



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATIONS STATUS CHANGE

SUMMARY

Report:	Third Coast Industries Petroleum Products Facility Fire
Recommendation Number:	2002-03-I-TX-R3
Date Issued:	March 6, 2003
Recipient:	International Code Council (ICC)
New Status:	Closed – Unacceptable Action/No Response Received
Date of Status Change:	January 11, 2017

Recommendation Text:

Revise the International Fire Code to address the following issues:

- *For facilities that are not staffed around the clock, specify circumstances where automatic fire detection is needed*
- *Narrow exemptions for Class IIIB*
- *Expand fire protection analysis requirements to include all areas of a facility where there may be flammable or combustible fire risks.*

Board Status Change Decision:

A. Rationale for Recommendation

On the night of May 1, 2002, a fire erupted at the Third Coast Industries (Third Coast) facility near Friendswood, Texas. The facility blended and packaged motor oils, hydraulic oils, and other highly flammable liquids. Firefighters arrived at the scene within minutes but were unable to control the fire. The facility burned for 24 hours and consumed 1.2 million gallons of combustible and flammable liquids, destroying the entire site. One hundred nearby residents were evacuated, a local school was closed, and significant environmental cleanup was needed.

The CSB investigation concluded that the facility did not have sufficient fire protection measures in place to detect or control a fire. The facility was not equipped with smoke/fire detection equipment or alarms, was not staffed at night, and there was no source of water for manual or automatic fire suppression.

Storage tanks in the Third Coast facility contained Class IIIB liquids and other Class IB and Class II liquids. At the time of the incident, the CSB investigation concluded that approximately 98% of the materials at Third Coast were classified as Class IIIB combustible liquid (flash point greater than 200 degrees Fahrenheit). The International Fire Code (IFC) exempts this group of liquids from the same storage requirements as Class I and II liquids.

In addition, Third Coast did not conduct a fire protection analysis. An evaluation of the facility for fire hazards might have identified shortcomings in the facility's fire detection and protection systems, drainage, onsite water supply and both manual and automatic fire suppression systems. The IFC at the time of the incident did not clearly address these issues.

B. Response to the Recommendation

While the IFC did provide an explanation as to the exemption for emergency venting for tanks larger than 12,000 gallons that store Class IIIB liquids, no changes were made to the IFC to remove this exemption. ICC has not made any changes to the IFC related to the CSB's recommendation and findings from the Third Coast investigation. The CSB feels that the requirements relating to hazard analysis have been fulfilled by National Fire Protection Association (NFPA), for which the ICC often relies upon for technical fire protection requirements, and can be reasonable incorporated into the IFC. Should the ICC choose to incorporate fire hazard analysis requirements outlined above in alignment with NFPA 30, *Flammable and Combustible Liquids Code*, in the next cycle of IFC revisions for 2021, then the CSB will revisit and reconsider this recommendation status at that time.

C. Board Analysis and Decision

As ICC has not acted on this recommendation, the Board voted to designate Recommendation **No. 2002-03-I-TX-R3** with the status of **“Closed – Unacceptable Action”** Should ICC choose to incorporate fire hazard analysis requirements outlined above, in alignment with NFPA 30, in the next cycle of IFC revisions for 2021, then the CSB will revisit and reconsider this recommendation status at that time.