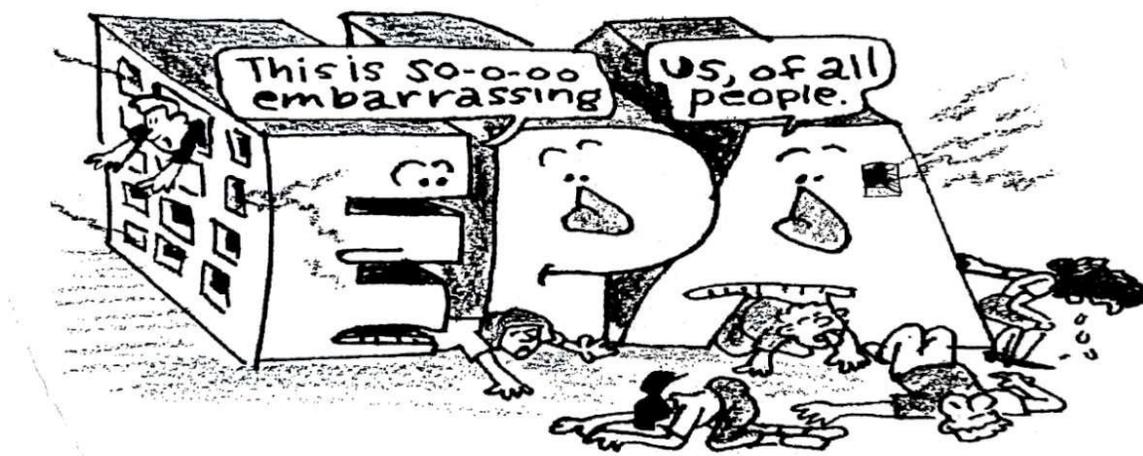


## The EPA's toxic carpet debacle



New carpet installed at the EPA headquarters in Washington, DC, made more than a hundred employees sick. Some became permanently disabled with chemical sensitivities.

*Keywords: carpet, carpet emissions, toxic, 4-PCH, Environmental Protection Agency, EPA, headquarters, Waterside Mall, indoor air quality, sick building syndrome, chemical sensitivity, MCS, history*

The Environmental Protection Agency, EPA, is tasked with protecting the public health in the United States. This includes regulating air quality. When the EPA itself had severe indoor air quality problems in their offices, the irony made it national news.

In October 1987 the EPA started replacing 27,000 square yards (26,000 m<sup>2</sup>) of carpeting at its headquarters in Washington, DC. The offices were in the Waterside Mall at the time. The office complex was already known to the employees to have insufficient ventilation.

The carpets were gradually installed over several months. Shortly after the project started a few employees complained about the fumes from the carpet, but the management ignored it.

By January 1988 the complaints from the office workers became loud and persistent. Some employees were taken to the hospital and there were frequent complaints about burning eyes, sore throats, blurred vision, dizziness, difficulty concentrating, joint pains, chest tightness and other neurological symptoms.

A few employees could not enter the building without becoming severely ill.

Management kept downplaying the problems and refused to take responsibility, just like it is often done by corporate America.

At a staff meeting in April the employees were told that an industrial hygienist had been hired to assess the problem and hadn't found anything abnormal. Management said that the carpeting could not be the cause of the problems and the air in the offices was not any worse than the typical living room.

The employee union demanded a halt to further carpet installation and a removal of what was already installed. The management agreed to stop further installation, but refused to pull up any carpet that was already in place.

The EPA had much in-house expertise to investigate toxic exposures and effects, but the management wasn't really interested in investigating themselves. They were apparently concerned that they might provide data to be used against them in a lawsuit. This was also during the Ronald Reagan administration, which was particularly hostile towards environmental issues.

The employee union (NFFE Local 2050) organized their own investigation, since their members had the needed expertise. The new carpet had a backing of styrene-butadiene-latex, which was used in commercial carpeting but not for residences. Analyzed air samples found chemicals such as phenol, styrene, dichlorobenzene and especially 4-PCH (4-phenylcyclohexene).

They focused on 4-PCH, since it was the top air pollutant. 4-PCH was an unintended byproduct from the production of the latex backing of the carpet. They found that the level of 4-PCH varied widely with each roll of carpet.

Together with the poor ventilation and the overcrowding of the EPA offices, 4-PCH was thought to be the culprit, but the union did not have the resources to actually prove it.

The reason some employees got sick and others didn't was likely due to genetic differences and current health status, they thought.

The union asked the EPA to issue an air standard for 4-PCH of maximum 0.005/0.017 parts-per-billion. In their request they noted that 4-PCH was chemically very similar to the illegal drug "angel dust" (phencyclidine), which had

been observed to be a potent neurotoxin. The EPA managers refused to authorize work on an air standard for 4-PCH.

In the first week of June, seventy employees picketed outside the buildings, demanding management solve the problem. On July 8 there was another protest rally.

By September 1988, nearly a year after the first carpet was installed, the management finally agreed to remove the toxic carpet. In the areas with clusters of complaints they installed hard tile flooring instead. In the rest they prudently installed 4-PCH free carpeting (it had a high-density polyurethane foam backing instead of latex).

The building ventilation was also improved.

A total of 759 people worked in the newly carpeted offices, and 124 them got sick, according to the union.

Three years later, in 1991, about 45 to 50 employees were still affected. Most of them worked at a different location in modified offices without carpeting and with windows that could open. Some worked from home.

About 17 or 19 employees were unable to work at all.

The number of people who became permanently disabled by MCS is unclear. Some sources say 8, some say 17 or 19. According to a 1996 article in *Spin* magazine, 19 employees joined together and sued the EPA. After three years of litigation they won, but then lost on appeal.

### **Press coverage**

There had already been other cases where fresh carpeting made people sick, but they didn't make national news. Just a few cases even made local news, such as when the Humboldt State University in California installed new carpeting in 1985 and a new veterinary building at the University of Florida, Gainesville, made half the staff of 600 workers sick in 1986.

But the irony that the EPA made its own employees sick with toxic air got the attention of the press. The *Washington Post* told the story on June 6, 1988 with the headline "EPA Has Air Pollution Right Under Its Own Roof" and *TIME* ran the story "Got that stuffy, run-down feeling?"

A spokesperson for the EPA admitted to *TIME* that "the air in some office buildings is 100 times as polluted as the air outside."

This was a major embarrassment for the government agency entrusted with keeping the nation safe from toxic chemicals.

One of the EPA scientists working in the building, Rufus Morrison, said to *The New York Times*, "The great irony is that no one studies indoor air problems more than we do and now this happens."

The carpet industry predictably commented that the problem really was one of "perception" due to the "distinctive aroma" of new carpet, which doesn't necessarily mean they pose a health risk.

The November 10, 1989 issue of the *Pacific Sun* had an interview with Bill Hirzy, an EPA chemist who was also president of the employee union. He said that prior to the carpet problem he had heard of chemical sensitivities, but had been skeptical. But then he saw people he knew very well get sick with MCS:

These were people I knew, and I knew they weren't crazy or shirkers or disappointed with their jobs. Yet they were reporting these kinds of effects...

But the debacle did not convince everyone MCS was "real." The previous president of the American College of Allergy and Immunology, Dr. Aaronson, stated to the *St. Petersburg Times*:

It's an illness that doesn't exist. It's never been proven...We think a lot of these people would benefit from some psychiatric testing.

### **Why it happened**

Until the 1970s carpets were made of wool with a backing of jute. This was expensive and prone to mold and mildew. The cheaper and mold-resistant synthetic carpets conquered the market by 1980. They were usually made of nylon with a latex backing, treated with chemicals to make them stain resistant and were often glued to the subfloor.

At the same time, the energy crises of the 1970s made building managers tighten up office buildings so they were more energy efficient. Offices then had both less ventilation and more toxic chemicals released into the air. This set the scene for the problems in EPA's Waterside Mall offices and many other cases of sick buildings.

The carpet and rug industry blamed the problem on insufficient ventilation and said that their own studies on rats showed that 4-PCH was safe. Besides, they thought it impossible to totally eliminate 4-PCH from all carpets.

### **EPA's indoor pollution study**

The EPA had started studying indoor air quality a few years before their own problems. In November 1988 they released a report that had been five years in the making.

They had measured the air in ten large buildings and found that the air inside could be a hundred times as polluted as outdoors in a major city. They found more than 500 different chemicals in the air in four of the buildings. They also found that in new buildings the air quality improved over time as the building materials outgassed.

### **The Consumer Product Safety Commission**

The press coverage of the EPA carpet problems made other people stand up and complain instead of suffering in silence. They now knew they were not alone, as they were often told by carpet vendors.

The U.S. Consumer Product Safety Commission (CPSC) issued a press release on August 24, 1989 that they had received many complaints about health effects from new carpets. They listed three examples and said they were investigating the issue.

Three months later a spokesperson for the CPSC stated to the *Pacific Sun* that they were not investigating 4-PCH, citing that "others" had already done so.

Twenty-six state attorneys general petitioned the CPSC to require carpet manufacturers to place warning labels on some carpets, but nothing came of it. The CPSC refused to respond to the petition and cited "insufficient evidence" when asked why they didn't do anything.

New York Attorney General Robert Abrams reported he had received hundreds of complaints about new carpeting and the glues used to install them. He also reported that two installers died when they were gluing down carpet inside an enclosed space on a boat.

The EPA continued to drag their feet investigating carpet emissions. Meanwhile, official EPA brochures stated that "limited research to date has found no link between adverse health effects and the levels of chemicals emitted by carpets."

In the March 1993 issue of Public Citizen's *Health Letter* a spokesperson for the EPA was still quite vague about their own carpet problem, saying that "It could have been the air ventilation system for all we know," despite that the head of the employee union, Bill Hirzy, stated that after the carpet was replaced there had been "no carpet-related complaints."

### **The Anderson Laboratories Study**

In 1985 Linda Sands had new carpets installed in her home in Vermont. It made herself and her five children sick. She had the carpet removed within three weeks.

Seven years later, in 1992, they were all still sick. She had saved a piece of the carpet, which she brought to Anderson Laboratories in Massachusetts.

Anderson Laboratories tested Linda Sands' carpet sample by blowing air over it and into a chamber with five mice. One mouse died within 40 minutes, three more died within 24 hours. Only one survived.

The carpet industry refused to accept the Anderson Lab findings and hired a scientist at the University of Pittsburgh to repeat the study. Again the mice died. Other scientists repeated the test with the same result.

Anderson Laboratories was contacted by several other people, who were made sick by new carpeting. They tested a total of nine carpet samples, all of which produced severe effects in mice, including death. In contrast, of eight random samples from local stores only three produced toxic effects in the mice and none caused death. Clearly some carpets were worse than others.

Responding to this public relations catastrophe, the carpet industry instituted a "Green Tag" certification of carpet emissions. But its requirements were lenient, and it required just one annual test. The attorneys general of New York, Vermont, Connecticut and Oregon issued the joint report "Carpets and Indoor Air: What You Should Know" which called the Green Tag program "deceptive" and "misleading" and asked it to be cancelled.

Bernie Sanders, who represented Vermont in the House of Representatives, met with Linda Sands and took action. The result was hearings of both Senate and House committees. Linda Sands testified before both committees.

Bernie Sanders also issued a statement calling for the industry to end the misleading certification program and organized multiple hearings about carpeting held by the House Government Operations Subcommittee.

In 1993 Bernie Sanders met with four prominent specialists in environmental medicine, the doctors Doris Rapp, William Rea, Al Johnson and Aubrey Worrell. They issued a joint statement about the need for more research and education about carpet exposures and chemical injuries.

Sanders also visited workers at carpet factories and heard about the health effects they suffered from working there.

Sanders later convened a meeting at his office between the carpet industry and three environmental physicians, including Dr. William Meggs. They discussed what steps the industry could take to remedy the problems. This was done in a constructive atmosphere and they agreed to meet again six months later. When no meeting was called, Dr. Meggs contacted Sanders' office and was told that since the Republicans had gained control of Congress, the carpet manufacturers were no longer interested (Meggs, 2017).

### **The EPA finally tests the carpet**

At Bernie Sanders' persistent urging, the EPA finally replicated the carpet tests done by Anderson Labs. The result was dead mice again.

Then they kept tweaking the test until the mice didn't die. They thoroughly humidified the air in the test chamber, which apparently made the humid air absorb more of the toxic chemicals. Voila, no problem. Case closed.

In her testimony before the Congressional committee on June 11, 1993, Dr. Rosalind Anderson stated that when she repeated EPA's modified test, her mice didn't die either, but if she sprayed the mice with the water that had absorbed the chemicals, they showed several neurotoxic symptoms.

### **What was the outcome?**

According to a press release from Bernie Sanders, dated June 11, 1993, the carpet industry agreed to "develop warning labels for all carpeting to alert consumers that the carpeting may contain chemicals that could cause illness in consumers who are 'chemically sensitive' "

The press release also criticized the EPA for continuing to drag its heels doing its job on this whole issue.

Whether rolls of carpet were ever labeled with the promised warning or not is uncertain. Today, 2019, there are no such warnings, even though carpets continue to be a problem for people with chemical sensitivities.

According to the Carpet & Rug Institute's web site, in the 2000s the Institute upgraded their testing program, which was renamed Green Label Plus.

Presumably the carpet industry solved the 4-PCH problem, but did it quietly to avoid ever acknowledging the problem.

There were several lawsuits against carpet companies around 1990. Most were settled quietly with gag orders, so they did not set any legal precedent. A prominent lawsuit was filed already 1981 by Glenn and Sharon Beebe in Cincinnati, Ohio. They wanted to set a precedent and refused to get hush money, but they lost both in regular court and on appeal. They self-published the book *Toxic Carpet III* about this sordid affair.

Terese Svoboda, the sister of one of the employees who became permanently disabled with MCS, made a documentary film about the affair and how it ruined her sister's life. The film is titled "EPA Poisons EPA: My sister's story" and was published by Bull Productions in 1997.

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### **More information**

Other stories about the history of MCS are available at [www.eiwellspring.org/history.html](http://www.eiwellspring.org/history.html).