



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

MAY 08 2012

REPLY TO THE ATTENTION OF:

Michael E. Hopkins, P.E.  
Assistant Chief, Permitting  
Ohio EPA, Division of Air Pollution Control  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

Dear Mr. Hopkins:

The U.S. Environmental Protection Agency has reviewed the Ohio Environmental Protection Agency's (OEPA) draft Permit to Install for Republic Steel, permit number P0109191, located at 1807 East 28th Street, Lorain, Ohio. To ensure that the source meets Federal 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 application claims netting credits from the idling of the Blast Furnace and Basic Oxygen Furnace (BF/BOF) process and applies those credits toward the installation of an Electric Arc Furnace (EAF), avoiding major New Source Review for all criteria pollutants except for Carbon Monoxide (CO) and Volatile Organic Compounds (VOC). However, Republic Steel wants to retain the ability to restart the BF/BOF process in case economic conditions improve. Under an operational restriction in the permit, while the BF/BOF process is operating, the EAF will be offline, and vice versa.

We do not believe it is valid to allow netting credits to be effectively interchangeable between multiple emissions units. To be creditable in a netting analysis, emission reductions must be federally enforceable. The term "federally enforceable" is defined in the regulations as any limitation or conditions which EPA can enforce, such as any permit requirements established pursuant to 40 C.F.R. § 52.21 or under regulations approved under 40 C.F.R. § 51.18 and 40 C.F.R. § 51.24. (August 7, 1980; 45 FR 52701.) Under Ohio's federally approved Permit to Install program, a major source undergoing modification must include all actual contemporaneous increases and decreases using appropriate baseline emission rates. Without such information, emission limits based on netting credits would not be federally enforceable. The permit as drafted would allow a future EAF shutdown to assume the same netting credits as the BF/BOF idling without undergoing an updated netting analysis containing actual emission reductions data and appropriate baseline emission rates. Therefore, the permit term allowing the BF/BOF to restart while the EAF is shut down, and vice versa,

is not provided for by federal regulations and is not federally enforceable. Furthermore, the permit allows for improper circumvention the Prevention of Significant Deterioration (PSD) regulations by switching between the BF/BOF and the EAF without undergoing PSD review for such operational changes.

For the above reasons, the netting analysis is inconsistent with the requirements of 40 C.F.R. § 52.21.

2. The December 2011 Air Quality Modeling and Additional Impacts Analysis Report notes that the project will trigger PSD air quality analysis requirements for CO and VOC. The document further states that because no air quality model exists to estimate ozone impacts from a single source of VOC, no National Ambient Air Quality Standards analysis was performed. While EPA does not yet have an Appendix W-recommended model for single source ozone analyses, there is still a requirement to evaluate significant VOC emissions impact on ozone. OEPA should consult with Region 5 regarding an appropriate form of analysis in this case.
3. The Wheeling-Pittsburgh Steel facility at Steubenville, Ohio, was issued a permit with a zero opacity requirement for its EAF meltshop. The zero opacity requirement was based on Ohio's federally approved Best Available Control Technology (BACT) rules. Because the same BACT rules apply at Republic Steel, the Republic Steel permit should also require zero opacity at the EAF.
4. The permit application's calculations do not appear to treat Nitrous Oxides (NO<sub>x</sub>) as a precursor of ozone. EPA's 8-hour ozone implementation phase 2 rule (November 29, 2005; 70 FR 71612) requires that NO<sub>x</sub> be considered as an ozone precursor under PSD. One of the elements of that rule is a requirement that the PSD program regulations define the term "significant" for ozone to include 40 tons per year of NO<sub>x</sub>. See 40 C.F.R. § 51.166(b)(23)(i). In accordance with 40 C.F.R. § 51.166(m)(1)(a), a permit application must contain an air quality analysis for each pollutant that a new source would have the potential to emit in significant amounts. The calculations in Republic Steel's permit application should therefore be clarified or revised to show NO<sub>x</sub> as a precursor of ozone.
5. For the year 2008, Republic Steel ranked 28<sup>th</sup> highest in Region 5 for manganese emissions according to data submitted to the Toxic Release Inventory and EPA's 2008 National Emissions Inventory. Although there is no regulatory requirement to do so, OEPA should consider including a review of the air toxic emissions under Ohio's Air Toxic Policy given the suspected emissions of manganese from this facility. We understand OEPA has done such a review in the process of permitting the Wheeling-Pittsburgh Steel facility in Steubenville, Ohio.

We appreciate the opportunity to provide comments on this proposed permit. Please feel free to contact me or Kaushal Gupta, of my staff, at (312) 886-6803 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Damico". The signature is written in black ink and is positioned above the typed name.

Genevieve Damico  
Chief  
Air Permits Section