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VIA Certified Mail

April 3, 2014

Mr. Brian Carley, Environmental Quality Specialist  
Air Quality Division  
Michigan Department of Environmental Quality  
301 E. Louis B. Glick Highway  
Jackson, MI 49201-1556



Re: DTE Electric Company, Monroe Power Plant's Response to MDEQ-AQD Violation Notice dated March 14, 2014 for Stack Heights on EU-LIMESTONE & EU-HYDRATEDLIME

Dear Mr. Carley:

Monroe Power Plant submits the following response to MDEQ's violation notice referenced above. It cites that stacks for EU-LIMESTONE & EU-HYDRATEDLIME do not meet the vertical minimum discharge height above ground specified in the current permit, PTI 27-13. Also, that EU-LIMESTONE is configured with three vents, instead of one combined stack for the three dust collectors. The actual as-built stack configurations for the 2 emission units were discovered during the Renewable Operating Permit (ROP) renewal application process and self-reported to MDEQ-ADQ on February 10 and March 3, 2014, respectively.

As a result, the ROP renewal application already contained a compliance plan to resolve this issue, AI 1-1 "ROP Compliance Plan" attached. The plan proposed either raising the stacks if feasible or conducting appropriate modeling, demonstrating acceptable emissions and submitting a permit to install (PTI) application at the current configuration and as-built stack heights by August 1, 2014.

DTE Energy is working toward remedying the stack height situations and remains committed to meeting compliance with all permit limits. While the actual stack heights do not conform to the PTI, the sources' impact at current stack heights would not exceed ambient air quality standards because the combination of the two sources only emit 2 pounds per year of particulate near the middle of the site. Nonetheless, until the final solution is achieved, EU-LIMESTONE dust collectors are venting inside the reagent prep building. Venting to ambient air will resume after stack height conforms to the permit.

## **Background**

On December 10, 2010, PTI 93-09 was issued for the overall pollution control project to install selective catalytic reduction (SCR) and flue gas desulfurization (FGD) devices on Units 3 & 4. Among the other various emission units installed at that time, EU-LIMESTONE & EU-HYDRATEDLIME were installed to support the FGD process. During the application process, modeling was conducted on all sources, including EU-LIMESTONE & EU-HYDRATEDLIME. A modeling height of 145 feet appeared in the AERMOD files. Design drawing #34LH-001-01 for EU-LIMESTONE indicates the planned discharge height was to be 115 feet (discharge elevation = 695' 8" minus ground elevation = 580' 8"). The 145 ft discharge elevation in AERMOD may have come from assuming the Limestone dust collector vents went through the reagent prep building roof, which is 138 feet above grade, then having a 7 foot stack. It should be noted that during the PTI review process, on the 7-21-2009 PTI draft, DTE Energy and MDEQ acknowledged that there were three (3) individual exhaust vents, not three dust collectors venting through one exhaust. However, that detail did not make it to the final permit. Included in this letter you will find excerpts from the 2009 first preliminary draft of PTI 93-09.

## **Status**

DTE Electric Company is evaluating several options to resolve this issue by August 1, 2014, including but not limited to: raising the stack heights if feasible, re-permitting to as-built stack heights, or discontinuing ambient venting, etc. For instance, to submit a permit to install (PTI) application at the current as-built configuration might require appropriate modeling for emission impacts. DTE Energy has begun conversations with MDEQ staff to agree on modeling details for the two sources, EU-LIMESTONE & EU-HYDRATEDLIME. Shortly thereafter, the PTI application can begin and should be completed well before the August 1, 2014 timeline proposed in the ROP compliance plan.

In any case, DTE Energy believes the two emission sources do not adversely impact ambient air quality standards because they only emit an infinitesimal portion of total site releases (at only 0.004 gr/dscf each and with actual 2013 emissions of 2 pounds combined) and the stacks are located near the middle of the site.

DTE Energy is committed to meeting regulatory compliance. The large investments made by the company in pollution control equipment signify our level of commitment to achieving significant emissions reductions and meeting new regulatory standards. This unfortunate situation should not result in penalty to the company compared to the overall emissions reductions now being achieved.

In the big picture, the two emission units are part of the overall pollution control processes involving the installation of selective catalytic reduction (SCR) and flue gas desulfurization (FGD) devices on Units 1 through 4. The SCRs and FGDs are already operational on units 1, 3, and 4 and are successfully reducing overall emissions of all pollutants by 90%. Specifically, particulate matter emissions on each of the three (3) FGD controlled boilers are reduced by over

400 tons per year, per unit. That is over 1,200 tons of PM reductions compared to 2 pounds of actual PM from these two emission units.

If you have any questions on the information contained herein or would like further information, please contact Mr. Andrew Fadanelli at (313) 235-6384 or [fadanelli@gteenergy.com](mailto:fadanelli@gteenergy.com), or Ms. Kelly Johnson at (734) 384-2560 or [johnsonk@gteenergy.com](mailto:johnsonk@gteenergy.com).

Sincerely,



Paul Tracy  
Plant Manager – Monroe Power Plant

Cc:	S. Miller – MDEQ Jackson	M. Solo – DTE Energy
	S. Boyd – DTE Energy	A. Fadanelli – DTE Energy
	B. Marietta – DTE Energy	K. Johnson – Monroe Power Plant
	B. Rice – Monroe Power Plant	
	File	



Michigan Department of Environmental Quality - Air Quality Division

**RENEWABLE OPERATING PERMIT APPLICATION****AI-001: ADDITIONAL INFORMATION**

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

Form Type

AI-001

SRN

B2816

1. Operator's Additional Information ID

AI 1-1 "ROP Compliance Plan"

## Additional Information

2. Is This Information Confidential?

☐ Yes ☒ No

3. Narrative

**Section 1: "Compliance Plan/Schedule" for material handling equipment at the Monroe Power Plant****Item 1:**

For SV-26A servicing EU-LIMESTONE-S1 in PTI 27-13, the minimum stack height above ground in special condition VIII.1 is 145 feet and the discharge is stated to be vertically upwards. The current height above ground was found to be significantly less than 145 feet and the current discharge is horizontal. This stack represents 3 separate vents.

Compliance Plan / Schedule: DTE Electric Company will resolve this discrepancy by simultaneously investigating two options and implementing the most feasible of the two options by August 1<sup>st</sup>, 2014:

- 1) Determine the structural and safety concerns in raising the three dust collector stacks to 145 feet,
- 2) Run screening models on the dust collectors at the current height and if acceptable ambient air quality standards are maintained per MDEQ-AQD approval, then apply for a PTI to change the stack height to 110 feet.

**Item 2:**

For SV-26B servicing EU-HYDRATEDLIME-S1 in PTI 27-13, the minimum stack height above ground in special condition VIII.1 is 145 feet and the discharge is stated to be vertically upwards. The current height above ground was found to be significantly less than 145 feet and the current discharge is horizontal. This stack represents 2 separate vents.

Compliance Plan / Schedule: By August 1<sup>st</sup> 2014, DTE Electric Company will resolve this discrepancy by simultaneously investigating two options and implementing the most feasible of the two options:

- 1) Determine the structural and safety concerns in raising the two dust collector stacks to 145 feet,
- 2) Run screening models on the dust collectors at the current height and if acceptable ambient air quality standards are maintained per MDEQ-AQD approval, then apply for a PTI to change the stack height to 85 feet.