

Testimony
Oversight on EPA Toxic Chemicals

Senate Environment and Public Works Committee
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Chairman Boxer, Senator Inhofe and members of the Committee on Environment and Public Works, it is my honor to testify today about the US Environmental Protection Agency (EPA) and its efforts to manage toxic chemicals. With your permission I would like to submit my full testimony for the record.

I am a professor of environmental health at the Johns Hopkins Bloomberg School of Public Health. From 1993-98, I served as Assistant Administrator for Prevention, Pesticides and Toxic Substances at the US EPA. Prior to that I worked for eight years in public health with the California Department of Health Services. The views I convey today are my own.

When the Toxic Substances Control Act (TSCA) was passed in 1976, there were great expectations that it would improve our understanding of chemical risks and manage these risks to protect human health and the environment. It is now 32 years since the enactment of TSCA. Unfortunately, this statute fails to provide EPA with the authorities that it needs to identify chemical hazards and to take decisive actions to manage risks. In particular, there are no specific provisions to protect children and other vulnerable populations. Chairman Boxer, I know that you have had a major role in enacting legislation to protect the health of children. I also appreciate the approach that has been taken by Senator Lautenberg and others on this committee to draft legislation to reform TSCA, in order to address this very serious weakness in EPA's authority. Chemicals play a vital role in the US and world economy, and to human welfare. Strong regulation is needed to assure the health of all our citizens, especially our children.

Today I am here to address more recent concerns with EPA's management of chemicals. I will make two points. The first is that suppression of scientific information about chemicals has real consequences to public health. The second is that the new changes to EPA's Integrated Risk Information System (IRIS) are counterproductive.

I am completing a study of one particular chemical, formaldehyde. I am going to start with the formaldehyde story because I think it illustrates the problem we are facing today. Formaldehyde is one of the most well characterized chemicals in the world. It has serious acute and chronic toxicity. Most of the formaldehyde produced today is used in wood products such as particleboard, plywood and veneer. For years formaldehyde has been considered a probable human carcinogen, but in 2006 the International Agency for Research in Cancer (IARC) determined that newer evidence supports classifying it as a known human carcinogen. IARC concluded that there is sufficient evidence that formaldehyde causes nasopharyngeal cancer in humans, "strong but not sufficient evidence" for causing leukemia in exposed workers and limited evidence it causes sinonasal cancer. As evidence has accumulated, many countries, and the state of California, have proposed strict enforceable standards for formaldehyde in buildings; the California standards are 3-4 times more stringent than the voluntary standards that have been adopted by the Consumer Products Safety Commission. California's standards are consistent with those in Europe, Australia, Canada and Japan.

For years, the scientists at the EPA have been trying to update the agency's assessment of formaldehyde on IRIS. In 2004, this was nearly complete, but the process was postponed. The formaldehyde industry persuaded members of Congress and the EPA's political leadership that "new" scientific findings would soon be forthcoming, justifying a delay. At the same time, the CIIT (Chemical Industry Institute of Toxicology) published its own formaldehyde cancer assessment. In an unprecedented action, in 2004 EPA incorporated the CIIT assessment into its fiberboard hazardous air pollution rule, without the concurrence either of EPA's scientists or the EPA's independent Science Advisory Board (SAB). Over the last five years no new scientific publications have emerged that would alter the formaldehyde listing on IRIS. Numerous published papers have disagreed with the CIIT assessment. Unfortunately, in 2005, Hurricanes Katrina and Rita flooded the Gulf Coast, and thousands were left homeless. FEMA rushed orders for 120,000 travel trailers, which, as we all know now, contained significant quantities of formaldehyde. The first complaints of formaldehyde-related symptoms among trailer residents surfaced in February 2006. You know about the rest of the tragedy; and the slow response to the problem by the federal government.

My point is that efforts to suppress science have real consequences for the protection of public health. With increasing frequency EPA's scientists tell me about impediments to doing their jobs. Like formaldehyde, several other major chemicals under assessment by the EPA, like the dry cleaning solvent perchlorethylene, also have been held hostage. The new process has nearly ground EPA's efforts on IRIS to a halt. Withholding information about chemical hazards does cause harm to the public. EPA leaders must stop suppressing and delaying IRIS listings and other scientific efforts.

The assessment of a toxic chemical like formaldehyde is a complex and challenging process that involves scientists with specialized training in a myriad of disciplines related to toxicology and epidemiology. Depth of expertise is required in many specific areas. The peer review for such an assessment is even more challenging; not only a broad array of expertise but also a higher level of proficiency is required. This is the role – appropriately – of the EPA Science Advisory Board. Another time-honored mechanism for scientific input to EPA is through processes like the National Toxicology Program, which promote scientist-to-scientist collaboration about toxic chemicals.

OMB's new role and the new interagency review process for IRIS are terribly misguided. With all due respect to the people at the OMB, their small complement of scientists is not likely to add value to these assessments. Even worse, the new process is an open invitation for interested parties to meddle with IRIS in secret. First, certain federal agencies, like the Department of Defense, are responsible for waste cleanups and have a direct financial stake in EPA's toxicology assessments. Like all responsible parties, they deserve a transparent process so that they can track EPA's thinking about chemicals and provide input at certain points in time. However, it is completely unacceptable for them to have even an appearance of a veto over EPA's scientific conclusions. Additionally many federal agencies are charged by Congress to promote industry and commerce. Their involvement in the IRIS interagency process gives appearance (if not the reality) of providing a back door through which industry groups

can exert pressure to modify EPA's conclusions or to subject the process to endless delays. In contrast, when the EPA's Science Advisory Board considers an IRIS listing, all parties, nongovernmental and governmental, are able to provide input in open meetings. The members of the SAB evaluate this input based on scientific merit, not politics. The net effect of this change in the IRIS process is to undercut the scientific credibility of the IRIS listings. It undermines the public's trust in the EPA. In other words, it injects political science into EPA's IRIS process.

This is a pivotal time. There is a rising tide of chemicals regulation by states. However, most states do not have sufficient resources to manage chemicals and must rely on EPA. Chemicals play a vital role in our economy but we must manage them well. As we have learned in the context of automobiles, continuing to rely on outdated and polluting older technologies can be harmful to human welfare as well as human health. Finally, in the case of chemicals, what you don't know *can* hurt you. Many people in public health, in state governments and in industry need to know about EPA's assessments of these chemicals. Let's allow the science to be the science; the new IRIS policy should be rescinded immediately and the work of EPA's scientists should be made available for peer review and publication. In the long run, overhaul of TSCA to strengthen our protections from health hazards of toxic chemicals. Meanwhile, EPA needs to act with prudence and to fulfill its duty to protect the health of the public and the environment.