



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

APR 18 2013

REPLY TO THE ATTENTION OF:

Andrew Hall
Division of Air Pollution Control
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Dear Mr. Hall:

The U.S. Environmental Protection Agency has reviewed the draft Prevention of Significant Deterioration (PSD)/nonattainment New Source Review construction permit, permit number P0112127, for General Electric Aviation, Evendale Plant in Evendale, Ohio. To ensure that the source meets 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. Page 28 of the permit application states the following: "Only the test cells in the [RACT/BACT/LAER Clearinghouse] database that are testing automotive engines resulted in the installation of physical controls for BACT (Best Available Control Technology). Testing Internal Combustion Engines (ICE) has a drastically different emissions profile and exhaust air flow rate. Therefore, ICE testing would not be considered a 'similar source' to gas turbine and jet engine component testing, and these control determinations would not be applicable to the test cells studied in this application." Please clarify how the difference in emissions profile and exhaust air flow rate between ICE and jet engines would make physical controls technically infeasible or not applicable as BACT.
2. Page 30 of the permit application states that water injection would be an infeasible control for NO_x reduction because it would be "technically infeasible to design, test and install water injection on a turbine-by-turbine basis as part of the test operation" and because water injection would affect performance characteristics during turbine testing. Please explain why turbine-by-turbine installation, design, and testing of water injection would be infeasible and how water injection would affect turbine performance during testing.
3. Page 30 of the permit application rejects Dry Low-NO_x (DLE) combustion technology because "it is technically infeasible to add or replace the combustion system of a gas turbine to be tested in Test Cell 1 with DLE on a unit-by-unit

basis. The article must be tested with the combustion system integral to the unit, built to customer specifications.” Please clarify whether DLE combustion could be implemented as an add-on control device to be used downstream of the gas turbine being testing, rather than as an integral part of it.

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

Sincerely,



Genevieve Damico
Chief
Air Permits Section