Non-Attainment New Source Review Pratt Industries (U.S.A.) – Visy Paper, Inc., located in Conyers, Georgia (Rockdale County)

FINAL DETERMINATION

SIP/Title V Permit Application No. 16655 January 2007



State of Georgia
Department of Natural Resources
Environmental Protection Division

Air Protection Branch

Heather Abrams – Chief, Air Protection Branch

Stationary Source Permitting Program

Planning & Support Program

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BACKGROUND

On March 16, 2006, Pratt Industries (U.S.A.) – Visy Paper, Inc. (hereafter Visy Paper) submitted an application for an air quality permit to construct and operate an alternative fuels power island (AFPI). The facility is located at 1800-A Sarasota Parkway in Conyers, Rockdale County. The AFPI project will serve the primary energy requirements of the Visy Paper facility and will consist of alternative fuels bubbling fluidized bed gasifier unit, air pollution control equipment, a turbine generator, fuel handling systems, and other ancillary equipment. The gasifier will have a nominal heat input rate of 380 MMBtu/hr, and the turbine generator will be able to co-generate approximately 8 MW of electricity. For fuel, the facility will use natural gas, (for startup and flame stabilization only), paper sludge, heavy rejects, dry scrap construction wood, tire-derived fuel, and carpet remnants.

On December 7, 2006, the Division issued a Preliminary Determination stating that the modifications described in Application No. 16655 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Visy Paper place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *The Rockdale Citizen* (legal organ for Rockdale County) on December 7, 2006. The public comment period expired on January 8, 2007.

During the comment period, comments were received from U.S. EPA Region 4. There were no comments received from the facility or the general public. A review of the comments received from U.S. EPA and EPD's responses follows.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

U.S. EPA REGION 4 COMMENTS

Comments were received from Jim Little of U.S. EPA Region 4, by email on December 28, 2006. The comments are typed, verbatim, below and were the result of reviews by Jim Little of U.S. EPA Region 4.

Comment 1

On page 5 you list the NNSR requirement that a source owner must "certify that all other major stationary sources owned or operated by the Permittee are operating in compliance, or are on a schedule of compliance." We do not find a statement in the preliminary determination indicating that this certification has been made.

EPD Response to Comment 1:

The statewide compliance statement was inadvertently omitted from the preliminary determination. All facilities owned or operated by Pratt Industries (U.S.A.) are in full compliance with the requirements of their air quality permits.

Comment 2

On page 17 you state that compliance assurance monitoring (CAM) provisions do not apply "because Visy is proposing to utilize continuous emissions and opacity monitors." We do not fully understand this reasoning and would appreciate further explanation. We also note that the applicant provided a CAM submittal as part of the permit application.

EPD Response to Comment 2:

We have re-evaluated CAM applicability for the proposed AFPI project and have determined that, although the continuous emissions monitors will be used to monitor compliance with applicable standards, the CAM provisions still apply with regards to NOx emissions because the proposed emission limit in the draft permit amendment is more stringent than that in the applicable New Source Performance Standard (Subpart Db). The CAM provisions do not apply to the AFPI with regards to the other pollutants because the monitoring specified for these pollutants in the NSPS constitutes CAM.

Condition numbers 5.2.11 and 5.2.12 have been added to Section 5 of the permit amendment to satisfy the CAM requirements. These conditions read as follows:

5.2.11 The following pollutant specific emission unit(s) (PSEU) is/are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Pollutant
Alternative Fuels Power Island (AFPI, Source Code PI01)	NOx

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9. [40 CFR 64]

5.2.12 The Permittee shall comply with the performance criteria listed in the table below for the NOx emissions from the Alternative Fuels Power Island (AFPI, Source Code PI01): [40 CFR 64.6(c)(1)(iii)]

	Performance Criteria [64.4(a)(3)]	Indicator No. 1	Indicator No. 2
A.	Data Representativeness [64.3(b)(1)]	Continuous Emissions Monitors (CEM) for NOx	N/A
3	Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	The NOx CEM will be installed according to the manufacturer's installation specifications and certification requirements for Performance Specification 2.	N/A
i.	QA/QC Practices and Criteria [64.3(b)(3)]	In addition to the daily drift tests (assessments) and data accuracy assessments required by Condition No. 5.2.9, the NOx CEM will undergo annual RATA evaluations pursuant to 40 CFR Part 60, Appendix F.	N/A
В.	Monitoring Frequency [64.3(b)(4)]	Continuous: readings will be taken and recorded at a minimum frequency of once every fifteen minutes.	N/A
	Data Collection Procedures [64.3(b)(4)]	The data will be recorded electronically.	N/A
	Averaging Period [64.3(b)(4)]	The values for each consecutive 30-day period will be averaged to determine whether an excursion has occurred.	N/A

Comment 3

On page 18 you explain that no further ambient air quality review is needed because securing offsets will result in a net decrease in nitrogen oxides (NO_x) emissions within the affected non-attainment area. You might wish to elaborate on this explanation by pointing out something along the lines of the following. NO_x emissions are a precursor to ozone formation, and the affected non-attainment area is an ozone non-attainment area. The general assumption is that NO_x emissions reductions anywhere within the same non-attainment area will offset the ozone formation impact of NO_x emissions increases at any specific point. Therefore, the Georgia Environmental Protection Division believes that securing a 1.3 to 1 NO_x offset reduction within the same ozone non-attainment area will have a beneficial effect on ozone levels even if the source of the offsetting reductions is not located in the immediate vicinity of the source at which NO_x emissions increases will occur.

EPD Response to Comment 3:

EPD agrees with the expanded rationale behind the external emissions offset requirement provided by U.S. EPA. The mechanisms that contribute to ground-level ozone generation and dispersion are extremely complex and dependent on many factors; however, it is generally accepted that the required 1.3 to 1 emissions offset requirement will result in a beneficial effect on ozone levels even if the source(s) of the offsetting reductions is not located in the immediate vicinity of the source at which NOx emissions increases will occur.

Comment 4

On page 1 (Condition 1.3) you list the materials that can be gasified to produce a fuel for the AFPI. These materials are paper sludge, heavy rejects, dry scrap construction wood, tire-derived fuel, carpet remnants, and other fuels compatible with the design of the gasifier. We have the following comments on this list of materials:

- a. The title of Condition 1.3 is "Process Description of Modification." We do not view a "process description" as being an enforceable requirement. If you wish to make the list of materials an enforceable list, you should add a condition to this effect under Part 2.0 of the permit.
- b. The term "other fuels compatible with the design of the gasifier" is vague. Please consider whether a permit condition is warranted that would require Visy Paper to provide advance notification before introducing any material to the gasifier other than the specific materials listed in Condition 1.3.
- c. Since we are not familiar with the characteristics of each of the materials listed (for example, "heavy rejects"), please consider based on your more detailed knowledge whether a restriction is needed on the quantity of any specific material that can be gasified.

EPD Response to Comment 4:

It was not the EPD's intention to establish a finite list of permissible fuels in Condition No. 1.3; that condition is actually just a general description of the modification taking place. EPD has evaluated, based on information submitted by Visy Paper in its permit application, the environmental impacts of the fuels listed in the modification description and is satisfied that, with the proposed control equipment and emissions standards in place, no adverse environmental impact will occur. In addition, EPD has included Condition No. 6.2.14, which requires Visy Paper to conduct an analysis of each new fuel proposed to be burned in the Bubbling Fluidized Bed reactor of the Alternative Fuels Power Island for HAP and sulfur content. Records of these analyses must be maintained for inspection or review by the EPD. We believe that this fuel analysis requirement, in conjunction with the proposed emissions standards and monitoring requirements, will allow Visy Paper flexibility in utilizing alternate fuels in appropriate quantities in the AFPI, while preventing any adverse environmental impacts.

Comment 5

In Condition 3.2.7 (page 4), please specify that the required external emission reduction credits are for nitrogen oxides.

EPD Response to Comment 5:

Condition No. 3.2.7 has been modified as requested to specify that the required external emission reduction credits must be for nitrogen oxides. The condition now reads as:

3.2.7 Prior to commencing operation of the Alternative Fuels Power Island (AFPI, Source Code PI01), the Permittee shall obtain external emission reduction credits for nitrogen oxides in the amount of 53 tons per year for use as offsets as required by the Non-Attainment New Source Review permitting regulations.

[Generation of Emission Reduction Credits for Non-Attainment NSR]

APPENDIX A

AIR QUALITY PERMIT Amendment No. 2631-247-0037-V-01-1

APPENDIX B

WRITTEN COMMENTS
RECEIVED DURING
COMMENT PERIOD