



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: Allen County
Lima Refining Company
Premise #0302020012
Notice of Violation - HPV
M3A, M4C

March 28, 2011

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 2010 Excess Emissions Report (EER) submitted by Lima Refining Company on January 28, 2011, 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 demonstrate 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. East Side Refinery Fuel Gas System, which supplies fuel gas to the Riley Boiler, FCC Furnace, CE Boiler, Coker Furnace and Process Heater for the Catalytic Gasoline Hydrotreating Unit - Emissions Units B009, B016, B026, B027 and B028 respectively:

89.84 percent data capture (10.16 percent CEM down time) for the hydrogen sulfide CEM used to measure refinery fuel gas quality.

2. Fluid Catalytic Cracker (FCC), Emissions Unit P010:
 - a. opacity from the electrostatic precipitator exhaust stack exceeded the limitation of 20 percent as a six-minute average for 6.26 percent of total source operating time; and
 - b. 70.74 percent data capture (29.26 percent CEM down time) for the sulfur dioxide CEM.

3. Claus 1 and Claus 2 Sulfur Recovery Units, and Butane/Butylene Treater – Emissions Units P040 and P041 respectively:
 - a. emissions of sulfur dioxide from the tail gas incinerator exhaust exceeded the limitation of 100 pounds per 1,000 pounds of sulfur processed for 17.00 percent of total source operating time; and
 - b. emissions of sulfur dioxide from the tail gas incinerator exhaust exceeded the limitation of 250 parts per million by volume (dry basis) at 0 percent excess air for 6.13 percent of total source operating time.

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

Item No. Above	Permit Terms/Rule Violated	Permit No./Effective Date
1.	Part III, A.III.2 and A.III.4 for B009, B016	03-17422/6-3-08
	Part III, A.III.1 and A.III.3 for B026, B027	Title V permit/11-28-05
	Part III, A.III.2 and A.III.4 for B028	Title V permit/11-28-05
2.a	Part III, A.I.1	Title V permit/11-28-05
2.b	Part III, A.III.5	Title V permit/11-28-05
3.a and 3.b	Part III, A.I.1	Title V permit/11-28-05
1., 2.a, 2.b, 3.a and 3.b	Ohio Revised Code 3704.05.	Not Applicable

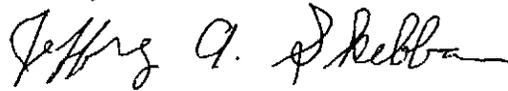
The table attached to this letter shows the date, duration, primary cause and corrective action for the majority of reported CEM down time and excess emissions. Since the duration of the excess opacity for emissions unit P010, and excess sulfur dioxide for P040 and P041 represent a significant amount of operating time during the Fourth Quarter 2010, please submit a written response by April 29, 2011. Include in the response an explanation for how the company will improve operations to minimize the excess emissions for the FCC, Claus 1 and Claus 2 Sulfur Recovery Units, and Butane/Butylene Treater.

Please be advised that submission of information to respond to this letter does not constitute a waiver of the Ohio EPA's authority to seek civil penalties pursuant to ORC Section 3704.06. The Ohio EPA will make a decision whether to pursue such penalties regarding this matter a later date.

Mr. Roy Warnock, Vice President & General Manager
March 28, 2011
Page 3

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

/llr

Enclosure

pc: William MacDowell, U.S. EPA – Region V
Tom Kalman - DAPC/CO
~~DAPC/NWDO:File~~
Certified Receipt Number 7009 1410 0001 1840 2390

ec: Jennifer Jolliff – DAPC/NWDO

Item No. Above	Date	Duration (minutes)	Primary Cause	Corrective Action
1.	10/21/10 to 10/29/10	11,718	Analyzer exhaust line blocked in to FCC flare during work to re-route exhaust line to NESHAPS compressor header system	New exhaust line to NESHAPS compressor header system installed
1.	11/4/10 to 11/6/10	1,623	Loss of instrument air flow during maintenance turnaround	Restored instrument air flow after maintenance turnaround
2.a	11/25/10 to 12/2/10	4,590 (non-exempt)	Extended start-up period of fluid catalytic cracker after maintenance turnaround	Lowered pressure in regenerator to increase cyclone velocity and lowered the catalyst level in regenerator
2.b	10/2/10 to 10/5/10	4,738	Tube leak on carbon monoxide boiler, excess water caused sulfur dioxide to be scrubbed out	Blocked in analyzer to protect instrumentation
2.b	10/5/10 to 10/15/10	14,013	Tube leak on carbon monoxide boiler worsened, routed all effluent to bypass stack	Carbon monoxide boiler permanently shut down as part of overall facility plan and maintenance turnaround that began 10/15/10. New Nebraska boiler brought on-line
2.b	12/11/10 to 12/12/10	1,469	Analyzer out of control	Conducted manual calibration
2.b	12/29/10 to 12/30/10	876	High moisture content in stack and analyzer filter coated with dust	Replaced analyzer filter and blew lines with air to remove moisture
3.a	10/27/10 to 11/10/10	20,160	Excessive corrosion of tail gas treatment unit outlet piping probably caused by condensation of sulfur in piping	Installed thicker walled piping and increased temperature of steam tracing to prevent condensation of sulfur in piping
3.b	10/16/10 to 10/17/10	1,140	Shut down of Claus 2 sulfur recovery unit for maintenance turnaround	None required
3.b	10/23/10 to 10/26/10	900	Low process flow rate and low process temperature in Claus 1 sulfur recovery unit	Increased demister set point, adjusted controller tuning and lowered the air pressure setting

Item No. Above	Date	Duration (minutes)	Primary Cause	Corrective Action
3.b	10/27/10	120	Sour water stripper control tap plugged	De-pressured the tower to the acid gas flare and shut down the sour water stripper temporarily to clear the pressure tap
3.b	10/27/10 to 10/29/10	1,740	Claus1 sulfur recovery unit and tail gas treatment unit (TGTU) shut down. Interlocks on the diverter valves forced Claus 1 tail gas to bypass the TGTU while flaring acid gas.	Changed position of diverter valves to route the tail gas to the TGTU.
3.b	11/7/10 to 11/9/10	1,800	Start-up of Claus 1 sulfur recovery unit and TGTU following maintenance turnaround	None required
3.b	11/28/10 11/29/10 12/12/10	1,560	TGTU amine system was saturated due to false indication of adequate air to the Claus 2 sulfur pit	Process engineer provided spreadsheet to operators and supervisors to maintain proper air ratios