



**Chemical Safety and Hazard Investigation Board**

**OFFICE OF GENERAL COUNSEL**

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Memorandum

To: Board Members

From: Kara Wenzel, Assistant General Counsel *KW*

Cc: CSB Staff

Subject: Board Action Report –Notation Item 2015-41

Date: July 21, 2015

On July 13, 2015, Notation Item 2015-41 was calendared and will be considered at the next public business meeting of the Board. The item would have provided for approval of the Caribbean Petroleum report, recommendations, and video.

**Voting Summary – Notation Item 2015-41**

**Disposition: CALENDARED**

**Disposition date: July 13, 2015**

	<b>Approve</b>	<b>Disapprove</b>	<b>Calendar</b>	<b>Not Participating</b>	<b>Date</b>
<b>M. Ehrlich</b>			<b>X</b>		7/13/2015
<b>R. Engler</b>	<b>X</b>				7/6/2015

## Attachment to CAPECO calendar vote

I wish to have it known at the outset that the CAPECO investigative team produced an excellent report with important factual findings, and did so with very limited staffing and resources. For this they are to be strongly commended. I also commend the CSB public affairs staff for another outstanding safety video describing the causes of the CAPECO incident, which will greatly benefit the industrial community.

I agree with the report's premise that overfilling gasoline storage tanks is a serious hazard that deserves a high level of attention from industry. Both the 2009 CAPECO incident in Puerto Rico and the 2005 Buncefield incident in the U.K. demonstrate the potentially severe consequences from gasoline vapor cloud explosions. Thankfully, gasoline tank overfill incidents have been rare in the U.S., and the report noted only a handful of such incidents since the 1970's. Fortunately, the explosion in Puerto Rico caused no serious injuries, and it has been many years since a gasoline tank overfill incident caused a fatality in the U.S.

My calendar vote is based on a fundamental philosophical disagreement with several of the key recommendations in the draft report, specifically the recommendations for extensive new regulations directed to the U.S. Environmental Protection Agency and to the U.S. Occupational Safety and Health Administration.

I believe these recommendations would be burdensome for industry, would not reflect the stated priorities of already overstretched regulatory agencies, and would do little to reduce the risk to the public from any facilities like CAPECO that fall far short of complying with existing regulatory standards. Their not having followed the existing regulations calls into question the issue how they would adhere to stricter regulations. I also believe that given the difficulty of getting new federal regulations adopted, the CSB should only recommend such regulations when absolutely necessary. Doing otherwise simply dilutes our very limited resources for recommendations advocacy.

In suggesting that the EPA expand its Risk Management Program to encompass thousands of terminals storing flammable liquids (NFPA Class 3) like gasoline, the draft report would greatly expand a regulatory program that already lacks sufficient staffing and resources to do effective inspection and enforcement at major refining and chemical manufacturing sites.

I am unique among the current members and staff of the agency in having run industrial chemical plants, and at one time I ran a petroleum terminal facility in New Jersey that handled products similar to CAPECO. There, however, the similarity ended. At the terminal I ran, we were extremely vigilant about the danger of an overfill event, and our safeguards and alarms received extensive and regular scrutiny from regulatory agencies like the EPA, NJDEP and the Coast Guard. Using the existing rule book, our terminal facility was held to a extremely high standard.

The draft report does an excellent job documenting the fact that CAPECO, at the behest of EPA and based on current regulations, previously installed an electronic level control system for its gasoline storage tanks but then unfortunately allowed that system to fall into serious disrepair. CAPECO management continued operating the facility right until the night of the incident without a functioning tank level control system that would meet existing EPA regulations. As the EPA noted in its comments on the report, the company also did not comply with existing regulations to properly supervise the containment dike valves to prevent the spread of any spilled petroleum. On the night of the incident, open valves allowed the spread of the spilled gasoline over a wide area and greatly increased the incident's severity. The lack of adherence to current EPA regulations was a direct cause of this incident. Had EPA regulations required additional layers of protection on the gasoline storage tanks, as suggested by the draft report, there is no assurance that CAPECO would have maintained those systems any more diligently.

As the EPA and others have pointed out in public comments on the draft report, current provisions of the Spill Prevention, Control, and Countermeasure (SPCC) rule already require companies to have continuous or fast-response tank level monitoring to prevent overfilling and to ensure these systems are designed according to "good engineering practice" and are regularly tested "to ensure proper operation."

The EPA might best assist the regulated community by providing additional interpretation or guidance concerning the "good engineering practice" that companies should implement to prevent overfills, including references to the appropriate and up-to-date National Fire Protection Association (NFPA) and American Petroleum Institute (API) standards (consensus). In light of the situation at CAPECO, it would also be beneficial for the EPA to apply additional resources to enforcing its existing SPCC requirements and to educating the regulated community on effective implementation.

However, layering on additional conflicting or duplicative regulations concerning tank overfill prevention through the EPA Risk Management Program and/or the OSHA Flammable Liquids standard (1910.106) will simply add cost and confusion to an already complex system, with little safety benefit. It would also run contrary to the approach directed by President Obama in several executive orders that encourage agencies to streamline and simplify regulatory approaches, and to specify performance objectives rather than specific compliance strategies.

I do support the draft recommendations to the NFPA, the API, and other consensus organizations and I encourage them to continue to update their best practices based on the important findings from the CSB's CAPECO investigation as well as the Buncefield investigation conducted by the U.K. government.

I am prepared to vote in favor of the draft report and the safety video provided they are modified to eliminate the regulatory recommendations to the EPA and OSHA.

Again this vote of mine should in no way be construed to have negative impact on the agency and the staff that prepared this report.

July 13, 2015