



State of Ohio Environmental Protection Agency

Northwest District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Allen County
Lima Refining Company
Premise #0302020012
Notice of Violation/HPF
Violation types GC7 and M3A

May 7, 2010

CERTIFIED MAIL

Mr. Roy Warnock, Vice President & General Manager
Lima Refining Company
1150 South Metcalf Street
Lima, Ohio 45804-1145

Dear Mr. Warnock:

The Fourth Quarter 2009 Excess Emissions Report (EER) submitted by Lima Refining Company on February 1, 2010, has been reviewed by the Division of Air Pollution Control/Northwest District Office (DAPC/NWDO) and our Central Office (DAPC/CO). Data summaries in the EER indicate emissions units with continuous emission monitor (CEM) data capture less than the minimum acceptable 95 percent and excess emissions greater than five percent of source operating time during the quarter for the following:

1. Fluid Catalytic Cracker/Carbon Monoxide (FCC/CO) Boiler, Emissions Unit P010:
 - a. 90.70 percent data capture (9.30 percent CEM down time) for the sulfur dioxide CEM which is located on the regenerator flue gas outlet prior to the CO boiler; and
 - b. Emissions of carbon monoxide from the regenerator flue gas outlet exceeded the limitation of 500 parts per million at zero percent oxygen, as a block hourly average for 20.82 percent of total source operating time.
2. Claus 1 and Claus 2 Sulfur Recovery Units, and Butane/Butylene Treater, Emissions Units P040 and P041: emissions of sulfur dioxide from the tail gas incinerator exhaust exceeded the limitation of 250 parts per million (dry basis) at zero percent excess air for 21.84 percent of total source operating time.

The excessive CEM down time and excess emissions are violations of the following:

Item No. Referenced Above	Permit Terms/Rule Violated	Permit No./Effective Date
1.b	40 CFR 63.1565(a)(1) and Table 8 of 40 CFR, Part 63, Subpart UUU	Applicable limit to be incorporated into Title V renewal permit
2.	Title V permit, Part III, term A.I.1 and 40 CFR 60.104(a)(2)(i)	Title V modification effective 11/28/05
1.b and 2.	Ohio Revised Code 3704.05.	Not Applicable



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In addition, DAPC/NWDO is informing the company that the CEM data capture noted in item No. 1.a above for the regenerator flue gas outlet is less than the minimum acceptable 95 percent. However, this is not considered a violation, since this emissions limitation for sulfur dioxide will not be established for the regenerator flue gas until a later date, per the federal consent decree addendum dated November 20, 2007.

Attached is a table that shows the primary causes, date, duration and corrective action for each CEM down time and excess emission occurrence.

Since the duration of the excess carbon monoxide and sulfur dioxide emissions for emissions unit P010, P040 and P041 represent a significant amount of operating time during the Fourth Quarter 2009, please submit a written response by June 11, 2010. Include in the response an explanation for how the company will improve operations to minimize the excess emissions for the FCC/CO boiler, Claus 1 and Claus 2 Sulfur Recovery Units, and Butane/Butylene Treater.

Please note, however, that submittal of the written response does not preclude the Director from seeking civil penalties pursuant to ORC section 3704.06 for these violations. The decision on whether to pursue or decline to pursue such penalties regarding this matter is dependent on several factors, one of which is the company's future compliance with applicable Ohio EPA requirements.

If you have any questions, feel free to contact me at (419) 373-3128.

Sincerely,



Jeffrey A. Skebba
Environmental Specialist
Division of Air Pollution Control

Enclosure

/llr

pc: Lisa Holscher, U.S. EPA-Region V
Mary McAuliffe, U.S. EPA-Region V
Tom Kalman-DAPC/CO
Don Waltermeyer - DAPC/NWDO
DAPC-NWDO File ↓
NWDO Follow-up File
Certified Receipt Number 7007 2560 0000 4479 2643

Item No. Referenced Above	Primary Cause	Date	Duration (Minutes)	Corrective Action
1.a	Partial plugging of sample line	11/23/09 to 11/25/09	2,451	Changed to spare sample line
1.a	Calibration drift greater than 10%	12/7/09 to 12/9/09	2,092	Manual calibration
1.a	Plugging of sample line	12/21/09 to 12/22/09	958	Cleared sample line, manual calibration
1.b	Low FCC production rate	10/1/09 to 10/5/09	6,360	Increased air flow to attempt control of slide valve
1.b	Low FCC production rate	11/23/09 to 11/25/09, and 11/29/09	7,620	Increased production rate
1.b	Reduced FCC feed rate while preparing for ultraformer compressor shut down and CO boiler expansion joint repair	12/6/09 to 12/10/09	2,400	Completed expansion joint repair and increased FCC feed rate
1.b	Reduced FCC feed rate due to adjacent 3rd party hydrogen plant shut down	12/15/09 to 12/16/09	840	Lined out steam system and increased FCC feed rate after hydrogen plant startup
2	Tail gas treatment unit (TGTU) tripped off on high reactor temperature, switched to natural gas firing in Claus 2 unit, which caused excess air and excess sulfur dioxide in TGTU	10/5/2009	240	Restarted TGTU
2	TGTU start up with natural gas, sulfur built up on metal surfaces	11/11/09 to 11/12/09	1,140	Not needed, emissions returned to normal

Item No. Referenced Above	Primary Cause	Date	Duration (Minutes)	Corrective Action
2	Sulfur recovery unit start up after maintenance turnaround - bypass of sulfur pit emissions, high oxygen level at low operating rate, burning off sulfur dioxide in catalyst beds, TGTU tripped off, feed to FCC had more light ends than normal, Coker unit shut down affected operations, safety issue prevented TGTU from operating until Coker unit started up	11/16/09 to 11/24/09	11,580	TGTU started up
2	Claus 1 unit hydrogen sulfide analyzer had liquid droplets in sample line deposited onto optical windows of sample cell	11/28/09 to 11/29/09, and 12/11/09 to 12/12/2009	2,220	Lined process out, replaced optical windows and cleaned internal parts of analyzer
2	Claus 1 unit low acid gas feed, sulfur pit operational problem caused TGTU bypass	12/15/09 to 12/16/09	1,620	Lined out Claus 1 unit and TGTU started up
2	Claus 1 unit shut down, and low acid gas feed rate	12/19/09 to 12/20/09	540	Lined out TGTU, cleaned and adjusted fire eyes, restarted Claus 1 unit