

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
INCIDENT REPORT

Incident ID: 132895

Incident Description

Incident Type: Release/Spill, Facility Air Release
Incident Date: 8/2/2011 17:31:00
Parish: Plaquemines
Municipality: Belle Chasse
Location: 15551 HWY 23 SOUTH
Lat/Lon:
Basin/Segment:
Substance(s):
Media Impacted: Air
Incident Desc: s11-2490 equipment malfunction lred to release of SO2 CML

Incident Status

Lead Investigator: Lindsay Maloan
Incident Region: Southeast
Incident Status: Closed
Followup Status: Closed
As Of: 1/6/2012 00:00:00

**Incident Reporter 1**

Received By: Spo Contact
Received Date: 8/2/2011 19:37:00
Dispatch #: s11-2490
Reported By: Steven Johnson
Phone: 504-415-8117 (Work phone number)
Reporter Title:
Organization: Conoco Phillips
Address:

Municipality:
State: LA
Zip Code:
Comments:

INCIDENT REPORT

Incident ID: 132895

Incident Source 1

Source Name: ConocoPhillips Co - Alliance Refinery
Address: 15551 Hwy 23 12 Mi S of

Municipality: Belle Chasse
State: LA
Phone: 5046567711 (Work phone number)
Parish: Plaquemines
AI #: 2418
Related Permits:

Comments: On 8/2/2011, LDEQ received an unauthorized discharge notification regarding the release of 1,664 lbs of SO₂ at the ConocoPhillips Alliance Refinery. The RQ for SO₂ is 500lbs. According to the facility, the discharge was unpreventable due to a malfunction in an Amine contractor's control valve. The release was routed through the Low Pressure Flare. Immediate corrective actions were taken, and an investigation was conducted to implement actions to prevent recurrence. No further action at this time. LMM



ConocoPhillips Company
Alliance Refinery
Agency Interest No. 2418
P. O. Box 176
Belle Chasse, LA 70037
(504) 656-7711

August 9, 2011

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Surveillance Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312

T 132895

CERTIFIED MAIL, RETURN RECEIPT REQUESTED
7007-0710-0000-5370-4353

RECEIVED

AUG 12 REC'D

**SOUTHEAST REGIONAL
OFFICE**

RE: August 2, 2011 Air Emission Occurrence
State Police Report Number: 11-04612

Dear Sir/Madame:

This letter serves as written notification to the verbal reports of the referenced incident made by Steven Johnson of our Environmental Services staff to Kristy Golden of the Louisiana State Police Hazardous Materials Unit at 6:24 PM on August 2, 2011. The forms have been completed and attached for your review and records.

Additionally, this letter serves to comply with 40 CFR Part 70 General Conditions N. and R. of Operating Permit 2779-V2 for the Low Pressure Flare (Emission Source 308F-D-1)

If you have any questions or require additional information, please contact me at (504) 656-3212.

Sincerely,

Laurence R. Poché
Environmental Services Superintendent

Attachments
LRP/swj

A10-11

cc: Louisiana Department of Environmental Quality Southeast Regional Office

**ALLIANCE REFINERY
SPILL AND/OR RELEASE
NOTIFICATION FORM**

OFFICIALS CONTACTED:

1. LOCAL EMERGENCY PLANNING COMMISSION: Operator # 24
 (504-391-9748 or 391-9759 or 394-3541) LEPC Incident No. 2011-0141
 DATE OF CALL: 08/02/2011 TIME OF CALL: 6:28 PM

2. STATE POLICE (HAZARDOUS MATERIALS UNIT): Kristy Golden / Wanda Colletti
 (1-225-925-6595 or 225-925-6113) REPORT NO. 11-04612
 DATE OF CALL: 08/02/2011 TIME OF CALL: 6:24 PM
08/09/2011 11:43 AM

3. NATIONAL RESPONSE CENTER (NRC): Ms. Johnson
 (1-800-424-8802) OBTAIN A REPORT NUMBER FROM NRC.
 REPORT NO. 984712
 DATE OF CALL: 08/02/2011 TIME OF CALL: 6:35 PM

LADEQ - BATON ROUGE OFFICE: Notified by Hazardous Materials Unit
 (225-219-3615, WORKING HRS.)/(225-342-1234, AFTER HRS.) REPORT NO. --
 DATE OF CALL: -- TIME OF CALL: --

COAST GUARD - NEW ORLEANS: --
 (589-6261) FOR SPILLS TO RIVER
 DATE OF CALL: -- TIME OF CALL: --

LADEQ - SOUTHEAST REGIONAL OFFICE --
 (1-985-624-4446) AFTER 4 P.M.
 DATE OF CALL: -- TIME OF CALL: --

ConocoPhillips ENVIRONMENTAL DUTY PERSON CONTACTED: Steven Johnson by Nat Sylve
 SEE WEEKEND DUTY SHEET

DATE/TIME OF CALL: 5:50 PM 08/02/2011



I. **Company Name** ConocoPhillips - Alliance Refinery
Physical Location 15551 Highway 23
12 miles south of Belle Chasse, Louisiana on Highway 23
River Mile Marker 62.5 AHP Plaquemines Parish
St. or P.O. Box P. O. Box 176, Belle Chasse, Louisiana 70037
Telephone Number (504) 656-7711

II. Emission point source(s) involved? (Including the process unit and the EIQ number if applicable) 308F-D-1 (Low Pressure Flare)

III. Applicable permit number and the current permitted limit (lbs/hr) for the emission point source(s) involved? 2779-V2

IV. Which applicable Air Quality regulation limits were exceeded? (SO2 limit, mass emission limit, opacity limit, etc. SO2 limit - 500 lbs. RQ exceeded

V. Give the date and time the release began and duration of release:
August 2, 2011 5:31 PM to 9:38 PM (247 minutes)

VI. Which specific pollutants were emitted and how much of each compound was released: (total amount of each compound expressed in pounds) (*attach emission calculations*) 1,664 lbs. Sulfur Dioxide

A. Media into which release occurred: AIR WATER GROUND

B. Wind Direction 220° SW (*Obtain by calling ext. 377*)

C. Wind Speed (*mph*) 3.0 Temperature 90.9°F Partly Cloudy

D. This material is a: GAS LIQUID SOLID

E. Hazardous Class:

Extremely Hazardous Substance

Regulated by OSHA HazCom

VII. Upset description, cause, and what offsite impact resulted?:

On August 2, 2011 at 5:12 PM, while starting up several Refinery Units simultaneously an unexpected high volume of light hydrocarbons and gases entered the Refinery Fuel Gas System's amine contactor vessel (410-V-3) resulting in a high liquid level in the contactor. The amine contactor's bottoms control valve responded by opening to reduce the high liquid level and maintain the proper set point liquid amine level in the contactor vessel. The bottoms control valve is designed to remain open at a designated set point in order to maintain appropriate liquid levels.

However, the bottoms control valve malfunctioned and could not be closed allowing the loss of all amine liquid in the contactor vessel causing hydrocarbon carryover into the amine system and subsequent downstream units.

The hydrocarbon carryover caused an unexpected increase of pressure at the amine flash drum (591-V-38) prompting the amine flash drum's flare valve to open to the Low Pressure Flare (308F-D-1), as it is designed to do to control vessel pressure.

The amine contactor's control valve was manually closed in order to build an amine liquid level once again at the Refinery Fuel Gas System's contactor (410-V-3). The flaring gradually decreased and stopped when the hydrocarbon layer evaporated off the amine in the flash drum.

During this entire event, continuous air monitoring was performed at the fence-line of the Refinery property and no offsite impact was noted.

VIII. Was the release preventable? YES NO If no, explain why the release was not preventable:

Unexpected malfunction of the amine contactor's control valve allowing a loss of amine liquid levels in the contactor.

IX. Immediate corrective action taken?

Manually closed the amine contactor's bottoms control valve to re-establish liquid levels to properly treat fuel gas and minimize light hydrocarbon liquids and gases from being routed downstream to the amine flash drum.

X. Specific remedial action taken and/or planned to prevent recurrence? (Include time completion of project if applicable)

An investigation is in progress to determine the cause of the control valve malfunction at the amine contactor which caused flaring of light hydrocarbons at the amine flash drum. Identified corrective actions shall be implemented.

XI. Regulation notification requirement(s)? (Check appropriate)

- LAC 33:III.927 General Requirements to Report Substantial Increase
- LAC 33:I.3917 Notification Requirements for Unauthorized Discharges
- LAC 33:III.5107B Air Toxics Discharge Reporting Requirements

XII. Company Official:

Signature:

Laurence Kloche

Title:

Environmental Services Superintendent

Date:

August 9, 2011

**CONOCOPHILLIPS - ALLIANCE REFINERY (AI # 2418)
AMINE FLASH DRUM FLARING EVENT**

AUGUST 2, 2011

Low Pressure Flare (308F-D-1) emission calculation			
		0308FI0320	
Start	8/2/2011 17:31	279.0	Duration 4.29 hrs
End	8/2/2011 21:38		
		0308AI0210	
H2S Conc. In Flare		8,236.3	ppm
Total SCF		1,196,406	SCF
		3156.74	lbmols
		884.0	lbs H2S (based upon H2S CEMs Analyzer)
SO2 Emissions from Flare		1,664	lbs SO2

Dionne Magness

8/3

To: Lindsay Maloan
Cc: Holly Herrmann; Mike Algero; Brian Tusa
Subject: FW: NRC#984712

132895

Lindsay - assigned to you.

-----Original Message-----

From: SPOC
Sent: Wednesday, August 03, 2011 12:40 PM
To: _DEQ-SEROAdmin
Subject: FW: NRC#984712

LSP notification not received by SPOC yet but will be merged with this NRC Numbers to follow

From: HQS-PF-flidr-NRC@uscg.mil [HQS-PF-flidr-NRC@uscg.mil]
Sent: Tuesday, August 02, 2011 6:43 PM
To: SPOC
Subject: NRC#984712

NATIONAL RESPONSE CENTER 1-800-424-8802

GOVERNMENT USE ONLYGOVERNMENT USE ONLY***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 984712

INCIDENT DESCRIPTION

*Report taken by: CIV LOTTIE JOHNSON at 19:37 on 02-AUG-11
Incident Type: FIXED
Incident Cause: EQUIPMENT FAILURE
Affected Area:
Incident occurred on 02-AUG-11 at 17:31 local incident time.
Affected Medium: AIR / ATMOSPHERE

REPORTING PARTY

Name: STEVEN JOHNSON
Organization: CONOCO PHILLIPS
Address: 15551 HWY 23 SOUTH
BELLE CHASSE, LA 70037

PRIMARY Phone: (504)4158117
Type of Organization: PRIVATE ENTERPRISE

SUSPECTED RESPONSIBLE PARTY

Name: STEVEN JOHNSON
Organization: CONOCO PHILLIPS
Address: 15551 HWY 23 SOUTH
BELLE CHASSE, LA 70037
PRIMARY Phone: (504)4158117

INCIDENT LOCATION

15551 HWY 23 SOUTH County: PLAQUEMINES
City: BELLE CHASSE State: LA Zip: 70037

RELEASED MATERIAL(S)

CHRIS Code: SFD Official Material Name: SULFUR DIOXIDE
Also Known As:
Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A RELEASE OF SULFUR DIOXIDE FROM A FLARE DUE TO EQUIPMENT MALFUNCTION.

SENSITIVE INFORMATION

INCIDENT DETAILS

Package: N/A
Building ID:
Type of Fixed Object: FLARE STACK
Power Generating Facility: NO
Generating Capacity:
Type of Fuel:
NPDES:
NPDES Compliance: UNKNOWN

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:
FATALITIES: NO Empl/Crew: Passenger: Occupant:
EVACUATIONS: NO Who Evacuated: Radius/Area:

Damages: NO

Closure Type	Description of Closure	Hours Closed	Direction of Closure
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	N		

Environmental Impact: NO
Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

MONITORING AROUND THE REFINERY PERIMETER AND THERE IS NO READINGS.
Release Secured: NO
Release Rate:
Estimated Release Duration:

WEATHER

Weather: PARTLY CLOUDY, 90°F Wind speed: 3 MPH Wind directi

ADDITIONAL AGENCIES NOTIFIED

Federal: NONE
State/Local: STATE POLICE, LEPC 2011-0141
State/Local On Scene: NONE
State Agency Number: 11-04612

NOTIFICATIONS BY NRC

CALCASIEU PARISH SHERIFF'S DEPT (CRIMINAL INTELLIGENCE UNIT)
02-AUG-11 19:43 (337)4913778
USCG-GC IMT (PRIMARY)
02-AUG-11 19:43 (609)3518503
DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
02-AUG-11 19:43 (202)3661863
FLD INTEL SUPPORT TEAM NEW ORLEANS (SUPERVISOR, FIST NEW ORLEANS)
02-AUG-11 19:43 (504)5894224
JFO-LA (COMMAND CENTER)
02-AUG-11 19:43 (225)3366513
JFO-LA (FEMA JFO LA)
02-AUG-11 19:43 (225)3366513
LA DEPT OF ENV QUAL (MAIN OFFICE)
02-AUG-11 19:43 (225)2193640
LA DEPT OF NATURAL RESOURCES (OFFICE OF CONSERVATION)
02-AUG-11 19:43 (225)3425524
LA DEPT OF WILDLIFE AND FISHERIES (MAIN OFFICE)
02-AUG-11 19:43 (337)
LA GOV OFFICE HS AND EMERGENCY PREP (MAIN OFFICE)
02-AUG-11 19:43 (225)9257500
LA OFFICE OF GOV (MAIN OFFICE)
02-AUG-11 19:43 (225)2195800
LA OFFICE OF PUBLIC HEALTH (MAIN OFFICE)
02-AUG-11 19:43 (888)2937020
NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
02-AUG-11 19:43 (202)2829201
NOAA RPTS FOR LA (MAIN OFFICE)
02-AUG-11 19:43 (206)5264911
SECTOR NEW ORLEANS (COMMAND CENTER)
(504)3652209
LA STATE POLICE (MAIN OFFICE)
02-AUG-11 19:43 (225)9256595

ADDITIONAL INFORMATION

CALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT #984712 ***

Report any problems by calling 1-800-424-8802
PLEASE VISIT OUR WEB SITE AT <http://www.nrc.uscg.mil>

Dionne Magness

From: Holly Herrmann
Sent: Wednesday, August 10, 2011 10:26 AM
To: Lindsay Maloan
Cc: Brian Tusa; Dionne Magness; Holly Herrmann; Mike Algero
Subject: FW: LSP # 11-04612 SERO s11-2490 T 132895 UPDATE

Lindsay- additional info. (LSP info.) for the same incident just sent to you. T 132895

Holly Herrmann

From: Charles Lato
Sent: Wednesday, August 10, 2011 10:08 AM
To: _DEQ-SEROAdmin
Subject: LSP # 11-04612 SERO s11-2490 T 132895 UPDATE

INCIDENT # 11-04612 SOURCE: STATE POLICE HAZMAT HOTLINE
877-925-6595 / 225-925-6595

** (INITIAL REPORT) DATE AND TIME *****
HOTLINE NOTIFIED: 08/02/11 18:25
INCIDENT OCCURRED: 08/02/11 17:31

** (INITIAL REPORT) INCIDENT LOCATION *****
PARISH: Plaquemines
ADDRESS: 15551 Hwy 23 South
CITY: Belle Chase

** (INITIAL REPORT) CALLER INFORMATION *****
CALLER'S NAME: Steven Johnson
CALLER'S ADDRESS OR EMPLOYER: ConocoPhillips Refinery
CALLER'S PHONE NUMBER: 504-415-8117

** (INITIAL REPORT) RESPONSIBLE PARTY *****
NAME: ConocoPhillips Refinery
MAILING ADDRESS: PO Box 176
CITY,STATE,ZIP: Belle Chasse, LA 70037

** (INITIAL REPORT) DETAILS *****
Equipment malfunction in refinery unit... Unit had upset that
destabilized aiming system... Which required flaring...

** (INITIAL REPORT) CHEMICAL INFORMATION *****
CHEMICAL 1: Sulfur Dioxide
QTY: Unknown
RELEASED STATE: Gas CLASS: Poison Gas ID: 1079 EHS: Yes

** (INITIAL REPORT) RELEASE INFORMATION *****
INCIDENT CLASSIFICATION: Unusual Event
DID MATERIAL GO OFFSITE? Yes
RELEASED TO: Flare

WHERE IS AIR BEING MONITORED? Perimeter of facility
IF MONITORING, WHAT IS HIGHEST READING? No readings yet
ANY OFF-SITE PROTECTIVE ACTION?

No
RELEASE EFFECTS:
FIRE: No
INJURIES: No :
FATALITIES: No :

** (INITIAL REPORT) FIXED SITE
Process Unit

** (UPDATE TO THE REPORT) DETAILS
PERSON/REPRESENTING: S/Tech Day/Hazmat
PHONE: 225-324-2670
Advised... Emailed...

** (UPDATE TO THE REPORT) DETAILS
PERSON/REPRESENTING: Laura/DEQ
PHONE: 225-237-3694
Advised...

** (UPDATE TO THE REPORT) DETAILS
PERSON/REPRESENTING: Sharon/LEPC
PHONE: 504-394-3541
Advised...

** (UPDATE TO THE REPORT) DETAILS
PERSON/REPRESENTING: CIV LOTTIE JOHNSON/ NRC
PHONE: 800-424-8802
NRC REPORT # 984712...