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410/05/JE0095D/AP1

Greg Willms
General Manager

MOTIVA
ENTERPRISES LLC

January 25, 2012

7011 1150 0001 0303 0122
CERTIFIED MAIL - RETURN RECEIPT REQUESTED
Mr. Mark R. Vickery, Executive Director
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, TX 78711-3087

Re: NESHAPs Subpart UUU - 40 CFR §63.1575(c), (d), and (e)
Petroleum Refinery MACT II Semi-Annual Report July 1, 2011 through December 31, 2011

Dear Mr. Vickery:

Pursuant to 40 CFR Part 63 Subpart UUU (§63.640 et seq.,) the following is information for the Motiva Enterprises LLC Port Arthur Refinery for the semi-annual reporting period from July 1, 2011 through December 31, 2011. The following brief process descriptions are provided as required by §63.1575(e)(10.)

FCCU3 Process – Motiva's fluid catalytic cracking unit (FCCU3) utilizes a complete-burn, continuous catalyst regenerator. The vent from the regenerator is subject to the emission limitations and compliance requirements of Subpart UUU. Under normal operation, the regenerator vent is directed to the Belco Scrubber for control of SO2 and particulate emissions. During periods of startup, shutdown, and malfunction, the regenerator vent may bypass the Belco Scrubber and be emitted through a bypass stack. Continuous compliance with the metal HAP emission limitation is demonstrated by an approved Alternate Monitoring Plan (AMP) for the Belco Scrubber and by a continuous opacity monitoring system (COMS) for the bypass stack. The AMP includes parametric monitoring of scrubber nozzle pressures, vent gas differential pressure, and the regenerator coke burn-off rate. Continuous compliance with the organic HAP emission limitation is demonstrated by continuous emission monitoring systems (CEMS for CO and O_2) for both the Belco Scrubber and the bypass stack.

CRU4 Process – Motiva's catalytic reforming unit (CRU4) utilizes a continuous catalyst regeneration section that is subject to Subpart UUU. The regenerator vent is directed to an external caustic scrubber for control of chloride emissions. Continuous compliance with the HAP emission limitation is demonstrated by continuous pH monitoring, continuous monitoring of the scrubber liquid-to-gas ratio, and by daily determining and recording the HCl concentration in the vent gas using Draeger tubes.

SRU Processes – Motiva operates three sulfur recovery units (SRUs) and two tail gas treatment units (TGTUs) that are subject to Subpart UUU. Each TGTU utilizes a tail gas incinerator for control of inorganic HAP emissions. Continuous compliance with the emission limitation is demonstrated by CEMS for SO2 and O2 on each incinerator exhaust stack.

Semi-annual Compliance Report

Attachment A contains a summary of all FCCU3 regenerator vent deviations from emission limits as required by §63.1575(d) and (e).

Attachment B contains a summary of CEMS and COMS analyzer downtime as required by §63.1575(e). As required by §63.1575(e)(12), the dates of the latest certification or audit of the COMS and CEMS are contained in Attachment C.

2555 Savannah Avenue P.O. Box 712

Attachment D contains a summary of all CRU4 deviations from emission limits as required by §63.1575(e).

Attachment E contains a summary of all SRU/TGTU deviations from emission limits as required by §63.1575(e).

As required by 40 CFR §63.1575(c)(2), I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete.

Please contact H. Scott Peters of my staff at (409) 989-7374 if you have any questions concerning this report.

Yours very truly,

MOTIVA ENTERPRISES LLC

Greg Willms
General Manager

:HSP

cc: Director, Air Pesticides & Toxics Division (2 copies)
US EPA
1445 Ross Ave.
Dallas, TX 75202

cc: Ms. Heather Feldman
TCEQ Region 10
3870 Eastex Freeway
Beaumont, TX 77703

Attachments

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program

All initial permit application, revision, renewal, and reopening submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I. IDENTIFYING INFORMATION

A. RN: 100209451	B. CN: 600124051	C. Account No.: JE-0095-D
A. Permit No.: 01386 **B.**	E. Project No.: N/A	
F. Area Name: Port Arthur Refinery		
G. Company Name: Motiva Enterprises LLC		

II. CERTIFICATION TYPE *(Please mark the appropriate box)*

A. ☒ Responsible Official:	B. ☐ Duly Authorized Representative:

III. SUBMITTAL TYPE *(Place an "X" in the appropriate box) (Only one response can be accepted per form)*

☐ SOP/TOP Initial Permit Application	☐ Update to Permit Application
☐ GOP Initial Permit Application	☐ Permit Revision, Renewal, or Reopening
☒ Other: Petroleum Refinery MACT II Semi-Annual Report July 1, 2011 through December 31, 2011	

IV. CERTIFICATION OF TRUTH

This certification does not extend to information which is designated by the TCEQ as information for reference only.

I, Greg Willms, certify that I am the RO for this application
(Certifier Name printed or typed) *(RO or DAR)*

and that, based on information and belief formed after reasonable inquiry, the statements and information dated during the time period in Section IV.A below, or on the specific date(s) in Section IV.B below, are true, accurate, and complete:

Note: Enter EITHER a Time Period OR Specific Date(s) for each certification. This section must be completed. The certification is not valid without documentation date(s).

A. Time Period: From _____ to _____
*Start Date** *End Date**

OR

B. Specific Dates: 01/25/12 _____ _____ _____ _____ _____ _____ _____
*Date 1** *Date 2** *Date 3** *Date 4** *Date 5** *Date 6** *Date 7** *Date 8**

**The Time Period option may only be used when the "Submittal Type" is 'Update to Permit Application' and there are multiple uncertified submittals; or a submittal package has multiple dates recorded in the documentation. Do not use the Time Period option if the "Submittal Type" is 'Other.'*

Signature: _____ Signature Date: JAN 24/12

Title: General Manager

Attachment A
FCCU3 Deviations from Emission Limits

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment A - FCCU3 Deviations for July 1, 2011 through December 31, 2011

FCCU3 - Belco Scrubber AMP Deviations

Start Time	End Time	Duration, Hrs	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0		Deviations as a percent of Regenerator Operating Hours		0.0%	
Other Known Causes		0					
Other Unknown Causes		0					

FCCU3 - Belco Bypass Stack CO Deviations (>500 ppmv CO)

Start Time	End Time	Duration, Hours	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0		Deviations as a percent of Bypass Stack Operating Hours		0.00%	
Other Known Causes		0					
Other Unknown Causes		0					

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment A - FCCU3 Deviations for July 1, 2011 through December 31, 2011

FCCU3 - Belco Bypass Stack Opacity Deviations (>30% Opacity)

Start Time	End Time	Duration, minutes	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0		Deviations as a percent of Bypass Stack Operating Hours		0.0%	
Other Known Causes		0					
Other Unknown Causes		0					

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment A - FCCU3 Deviations for July 1, 2011 through December 31, 2011

FCCU3 - Hours of Operation During the Reporting Period

Belco	4417	hours	
Bypass Stack	0	hours	
Regenerator	4417	hours	

FCCU3 - Belco Scrubber CO Deviations (>500 ppmv CO)

Start Time	End Time	Duration, Hrs	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0					
Other Known Causes		0					
Other Unknown Causes		0					

Deviations as a percent of Regenerator Operating Hours	0.0%

Attachment B
Analyzer Downtime

MOTIVA Enterprises, LLC - Port Arthur Refinery
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment B - Analyzer Downtime Summary for July 1, 2011 through December 31, 2011

Unit	Location	Analyte	Analyzer Information	Start	End	Duration, hours	Percent Online	Cause	Action
FCCU3	Belco Scrubber	NOX	Siemens Ultramat 6 NOX	N/A	N/A	0.0	100.0%	N/A	N/A
FCCU3	Belco Scrubber	CO	Siemens Ultramat 6	N/A	N/A	0.0	100.0%	N/A	N/A
FCCU3	Belco Scrubber	O2	Siemens Oxymat 6	8/12/11 6:00	8/14/11 6:00	48.0	98.9%	Did not calibrate correctly on Saturday & Sunday	Re-Calibrated on Monday
FCCU3	Bypass	CO	Horiba Siemens Ultramat 6	10/15/11 6:00	10/16/11 8:00	26.0	Bypass was not used during this time	Chiller on Instrument Housing Malfunction	Repaired Chiller
FCCU3	Bypass	O2	Siemens Oxymat 6	10/15/11 6:00	10/16/11 8:00	26.0	Bypass was not used during this time	Chiller on Instrument Housing Malfunction	Repaired Chiller
TGTU1	Incinerator	O2	Hartmann & Braun Magnos 6	10/30/2011 6:00	10/31/2011 8:00	26.0	99.4%	Did not calibrate correctly	Re-Calibrated
TGTU2	Incinerator	O2	Hartmann & Braun Magnos 6	11/14/11 8:00	11/14/11 9:00	1.0	99.86%	Unknown Causes	Corrected
TGTU2	Incinerator	O2	Hartmann & Braun Magnos 6	7/29/11 1:00	7/29/11 5:00	4.0		Malfunction	Corrected Malfunction
TGTU2	Incinerator	O2	Hartmann & Braun Magnos 6	7/29/11 9:00	7/29/11 10:00	1.0		Malfunction	Corrected Malfunction
TGTU1	Incinerator	SO2	Hartman & Braun Radas 2	N/A	N/A	0.0	100.0%	N/A	N/A
TGTU2	Incinerator	SO2	Hartman & Braun Radas 2	7/29/11 1:00	7/29/11 5:00	4.0	99.82%	Malfunction	Corrected Malfunction
TGTU2	Incinerator	SO2	Hartman & Braun Radas 2	7/29/11 9:00	7/29/11 10:00	1.0		Malfunction	Corrected Malfunction
TGTU2	Incinerator	SO2	Hartman & Braun Radas 2	7/31/11 18:00	7/31/11 19:00	1.0		Malfunction	Corrected Malfunction
TGTU2	Incinerator	SO2	Hartman & Braun Radas 2	10/18/11 11:00	10/18/11 12:00	1.0		Unknown Causes	Corrected
TGTU2	Incinerator	SO2	Hartman & Braun Radas 2	11/14/11 8:00	11/14/11 9:00	1.0		Unknown Causes	Corrected

MOTIVA Enterprises, LLC - Port Arthur Refinery
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment B - Analyzer Downtime Summary for July 1, 2011 through December 31, 2011

Unit	Location	Analyte	Analyzer Information	Start	End	Duration, hours	Percent Online	Cause	Action
Unit	**Location**	**Analyte**	**Analyzer Information**	**Start**	**End**	**Duration, Minutes**	**Percent Online**	**Cause**	**Action**
FCCU3	Bypass	Opacity	USI Model 500C	10/15/11 6:00	10/16/11 8:00	26.0	Bypass was not used during this time	Chiller on Instrument Housing Malfunction	Repaired Chiller
FCCU3	Bypass	Opacity	USI Model 500C	12/18/11 6:00	12/19/11 6:00	24.0		Did not calibrate correctly	Re-Calibrated

NOTE: The percent online is based upon the operating hours of the device on which the CEMs or COMs is installed.

Attachment C
Certification or Audit for COMS and CEMS

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Latest Certification or Audit for COMS or CEMS

Unit	Location	Parameter	Analyzer	Date of Last RATA/CGA
FCCU3	Belco Scrubbber	CO	Siemens Ultramat 6	RATA 5/16/11; CGA: 8/11/2011
FCCU3	Belco Scrubbber	O2	Siemens Oxymat 6	RATA 5/16/11; CGA: 8/11/2011
FCCU3	Belco Scrubbber	SO2	Siemens Ultramat 6	RATA 5/16/11; CGA: 8/11/2011
FCCU3	Bypass Stack	CO	Siemens Ultramat 6	CGA: 8/22/2011
FCCU3	Bypass Stack	O2	Siemens Ultramat 6	CGA: 8/22/2011
FCCU3	Bypass Stack	Opacity	USI 560C	CGA: 8/22/2011
TGTU1	Incinerator Stack	SO2	Hartman and Braun Radas 2	RATA 2/22/11; CGA: 8/16/2011
TGTU1	Incinerator Stack	O2	Hartman and Braun Magnox 6	RATA 2/22/11; CGA: 8/16/2011
TGTU2	Incinerator Stack	SO2	Hartman and Braun Radas 2	RATA 2/22/11; CGA: 8/17/2011
TGTU2	Incinerator Stack	O2	Hartman and Braun Magnox 6	RATA 2/22/11; CGA: 8/17/2011

Attachment D
CRU4 Deviations from Emissions Limits

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment D - CRU4 Deviations for July 1, 2011 through December 31, 2011

CRU4 - Hours of Operation During the Reporting Period

CRU4	4306	hours	

CRU4 - Deviations from pH limits (Standard is pH > 7.0)

Start Time	End Time	Duration, Hrs	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0					
Other Known Causes		0					
Other Unknown Causes		0					

Deviations as a percent of CRU4 Operating Hours	0.0%

* From July 17, 2011 to July 22, 2011 the CRU was down for maintenance and did not meet pH limit, but is not a deviation since vapor was not being sent to the scrubbe during this time

CRU4 - Deviations from HCl limits (Standard is ≤ 10 ppm-v dry, 3% O2)

Start Time	End Time	Duration, Hrs	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
NA	NA	NA	NA	NA	NA	NA	NA
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0					
Other Known Causes		0					
Other Unknown Causes		0					

Deviations as a percent of CRU4 Operating Hours	0.0%

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment D - CRU4 Deviations for July 1, 2011 through December 31, 2011

CRU4 - Deviations from Caustic Scrubber Liquid/Gas Ratio Limit

Start Time	End Time	Duration, Hrs	Description	Regenerator Status	Corrective Action	Category	SSMP Followed?
12/13/2011 9:00	12/15/2011 5:00	45	Startup of CRU after maintenance, pH was maintainded during this time period and the HCl was below 10 ppm standard	active	Follow SSMP for startup	startup	Yes

Startup	45
Shutdown	0
Control Equipment Problems	0
Process Problems	0
Other Known Causes	0
Other Unknown Causes	0

Deviations as a percent of CRU4 Operating Hours	1.0%

Attachment E
SRU/TGTU Deviations from Emission Limits

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment E - Incinerator Deviations for July 1, 2011 through December 31, 2011

TGTU - Hours of Operation During the Reporting Period

TGTU1	4417	hours	
TGTU2	4417	hours	

TGTU1-Chamber temp Deviations

Start Time	End Time	Duration, Hrs	Description	Incinerator Status	Corrective Action	Category	SSMP Followed?
N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Startup		0.00					
Shutdown		0.00					
Control Equipment Problems		0.00					
Process Problems		0.00		**Deviations as a percent of TGTU1 Operating Hours**		0.0%	
Other Known Causes		0.00					
Other Unknown Causes		0.00					

TGTU2 -Chamber temp Deviations

Start Time	End Time	Duration, Hrs	Description	Incinerator Status	Corrective Action	Category	SSMP Followed?
N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Startup		0.00					
Shutdown		0.00					
Control Equipment Problems		0.00					
Process Problems		0.00		**Deviations as a percent of TGTU2 Operating Hours**		0.0%	
Other Known Causes		0.00					
Other Unknown Causes		0.00					

MOTIVA Enterprises, LLC - PAR
NESHAP Subpart UUU Refinery MACT II Semiannual Report
Attachment E - SRU/TGTU Deviations for July 1, 2011 through December 31, 2011

TGTU - Hours of Operation During the Reporting Period

TGTU1	4417	hours	
TGTU2	4417	hours	

TGTU1 - Deviations from 12-hour average SO2 limit (250 ppm-v)

Start Time	End Time	Duration, Hrs	Description	Incinerator Status	Corrective Action	Category	SSMP Followed?
N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0					
Other Known Causes		0					
Other Unknown Causes		0					

Deviations as a percent of TGTU1 Operating Hours	0.0%

TGTU2 - Deviations from 12-hour average SO2 limit (250 ppm-v)

Start Time	End Time	Duration, Hrs	Description	Incinerator Status	Corrective Action	Category	SSMP Followed?
N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Startup		0					
Shutdown		0					
Control Equipment Problems		0					
Process Problems		0					
Other Known Causes		0					
Other Unknown Causes		0					

Deviations as a percent of TGTU2 Operating Hours	0.0%