TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

International Paper Company
375 Muscogee Road
Cantonment, Florida 32533-0087

Pensacola Mill
Facility ID No. 0330042

PROJECT

Project No. 0330042-015-AC
Application for Title V Air Construction Permit
Modify B-Line Pulp Production Limit

COUNTY

Escambia County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Section
Northwest District Office
160 Governmental Center, Suite 308
Pensacola, Florida 32502-5794

October 8, 2010

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

International Paper Company is an existing kraft pulp and paper mill, which is categorized under Standard Industrial Classification Code No. 2611. The facility is located in Escambia County at 375 Muscogee Road in Cantonment, Florida. The UTM coordinates of the existing facility are Zone 16, 469.2 km East, and 3368.0 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

In 2007, International Paper implemented changes in the mill's configuration referred to as Project Onyx. To evaluate major New Source Review (NSR) applicability for Project Onyx, the mill projected maximum air dried tons of unbleached pulp (ADTUP) annual production rates for the A-Line and B-Line operations. Construction permit 0330042-012-AC and the subsequent operating permit 0330042-014-AV set an individual pulp production limit on the B-Line at 178,836 ADTUP per year and a combined A and B-Line pulp production limit of 694,373 ADTUP per year.

This project will allow International Paper the flexibility to shift production between lines. The proposed project would eliminate the individual B-line pulp production limit but maintain the total A-line and B-line pulp production limit. The mill is also proposing to begin production of a new product (white top) which will require physical changes to be made to the No. 5 Paper Machine.

Processing Schedule

July 7, 2010 Received the application for a Title V air pollution construction permit.

August 5, 2010 Requested additional information.

September 9, 2010 Received additional information; application complete.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The mill's operations since the implementation of Project Onyx indicate that the individual B-Line pulp production limit is restrictive and the mill desires the flexibility to shift production between lines. At this time, the mill is not proposing to increase the mill-wide total pulp production limit. Also, the mill emissions will not exceed the original post-project Onyx projected actual emissions.

The mill is also proposing to begin production of a new product (white top) which will require physical changes to be made to the No. 5 Paper Machine. Based on the currently permitted production rates and the production scenarios evaluated in this application, the mill has concluded that the recovery operations and the causticizing operations will not be affected by the proposed project. The projected black liquor solids (BLS) generation rates will not exceed the mill's historic BLS generation and throughput rates, so therefore the recovery and causticizing operations are not included as affected units as part of the emissions inventory for this project.

International Paper developed a range of operating scenarios that balanced the production between the A-line and B-line while maintaining the combined production below the current permit limit of 694,373 ADTUP per year. The production levels for each line of each scenario are based on the individual equipment capacities and real operating projections. The different equipment comprising each line results in increasing emissions from certain units for certain pollutants as production on the A-line increases, while for certain other units and pollutants the emission rates increase as production on the B-line increases. Therefore, the projected actual emission rates presented in the application for individual emission units are based on the individual scenario that resulted in the highest projected emission rate (i.e., either maximum A-line or maximum B-line production rates).

Although the International Paper Pensacola Mill is a major source with respect to Prevention of Significant Deterioration (PSD), the "baseline actual emissions" to "projected actual emissions" from this project are less than the PSD significant emission rates. Therefore, this project is not subject to the requirements of PSD review (Rule 62-212.400, F.A.C.). In order to verify that this project will not exceed the PSD significant modification thresholds, annual recordkeeping has been included in this permit for ten years following resumption of regular operations, per Rule 62-212.300(1)(e), F.A.C.

As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Emissions Changes due to Project:

Pollutant	Baseline Actual Emissions (TPY)	Projected Actual Emissions (TPY)	Project Emissions Increase (TPY)	Significant Emissions Rate (TPY)	Subject To PSD?
CO	194.27	109.69	-84.59	100	No
NO_X	36.28	57.38	21.09	40	No
PM/PM_{10}	90.61/36.47	90.07/37.55	-0.54/1.08	25/15	No
SO_2	14.32	9.64	-4.72	40	No
VOC	223.48	217.3	-6.18	40	No
H_2SO_4	2.39	1.93	-0.47	7	No
TRS	54.48	7.34	-47.14	10	No

This facility is considered a major stationary source for PSD because as a Kraft pulp mill, it is one of the 28 PSD-major facility categories listed in Rule 62-210.200(195)(a)1., and it emits 100 TPY or more of one or more regulated pollutants.

As shown in the above table, this project is not a major modification under PSD regulations since the difference between the baseline actual emissions and projected actual emissions do not exceed the significant emissions thresholds. Therefore, the project is not subject to PSD preconstruction review.

3. APPLICATION REVIEW

Application Fee

This is an AC/ 1E (source increase of 5 TPY but less than 25 TPY). The facility is exempt from AC permit

processing fees as a Title V source. The facility is subject to annual emission fees as a Title V source.

Discussion of Emissions

NO_x is the only pollutant expected to increase with this project. The future emissions were compared with the baseline actual emissions. Facility-wide emission totals were compared to the projected actual emissions in order to verify that there shall be no PSD-significant increase in emissions.

State Requirements

Rules 62-210.300(1), 62-210.370, 212.300(1)(e), 62-213, 62-296.320, 62-296.401 and 404, 62-297, F.A.C.

Federal NSPS Provisions

All NSPS Provisions remain the same as contained in the existing Title V permits (40 CFR 60 subpart BB, Standards of Performance for Kraft Pulp Mills). No new NSPS requirements are triggered as a result of this project.

Federal NESHAP Provisions

40CFR 63, subpart S, National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry; 40 CFR 63 subpart MM, Emission Standards for Chemical Recovery Sources; and 40 CFR 63 subpart RR, National Emission Standards for Individual Drain Systems.

Other Draft Permit Requirements

The applicant shall maintain and submit to the Department on an annual basis for a period of 10 years from the date of the permit, information demonstrating in accordance with Rule 62-212.300(1)(e), F.A.C., that the following emission units together do not result in a significant emissions increase: EU 051, EU 052, EU 063, EU 066 (specifically A-Line Diffusion Washing – Other Sources, B-Line #1 and #2 Brown Stock Washing, Diffusion Washer, Digester and Brown Stock Washers -Other Sources, A-Line O2 Decker System, B Line O2 Delignification, B-Line Bleach Plant- Other Sources, No. 4 Pulp Dryer), EU 067, and EU 069.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Debbie Moore is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at 850/595-0624 or Deborah.L.Moore@dep.state.fl.us.