

Appendix BACT

Name: Lyondellbasell Flavors and Fragrances, LLC

Emission Unit Nos.: 032 (Boiler No. 1), 006 (Boiler No. 6), and 011 (Boiler No. 7)

Date: November 19, 2010

Best Available Control Technology Determination

Lyondellbasell Flavoring and Fragrances, LLC

Jacksonville Facility

Duval County

This BACT Determination is required for the source as set forth in Rule 62-296.400, Florida Administrative Code (F.A.C.) - Specific emission Limiting and Performance Standards, and Rule 62-296.406, F.A.C. - Fossil Fuel Steam Generators with less than 250 MMBtu per Hour Heat Input, New and Existing Sources.

The applicant has applied for a permit for a Steam Repowering Project at the existing Jacksonville Facility Chemical Manufacturing Plant. part of the project is the construction of Boiler No. 1 which will be rated at a nominal 140 MMBtu per hour heat input firing natural gas, No. 2 fuel oil and process derived fuel [PDF] (formerly known as Glidfuel). PDF originates from crude sulfate turpentine which is the primary raw material at the manufacturing plant. PDF is not part of this BACT Determination since it is not a fossil fuel.

BACT Determination Requested by the Applicant

Particulate matter (PM) and Sulfur Dioxide (SO₂) emissions shall be controlled by the use of natural gas and/or ultra low sulfur No. 2 fuel oil (maximum of 0.05% sulfur content by weight).

Date of Receipt of BACT Application

February 5, 2010, additional information received April 27, 2010 and August 5, 2010

BACT Determination by the Department

PM and SO₂ emissions shall be controlled by the use of natural gas and/or ultra low sulfur No. 2 fuel oil (maximum of 0.05% sulfur content by weight).

BACT Determination Rationale

Sulfur in fuel is a primary air pollution concern since most of the fuel sulfur becomes SO₂. PM emissions are also related to the sulfur content of the fuel oil.

This determination is consistent with other recent BACT Determinations for small boilers (i.e. less than 250 MMBtu per hour heat input) and is more stringent than 40 CFR 60, Subpart Db, New Source Performance Standards requirements for very low sulfur fuel oil (i.e., 0.5% sulfur content by weight).

Details of the analysis may be obtained by contacting:

Jerry Woosley, Environmental Specialist
Department of Environmental Protection
Northeast District Office
Air Resources Section
7825 Baymeadows Way, Suite 200B
Jacksonville, FL 32256

Approved by:



Christopher Kirts, P.E., Air Administrator
Northeast District Office

19 Nov 2010

Date

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BACT Determination Rationale

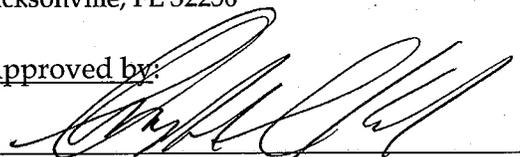
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