

Road to regulation paved with conflicting intentions **by Jim Morris, Houstin Chronicle**

WASHINGTON -- The subject at hand was asphalt fumes, inhaled by highway laborers, heavy-equipment operators and roofers consigned to some of the most grueling work in construction.

The fumes had long been known to irritate the lungs and eyes. They were, if nothing else, a nuisance.

Scientific evidence had emerged, however, to suggest that the fumes -- especially those given off by roofing asphalt, which is heated to higher temperatures than paving asphalt -- caused cancer as well.

Tumors had developed in laboratory mice whose skin had been painted with condensed roofing asphalt fumes, asphalt-based paint and raw asphalt. An excess of cancer deaths had been noted among Swedish roofers who worked with asphalt.

The case against paving asphalt fumes was weaker. Animal studies had produced cancers, but the studies' designs and methods had been questionable.

A study of deaths among Danish highway workers had suggested links to cancers of the lung, esophagus, mouth and rectum, but it, too, had flaws.

Nonetheless, by the spring of 1991 scientists in the Occupational Safety and Health Administration's Health Standards Program had seen enough to suggest that asphalt fumes were carcinogenic. They proposed a permissible exposure limit, or PEL, of .2 milligrams per cubic meter of air over an eight-hour workday.

Yet events over the following year -- notably, private meetings and other communications with the Asphalt Institute of Lexington, Ky. -- would prompt OSHA to propose a PEL 25 times higher: 5 milligrams per cubic meter. The higher PEL, OSHA scientists had estimated, would lead to 25 excess cancer deaths per 1,000 workers, the lower PEL one excess death.

More than two years later, the question remains: Did OSHA cave in to intense pressure from the asphalt industry, thereby affronting the agency's own health experts, or did it merely do what was prudent, given the lack of conclusive evidence that asphalt fumes cause cancer?

"There was a great amount of political pressure put on the agency, and the agency bowed," said David Vladeck, director of the Public Citizen Litigation Group, a Ralph Nader organization in Washington.

Said Bernie McCarthy, vice president of the Asphalt Institute: "I would personally like to think we had the power to make (OSHA) cave in to us, but I don't think that's true. I didn't think at that time and don't think today that they had any scientific evidence" to justify the lower PEL.

The conflict over asphalt fumes illustrates the quandary OSHA

often faces when it tries to regulate a hazard in construction: How to be both protective and reasonable.

When a new standard is proposed in construction, company owners and trade groups can be counted on to protest. How, they ask, do you expect this to fly in our industry? What about the cost, which OSHA is required to consider?

Organized labor, perhaps in concert with a public-interest group, responds just as passionately. This standard isn't tough enough, the union people tell OSHA. You're letting bad actors off the hook, and people are getting sick, hurt and killed as a result.

Such conflict arose three years ago with asphalt. It arose seven years ago when OSHA sought to include construction workers in a sweeping hazard-communication rule.

It has arisen now, as OSHA crafts an ergonomic standard it hopes will reduce crippling musculoskeletal injuries among carpenters, laborers, painters and others who perform repetitive and strenuous tasks.

It's the politics of construction, a transient, dangerous industry. Sometimes, as in the case of asphalt, the industry prevails. Sometimes, as with hazard-communication, it doesn't.

THE industry has no trouble getting OSHA's ear. It is, after all, hard to ignore global companies like Fluor Daniel, Bechtel and Brown & Root, which between them won \$50 billion in new contracts last year. It's hard to overlook politically connected organizations like the Associated Builders and Contractors and the National Association of Home Builders.

Even when it ultimately loses, the industry often succeeds in prolonging the inevitable. Construction companies escaped a stricter federal lead standard -- already in place for manufacturing and other segments of "general industry" -- for 15 years, until Congress finally compelled OSHA to act.

John Rekus, an industrial hygiene consultant in Baltimore and former technical coordinator for Maryland Occupational Safety and Health believes that "both sides are really at fault" -- OSHA for not finding innovative ways to solve problems unique to construction and the industry "for looking at some of these things and throwing its hands up."

Rekus wishes the process could be made less confrontational. The British, he said, may have the right idea. Whenever a new rule is proposed, union, business and government representatives meet and hash it out, averting lengthy court battles.

"What these people need is someone to sit down and mediate -- somebody who can be objective and find that middle ground," Rekus said.

AS it turned out, OSHA's internal struggle over asphalt fumes became moot because of a July 1992 federal appellate court ruling

nullifying hundreds of PELs for air contaminants. Asphalt fumes in the construction industry continue to be regulated as a "nuisance dust," with a PEL of 15 milligrams per cubic meter.

Still, the asphalt rule-making process showed how OSHA's heart and head can be at odds. In this case OSHA wanted to make sure that thousands of workers, mostly laborers and roofers, weren't at increased risk of getting work-related cancer. On the other hand, it couldn't ignore the economic impact of a strict PEL, estimated to be \$45 million by the Asphalt Institute and far less by government researchers.

"You always have a controversy when you have a substance widely used in commerce," said Dr. Edward Stein, an OSHA health scientist who worked on the asphalt project.

The Asphalt Institute, which represents most of the major U.S. asphalt manufacturers, began an intensive letter-writing campaign in early 1991, urging OSHA to adopt the higher PEL of 5 milligrams.

Copies of the documents were obtained by Rep. David Obey, D-Wis., who made them available to the Houston Chronicle. A letter from the Asphalt Institute's Earl Arp to Charles Adkins, then OSHA's director of health standards, on Aug. 1, 1991, is typical: Arp wrote that since "there is no adequate scientific basis for concluding" that asphalt fumes cause cancer, "a lower PEL is neither necessary nor cost-effective."

Meetings also were held between OSHA policy-makers and asphalt industry representatives. OSHA health staffers were not invited -- a slight about which they later complained in a memorandum. Nor were labor unions consulted.

"There was a lot of pressure on the agency not to classify (the fumes) as a carcinogen," Stein said. "These people in industry had contact with higher-level (OSHA) policy people. A lot of it was verbal."

Sarah Gibson, a Boston attorney who wrote her master's thesis on the asphalt rule-making process, said the industry succeeded in turning OSHA's attention away from the damning science and toward politics and economics -- and the industry's own studies suggesting that asphalt fumes were at worst a respiratory and eye irritant. The industry, she reasoned, was rightly concerned that the public might react with alarm if pavers and roofers working with something as familiar as asphalt suddenly began wearing respirators and other protective gear.

Although the court ruling, and other priorities, forced the issue onto OSHA's back burner, the asphalt industry is still spending money to try to exonerate asphalt fumes. The Asphalt Institute has spent \$3 million on studies and has committed another \$1 million, said its president, Ed Miller.

Thus far, Miller said, no data from the "real world" -- actual job sites, as opposed to labs -- suggest that the fumes are carcinogenic. Still, he said, the \$3 billion-a-year asphalt industry is investigating ways to reduce fume levels on roads and

roofs, perhaps by using special exhaust systems.

"We're all American citizens," Miller said. "We all care about this country. I just hate it when somebody tries to make it seem like industry doesn't care."

At times, the construction industry itself helps create that perception.

In the late 1980s, when OSHA was soliciting comments on its plan to extend a hazard-communication rule to construction workers, it was inundated by letters and thick position papers from trade groups and companies large and small.

Valid points were made and tough questions asked. In essence, however, the industry's response to the proposed rule was: We don't need this. And even if we do, it will cost too much.

The rationale behind OSHA's extension of the rule -- proposed for general industry in 1983 and fully in place by 1986 -- was that itinerant construction workers needed to be warned about, and trained to handle, any hazardous chemical they might encounter.

ALTHOUGH construction sites are known to harbor many toxic chemicals -- lead, asbestos, silica, solvents with unpronounceable names -- many in the industry insisted there was no need for the rule.

Trade groups such as the Associated General Contractors of America made lengthy arguments against it. Some of the most acerbic responses came from individual companies, the very operations OSHA was relying on to help educate workers.

For example, Trio Construction Services Inc. of Columbus, Ohio, maintained that the construction industry "is not a user of today's highly toxic materials, chemicals, carcinogens, explosives, etc." Trio went on say that its employees used gasoline, kerosene, fuel oil, paints, lacquers, thinners, adhesives, concrete, oxygen and acetylene, among other substances.

"By the definitions of hazard in the rule," OSHA noted in the Federal Register, "the types of chemicals cited do indeed include 'highly toxic materials, chemicals, carcinogens.' "

OSHA took in all the comments, withstood a construction industry legal challenge and began enforcing the hazard-communication rule in 1989.

The argument of the moment is over OSHA's plan to adopt an ergonomics standard, which would require employers to identify tasks that require repetitive motion, awkward postures or heavy lifting, and find different ways for those tasks to be performed, perhaps through the use of new tools or, in the case of lifting, a "buddy system."

Dr. Laura Welch, director of the Division of Occupational and Environmental Medicine at George Washington University, believes that ergonomic injuries are "probably the biggest burden

construction workers have. By the time you're 45, you need another career."

"To not do anything would be a disaster," said Barbara Silverstein, an OSHA special assistant for ergonomics.

BUT the Associated Builders and Contractors, a trade group of primarily non-union firms, has "grave concerns" about the idea, chiefly because of the implications for small employers, according to Suey Howe, the ABC's director of federal regulations.

"The majority of companies in the construction industry are small businesses," Howe said. The ABC's fear, she said, is that an overzealous OSHA will force the owners of these firms to spend lots of time and money trying to meet a "very subjective" standard that's "pretty much being tailored to a fixed environment, like an office."

Howe said she has not seen a "good body of data" suggesting that ergonomic injuries are a major problem among construction workers, although "there might be some anecdotal evidence."

Ed Gorman, executive director of the United Brotherhood of Carpenters' Health and Safety Fund of North America, said that Howe is "simply uninformed."

Statistics show that more than 60 percent of all workers' compensation claims nationwide are paid to people with back injuries and other musculoskeletal disorders, Gorman said.

"Any contractor that fails to address ergonomic problems in the workplace simply doesn't understand the effect of back injuries, knee injuries and shoulder injuries on his bottom line," he said.