



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Compliance and Enforcement Division

INCIDENT REPORT

**ConocoPhillips Refinery (Plant A0016)
Rodeo, CA
May 1, 2006**

On May 1, 2006 at about 10:00 am, the ConocoPhillips Refinery in Rodeo experienced an electrical shortage that caused the MP-30 unit to shut down and resulted in process gasses being sent to the main flare. The MP-30 unit converts heavier product streams into lighter, more useful products. Initially, steam injection to the flare was interrupted which resulted in black smoke from the flare. Steam injection promotes combustion and improves flare operation. Level-3 (off site impact is expected) emergency notification was issued on the Contra Costa County's Community Warning System, the community warning sirens were activated, and a shelter in place order was given for the cities of Crockett and Rodeo. Sufficient steam was restored to the flare at approximately 10:20 am and the smoking ceased. The shelter in place was rescinded at 11:01 am.

Seven air canister samples were taken in Crockett, Benicia and Vallejo, of which five we analyzed by the District Laboratory (click here for a [copy of map](#) and [sampling results](#)). The District received one complaint from a motorist on I-80 who stated he observed "carbon soot fallout and smoke."

Preliminary reports from ConocoPhillips indicate that the electrical shortage was caused by an electrical generator within the refinery. At the time of the incident CP was isolating a transformer for routine maintenance. The generator experienced a power drop and this caused the electrical shortage at the MP-30 unit. Other units experienced a power dip, but remained online.

District staff will continue to investigate this incident to further determine the root cause of the incident, and to determine if any air quality regulations were violated. This report will be updated as new information becomes available.

UPDATE

The District has issued two Notices of Violation (NOV) for this event.

1. NOV # A48333 was issued for an alleged violation of Regulation 12, Rule 11, Section 502.2.1: Vent Gas Composition Monitoring – for failure to obtain a flare sample within 30 minutes of flaring.
2. NOV # A48344 was issued for an alleged violation of Regulation 2, Rule 6, Section 307: Non-compliance, Major Facility Review - for failure to meet a Title V permit condition limit due to excessive smoke from the flare.

ConocoPhillips estimated the emissions for this event to be:

- Sulfur Dioxide – 8,300 lbs
- Non-methane Hydrocarbons – 620 lbs
- Methane – 460 lbs

These emission estimates were calculated for the 4.5 hour period of flaring between 9:55 a.m. and 2:30 p.m. The duration of the flare smoking was approximately 15 minutes beginning at 10:00 a.m.