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Author: Weyman Lee at CC_FS
Date: 10/11/01 2:11 PM
Priority: Normal
TO: gbehymer@energy.state.ca.us at Internet
Subject: RCEC

Gabe-

I want to update you on the status of the RCEC PDOC. Distict Regulation 2-2-307 requires certification that all major facilites owned and operated by the applicant are in compliance with all applicable emission limits and standards. A Certification of Compliance from the applicant was included in the application. However, we recently received source test results from Calpine power plants, Los Medanos and Sutter, that show non-compliance with POC limits. We are waiting for the applicant to resolve this issue, and to submit an updated Certificate of Compliance before issuing the PDOC. I will update you on the progress.

Weyman

Gabe:

The draft PDOC for RCEC is being review by Steve Hill (Manager of the Permit Review Section). I was not able to ascertain the projected date the PDOC will be issued. However, I will contact you when I have more info.

Weyman

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Compliance and Enforcement Division

INCIDENT REPORT

Calpine Los Medanos Energy Center (Site # B1866)
Pittsburg, CA
May 24, 2007

On May 24, 2007 at approximately 8:00 am, 3 operators at Calpine Los Medanos Energy Center (LMEC) were exposed to chlorine gas when approximately 300 gallons of phosphoric acid was mistakenly loaded into a 7,500 gallon tank containing 350 gallons of 12.5% sodium hypochloride solution located in the facility's water treatment building. LMEC is a 350 megawatt power plant located in Pittsburg, California that produces electricity for the public utility grid. LMEC plant operators immediately contacted the Contra Costa Fire Department (CCFD) and Contra Costa Health Services (Hazmat). The 3 operators who were exposed to the chlorine gas were taken to Delta Diablo Hospital for treatment.

At 9:30 am, CCFD declared the chlorine gas release incident a Level 3 (offsite impacts expected) shelter-in-place. As a precaution, CCFD asked the Pittsburg Police Department to close 3rd Street and Harbor Road, denying entry to a 400 yard section along 3rd Street. Local businesses were informed of the incident and advised by CCFD personnel to evacuate the area.

Upon entry into the LMEC building, the Hazmat team measured chlorine gas concentrations of greater than 50 parts per million (ppm). The contents of the tank containing the sodium hypochloride and phosphoric acid mixture was safely emptied which stopped the chlorine gas emissions. The doors of the building where the tank was located were opened at 1:15 pm to ventilate the remaining chlorine vapors out of the building. The chlorine levels were measured between 0.3 to 0.5 ppm exiting the building when the doors were opened. Additional samples were taken at the property line of the facility without any positive readings.

The District did not receive any odor complaints from the community during this incident.

LMEC representatives do not know at this time how much chlorine gas was released into the air due to this incident. The CCFD downgraded the incident from a Level 3 to a Level 0 (contained and controlled by plant personnel) at 11:23 am on May 24 and eventually re-opened 3rd Street to the pubic at 1:15 pm. The three LMEC employees that were sent to Delta Diablo Hospital for treatment have been released. District Inspection staff will continue to investigate this incident to determine if any District regulations were violated.

UPDATE:

The final investigation report indicates the chlorine gas release was due to approximately 300 gallons of phosphoric acid mistakenly unloaded into a bleach tank containing 300 gallons of sodium hypochlorite. Events and conditions that contributed to the incident included the facility personnel assuming the bulk delivery was bleach, miscommunication between the bulk delivery driver and the Control Room Operator, driver did not receive site safety indoctrination, and unloading checklist was not correctly followed since product was never verified before off loading.

To prevent the recurrence of this type of incident, LMEC is revising their chemical off loading procedures and training to include:

- Emphasis on contractor orientation for Bulk Chemical Delivery Drivers
- Employee re-training on chemical unloading with emphasis on product verification and job briefing of driver.
- Relocate product cap keys to control room for issuance by Control Room Operator upon first verification of delivery manifest and field operator to provide second verification upon acceptance of key.
- Audit delivery checklists to verify all steps are followed.

The Contra Costa Health Services (CCHS) did not receive any off-site complaints during the incident. In addition, the CCHS Hazardous Materials Response Team conducted air sampling at various locations of the plant perimeter without any positive readings.

The District has not taken any enforcement action since no violation was documented.