



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATIONS STATUS CHANGE

SUMMARY

Report:	ExxonMobil Refinery Explosion
Recommendation Number:	2015-02-I-CA-R5
Date Issued:	May 3, 2017
Recipient:	ExxonMobil Corporation
New Status:	Closed – No Longer Applicable

Recommendation Text:

Electrostatic precipitators create potential ignition sources during normal operation, and have historically caused explosions within the refining industry. At all U.S. ExxonMobil refineries, require a siting risk analysis be performed of all electrostatic precipitators and implement appropriate safeguards to minimize the consequences of an electrostatic precipitator explosion.

Board Status Change Decision:

A. Rationale for Recommendation

On February 18, 2015, an explosion occurred in the ExxonMobil Torrance, California refinery's Electrostatic Precipitator (ESP); a pollution control device in the fluid catalytic cracking (FCC) unit that removes catalyst particles using charged plates that produce sparks during normal operation. The incident occurred when ExxonMobil was attempting to isolate equipment for maintenance while the unit was in an idle mode of operation. Preparations for the maintenance activity caused a pressure deviation that allowed hydrocarbons to backflow through the process and ignite in the ESP.

The CSB found that this incident occurred due to weaknesses in the ExxonMobil Torrance refinery's process safety management (PSM) system. These weaknesses led to operation of the FCC unit without pre-established safe operating limits and criteria for unit shutdown, reliance on safeguards that could not be verified, the degradation of a safety-critical safeguard, and the re-use of a previous procedure deviation without a sufficient hazard analysis that confirmed that the assumed process conditions were still valid.

As a result, the CSB made five recommendations to ExxonMobil Corporation regarding their PSM system. This recommendations status change summary is specific to Recommendation No. 2015-02-I-CA-R5.

B. Response to the Recommendation

In a letter dated September 13, 2017, and clarified in a letter dated November 10, 2017, the ExxonMobil Corporation confirmed that with the sale and subsequent change in control of the Torrance Refinery to PBF Energy, Inc. in July 2016, ExxonMobil no longer operates any FCC units with ESPs in the U.S.

C. Board Analysis and Decision

Since ExxonMobil no longer owns any refineries in the U.S. with ESPs, there are no sitings to analyze and no subsequent consequences to safeguard against. As such, the Board voted to change the status of CSB Recommendation No. **2015-02-I-CA-R5** to: “**Closed – No Longer Applicable.**”