

Incident Reporter

**Received By:** Robin Stewart  
**Received Date:** FEB-02-05 02:36:00  
**Dispatch #:** s05-0390  
**Reported By:** Ricky Cooper, Agency Interest Self Rept  
**Phone Desc:** 504-915-9325  
**Reporter Title:**  
**Org Desc:** Shell Chemical  
**Address:** PO Box 10

**Municipality:** Norco  
**State Code:** LA  
**Zip Code:** 70079  
**Comments:** This was a self reported incident.

Incident Description

**Incident Type:** Release/Spill, Facility Discharge/Release  
**Incident Date:** FEB-02-05 01:57:00  
**Parish:** St. Charles  
**Municipality:** Norco  
**Location:** Shell - 15536 River Rd. - Norco  
**Lat/Lon:**  
**Basin/Segment:**  
**Substance:** Benzene  
**Media Impacted:** Air  
**Incident Desc:** s05-0390 Solvent recovery column pressuring up, instruments not working properly...NOX, butadiene. col

**Incident Type:** Release/Spill, Facility Discharge/Release  
**Incident Date:** FEB-02-05 01:57:00  
**Parish:** St. Charles  
**Municipality:** Norco  
**Location:** Shell - 15536 River Rd. - Norco  
**Lat/Lon:**  
**Basin/Segment:**  
**Substance:** VOC fraction  
**Media Impacted:** Air  
**Incident Desc:** s05-0390 Solvent recovery column pressuring up, instruments not working properly...NOX, butadiene. col

Incident Source

**Source Name:** Shell Chemical LP - Norco Chemical Plant - East Site  
**Address:** 15536 River Rd

**Municipality:** Norco  
**State:** LA  
**Phone:**  
**Parish:** St. Charles  
**AI#:** 26336

**Related Permits:** 0

**Investigation** The level controller on the BD5 Solvent Recovery Column was not functioning properly on February 2, 2005.  
**Findings:** The level controller was repaired and returned to service. During the repair there was some flaring. The flaring was reported to DEQ because of the policy to report at the time of the incident and let the BAER (Business Area Environmental Representative) review the incident and determine if the incident was reportable. A review of the calculations at the time of the site visit confirmed that the incident was not a reportable incident. A review of the incident confirmed that the incident was caused by a mechanical failure and that no human error was involved.

Incident Status

Lead Investigator: Jim Stone  
Region: Southeast  
Incident Status: Closed  
As Of: 04/20/2005

*J. Stone*  
*Ella Barber*

*4/20/05*



**Shell Chemicals**

AI 26336  
Incident # 76671

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Department of Public Safety and Corrections  
Office of State Police  
TESS – Right-to-Know Unit  
P.O. Box 66614  
Baton Rouge, LA 70896-6614

Shell Chemical Company  
Shell Chemical LP  
Norco Plant  
P.O. Box 10  
Norco, LA 70079-0010  
Tel +1 (504) 465 7220  
Fax +1 (504) 465 6360

Internet <http://www.shell.com/chemicals>

February 9, 2005

**SUBJECT:   RELEASE REPORT: FEBRUARY 2, 2005  
STATE POLICE CASE # 05-00769  
NRC CASE # 748921  
SHELL CHEMICAL LP - NORCO CHEMICAL PLANT - EAST SITE  
AI# 26336**

Dear Sir/Madam:

In accordance with the authorities listed below, Shell Chemical LP - Norco Chemical Plant - East Site is providing a written follow-up report to our verbal notification on February 2, 2005 at 0232 hours of a release of benzene and nitrogen oxides.

Final calculations confirm that no permit limits or reportable quantities were exceeded. Notification and release information are detailed in the tables below:

**Verbal Notifications:**

Agency	Initial and Follow-up Verbal Contact				
	Agency Contact	Date	Time	Shell Caller	Case Number
EOC	Jim	2/2/2005	0230	RL Cooper	N/A
State Police	Tracy	2/2/2005	0232	RL Cooper	05-00769
DEQ via State Police	Tracy	2/2/2005	0232	RL Cooper	N/A
NRC	Baumgartner	2/2/2005	0235	RL Cooper	748921
EOC	Jim	2/2/2005	1207	WP Gauthreaux	N/A
State Police	Walter	2/2/2005	1208	WP Gauthreaux	05-00769
DEQ via State Police	Walter	2/2/2005	1208	WP Gauthreaux	N/A

**Release Information:**

Name	CAS Number	US DOT Hazard Class	EHS ?	Physical State (solid, liquid, gas)	RQ Standard	RQ(s)	Amount Released (Above permitted quantities)
Benzene	71-43-2	Flammable	No	Gas	CERCLA/DEQ	10 lbs	0 lbs
Nitrogen Oxides	N/A	N/A	Yes	Gas	CERCLA/SARA/DEQ	10 lbs	0 lbs

The sources listed in the following table are permitted in AQD Permit # 2520-V2.

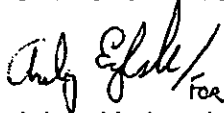
Emission Point Identification (EPN)	Pollutant	Permit Limit Avg (lb/hr)	Permit Limit Max (lb/hr)	Event Duration (hours)	Total Quantity Released by Event (lbs)	**Amount Released Above Permitted Quantity (lbs)
7-84 (OL-5 Ground Flare, FG-101)	CO	2.1	18.1	8.2	22	0
7-84 (OL-5 Ground Flare, FG-101)	NO <sub>x</sub>	3.6	30.8	8.2	38	0
7-84 (OL-5 Ground Flare, FG-101)	PM	0.66	5.7	8.2	7	0
7-84 (OL-5 Ground Flare, FG-101)	Total VOC's	40.0	430.5	8.2	28	0
7-84 (OL-5 Ground Flare, FG-101)	1, 3-Butadiene	0.97	6.2	8.2	7	0
7-84 (OL-5 Ground Flare, FG-101)	Benzene	0.98	0.98	8.2	0	0

\*\* This is the quantity of material released above permitted maximum emission rates. It is this number-summed for each pollutant- which Shell evaluates against reportable quantities in the above table. It is calculated using the formula below. This formula conservatively assumes the flare is emitting at its average rate just prior to and during the event.

$$\text{Total Quantity Above Permit Limit} = \text{Total Released} - [(\text{Permit Limit}_{\text{max}} - \text{Permit Limit}_{\text{avg}}) * \text{Duration}]$$

If you have any questions regarding this matter, please call Mr. A. J. Englande at (504) 465-7011.

Yours sincerely,  
Shell Chemical LP



Johan Verburgh  
Manager -Health, Safety & Environmental

AJE/mse

cc: CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

Ms. Peggy Hatch, Administrator  
Office of Environmental Compliance-Enforcement  
Louisiana Department of Environmental Quality  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
Louisiana Department of Environmental Quality  
ATTENTION: SURVEILLANCE DIVISION-S.P.O.C.  
"UNAUTHORIZATION DISCHARGE NOTIFICATION REPORT"  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
Mr. Tab Troxler  
St. Charles Parish Emergency Planning Committee  
P. O. Box 302  
Hahnville, LA 70057

CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
Mr. Phil Frazier, Environmental Scientist  
Louisiana Department of Environmental Quality  
201 Evans Road, Bldg. 4, Suite 420  
New Orleans, LA 70123-5230

CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
ERNS Coordinator (6E-EP)  
U. S. Environmental Protection Agency, Region VI  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

Data		2/2/2005				
Flared About	27,459 lbs		CO	22.36		
Total Time	8.2 Hours		NOx	38.012		
Stream Flared	BD-5 Heavy Ends		PM	7.1552		
Total Heating Value Flared	559 mmbtu*		VOC	27.459 Non-smoking Flare		
			1,3 BD	6.86475		
<b>Speciation**</b>						
1,3 BD	25 %					
1,2 BD	7 %					
1-butene	13 %					
isobutene	20 %					
Vinyl acetylene	13 %					
2-butene	11 %					
Bulanes	5 %					
Ethyl acetylene	4 %					
Heavier C5's	2 %					

\* Heating values is taken from the flare database  
 \*\* Information taken from the most recent GC analysis

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
FIELD INTERVIEW FORM**

AGENCY INTEREST#: 26336 INSPECTION DATE: 4/15/05 TIME OF ARRIVAL: 10<sup>19</sup>

ALTERNATE ID#: \_\_\_\_\_ DEPARTURE DATE: \_\_\_\_\_ TIME OF DEPARTURE: \_\_\_\_\_

FACILITY NAME: SHELL CHEMICALS (ID Type/Number) PH #: 504 465-7220

LOCATION: 15536 RIVER ROAD

NORCO LA 70079 PARISH NAME: ST CHARLES

RECEIVING STREAM (BASIN/SUBSEGMENT): N/A

MAILING ADDRESS: P.O. Box NORCO LA 70079  
(Street/P.O. Box) (City) (State) (ZIP)

FACILITY REPRESENTATIVE: ANDY ENGLAND TITLE: BAKER

FACILITY REPRESENTATIVE PHONE NUMBER: 504 465 7011

NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above):

VINCE BRUND, HSSE/IA INTERIM MANAGER

INSPECTION TYPE: INCIDENT PROGRAM INVOLVED:  AIR WASTE WATER OTHER \_\_\_\_\_

INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

176671-259. ISOBUTENE - THE LEVEL CONTROLLER  
ON THE BDS SOLVENT RECOVERY COLUMN WAS NOT  
FUNCTIONING PROPERLY - IT WAS REPAIRED AND RETURNED  
TO SERVICE - THE NOx FROM THE FLORE WAS BELOW PD  
NO HUMAN ERROR.

**AREAS OF CONCERN:**

REGULATION	EXPLANATION	CORRECTED?	
		YES	NO
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PHOTOS TAKEN:  YES  NO SAMPLES TAKEN:  YES  NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE: Andrew England III

PRINT NAME: Andrew ENGLAND III

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): JH Stone

CROSS REFERENCE: \_\_\_\_\_

JH STONE

ATTACHMENTS: \_\_\_\_\_

REVIEWER: Ella Barbe

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
FIELD INTERVIEW FORM**

AGENCY INTEREST#: 1406 INSPECTION DATE: 4/15/05 TIME OF ARRIVAL: 10:19

ALTERNATE ID#: 26336 DEPARTURE DATE: \_\_\_\_\_ TIME OF DEPARTURE: \_\_\_\_\_

FACILITY NAME: MOTIVA ENTERPRISES LLC (ID Type/Number) 584 PH #: 465 7606

LOCATION: 15536 RIVER ROAD

NORCO LA 70079 PARISH NAME: ST CHARLES

RECEIVING STREAM (BASIN/SUBSEGMENT): \_\_\_\_\_

MAILING ADDRESS: PO BOX 10 NORCO LA 70079  
(Street/P.O. Box) (City) (State) (ZIP)

FACILITY REPRESENTATIVE: ADRIAN FORD TITLE: BAKER

FACILITY REPRESENTATIVE PHONE NUMBER: \_\_\_\_\_  
NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above):  
SOY TIR - ENVIRONMENTAL MANAGER

INSPECTION TYPE: INCIDENT PROGRAM INVOLVED: AIR WASTE WATER OTHER \_\_\_\_\_

INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

DRIVER BOYD  
76677 - THEY CAN HANDLE 8-10 INCHES IN A 24 HOUR RAIN  
EVENT AND ABOUT 3 INCHES PER HOUR. THIS WAS AN  
INTENSE EVENT. THE FIRST FLUSH WENT TO THE  
WASTE WATER TREATMENT SYSTEM AND THEN THE REST  
WENT TO LAKE PONTCHARTRAIN VIA ENGINEERS CANAL  
THE INCIDENT WAS NOT PREVENTABLE, NO HUMAN  
ERROR WAS INVOLVED.  
76659 - THERE WAS A MECHANICAL FAILURE

**AREAS OF CONCERN:**

REGULATION	EXPLANATION	CORRECTED?
_____	_____	YES NO
_____	_____	YES NO

PHOTOS TAKEN:  YES  NO SAMPLES TAKEN:  YES  NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE: [Signature]

PRINT NAME: Paul Tupper

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): JH Stone CROSS REFERENCE: \_\_\_\_\_

REVIEWER: Ellen Barber ATTACHMENTS: \_\_\_\_\_

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.



LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
ADDITIONAL OBSERVATIONS (cont'd)

AGENCY INTEREST#: 1406 ALTERNATE ID#: LA 0003522 INSPECTION DATE: 4/15/05

FACILITY NAME: MOTIVA ENTERPRISE LLC

INSPECTOR OBSERVATIONS CONT'D: 76659

1406  
IN THE ~~THE~~ DISCHARGE NIPPLE BETWEEN THE  
SANITARY SEWER AND THE DRAIN FROM THE  
CEN MAIN SHOP. THIS WAS A MECHANICAL FAILURE  
AND NOT DUE TO HUMAN ERROR BUT IT IS  
INCLUDED THE CONSOLIDATED COMPLIANCE ORDER/NOMP  
WE-CN-04-1034 AND IS BEING REVIEWED BY  
THE COMPANY AND ENFORCEMENT.

26336  
76771 - THIS WAS A PERMITTED FLARING EVENT -  
THE SITE SUPERVISORS ARE CALLED ON TO NOTIFY  
AND LET ENVIRONMENTAL SORT IT OUT - THIS  
WAS NORMAL OPERATIONS AND NOT AN EVENT.

26336  
77395 - THIS IS STILL UNDER REVIEW - A ROOT CAUSE ANALYSIS  
WILL FOLLOW

26336  
77467 - BUTADIENE WAS RELEASED 8# -

THERE WAS A PUMP PROBLEM ON THE DEBUTANIZER.

26336  
WHILE THE SPAIR WAS BEING PLACED IN SERVICE

SOME MATERIAL WAS FLARED AND ABOUT 8# OF

BUTADIENE WAS RELEASED. THIS IS A PERMITTED

MAINTENANCE ACTIVITY UP TO 319# / DAY (2510-V2)

76324 - 16 MINUTES OF FLARING BUT SO<sub>2</sub> EXCEEDED

26336  
PERMIT 2510+V2. THIS WAS FROM THE DRY GAS THAT

SHELL CHEMICAL GETS FROM MAP, VALERO + LOCAL GAS.

NO HUMAN ERROR WAS INVOLVED

1406  
77688 - THIS BLACK MATERIAL CAME FROM THE

SHIP "KEYSTONE TEXAS" WHICH HAD JUST

LEFT THE SHELL DOCK. THIS IS NOT A SHELL INCIDENT

76388 - FLARE (2510-V=1) (HYDROCRACKER FLARE) HAD A

1406  
BRIEF FLAMEOUT. THE FLARE WAS IMMEDIATELY

RELIT. THE UNBURNED VOC DID NOT EXCEED AN RQ.

NO PERMIT LIMITS WERE EXCEEDED.

INITIALS OF RECEIPT P.F.T.

JH