

For CCHS Use Only:

Received By:

Date Received:

Incident Number:

Copied To:

Event Classification Level:

ATTENTION: Randall L. Sawyer
Hazardous Materials Program Director
Contra Costa Health Services Department
4333 Pacheco Boulevard
Martinez, CA 94553

INCIDENT DATE: December 18, 2014

INCIDENT TIME: 18:36

FACILITY: Chevron Richmond Refinery

PERSON TO CONTACT FOR ADDITIONAL INFORMATION: Karla Salomon

Phone Number: (510) 242-2508

I. SUMMARY OF EVENT

On December 18, 2014 at approximately 6:36 PM unplanned flaring occurred at the Richmond Refinery. The initiating event was a process upset on the Solvent De-Asphalting (SDA) Unit, at the Asphalt Flash Tower (C-122). The flaring resulted from a loss of cooling capability in the C-122 overhead system. The safety devices worked as intended to preserve the mechanical integrity of the equipment, and resulted in flaring. To minimize any further flaring, the unit was shut down pursuant to the shutdown procedure.

The SDA Unit separates vacuum residuum into asphalt and deasphalted oil, which is processed further in other refinery processing units.

II. AGENCIES NOTIFIED, INCLUDING TIME OF NOTIFICATION

After making a determination of potential off-site consequences from flaring, in accordance with the Contra Costa County Health Services (CCCHS) incident notification policy, a CWS Level 1 notification was sent.

Primary: Community Warning System (CWS):

- Level 1 CWS activated at approximately 18:53
- Event Over CWS activated at approximately 22:01

Secondary: Subsequent notifications via telephone to the agencies below

Agency	Person Reached	Phone Number	Time
Richmond Fire/ Police Central Dispatch	Dispatch	510-620-6933	19:10
Contra Costa County Health Services Department	Pager	925-677-6700	19:11
BAAQMD	Left Message	415-749-4979	19:12
BAAQMD for Flow >500,000 SCF	Brian Beard	415-749-4775	20:00
SOES	Blake	800-852-7550	19:12
NRC	Left Message	800-424-8802	19:17

The list above does not include all representatives from all agencies

III. AGENCIES RESPONDING, INCLUDING CONTACT NAMES AND PHONE NUMBERS:

At this time, we are aware of the following agencies that have responded.

Contra Costa County Health Services Department	Trisha Asuncion	
Contra Costa County Health Services Department	Steve Marioca	
Richmond Fire Department	Oscar Jones	510-620-6989

IV. EMERGENCY RESPONSE ACTION:

The Chevron Fire Department Incident Command System was not required nor initiated, and Fire Brigade members were not mobilized.

No mutual aid was required for this event.

V. IDENTITY OF MATERIAL RELEASED AND ESTIMATED OR KNOWN QUANTITIES:

Emissions from flaring associated with the event are summarized below.

Vent gases were combusted with at least 98% combustion efficiency.

	Flare emissions
Vent Gas Volume (SCF)	1,200,609
SO ₂ (lbs)	1,959
Methane (lbs)	426.5
Non-Methane Hydrocarbon(lbs)	1,552
H ₂ S (lbs)	10.41
NO _x (lbs)	89.02

* Flare emissions data presented herein is for the date of the flaring (12/18/2014). Estimates herein are based on currently available data. Upon further investigation and analyses, an update will be provided should a significant change of the data occur.

VI. METEOROLOGICAL CONDITIONS AT TIME OF EVENT:

Wind Speed (mph)	5.50
Wind Direction (degree)	51.27
Precipitation (inches)	0.0003
Temperature (F)	57.25

Information based on data received from the Refinery's meteorological station which is located near Gertrude Street.

VII. DESCRIPTION OF INJURIES:

There were no injuries associated with this event.

VIII. COMMUNITY IMPACT:

There were no regulatory exceedances based on Ground Level Monitoring data. There are no detects above known health limits based on Air Monitoring data.

Ground Level Monitoring Data Summary

	Background Prior to and Maximum Concentration Readings During the Flaring		
	Castro Street	Office Hill	Gertrude Street
H ₂ S (ppb) Background @ 18:00	4.64 PPB	1.86 PPB	1.48 PPB
H ₂ S (ppb) Max.	6.21 PPB	1.86 PPB	1.75 PPB
SO ₂ (ppm) Background @ 18:00	0.003 PPM	0.007 PPM	0.003 PPM
SO ₂ (ppm) Max.	0.01 PPM	0.01 PPM	0.004 PPM

Note: The Cal/OSHA PEL for SO₂ is 2,000 ppb (2 ppm) averaged over an 8-hour period. The Cal/OSHA PEL for H₂S is 10,000 ppb (10 ppm) averaged over an 8-hour period.

Fence Line Air Monitoring Summary

During the time period of flaring, no obvious detections were seen at fence line air monitoring stations.

Community Air Monitoring Summary

During the time period of the event, slightly elevated detections of Black Carbon, Particulate Matter, and Hydrogen Sulfide were seen at community air monitoring stations. None of these detections exceeded known health limits. There have been other instances when these air monitoring stations registered slightly elevated detections of these compounds from other offsite sources.

IX. INCIDENT INVESTIGATION RESULTS:

An incident investigation will be conducted to determine the cause of the flaring.

X. SUMMARIZE INVESTIGATION RESULTS BELOW OR ATTACH COPY OF REPORT:

Results will be determined by the investigation.

XI. SUMMARIZE PREVENTABLE MEASURES TO BE TAKEN TO PREVENT RECURRENCE INCLUDING MILESTONE AND COMPLETION DATES FOR IMPLEMENTATION

Preventable measures will be determined by the investigation.