

Georgia Department of Natural Resources PF

Environmental Protection Division • Air Protection Branch

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Mark Williams, Commissioner

F. Allen Barnes, Director

JAN 25 2011

Matthew Lydon, EH&S Manager
Mackinaw Power - Effingham County Power Plant
3440 McCall Road
Rincon, Georgia 31326

Re: Application No. 19810, dated July 22, 2010
Mackinaw Power - Effingham County Power Plant, Rincon, AIRS No : 10300012

Dear Mr. Lydon:

Technical review of the above referenced application for the construction and operation of a 668-megawatt (MW) power plant has progressed. As a result, the Division sent a letter dated November 15, 2010 requesting additional information. As an addendum to the November 15, 2010 letter, the Division has the following comments:

Effingham proposed carbon monoxide (CO) emission limits for Best Achievable Control Technology (BACT) limits for each proposed combustion turbine as follows:

- 3.0 ppmvd at 15% O₂ without duct firing while firing natural gas
- 10.5 ppmvd at 15% O₂ with duct firing while firing natural gas
- 20.0 ppmvd at 15% O₂ without duct firing while firing fuel oil
- 23.3 ppmvd at 15% O₂ with duct firing while firing fuel oil.

However, the Division's review of the proposed emission limits and economic analysis as included in the permit application has determined that the proposed limits and justification for the exclusion of an oxidation catalyst are insufficient. The Division proposes to require a CO BACT emission limit of 2.0 ppmvd at 15% O₂ with the installation of an oxidation catalyst. This proposal is based on similar sources that are in existence and/or recently received a permit. Therefore, unless and until we receive additional information leading to a different conclusion, the Division proposes a CO BACT emission limit of 2.0 ppmvd at 15% O₂ with the installation of an oxidation catalyst.

As a result, Effingham should reevaluate its modeling, particularly related to the nitrogen dioxide (NO₂) National Ambient Air Quality Standard (NAAQS) to include the installation of an oxidation catalyst assuming full conversion of NO to NO₂ and using a NO₂/NO_x ratio of 100 percent.

The Division requests a response to these comments in addition to the information requested in the November 15, 2010 letter by March 25, 2011. Failure to respond by this date will result in the return of this application to the facility. If you have any questions or need more information, please contact Tyneshia Tate at (404) 362-2700 or via email at tyneshia.tate@dnr.state.ga.us or Susan Jenkins at (404) 362-4598 or via email at susan.jenkins@dnr.state.ga.us.

Sincerely,



Tyneshia Tate
Stationary Source Permitting Program

c: Susan Jenkins, Environmental Engineer, PSD Facilitator
Rosendo Majano, Georgia EPD Planning & Support Program