Illinois Environmental Protection Agency

Notice of Comment Period Proposed Issuance of a Construction Permit/PSD Approval Cronus Chemicals, LLC near Tuscola

Cronus Chemicals, LLC (Cronus), having its principal place of business at 150 N. Michigan Ave., Suite 2800, Chicago, IL, 60601, has applied to the Illinois Environmental Protection Agency (Illinois EPA) for an air pollution control permit to construct a fertilizer manufacturing facility at 785 East Highway 36, west of Tuscola. The facility would make nitrogen based fertilizers, (i.e., ammonia), from natural gas feedstock. The principle emission units at the facility would be an ammonia plant, a reformer furnace, and two boilers. The proposed facility is subject to the state rules for Prevention of Significant Deterioration (PSD), 35 Ill. Adm. Code Part 204, for its proposed emissions of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic material (VOM), particulate matter₁₀, particulate matter_{2.5} and greenhouse gases (GHGs).

Based on review of the application, the Illinois EPA has made a <u>preliminary</u> determination that this project will comply with the applicable air pollution control regulations. The Illinois EPA has prepared a draft construction permit/PSD approval for public review and comment.

The Illinois EPA is accepting written public comments until 11:59 PM on December 15, 2023. Requests for information, written comments, and questions should be directed to Sarah Brubaker, Office of Community Relations, Illinois Environmental Protection Agency, 1021 North Grand Ave. East, PO Box 19276, Springfield, Illinois 62794-9506, phone (217) 786-0790, TDD phone number (866) 273-5488, Sarah.Brubaker@Illinois.gov.

In response to written requests or at the discretion of the Illinois EPA, a hearing may be held. A hearing request must be made in writing citing material issues with respect to the terms and conditions of the draft permit. Written hearing requests should be sent to the Illinois EPA contact identified above by the end of the comment period

A repository of documents for this permitting action is available at the Illinois EPA's offices at 2125 South First Street in Champaign, (217) 278-5800 and 1021 N. Grand Ave. East, Springfield, (217) 782-7027 (you must call ahead to ensure that someone will be available to assist you). The draft permit and other pertinent documents may also be viewed on the Illinois EPA Bureau of Air permit public notice database at https://epa.illinois.gov/public-notices/boa-notices.html.

Under the PSD rules, Best Available Control Technology (BACT) must be implemented for pollutants that are subject to PSD. The Illinois EPA's initial review concludes that the proposed control measures for the facility, as addressed in the draft permit and discussed in Attachment B of the Project Summary, will provide BACT.

The air quality analyses for the facility required by the PSD rules for the pollutants that are subject to PSD show that the plant would not cause or contribute to an exceedance of

applicable National Ambient Air Quality Standards (NAAQS) or PSD increments. For the annual PSD increment for NO₂, the maximum modeled consumption of increment by the proposed facility is $7.65~\mu g/m^3$ compared to the increment of $25~\mu g/m^3$.

For PM_{2.5}, the air quality analyses also addressed secondary PM_{2.5} formation from the proposed facility. Consistent with USEPA guidance, a quantitative analysis was conducted and shows that the proposed facility would not have a significant contribution to secondary PM_{2.5} formation. Secondary PM_{2.5} emissions in addition to the primary PM_{2.5} emissions from the proposed plant would not result in exceedances of applicable NAAQS or PSD increments. For the 24-hour PSD increment for PM_{2.5}, the maximum modeled consumption of increment by the proposed facility is 3.81 μ g/m³ compared to the increment of 9 μ g/m³. For the annual PSD increment for PM_{2.5}, the maximum modeled consumption of increment by the proposed facility is 0.66 μ g/m³, compared to the increment of 4 μ g/m³.