



Crystalline silica dust released during construction work can cause serious lung damage.

ENVIRONMENTAL HEALTH

Dust regulations trigger backlash

US agency's reassessment of silica exposure rules provokes conflict-of-interest row with senators.

BY DANIEL CRESSEY

Senate accusations of prejudice have forced a US government agency to defend its actions over a proposed tightening of regulations concerning industrial workers' exposure to deadly silica dust.

The row blew up late last year when the Occupational Safety and Health Administration (OSHA) began a public consultation on setting new limits for working with the dust, which is a major hazard for construction workers, causing serious lung disease. The agency ruffled feathers in the Senate when it asked that those submitting evidence should declare their funding sources.

Last November, a group of 16 senators wrote an open letter to OSHA criticizing the move for its implication that the agency might prejudice submissions. The consultation period closed on 11 February, and OSHA is now vigorously defending its request.

"What I'm doing here is essentially saying the information that we will base our standard on has to be of the highest integrity, and we have to do it in a transparent manner, and conflict-of-interest disclosure is an important

component of both of those," David Michaels, the head of OSHA, told *Nature*. "It would be surprising right now if a scientific journal didn't ask for that information."

Produced by tasks such as grinding concrete and sandblasting, used in the construction and other industries, crystalline silica dust can cause silicosis — an incurable disease involving inflammation of the lungs — and lung cancer. The dust is thought to kill or disable thousands of people in the United States every year, but guidelines on working with it have not been updated for more than 40 years.

"Our current standard is antiquated," says Michaels. "There are literally millions of workers in the United States who are exposed to dangerous levels of silica."

The present rules generally advise limiting exposure to roughly 100 micrograms of crystalline silica per cubic metre of air, averaged over 8 hours. OSHA has proposed halving this limit. Workers would also have to be better protected, for example by dust being 'wetted down' and with the use of extraction fans. OSHA estimates that the new regulations will cost about US\$640 million a year, with employers picking up most of the tab, but the agency

believes that the rules will save up to 700 lives a year. US standards are also influential in other countries, some note, potentially saving many more workers' lives.

The proposals were published in the *Federal Register* last September, at the start of the consultation period. In a first for OSHA, those wishing to submit scientific evidence as part of their comments were requested — although not required — to provide information on the funding sources of the research, as well as any funding received by the commenters that could potentially be considered a conflict of interest.

The Associated General Contractors of America, an industry group based in Arlington, Virginia, called the proposals "significantly flawed" and "rife with errors and inaccurate data". And shortly after they were published, the group of senators, led by Lamar Alexander (Republican, Tennessee), a senior member of the Senate Committee on Health, Education, Labor, and Pensions, wrote to OSHA saying that they were "very concerned about OSHA's attempt to have commenters disclose their financial backers". They added that the request "raises questions" about whether OSHA would prejudice submissions on the basis of who was sending them.

"The chilling effect the financial disclosure could have seems counter to the idea of robust inclusion of a diverse set of ideas and views to inform the rule-making," Liz Wolgemuth, a spokeswoman for Alexander, told *Nature*.

But pharmacologist Lisa Bero of the University of California, San Francisco, says that her own research on similar rule-making processes for tobacco control found that scientists opposing rules were often funded by industry groups. She supports the new disclosure request. "The regulatory agencies have to be in a position to critically appraise the studies that come to them," she says.

There is also support for the new silica standard. Tee Guidotti, a physician in Washington DC and a member of the American Thoracic Society's Environmental Health Policy Committee, says that the scientific case for the proposed limit is "close to being bullet-proof". He adds that, if it is successful, it could provide a template for how OSHA deals with similar hazards, such as dust and radon.

But Susan Dudley, director of George Washington University's Regulatory Studies Center in Washington DC, which conducts independent research on regulatory proposals, argues that there has already been a drop in exposure to silica dust and its health effects in recent years. She supports a lower exposure limit, but believes evidence is weaker for some of the specific requirements proposed to reach it, such as dust wetting.

The viewpoints contained in the 1,600 or so comments received through the consultation will be discussed in public hearings starting on 18 March. It will probably be several years before a final rule is enacted. ■ **SEE EDITORIAL P8**