Illinois Environmental Protection Agency

Notice of Public Comment Period for the
Proposed Issuance of a Construction Permit/PSD Approval to
Washington Mills, Hennepin, Illinois

Washington Mills Electro Minerals, 1801 Buffalo Ave., Niagara Falls New York, has applied to the Illinois EPA for an air pollution control construction permit for another furnace group at its plant northeast of Hennepin on ESK Road. The plant currently has four furnace groups that produce silicon carbide from sand and petroleum coke. This project is considered a major project for emissions of sulfur dioxide (SO_2) and particulate matter (PM) under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

The Illinois EPA has made a preliminary determination to issue a permit for the project. Before making a final decision on the application, the Illinois EPA is holding a public comment period to accept comments on the proposed issuance of a permit. Comments must be postmarked by midnight February 6, 2009. If sufficient interest is expressed in the permit, a hearing may be held.

Requests for information, comments, and questions should be directed to Brad Frost, Division of Air Pollution Control, Illinois EPA, P.O. Box 19506, Springfield, IL, 62794-9506, phone 217/782-2113, TDD 217/782-9143. The public may review the draft permit and accompanying project summary at www.epa.gov/region5/air/permits/ilonline.htm (please look under All Permit Records, PSD, New). These documents and the permit application can also be viewed at the Illinois EPA's offices at 12 Gunia Drive in LaSalle, 815/223-1344 and 1340 N. Ninth St., Springfield, 217/782-7027 (please call ahead so someone will be available to assist you). Copies of the documents will be made available upon request.

As a major project for SO_2 and PM under PSD, emissions of SO_2 and PM from this project must be controlled with Best Available Control Technology (BACT). Washington Mills has proposed to control SO_2 emissions from the new furnace group by processing off-gas to remove hydrogen sulfide, which would otherwise form SO_2 when the off-gas was burned. This would be accomplished with the existing Sulferox unit that is used to control the SO_2 emissions of the existing furnaces. PM emissions from the new furnace group would also be controlled by processing the off-gas, using a mist eliminator and the Sulferox unit. PM emissions from building and dismantling the furnace piles would be minimized by the nature of the raw materials. The Illinois EPA's initial review concludes that these measures and other proposed control measures will provide BACT for the project.

The air quality analysis submitted for this project shows that it will not cause a violation of the National Ambient Air Quality Standards (NAAQS) for SO_2 or PM or an exceedance of applicable PSD increments. For SO_2, the maximum modeled ambient concentrations with the plant in micrograms per cubic meter ($\mu g/m^3$) are 968 (3-hr average), 349 (24-hr average), and 41 (annual average), compared to NAAQS of 1,300, 365, and 80 $\mu g/m^3$, respectively. For PM_{10}, the maximum concentrations are 149 (24-hr) and 47 (annual), compared to NAAQS of 150 and 50 $\mu g/m^3$, respectively. For SO_2, the modeled increment consumption, which generally reflects the impact of the plant, is 139 (3-hr), 31 (24-hr), and 3.5 (annual) compared to applicable increments of 512, 91 and 20 $\mu g/m^3$, respectively. For PM_{10}, the modeled increment consumption is 22.6 (24-hr) and 3.2 (annual), compared to increments of 30 and 17 $\mu g/m^3$, respectively.