company was going to make significant investments in equipment that would cause the plant to operate more efficiently and with fewer accidental releases. Having the plant be in compliance with regulatory standards was important, Marshall observed, but it was not enough. "We want to go beyond compliance and meet community expectations for the way we operate," Marshall says. After all, it is really community expectations that drive whether or not you have a right to operate a facility, he notes.

Asked about recent complaints about foul odors coming from the plant that are causing residents headaches, coughs, and tearing eyes, Marshall warns that improving a plant is a long-term process. "Are we at the holy grail yet? No," he concedes. But the trends are good. Releases of butadiene are down from 5-10 ppb to 1 to 2 ppb; and while reductions in releases of acrylonitrile are not as impressive company managers are starting to focus on them more.

As for the possibility that releases from the plant cause cancer or other health problems in the community, Marshall is skeptical. The plant is meeting occupational standards and has a healthy workforce despite the fact that exposure to chemicals in the plant are likely to be 1,000 times higher than in the surrounding residential community, he points out. And most of the cancers reported in the community are not ones associated with the chemicals used at the plant, he adds. Marshall is also "not convinced" by the Ohio EPA's risk assessment projections that point to a 50 times higher probability of contracting cancer among residents with long-term exposure to chemicals coming from the plant. And he was "disappointed" by the decision to close the school across from the plant.

The company will also challenge in court a state regulatory standard that was recently imposed which is requiring the plant to lower the level of butadiene in the air outside its fenceline to less than 1 ppb, a level lower than the "background" level that exists around the metro area, Marshall continues. "They are doing administrative law setting," he asserts, without going through the normal steps involved in setting regulations.

On June 14, 2006, The U.S. EPA issued an 8-page Notice of Violation against Lanxess citing air pollution problems, leaks in the chemical piping system, and asking questions about wastewater discharge. Plant Manager Marshall took exception to some of the conclusions drawn by the notice of violation but said plant workers had already fixed or were working on four of the six issues raised.<sup>32</sup>

#### **Lanxess Under Close Watch**

The new Lanxess management team is beginning to make positive changes and they have committed money to upgrading pollution controls but whether or not they will carry through on all their commitments remains to be seen, says Sandy Buchanan, executive director of Ohio Citizen Action, the state's largest environmental organization. "We are going to continue to track this very closely," she continues. Buchanan has been following the environmental record of the plant ever since it was operated by Monsanto when the plant already had a history of lax environmental management and accidental releases. "Everyone knew the plant was a problem even back then," she recalls.

"Our most significant contribution is that we took the problem that was festering in Addyston for 50 years and we forced people to do something about it," she continues. As a result of Ohio Citizen Action's highprofile, Good Neighbor Campaign that highlighted toxic releases from the plant, regulatory officials suddenly started discovering problems with the plant, with the releases, with the cancer rates, and with the school. "Ruth Breech did an amazing job of helping neighbors organize and meet every week," Buchanan continues. She went into a highly charged environment in a small company town where the mayor was not happy with an outside group raising issues about air quality and she did not back down, Buchanan says with undisguised pride. Through canvassing and walking-and-talking tours through Addyston, Breech continued to find new people willing to speak out and keep pressure on Lanxess to clean up its act. "As a result I think we had a significant impact on the way the company operates," Buchanan concludes.

Whether or not Lanxess officials will be able to significantly reduce every-day and accidental releases from the plant remains an open question. What seems sure, however, is that the media and environmental groups will continue to follow this story closely and that the residents of Addyston, now informed about the dangers of some of the chemicals being handled next door, will continue to watch their neighborhood industry for releases and demand improvements.

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This story and others like it can be found on the Collaborative on Health and the Environment website at: www.HealthandEnvironment.org.



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#### **Endnotes**

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