



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

Report:	Donaldson Enterprises, Inc. Fatal Fireworks Disassembly Explosion and Fire
Recommendation Number:	2011-06-I-HI-R10
Date Issued:	January 17, 2013
Recipient:	Environmental Protection Agency (EPA)
New Status:	Closed – No Longer Applicable
Date of Status Change:	

Recommendation Text:

Until recommendation 2011-06-I-HI-R9 can be implemented, develop and issue a policy guidance document to provide a regulatory process with rigorous safety reviews to replace the use of emergency permits under 40 C.F.R. § 270.61 for the disposal of explosive hazardous materials, including fireworks. At a minimum, the new process should require the use of best available technology, safe disposal methodologies, as well as safety management practices, such as those required by OSHA's Process Safety Management Standard (PSM), 29 C.F.R. § 1910.119 (e.g., hazard analysis and control, management of change). Ensure its effective communication to all EPA regional administrators, state environmental agencies, and organizations within the fireworks industry

Board Status Change Decision:

A. Rationale for Recommendation

On April 8, 2011, an explosion and fire occurred inside a storage magazine leased by Donaldson Enterprises, Inc. (DEI) at Waikele Self Storage in Waipahu, Hawaii. DEI used the magazine for seized fireworks storage and disposal related activities. As a result of the explosion and fire, five DEI personnel inside the magazine were fatally injured and a sixth sustained minor injuries.

As part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) reviewed the hazardous solid waste disposal regulations promulgated under the Resource Conservation and Recovery Act (RCRA) pertaining to the disposal of fireworks and the issuance of emergency permits for these disposal activities. CSB concluded that RCRA emergency permits lack safety management provisions. As the DEI firework disposal operation evolved and major hazards were introduced from disassembling and accumulating firework components, the emergency hazardous waste permit included no requirements to review safety aspects of these critical changes. Based on the findings of the investigation, the Board voted on January 17, 2013 to issue three recommendations to the Environmental Protection Agency (EPA). This evaluation addresses CSB Recommendation No. 2011-06-I-HI-R10.

B. Response to the Recommendation

In July of 2017, EPA advised the CSB that it had issued a memorandum entitled: “Safe Handling, Storage, and Treatment of Waste Fireworks,” which was developed to disseminate information on safety concerns, best management practices, and standard operating procedures for waste fireworks in order to improve compliance with federal waste management requirements and promote safer management of explosive wastes.

A review of this memo by CSB revealed that the primary requirement listed in CSB Recommendation, namely the need for “rigorous safety reviews to replace the use of emergency permits” was not acknowledged or addressed in the memo. Also, while an attachment to the memo lists the OSHA PSM standard as an element that could be incorporated as a best management practice for handling energetic waste, a footnote states that it is not applicable to their disposal. Moreover, while the Department of Defense (DoD) *Contractor Safety Manual* can also be incorporated as a best management practice for handling energetic waste, Section C8.3.3., which requires a hazard analysis and risk assessment, is not called out although several other specific DoD requirements in other guidance are listed.

However, the language in the recommendation says, “*Until recommendation 2011-06-I-HI-R9 can be implemented..*,” This recommendation assumed that the EPA would implement CSB Recommendation No. 2011-06-I-HI-R9 (R9) and was meant to act as a temporary measure dependent upon the EPA’s implementation of R9 to revise the *Resource Conservation and Recovery Act (RCRA)* regulations. In this case, the EPA disagreed with the CSB and declined to implement R9 and, as a result, CSB staff proposed that R9 be closed as unacceptable. Due to this recommendation’s direct link to R9’s implementation, the incorrect assumption that R9 would be implemented, and the status of R9, this recommendation no longer has a reasonable applicability.

C. Board Analysis and Decision

Based on the above review, the fact that this recommendation is directly linked to the implementation of R9 which the EPA declined to implement, the resulting status of R9, and that it is unlikely that further actions will persuade the EPA to implement this recommendation, the Board voted to change the status of CSB Recommendation No. 2011-06-I-HI-R10 to: “**Closed – No Longer Applicable.**”