Recommendation Text:

For each DuPont facility that uses, but does not manufacture, phosgene onsite:

- Conduct a risk assessment of manufacturing phosgene onsite against the current configuration.
- Communicate the findings of each assessment to compile recommendations applicable to all DuPont phosgene delivery systems.
- Implement these recommendations

Board Status Change Decision:

A. Rationale for Recommendation

On January 22 and 23, 2010, three accidents occurred over a 33-hour period at the DuPont Corporation's Belle, West Virginia, chemical manufacturing plant. The series of accidents began when an alarm sounded, leading operators to discover that 2,000 pounds of methyl chloride, a toxic and extremely flammable gas, had been leaking unnoticed into the atmosphere for five days. The next morning, workers discovered a leak in a pipe carrying oleum, which produced a fuming cloud of sulfur trioxide, another toxic gas. A release of highly toxic phosgene occurred later that day, exposing a worker who died the following evening in a hospital.

While investigating these three incidents, the CSB also reviewed E. I. du Pont de Nemours and Company (DuPont) corporate policies pertaining to phosgene handling and found inconsistent application of internal guidelines regarding phosgene handling and noncompliance with consensus standards for handling highly toxic materials. A recommendation was issued to the corporation to address these issues at all DuPont facilities that use, but do not manufacture, phosgene.

B. Response to the Recommendation

On December 31, 2014, DuPont implemented an inherently safer technology (IST) risk reduction approach to the CSB Recommendation by completely eliminating all phosgene handling at its one U.S. crop protection facility in Mobile, AL that handled, but did not manufacture phosgene. As a result, that site has eliminated all associated risks to both on and off-site receptors due to an
accidental phosgene release. Consequently, a listed toxic regulated substance has been eliminated from the EPA Risk Management Plan (RMP) registration for this site as well as a high visibility substance under the Chemical Facility Anti-Terrorism Standards (CFATS).

C. Board Analysis and Decision

As the actions taken by DuPont meet the intent of all the elements listed in CSB Recommendation No. 2010-6-I-WV-R8, the Board voted to change the status to: “Closed-Acceptable Action.”