Illinois Environmental Protection Agency

Notice of Public Comment Period
Proposed Issuance of a Construction Permit/PSD Approval
Hoosier Energy REC, Inc. in Davis Junction

Hoosier Energy REC, Inc., has applied to the Illinois EPA Bureau of Air for a construction permit and Prevention of Significant Deterioration (PSD) approval for a new landfill gas to energy facility at the Veolia ES Orchard Hills Landfill located at 8290 Highway 251 South in Davis Junction. The facility would have six engines and the capacity to generate about 16 MW of electricity.

The plant would be a major modification for emissions of nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM, PM_{10}, $PM_{2.5}$), volatile organic material (VOM) and municipal solid waste landfill emissions (measured as nonmethane organic compounds or NMOC) under the federal PSD rules, 40 CFR 52.21. The Illinois EPA Bureau of Air has made a preliminary determination to issue a construction permit/PSD approval and has prepared a draft permit for public review.

The Illinois EPA is accepting comments prior to making a final decision on the application for this project. **Comments must be postmarked by midnight November 15, 2013.** If sufficient interest is expressed in this matter, a hearing or other informational meeting may be held. Comments, questions and requests for information, should be directed to Brad Frost, Bureau of Air, Illinois EPA, P.O. Box 19506, Springfield, IL 62794-9506, phone 217/782-7027, TDD 217/782-9143.

The repositories for these documents and the application are located at the Illinois EPA's offices at 4302 N. Main in Rockford, 815/987-7750 and 1021 North Grand Avenue, East, Springfield, 217/782-7027 (please call ahead to assure that someone will be available to assist you). Persons may also view the draft permit and project summary at http://www.epa.gov/reg5oair/permits/ilonline.html Copies of the documents will be made available upon request.

Under the PSD rules, the emissions of pollutants from the plant for which it would be a major project must be controlled with Best Available Control Technology (BACT). The draft permit contains the Illinois EPA's proposed determination of BACT for the plant. A summary of the proposed BACT controls and limits can also be found in Attachment 1 of the project summary.

The air quality analysis submitted by Hoosier Energy for this project shows that it will not cause or contribute to a modeled exceedance of the National Ambient Air Quality Standards (NAAQS) for NO_x, CO, PM, PM_{10}, or $PM_{2.5,}$ or contribute to a modeled exceedance of applicable PSD increments. Modeled exceedances of the $PM_{2.5}$ 24 hour averaging time NAAQS as well as the NO_2 one hour averaging time for the NAAQS occurred in the analysis. However, Hoosier Energy demonstrated that the project would

not have a significant impact and would therefore not cause or contribute to these modeled exceedances.

For NO_2, the maximum modeled ambient concentrations would be 361.61 micrograms per cubic meter ($\mu g/m^3$) 1-hour average, compared to the NAAQS of 188.14 $\mu g/m^3$ and 19.9 micrograms per cubic meter ($\mu g/m^3$) annual average, compared to NAAQS of 100 $\mu g/m^3$. For SO_2, the maximum modeled ambient concentrations would be 121.1 $\mu g/m^3$ 1-hour average and 64.10 $\mu g/m^3$ 24-hour average compared to the NAAQS of 196.32, and 365 $\mu g/m^3$, respectively. For PM_{10}, the maximum concentrations would be 115.3 $\mu g/m^3$ 24-hour, compared to the NAAQS of 150 $\mu g/m^3$. For $PM_{2.5,}$ the maximum modeled ambient concentrations would be 42.6 $\mu g/m^3$ 24-hour average and 11.2 $\mu g/m^3$ annual average, compared to the NAAQS of 35 and 12 $\mu g/m^3$, respectively. For CO, the maximum modeled ambient concentrations were not above significant impact levels. The air quality analysis also shows compliance with the allowable increments for PM_{10} and NO_2. For PM_{10}, the maximum increment consumption should be no more than 9.1 $\mu g/m^3$ 24-hour average and 1.3 $\mu g/m^3$ annual average, compared to increments of 30 and 17 $\mu g/m^3$, respectively. For NO_2, the maximum increment consumption should be no more than 1.7 $\mu g/m^3$ annual, compared to the increment of 25 $\mu g/m^3$.