On December 8, 2008, USA Today published the article “The Smokestack Effect: Toxic Air and America’s Schools.” The article reported that as a result of computer modeling of the potential dispersion of contaminants into the air (not actual tests of air samples) done by the University of Maryland and Johns Hopkins University, 128,000 American schools were ranked according to air quality issues based on the schools’ proximity to industrial pollution.

The Port Washington–Saukville School District’s Saukville Elementary School was rated in the bottom 1%. The study indicated that two businesses in the area—a steel manufacturing company and a plastic products producer—were potentially emitting particulates in amounts that could present possible health risks for students. Because the district was 20 miles north of Milwaukee, industries in Milwaukee were also factors in our rating. Saukville Elementary made the bottom 1%, and the district’s other four schools ranked in the bottom 3%.

When informed about the ranking, the district’s leadership team, which consisted of Superintendent Michael Weber, Special Services Director Gary Myrah, and me, the director of business services, met to plan a course of action.

Under Investigation

The Port Washington–Saukville School District contracts with an environmental management consulting company in Fort Atkinson to oversee the district’s safety certification. On January 6, 2009, our leadership team met with Dan Krueger, district maintenance supervisor; Kathy Tubbs, Saukville’s principal; and the consulting firm’s president, Bill Freeman, to outline a plan for conducting our own testing and for communicating our plans to the parents and the community.
Freeman researched the model that was used to create the list of potential school “toxic hot spots” that were identified in the article. The particulate listed as being of the greatest concern was manganese, a metal used in the casting of steel. For our purposes, air quality was to be tested for a 72-hour period, with two monitoring meters set up outside the buildings in the air intake manifolds and six tests conducted inside the building. We estimated the cost for the tests at $2,000–$3,000, with the potential for testing more than once.

We knew that the health of our students was in question. If we received unfavorable results from outside the building, but not inside, we might need to limit outdoor activities. If both sets of tests were unfavorable, we knew that we could beef up the school’s air filtration system to trap the unwanted particulates before they entered the building. If all the tests came back negative, the village and the local companies would appreciate that we tested.

During this process, the district worked to be transparent with regard to the testing. The local paper, the Ozaukee Press, and the Milwaukee Journal ran informative articles about the process we were undertaking. As a district, we needed to do what was best and we needed to do it in a timely fashion.

The tests were sent to the Wisconsin Department of Natural Resources (DNR) state lab for results. Before the lab received the results, the Wisconsin DNR called a meeting of representatives from the state and county health departments, state environmental protection staff, DNR modelers, local government officials, one of the manufacturers’ safety directors, and school district personnel, including the environmental consulting firm.

The DNR modelers reported that the computerized testing model used in the first study had deficiencies. Their preliminary model indicated that there should be no detectable sign of the manganese particulate in question. Saukville Elementary’s distance from the manufacturing facilities should not yield results that exceeded acceptable levels.

In a follow-up telephone conference with the same group two days later, the district shared its similar findings. Having results that were in step with the Wisconsin DNR modeling was reassuring to the district and the community. In concluding our session, I asked if anyone would like to pay for our testing, since it benefited us all. I was pleasantly surprised that the DNR said that it would cover the lab costs of the tests that were processed through its labs. (It never hurts to ask.)

The manner in which the district actively tested and shared information with interested parties fostered positive relations with residents and manufacturers that may help create educational opportunities for our students.

In February and March, I learned that our insurance company might pick up a portion of our costs. The DNR said it would have done the same thing, and the U.S. Environmental Protection Agency said in a statement on March 2, 2009, that it would become more involved in helping with testing at school sites.

Jim Froemming is director of business services for the Port Washington–Saukville School District in Wisconsin. Email: jim.froemming@pwssd.k12.wi.us