



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

Report:	Bethune Point Wastewater Plant Explosion
Recommendation Number(s):	2006-03-I-FL-R7
Date Issued:	March 13, 2007
Recipient:	Water Environment Federation (WEF)
New Status:	R7: Closed – Acceptable Action
Date of Status Change:	March 31, 2015

Recommendation Text:

Work with the Methanol Institute to prepare and distribute a technical bulletin containing information on the safe receipt, storage, use, and dispensing of methanol in wastewater treatment plants. In addition, include information on basic fire and explosion prevention measures when using bulk methanol (e.g., flame arrester maintenance, hot work programs, electrical classification).

Board Status Change Decision:

A. Rationale for Recommendation

On January 11, 2006 an explosion and fire occurred at the City of Daytona Beach, Bethune Point Wastewater Treatment Plant in Daytona Beach, Florida. Two employees were killed and a third severely burned while they were using a cutting torch on a roof above the methanol storage tank, accidentally igniting vapors coming from the tank vent. The flame flashed back into the storage tank, causing an explosion inside the tank that precipitated multiple methanol piping failures and a large fire that engulfed the tank and workers.

The CSB issued joint recommendations to the Water Environment Federation (WEF) and the Methanol Institute. The recommendation to the Methanol Institute was previously designated by the Board with the status "Closed - Acceptable Action" on March 25, 2010. The WEF is a not-for-profit technical and educational organization with members from the wastewater industry. WEF offers training programs, workshops and seminars. It also publishes technical manuals and other information for the wastewater industry.

B. Response to the Recommendation

The WEF planned to revise and publish a new *Manual of Practices* (MOP) which would contain the methanol-related safety issues outlined in the CSB Recommendation. In 2012, the WEF published the sixth edition of *Safety, Health and Security in Wastewater Systems* (MOP 1). Subsection 3.3.8 of the MOP, entitled "Methanol", contains safety information for storage, handling and use of methanol at wastewater treatment plants and also states that workers should be trained in accordance with the Methanol Institute's *Methanol Safe Handling Manual* (2011).

C. Board Analysis and Decision

Section 3.3.8 of the WEF *Safety, Health and Security in Wastewater Systems* (MOP 1) addresses the safety issues for methanol that are consistent with the intent of the CSB recommendation. As the manual is equivalent to a technical bulletin and is being used in the same manner for information and educational purposes, the Board voted to change the status of CSB Recommendation No. 2006-03-I-FL-R7 to: “**Closed-Acceptable Action.**”