



U.S. Chemical Safety and
Hazard Investigation Board

NEWS RELEASE

U.S. CHEMICAL SAFETY BOARD

April 26, 2010

CSB Requests Public Comment on National Academy of Sciences Study on Use of Toxic Methyl Isocyanate (MIC), Inherently Safer Technology Alternatives

Congressionally Mandated Study Follows Fatal 2008 Explosion at Bayer's Chemical Complex in Institute, West Virginia

Washington, DC, April 26, 2010 — In a [Federal Register notice](#) published April 23, the U.S. Chemical Safety Board (CSB) announced it is seeking public comment on the design of a Congressionally mandated study on the use of methyl isocyanate (MIC) in the manufacturing of certain pesticides, and the feasibility of implementing safer alternatives to protect workers and the public from a potential release.

The highly toxic chemical intermediate MIC is used at the Bayer CropScience pesticide manufacturing complex in Institute, West Virginia, just to the west of Charleston. An explosion at the complex on August 28, 2008, which fatally injured two workers, occurred within 80 feet of a 37,000-pound capacity storage tank of MIC, the chemical which resulted in thousands of public fatalities when it was suddenly released into the air from a pesticide manufacturing plant in Bhopal, India, in December 1984.

Congress appropriated \$600,000 to the CSB for fiscal year (FY) 2010 specifically “for a study by the National Academy of Sciences to examine the use and storage of methyl isocyanate including the feasibility of implementing alternative chemicals or processes and an examination of the cost of alternatives at the Bayer CropScience facility in Institute, West Virginia.” Prior to the Congressional action, Bayer had publicly committed to reducing its inventory of MIC at Institute from approximately 200,000 pounds to 40,000 pounds by discontinuing the production of two MIC-derived pesticides and strengthening inventory controls over its remaining pesticide manufacturing processes.

“Following the Bhopal disaster in 1984, other chemical companies largely phased out the use and bulk storage of MIC due to safety concerns,” said CSB Chairman John Bresland. “The goal of the NAS study is to determine whether further reductions or the elimination of MIC use are achievable at Bayer, and what are the costs of doing so. The study will also lay the foundation for better understanding how chemical companies across the country could adopt inherently safer technologies to protect the public and their workers from chemical accident hazards.”

Mr. Bresland said that depending on the public comments received and the availability of funding, the CSB could request the NAS to examine additional topics such

as the use of hydrofluoric acid (HF) in refinery alkylation processes or chlorine in water treatment. The CSB is currently investigating two releases of toxic HF from U.S. oil refineries in 2009.

The [Federal Register notice](#) asks for specific public comments on the proposed study design, the timetable for the study, the appropriate composition of the study panel, and the desirability of examining other chemicals for which inherently safer technology (IST) alternatives have been proposed. Public comments are due to the CSB by May 10 and can be submitted by email to naocomments@csb.gov or mailed as described in the notice.

The CSB is an independent federal agency charged with investigating serious chemical accidents. The agency's board members are appointed by the president and confirmed by the Senate. CSB investigations look into all aspects of chemical accidents, including physical causes such as equipment failure as well as inadequacies in regulations, industry standards, and safety management systems.

The Board does not issue citations or fines but does make safety recommendations to plants, industry organizations, labor groups, and regulatory agencies such as OSHA and EPA. Visit our website, www.csb.gov.

For more information, contact Director of Public Affairs Dr. Daniel Horowitz at (202) 261-7613.