

SPAC

August 11, 2005

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

565-2671  
T 81012

SERO - McCormick  
A1 #1406

To Whom It May Concern:

**SUBJECT:      RELEASE REPORT: August 4, 2005**  
**STATE POLICE # 05-05240**  
**NRC # 767977**  
**LDEQ AGENCY INTEREST #1406**  
**MOTIVA ENTERPRISES, LLC – NORCO REFINERY**  
**RESIDUE CATALYTIC CRACKING UNIT (RCCU)**

In accordance with the authorities listed below, Motiva Enterprises LLC – Norco Refinery is providing a written follow up report to our verbal notification on August 4, 2005 at 1456 hours of a release of slurry oil to the ground and benzene, flammable liquid, nitrogen oxides and sulfur dioxide from the RCCU Flare (EPN 8-84) and the West Operations Ground Flare (WOGF - EPN 9-84).

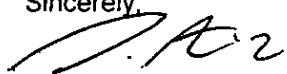
Authorities:

LAC 33:V.10111  
LAC 33:I.3925  
LAC 33:III.5107  
40 CFR 355.40(b)(3)  
Title V Permit 2602-V1 General Condition XI and R  
Title V Permit 2510-V1 General Condition XI and R

Final calculations confirm that the hourly maximum permitted limits for sulfur dioxide and VOCs were exceeded for the RCCU Flare (EPN 8-84). The reportable quantity for SO2 and the hourly maximum permitted limits for sulfur dioxide were exceeded for the WOGF (EPN 9-84). In addition, the reportable quantities for flammable gas and oil to land were exceeded from the slurry oil release to the land and atmosphere.

Notification and release information are detailed in the attached report. If you have any questions regarding this matter, please contact Ms. Chrystal Kain at (504) 465-7455.

Sincerely,



Soy T. Tir  
Manager - Environmental

CMK/mse

Attachment

**RECEIVED**

**AUG 18 2005**

**DEQ**  
**Single Point of Contact**

**RECEIVED**

**AUG 15 2005**

**OFFICE OF**  
**ENVIRONMENTAL COMPLIANCE**  
**ENFORCEMENT DIVISION**

cc: W/Attachment  
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  
Louisiana Department of Environmental Quality  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
ATTENTION: SURVEILLANCE DIVISION - SPOC  
"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

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

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

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

**MOTIVA ENTERPRISES, LLC  
RELEASE NOTIFICATION FORM**

I.

<b>Company Name</b>	<b>MOTIVA ENTERPRISES, LLC – NORCO REFINERY</b>
<b>Physical Location</b>	<b>15536 River Road, St. Charles Parish</b>
<b>Street or P. O. Box</b>	<b>P.O. Box 10</b>
<b>City, State, Zip</b>	<b>Norco, Louisiana 70079</b>
<b>Telephone</b>	<b>(504) 465-6274 (S.T. Tir)</b>

II. **Date and Time of Verbal Notifications:**

<b>Initial Verbal Contact</b>				
<b>Agency</b>	<b>Contact</b>	<b>Date/Time</b>	<b>Caller</b>	<b>Case #</b>
EOC	George	08/4/2005 @ 1425 hrs	CS Matherne	N/A
State Police	Charlie	08/4/2005 @ 1456 hrs	CS Matherne	05-05240
LDEQ (via State Police)	Charlie	08/4/2005 @ 1456 hrs	CS Matherne	N/A
NRC	Crews	08/4/2005	CS Matherne	767977

<b>Follow-up Verbal Contact</b>				
<b>Agency</b>	<b>Contact</b>	<b>Date/Time</b>	<b>Caller</b>	<b>Case #</b>
EOC	George	08/4/2005 @ 1900 hrs	CS Matherne	N/A
State Police	Katherine	08/4/2005 @ 2000 hrs	CS Matherne	05-05240
LDEQ (via State Police)	Katherine	08/4/2005 @ 2000 hrs	CS Matherne	N/A
EOC	Steve	08/5/2005 @ 2020 hrs	RL Cooper	N/A
State Police	Tracey	08/5/2005 @ 2012 hrs	RL Cooper	05-05240
LDEQ (via State Police)	Tracey	08/5/2005 @ 2012 hrs	RL Cooper	N/A
EOC	George	08/6/2005 @ 1935 hrs	RL Cooper	N/A
State Police	Amanda	08/6/2005 @ 1933 hrs	RL Cooper	05-05240
LDEQ (via State Police)	Amanda	08/6/2005 @ 1933 hrs	RL Cooper	N/A
EOC	Brandon	08/8/2005 @ 0202 hrs	RL Cooper	N/A
State Police	Linda	08/8/2005 @ 0200 hrs	RL Cooper	05-05240
LDEQ (via State Police)	Linda	08/8/2005 @ 0200 hrs	RL Cooper	N/A

### III. Release Start/End Time

Date/Time Start *	Date/Time End	If Not Ended, Anticipated End Time	Weather Conditions During Release
08/4/2005 @ 1418 hrs	08/4/2005 @ 1425 hrs	N/A	80 degrees, overcast, winds NE at 5 mph.

\*flaring and emissions were not continuous from start to stop time.

### IV. Release Event Description and Cause

Maintenance was turning a blind when contents of the line began spraying from the line. Fractionator bottoms and vapors were released to atmosphere, land, concrete and the RCCU drainage system. Flaring occurred at the RCCU flare following the event during the RCCU unit startup. Additional downstream flaring occurred at the Shell Chemical LP GO-1 elevated flare and the Motiva West Operations Ground Flare. Shell Chemical will provide additional details regarding GO-1's events in a separate letter.

This release did not result in an offsite emergency condition, road closure, evacuation, or cause any injuries or fatalities.

### V.a. Material Released

Emissions from the RCCU Flare include:

Material	CAS Number	US DOT Hazard Class.	EHS?	Physical State	RQ Standard	Applicable RQs (lbs)	Amount Released Above Permitted Limit (lbs)
NO <sub>x</sub> <sup>1</sup>	N/A	N/A	Y	Gas	CERCLA, SARA, DEQ	10	0
CO	N/A	N/A	N	Gas	State Police	5000	0
PM	N/A	N/A	N	Gas	State Police	5000	0
VOC	N/A	N/A	N	Gas	State Police, DEQ	5000	186.9
SO <sub>2</sub>	7446-09-5	N/A	Y	Gas	SARA	500	139.8

<sup>1</sup> NO<sub>x</sub> is a combustion product and is a mixture of nitrogen dioxide (CAS number 10102-44-00) and nitric oxide (CAS number 10102-43-9). The estimated quantities released are 0 lb. NO<sub>2</sub> and 0 lb. NO.

Emissions from the West Operations Ground Flare include\*\*:

\*\*The WOGF is subject to an NSPS Subpart J Alternate Monitoring Plan (AMP) for H2S; however, NSPS does not apply during startup, shutdown, or malfunction events, so the AMP does not apply.

Name	CAS Number	US DOT Hazard Class	EHS ?	Physical State (solid, liquid, gas)	RQ Standard	RQ(s)	Amount Released Above Permitted Quantities (lbs)
Nitrogen Oxides*	N/A	N/A	Yes	Gas	CERCLA/ SARA LADEQ	10 lbs	0
Carbon Monoxide	630-08-0	N/A	No	Gas	State	5000 lbs	0
Benzene	71-43-2	Flammable	No	Gas	CERCLA/ LADEQ	10 lbs	0
1,3 Butadiene	106-99-0	Flammable	Yes	Gas	CERCLA/ LADEQ	10 lbs	0
Toluene (HRVOC)	108-88-3	Flammable	Yes	Gas	CERCLA/ LADEQ	1000 lbs/ 100 lbs	0
SO2	7446-09-5	N/A	Y	Gas	SARA	500	739.2 lbs

<sup>1</sup> NO<sub>x</sub> is a combustion product and is a mixture of nitrogen dioxide (CAS number 10102-44-00) and nitric oxide (CAS number 10102-43-9). The estimated quantities released are 0 lb. NO<sub>2</sub> and 0 lb. NO.

Emissions to the atmosphere/land include:

Material	CAS Number	US DOT Hazard Class	EHS?	Physical State	RQ Standard	Applicable RQs (lbs)	Amount Released (lbs)
Hydrogen Sulfide	7783-06-4	Flammable	Y	Gas	CERCLA SARA, DEQ	100	0.9
Flammable Gas**	N/A	N/A	N	Gas	State Police	1000	2283.1
Total VOCs (not otherwise listed)	N/A	N/A	N	Gas	LDEQ	5000	2283.1
Oil	N/A	N/A	N	liquid	LDEQ	1 bbl	3 bbls

\*CERCLA Petroleum Exclusion applies [40 CFR 302] – Components are exempt from reporting as refinery process streams

\*\*Flammable gas includes some volumes listed above

**V.b. Permitted Source Emissions:**

The source listed in the following table is permitted in Permit #2602-V1.

Emission Point Identification (EPN)	Pollutant	Permit Limit Average (lb/hr)	Permit Limit Max (lb/hr)	Event Duration (hr)	Total Quantity Released (lbs)	Amount Released above permitted quantity (lbs)**
8-84 (RCCU Flare)	NO <sub>x</sub>	0.63	40.69	9.3	194.5	0
8-84 (RCCU Flare)	SO <sub>2</sub>	0.01	0.23	9.3	141.9	139.8
8-84 (RCCU Flare)	CO	3.4	222.24	9.3	1058.3	0
8-84 (RCCU Flare)	PM	0.12	7.66	9.3	21.45	0
8-84 (RCCU Flare)	VOC	0.27	42.39	9.3	578.6	186.9

\*\* 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 table in section V.a of this report. 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. This average emission rate is added to the event release amount to give a total emission amount during the event. Finally, the maximum permitted emissions allowed at the flare are subtracted to yield the amount emitted above the permitted limit. If the number is negative then a zero is entered (no emissions above the permitted rate).

$$\text{Total Quantity Released by Event} + [(\text{Permit Limit Avg}) \times (\text{Duration})] - [(\text{Permit Limit Max}) \times (\text{Duration})]$$

The source listed in the following table is permitted in Permit #2510-V1.

Emission Point Identification (EPN)	Pollutant	Permit Limit Avg (lb/hr)	Permit Limit Max (lb/hr)	Event Duration	Total Quantity Released by Event (lbs)	**Amount Released Above Permitted Quantity (lbs)
9-84 (West Ops Ground Flare FG-201)	CO	1.19	38.28	6	13.9	0
9-84 (West Ops Ground Flare FG-201)	NO <sub>x</sub>	16.35	526.28	6	23.7	0
9-84 (West Ops Ground Flare FG-201)	PM	0.38	12.25	6	2.6	0
9-84 (West Ops Ground Flare FG-201)	Total VOC	25.18	868.91	6	17.9	0
9-84 (West Ops Ground Flare FG-201)	1,3 Butadiene	0.78	77.18	6	0	0
9-84 (West Ops Ground Flare FG-201)	Benzene	0.002	0.05	6	0	0
9-84 (West Ops Ground Flare FG-201)	Toluene	0.001	0.003	6	0	0
9-84 (West Ops Ground Flare FG-201)	SO <sub>2</sub>	0.03	5.79	6	773.8	739.2
9-84 (West Ops Ground Flare FG-201)	Hexane	0.13	0.31	6	0.6	0

**V.c. Description of methodology used for calculations and estimates:**

Emission calculations were performed using process knowledge and information, stream speciation, physical properties, and appropriate AP-42 emissions factors.

**VI. Statement of actual or probable fate or disposition of the material:**

The material was released to the environment and dispersed naturally into the air and from an elevated control device. No adverse offsite impact occurred. No road closure or evacuation was required. No flare smoking occurred during this incident.

**VII. Immediate remedial or corrective actions taken, or to be taken, to stop the release and/or to recover pollutants**

Vacuum trucks were deployed in an attempt to capture the oil in the RCCU drainage system. Feed was immediately diverted from the unit. Additional adjustments were made to minimize the forward flow into the main fractionator column while isolations were being made to the slurry circulation system. VSERT was activated to make positive isolation of the leak.

**VIII. Procedures or measures which have or will be adopted to prevent recurrence of the incident or similar incidents**

Motiva's incident investigations group is investigating the incident and recommendations will be addressed.

**IX. If an unpermitted or unlicensed site or facility was involved in the release, a schedule for submitting a permit or license application to the department, or rationale for not requiring a permit or license:**

No unpermitted or unlicensed facility was involved in this release.

**X. For discharges to the ground or ground water, the following information shall also be included: all information of which the reporting party is aware that indicates pollutants are migrating, including, but not limited to, monitoring well data; possible routes of migrations; and all information of which the reporting party is aware regarding any public or private wells in the area of the migration used for drinking, stock watering, or irrigation;**

N/A

**XI. Reporting party's status/other responsible parties:**

Motiva Enterprises, LLC – Norco Refinery is the owner and operator of RCCU and the RCCU Flare. SCOGI Louisiana Holdings LLC and Shell Chemical LP are the owner and operator, respectively, of the GO-1 process unit and the GO-1 Elevated Flare.

**XII. A determination of whether or not the release was preventable; if not, an explanation of why the release was not preventable.**

This release was preventable.

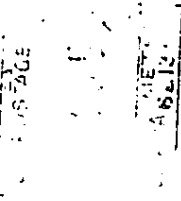
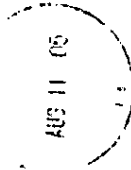
**MOTIVA**  
ENTERPRISES LLC

15536 River Road P.O. Box 10 Norco, LA

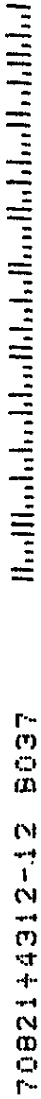
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
Ms. Peggy M. Hatch, Administrator  
Louisiana Department of Environmental Quality  
Office of Environmental Compliance-Enforcement Division  
P. O. Box 4312  
Baton Rouge, LA 70821-4312



70821+4312-12 8037