EPA workers say North Carolina building making them sick despite attempts to fix problems

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RALEIGH, N.C. -- When it opened in November 2002, the Environmental Protection Agency's campus in Research Triangle Park, N.C., was touted as a state-of-the-art facility.

It contains more than a million square feet of labs and offices, where some of the top researchers in the U.S. work to improve the quality of the nation's air, water and land. But there's one problem nobody at EPA has been able to solve: Air pollution in the EPA's own offices is making staffers sick.

An investigation by WRAL-TV in conjunction with the Investigative Reporting Workshop, found that soon after the building opened, EPA employees began complaining that contaminated air was causing a range of health problems, among them, asthma, shortness of breath and eye trouble. Although the agency has taken numerous actions to try to fix the situation, some staffers say it is still risky for them to go to work — and have had to get permission to telecommute from home. Others continue to work in the affected building, but believe their health is suffering.

"You're having throat problems. Your eyes are watering. You're having, possibly, difficult breathing," said Silvia Saracco, the president of the union that represents many of those workers. "They want to come to work. They want to do their jobs. And their health is being negatively affected. They're having a hard time breathing."

A report done in 2009, written by an EPA contractor and obtained by the Investigative Reporting Workshop, highlights years of problems dating back to 2003. At that time, laboratory staff reported "excessive indoor particulate levels," i.e., toxic dust, some of which was contaminated with metals. Since then, the report noted, workers in two buildings reported symptoms, including coughs, eye irritation and chest pain with inhalation after a "dump" of particulate matter occurred. "Some individuals had persistent symptoms for many days prior to eventual resolution, and some had symptoms recur when they tried to return to their usual laboratories," the report said.

The study focused chiefly on Building-B, which consists of laboratories and office space. It concluded that the complex did not have "Sick Building Syndrome," but acknowledged that some workers were likely suffering from "Building-Related Symptoms." The report also called for additional sampling of indoor air contaminants.

EPA employees interviewed by the WRAL and the Workshop asked not to be named, for fear of retaliation by EPA officials. One said it's still common for small pieces of rusted metal to fall out of the air and land on computer keyboards. Surfaces in labs and offices often look like they have a thick coating of dust. It isn't typical office dust, however. Tests showed the presence of metal and glass fragments that were not found in the air outside of the buildings.

Inside, the air has been so bad that electrical components of some lab equipment have corroded. The damaged equipment was fixed quickly, but the cause of toxic particulates contaminating the equipment remained elusive.

Workers got little support from top officials

MaryJane Selgrade, who retired in July as acting director of the Experimental Toxicology Division of the Research Triangle Park campus, says EPA was slow to respond to employee concerns about air quality.

"Early on it seemed they cared more about the equipment than the people," Selgrade said. "There was almost a sense of apathy. They reacted slowly. It was frustrating for everybody."

She said workers who developed health problems were encouraged to go to the EPA health unit, but they got little support.

"They told people to go to the health unit when they had problems," she said. "But when they went, the health unit was not very receptive, for a long time. People were very turned off by that."

One man in her unit, Selgrade said, reacted so badly to the particles that he had to be rushed to the emergency room. His hand had swollen up so much that hospital workers had to cut off his wedding ring.

"It impacted his career," she said. "He couldn't go into his office."

Saracco, president of the American Federation of Government Employees Local 3347, which represents the workers, said the agency was slow to address the problems. "I think it became a real issue when management realized it was affecting the equipment," he said.

Agency commissioned several studies

When complaints continued, EPA contracted with Booz Allen Hamilton and El Group Inc. to examine many aspects of the building structure and functioning, from the heating and air conditioning systems to laboratory hood performances. The final report, done by Booz Allen Hamilton with technical help from the El Group Inc., examined several previous studies of the building's air quality issues. The Booz Allen study concluded that most of the substantial changes recommended in the earlier studies were done. But the report contains a list of key recommendations that were not implemented, or not complete.

Saracco noted that the study only looked at Building-B, even though employees who work in other buildings in the complex also had complained about health problems.

One current staffer, who asked not to be named, said, "The report is based on a limited investigation and therefore was unable to provide information on mold problems in the building and the scope of the number of people affected not only in the B-wing, but in other parts of the building."

Alex Montilla, the director of the Facilities Management Support Division in Research Triangle Park, said EPA is doing all that it can. He noted that troubleshooting the problem is difficult because the building is so large. He also said that particulate matter in the air was traced to impure water from the city of Durham, which was used in the buildings' humidifiers. The humified air corroded metal inside the

buildings, including pipes, coils and possibly ductwork. The problem got so bad, the humidifiers were shut off. But that didn't solve the problem.

In recent months, nearly seven years after the first complaints, the EPA stripped and recoated the air handlers in the buildings. Montilla said he believes this will stop the new particulate matter from forming.

If deposits of particulate matter, primarily rust, are found in the ducts, they'll be cleaned. That process could take months, if not years.

The EPA buildings also have a history of water issues, from leaking roofs to broken water pipes. Montilla says the problems are not out of the ordinary with large buildings like the ones on the Research Triangle Park campus. But many of the workers contacted by WRAL believe the design of the building is at fault. They are especially worried about toxic mold. Montilla says the building was tested for mold and the findings were insignificant.

Former and current employees also point to a third possible cause of the air issues. The basement in the B-building, where most of the sick workers are located, has a wastewater treatment plant. That's where the EPA cleans its own water before releasing it back to the city of Durham. That water includes chemicals used in experiments, as well as chemicals used to neutralize the water. According to one employee, the waste water was stored in an open tank and emissions of volatile compounds contaminated the air in the floors above it.

On the other side of the basement there's a large air intake system that was supposed to supply air only to unoccupied sections of the building. Investigators raised concerns that the potentially contaminated air was escaping and reaching the labs and offices. In one case, investigators noted that ductwork was leaking so much that carpet was pushed up on the first floor of the B-building. A former worker, who asked not to be identified, said she worked on the first floor and started having problems with her eyes. Though she's now retired, the eye problems persist.

Montilla said the basement is now being vented, to keep the potentially contaminated air out of the air supply system.

Despite all the studies and recently completed work, there's no guarantee the repairs will fix the problem. Montilla says the EPA will keep trying. "Nothing is more important than the health and safety of our employees," he said.

Union says EPA efforts to fix problems insufficient

Current and former employees wonder why it's taking so long to fix the building. The employees' union president, Saracco has concerns as well. "Have there been actions? Yes. Have they solved the problem? We still have sick people coming to work."

It's a sensitive subject at the agency.

On Thursday, after reporters interviewed EPA staffers, EPA official Gary Carter sent a memo to staff noting the "increase in concern regarding the indoor air quality" in the complex.

In his note, Carter attributed this anxiety to "recent documented health symptoms among some of our people, visible mold growth" and other issues. Carter said those responsible for building-related problems were "vigilant in responding to and resolving those problems to the best of their ability." He added that management is taking steps to improve communication regarding building-related concerns.

 $Source: \ \underline{http://investigativereportingworkshop.org/investigations/toxic-influence/story/epa-building-north-carolina-has-air-quality-issues/$