



U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATION STATUS CHANGE SUMMARY

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| Report: | Bayer CropScience Pesticide Waste Tank Explosion |
| Recommendation Number: | 2008-08-I-WV-R6 |
| Date Issued: | January 15, 2014 |
| Recipient: | Kanawha Charleston Health Department |
| New Status: | Closed – Unacceptable Action/No Response Received |
| Date of Status Change: | October 26, 2021 |

Recommendation Text:

Establish a Hazardous Chemical Release Prevention Program to enhance the prevention of accidental releases of highly hazardous chemicals, and optimize responses in the event of their occurrence. In establishing the program, study and evaluate the possible applicability of the experience of similar programs in the country, such as those summarized in Section 5.3 of this report. At a minimum:

- a. *Ensure that the new program:*
 1. *Implements an effective system of independent oversight and other services to enhance the prevention of accidental releases of highly hazardous chemicals;*
 2. *Facilitates the collaboration of multiple stakeholders in achieving common goals of chemical safety; and*
 3. *Increases the confidence of the community, the workforce, and the local authorities in the ability of the facility owners to prevent and respond to accidental releases of highly hazardous chemicals*
- b. *Define the characteristics of chemical facilities that would be covered by the new Program, such as the hazards and potential risks of their chemicals and processes, their quantities, and similar relevant factors;*
- c. *Ensure that covered facilities develop, implement, and submit for review and approval:*
 1. *Applicable hazard and process information and evaluations;*
 2. *Written safety plans with appropriate descriptions of hazard controls, safety culture and human factors programs with employee participation, and consideration of the adoption of inherently safer systems to reduce risks;*
 3. *Emergency response plans; and*
 4. *Performance indicators addressing the prevention of incidents and chemical incidents.*
- d. *Ensure that the program has the right to evaluate the documents submitted by the covered facilities, and to require modifications, as necessary;*
- e. *Ensure that the program has right-of-entry to covered facilities, and access to requisite information to conduct periodic audits of safety systems and investigations of chemical releases;*

- f. *Establish a system of fees assessed on covered facilities sufficient to cover the oversight and related services to be provided to the facilities including necessary technical and administrative personnel; and,*
- g. *Consistent with applicable law, ensure that the program provides reasonable public participation with the program staff in review of facility program and access to:*
 - 1. *The materials submitted by covered facilities (e.g., hazard evaluations, safety plans, emergency response plans);*
 - 2. *The reviews conducted by program staff and the modifications triggered by those reviews;*
 - 3. *Records of audits and incident investigations covered by the program;*
 - 4. *Performance indicator reports and data submitted by the facilities, and;*
 - 5. *Other relevant information concerning the hazards and the control methods overseen by the program.*
- h. *Ensure that the program will require periodic review of the designated agency activities and issue a periodic public report of its activities and recommended action items.*

Board Status Change Decision:

A. Rationale for Recommendation

On August 28, 2008, an explosion occurred at the Bayer CropScience (BCS) facility in Institute, West Virginia. A runaway chemical reaction inside a residue treater containing the pesticide, methomyl, caused a vessel to overpressurize and catastrophically rupture during an attempted restart of a pesticide manufacturing unit. Highly flammable solvent sprayed from the ruptured vessel and immediately ignited, resulting in an intense fire. Two Bayer employees were fatally injured, one from injuries sustained as a result of the vessel rupture and one from burns received in the fire. In addition, two contract workers and six volunteer firefighters were medically treated for possible toxic chemical exposure. More than 40,000 residents were advised by fire officials to shelter-in-place for more than three hours as a precaution.

As a part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) evaluated regulatory oversight of high hazard chemical facilities in the Kanawha Valley. The CSB noted that despite the presence of many facilities that handle large quantities of hazardous materials, some of which are acutely toxic, comprehensive Occupational Safety and Health Administration (OSHA) and Environmental Protection (EPA) safety inspections have been historically infrequent. While some state and local governments with similarly high concentrations of these facilities have developed programs to audit and inspect them on a regular basis, neither the state of West Virginia nor any local government agency currently has developed such a program. As such, the CSB recommended that the Kanawha-Charleston Health Department (KCHD) develop a local program to audit and inspect high hazard chemical facilities.

B. Response to the Recommendation

KCHD initially showed a great interest in implementing the recommendation. Despite numerous communications over the past few years, that interest appeared to wane over time as KCHD was

unable to obtain necessary state regulatory authorization. KCHD provided the CSB a list of hurdles to addressing this recommendation, and eventually communication diminished. The CSB ultimately wrote a letter to the Governor of West Virginia to request a status update on recommendation implementation and did not receive a response.

C. Board Analysis and Decision

Based on the lack of response from KCHD and the Governor of the State of West Virginia's office, the Board voted to change the status of CSB Recommendation No. 2008-08-I-WV-R6 to: Closed – Unacceptable Action/No Response Received.”