



**TESORO**

Tesoro Refining & Marketing Company LLC  
150 Solano Way  
Martinez, CA 94553-1487

January 14, 2016

Mr. Randy Sawyer  
Director, Hazardous Materials Division  
Contra Costa Hazardous Materials Program  
4585 Pacheco Blvd.  
Martinez, CA 94553

Via email  
Original will follow in the mail.

**Subject: 30 Day Report for the December 15, 2015 Loss of 6 Boiler Causes Smoky Flaring**

Dear Mr. Sawyer:

The Tesoro Golden Eagle Refinery is submitting a 30-day report for the December 15, 2015 Loss of 6 Boiler causes Smoky Flares. The investigation is complete; but the root cause analysis report is being written. The Root Cause Analysis Report will be submitted as soon as the report is completed. This 30-day report is submitted as partial satisfaction of the requirements set forth in County Ordinance 98-48, the "Industrial Safety Ordinance" for root cause analysis reports.

If you have any questions regarding this report, please call me at (925) 370-3279 or Ms. Sabiha Gokcen at (925) 370-3620.

Sincerely,

James Jeter  
Environmental, Health and Safety Manager

Cc: Ms. Cho Nai Cheung

**30-Day Report  
Tesoro Golden Eagle Refinery  
December 15, 2015 Loss of 6 Boiler causes Smoky Flaring**

Summary of Event:

On December 15, 2015, the 6 Boiler unit, which provides 600 psig steam, tripped offline due to a loss of fuel gas. Loss of 600 psig steam caused the FCCU to trip offline and a rise in pressure in the flare knock out pot caused the flare gas recovery compressors to trip offline. This resulted in flaring from three flares which also generated smoke due to the loss of steam to the flares. A CWS level 1 was sent at approximately 11:59 hours for shut down of the 6 Boiler unit, but was inadvertently sent as a test. CWS level 1 sent out at 12:15 hours for the 6 Boiler unit shut down. A CWS level 2 was sent out at 12:19 hours due to smoking and potential offsite impact. One flare compressor was restarted at 12:50 hours and all flaring stopped as of 12:51 hours. Odor, Science, & Engineering (OS&E) was dispatched to determine if there were any odors offsite; no odors were found in surrounding neighborhoods, slight odor detected in area around Highway 4 and 680 intersection. Refinery operations stabilized and event downgraded to CWS level 0 at 14:02 hours after consultation with and confirmation from CCCHMP.

A brief timeline follows:

11:47 hrs:	6 Boiler trips on loss of fuel gas
11:55:57 hrs:	West Flare Gas Compressor CP540 trips offline due to high pressure in the extraneous Knock Out pot
11:56:02 hrs:	East Flare Gas Compressor CP539 trips offline
11:56:22 hrs:	FCCU trips offline on low riser flow
11:59 hrs:	Shift Superintendent (in training) sends CWS level 1 notification to agencies (but sends as test)
12:00:32 hrs:	Flaring begins at smaller flares
12:06:26 hrs:	DCU Flare begins; small amount of smoke seen from smaller flares
12:10:32 hrs:	Flare smoking is intensified
12:15 hrs:	Shift Superintendent (in training) sends CWS level 1 notification to agencies
12:19 hrs:	Shift Superintendent (in training) sends CWS level 2 notification to agencies
12:23:26 hrs:	Flaring from DCU Flare stops; small flares still smoking
12:30 hrs:	OS&E dispatched to monitor for odors in the community
12:36 hrs:	IH monitors area near South Gate, Concord Business Park, and area South of Hwy 4. Detection for H <sub>2</sub> S, SO <sub>2</sub> , CO and LEL is zero. Collection plates set in locations for particulate collection
12:44:27 hrs	Flares stop smoking
12:50:33 hrs	East Flare Gas Compressor CP539 is re-started
12:51:57 hrs	All flaring stops
14:12 hrs	CCHMD downgrades event from CWS level 2 to level 0

Agency Notification and Response:

The following agencies were immediately notified: Contra Costa Hazardous Materials Program (CCHMP) via the CWS, the Bay Area Air Quality Management District (BAAQMD) via the CWS, Contra Costa Fire Protection District, and the Contra Costa County Office of Emergency Services. The following agencies responded with personnel to the scene: CCHMP and BAAQMD.

The following is a summary of the initial agency notifications made by Tesoro.

Community Warning System activation (Level 1) ..... 12:15 hrs  
Community Warning System activation (Level 2) ..... 12:19 hrs  
Cal-OES for SO2 RQ exceedance (Report# 15-7322) ..... 12:42 hrs

[Note: Notifications over the CWS terminal: CWS level 1 notifies CCHMP, Contra Costa OES, and the Contra Costa Sheriff with a specific message. Additional notice informs BAAQMD, Contra Costa Fire Protection District, Martinez Police, Antioch Police, Pinole Police and Richmond Police. CWS level 2 notifies CCHMP, Contra Costa OES, Contra Costa Sheriff and BAAQMD with a specific message. Additional notice informs Contra Costa Fire Protection District, California Highway Patrol, California Dept. of Health, San Ramon Valley Fire, Martinez Police, Antioch Police, Pinole Police and Richmond Police. CWS level 3 notifies CCHMP, Contra Costa OES, Contra Costa Sheriff and BAAQMD with a specific message. Additional notice informs Contra Costa Fire Protection District, California Highway Patrol, California Dept. of Health, San Ramon Valley Fire, Martinez Police, Antioch Police, Pinole Police, Richmond Police, EDIS and National Weather Service. CWS level 3 also activates sirens and the news media with a shelter in place message.]

Emergency Response Actions:

No emergency response actions were required. Additional process actions were taken to accommodate the shutdown unit and loss of steam.

Material Released:

The material released was Sulfur Dioxide from the flaring. The release amount was estimated as exceeding the Reportable Quantity of 500 lbs.

Meteorological Conditions:

The weather was clear and dry on 12/15/15. The average wind speed and direction, during the flaring event was 15 mph and 15 degrees respectively (wind direction primarily from the North). The temperature was about 55 degrees F.

Injuries:

No injuries were reported on or off site.

Community Impact:

There was visible flaring and smoke from the refinery flares.

Incident Investigation of the event:

The incident investigation is complete. The root cause report is being written and will be submitted upon completion.