



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

**MAY 29 2014**

REPLY TO THE ATTENTION OF

Mr. Andrew Hall  
Division of Air Pollution Control  
Ohio Environmental Protection Agency  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

Dear Mr. Hall:

The U.S. Environmental Protection Agency, Region 5, has reviewed the draft Prevention of Significant Deterioration (PSD) construction permit (permit number P0116496) for Linde Gas North America, LLC (Linde Gas) in Lima, Ohio. The proposed permit would allow construction of a second hydrogen plant (Linde Lima 3) at Linde Gas's existing Lima site which is adjacent to the Lima Refining Company. This permit reflects major levels for greenhouse gases. To ensure that the source meets Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

1. The permit contains several case-by-case "source design" Best Available Technology (BAT) limits under which Linde Gas is required to install an emission unit only "designed to meet" certain emission rates but the permit does not require any way to assure compliance with those BAT limits. The permit contains these "source design" BAT limits for: (1) Nitrogen Oxides (NO<sub>x</sub>), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), particulate matter smaller than 10 microns, and sulfur dioxide, for the Reformer Heater, and (2) CO and VOCs for the De-aerator Vent. EPA disagrees with the methodology for "source design" permitting because such limits are not practically enforceable because they fail to provide for actual emission limits, testing, monitoring, recordkeeping or reporting. Under such permits there is no way to assure ongoing compliance with the BAT limit. For example, page 14 of the draft permit sets forth a "source design" BAT limit requiring the Reformer Heater to be designed to meet 0.033 pound of NO<sub>x</sub> per million Btu, but the permit does not require any means to assure that the Reformer Heater is actually operated at or below the 0.033 pound per million Btu emission rate. The permit does require NO<sub>x</sub> emission testing for the Reformer Heater, but that does not assure ongoing compliance with the BAT limit. The Reform Heater's 0.033 pound per million Btu NO<sub>x</sub> emission rate equates to 37.44 tons per year NO<sub>x</sub> emissions, and that is close to the 40 tons per year NO<sub>x</sub> significant emission rate. Without a practically enforceable limit, the Reform Heater could possibly trigger the 40

typy NOx significant emission rate in the future without realizing it, thus triggering PSD requirements for NOx. The permit should be revised to assure that the source is actually operated in a way that meets the limit.

2. The permit application (page No. 6-6) shows the BAT determination for the Reformer Heater as the use of ultra-low NOx burners along with the 0.033 pound of NOx per million Btu emission rate. The permit does not specifically require the use of ultra-low NOx burners. Please add the specific requirement to use ultra-low NOx burners to the permit.

We appreciate the opportunity to provide comments on this draft permit. If you have any questions, please feel free to contact me or have your staff contact Rich Angelbeck, of my staff, at (312) 886-9698.

Sincerely,



Genevieve Damico

Chief

Air Permits Section