



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

**AUG 23 2013**

Bob Bernoteit  
Bureau of Air  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Springfield, Illinois 62794-9276

Dear Mr. Bernoteit:

The U.S. Environmental Protection Agency has the following comments on the draft renewal Clean Air Act Permit Program permit number 95090027 for Winnetka Electric Plant, located at 725 Tower Road, Winnetka, Cook County, Illinois (draft permit).<sup>1</sup> EPA has previously discussed these comments with you and other representatives of the Illinois Environmental Protection Agency (IEPA).

- 1. It is not clear from either the draft permit or the statement of basis (SOB) what changes were addressed by Construction Permits 89080012 and 92090051, which were issued to the source for changes to boilers BLR #5 and BLR #7, and whether these changes resulted in modifications to boilers BLR #5 and BLR #7, as defined at 40 C.F.R. § 60.14.**

In discussions with IEPA, we understand that the above mentioned changes were related to conversion of the affected units from coal-fired units to gaseous and liquid-fueled units. However, such a discussion is not included in the SOB or draft permit. Additionally, neither the draft permit nor the SOB explains why the changes would not be classified as modifications to the affected units, as defined at 40 C.F.R. §§ 60.14, 60.40da, 60.40b, and/or 60.40c, as applicable. Please provide this explanation in either the draft permit or the SOB.

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<sup>1</sup> The source includes four boilers: BLR #4, which is rated at 145 million British thermal units per hour (mmBtu/hr), was initially constructed in 1958 and fires both natural gas and fuel oil. BLR #5, which is rated at 62 mmBtu/hr, was initially constructed in 1938 and fires both natural gas and fuel oil. BLR #7, which is rated at 102 mmBtu/hr, was initially constructed in 1948 and fires both natural gas and fuel oil. BLR #8, which is rated at 174 mmBtu/hr, was initially constructed in 1963 and fires natural gas only. The source also includes two diesel-fired internal combustion engines: Diesel #8, rated at 2,408 kilowatts (kW) and constructed in 1978, and Diesel #9, rated at 2,408 kW and constructed in 1978.

**2. The permit record does not demonstrate that the periodic monitoring provisions in the draft permit are adequate to assure continuous compliance with the numerical emissions limits for particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO<sub>2</sub>), and carbon monoxide (CO).**

The draft permit includes hourly and annual numerical emissions limits for PM, NOx, SO<sub>2</sub> and CO in the units of pounds per hour (lb/hr), pounds per million British thermal units (lb/mmBtu), tons per year (tpy) and parts per million (ppm) in conditions 4.2.2(b)(i)(A) and 4.2.4(b)(iii)(A)(I) (PM limits), conditions 4.2.2(e)(i)(B) and 4.2.2(e)(i)(E) (NOx limits), conditions 4.2.2(c)(i)(A) and 4.2.4(b)(iii)(C)(I) (SO<sub>2</sub> limits), and condition 4.2.2(d)(i)(A) (CO limits). These emissions limits originate from Construction Permits 89080012 and 92090051 and Illinois' State Implementation Plan. However, neither the draft permit nor the SOB explains how the source will quantify emissions to demonstrate compliance with these emissions limits. In addition, it is not clear from either the draft permit or the SOB how the permit's requirements to maintain records of emissions "with supporting calculations" and to conduct monthly inspections of the emissions units will assure compliance with the numerical emissions limits. Please either show, based on actual historical emissions data, that actual emissions from the affected units are expected to be significantly lower than the applicable emissions limits regardless of whether the affected units burn diesel fuel or natural gas, or add emissions testing requirements to the permit to ensure actual quantification of emissions. Note that verification of emissions from these units is especially critical because of the age of the units and the fact that neither of the affected units is subject to a national emissions standard.<sup>2</sup>

**3. Other Comments**

- a. Condition 4.2.2(a)(ii) requires the source to perform observations for opacity on the boilers in accordance with EPA Method 22 at least once every calendar year, followed by corrective action and follow-up Method 22 observations if visible emissions are observed, and subsequent EPA Method 9 observations if visible emissions continue. Because some of the boilers (i.e., Boilers BLR #4, BLR #5 and BLR #7) are permitted to fire both natural gas and fuel oil, EPA suggests that the visible emissions observations be conducted when the boilers fire fuel oil since, under normal operation, higher opacity emissions would be expected when the boilers fire fuel oil than when they fire natural gas.
- b. Condition 4.1.2(a)(ii)(A) requires the source to perform observations for opacity on each engine in accordance with EPA Method 9 at least once every calendar year. However, the SOB explains that EPA Method 22 observations must be performed annually for these units, and that EPA Method 9 observations are only performed if

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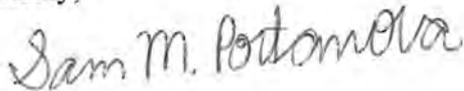
<sup>2</sup> We note from recent discussions with IEPA that the affected units are classified as peaking units under Federal Energy Regulatory Commission (FERC) guidelines; however, since the permit record does not identify such information as the basis for any of the monitoring provisions in the permit, and it does not explain how the units' classification as peaking units assures compliance with the short term and/or annual emissions limits, this comment still applies.

required by IEPA. See SOB at 13. We understand from discussions with the permit writer that the statement in the SOB is incorrect. Please clarify this discrepancy.

- c. Please correct a numbering error in condition 4.2.2(e)(ii). The draft permit includes two conditions numbered 4.2.2(e)(ii)(A).
- d. Please correct a numbering error in condition 4.2.3(c). The draft permit includes two conditions numbered 4.2.3(c).

EPA provides these comments to help ensure that the permit complies with all federal requirements and provides all necessary information so that it is readily accessible to the public, and that the record provides adequate support for the permit decision. We look forward to working with you to address all of our comments. If you have any questions, please feel free to contact me at (312) 353-4761 or David Ogulei, of my staff, at (312) 353-0987.

Sincerely,



for  
Genevieve Damico  
Chief  
Air Permits Section