Permit No. 1230033-013-AV

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Draft PSD-FL-427 - TEPD

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ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Abbreviations and Acronyms:

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

AOR: Annual Operating Report

ARMS: Air Resource Management System (Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resources Management

DCA: Department of Community Affairs

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

ISO: International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)

kPa: kilopascals

LAT: Latitude

lb: pound

lbs/hr: pounds per hour

LONG: Longitude

MACT: maximum achievable technology

mm: millimeter

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

ORIS: Office of Regulatory Information Systems

OS: Organic Solvent

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RMP: Risk Management Plan

RO: Responsible Official

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SOA: Specific Operating Agreement

SO_2: sulfur dioxide

TPH: tons per hour

TPY: tons per year

ULSD: Ultra Low Sulfur Diesel

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

x: By or times

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:	40	refers to	Title 40
	CFR	refers to	Code of Federal Regulations
	60	refers to	Part 60
	60.334	refers to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213.205, F.A.C.]**

Where:	62	refers to	Title 62
	62-213	refers to	Chapter 62-213
	62-213.205	refers to	Rule 62-213.205, F.A.C.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:

AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221= 4-digit number assigned by permit tracking database
001 or 002= 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC53 = old Air Construction Permit numbering identifying the facility is located in Polk County

Best Operating Practices

#4 Kiln - Direct-Fired Lumber Drying Kiln (EU 008)

Gilman Building Products, LLC, Perry Mill

The following are the best operating practices (BMP) for #4 Kiln, as required under Specific Condition (SC) No. A.8 in permit No. 1230033-013-AV.

SC No. A.8 states: *Best Operating Practices for # 4 Kiln (EU 008): At a minimum, the permittee shall operate the kiln in accordance with the following best operating practices (BMP).*

a. Minimize over-drying the lumber;

b. Maintain consistent moisture content for the processing lumber charge; and

c. Dry at the minimum temperature.

The permittee shall operate in accordance with a written plan to implement the above BMP and any others required by the kiln manufacturer (See Appendix BMP).

{Permitting Note: For this kiln, the Department determined that compliance with the BACT VOC emissions limit shall be demonstrated by the implementation of the BMP plan.}

The best operating practices (BMP) for #4 Kiln are detailed below.

1. <u>Minimize over-drying the lumber</u>: The operator shall minimize over-drying lumber with the following methods.
    a. Set the charge target moisture content relative to the industry lumber grade requirement and/or customer required moisture content at the maximum value possible that will not result in an unacceptable re-dry rate.
    b. Maintain records of the actual charge average moisture content and compute a monthly average. Calculate the monthly over-dry percent and an adjust operations to minimize the amount of over-dry.
    c. Maintain kiln components (baffles, fans, vents, heating and kiln controls) to provide reasonably uniform temperatures and air flow throughout the kiln.
    d. Periodically, as practical, reverse the air flow direction in the kiln to improve uniform drying and reduce over-drying.
    e. Maintain records of the kiln conditions for each charge dried, including dry bulb temperature, wet bulb temperature, relative humidity and drying time.
2. <u>Maintain consistent moisture content for the processing lumber charge</u>: The operator shall maintain consistent moisture content for the processed lumber charge with the following methods.
    a. Maintaining proper stacking and spacer stick placement to provide adequate air flow throughout the charge.

b. Properly maintaining critical kiln components such as baffles, fans, vents, heating and kiln controls to provide reasonably uniform temperatures and air flow throughout the kiln.

c. Periodically, as practical, reversing the air flow direction in the kiln to improve uniform drying and reduce over-drying.

d. Maintaining records of the piece-to-piece moisture content variability for each charge including the mean and standard deviation of the data. Tracking mean values and standard deviations on a monthly and 12-month rolling basis.

3. Dry at the minimum temperature practical:

   a. The operator shall dry lumber at the minimum temperature, as practical, by monitoring and recording thermocouple readings at various locations inside the kiln to identify and prevent "hot spots" that are above the maximum target drying temperature.

This plan may be revised by submitting a request in accordance with Rule 62-213.410(2), F.A.C. at least 7 days prior to implementing the change. The air permit does not need to be revised to change the plan.

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), FAC, Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., FAC, Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, FAC; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., FAC, shall not be exempt from the permitting requirements of Chapter 62-213, FAC, if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), FAC. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., FAC, if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), FAC.

Brief Description of Emissions Units and /or Activities

- Above ground Storage Tanks used for mobile vehicles and heavy equipment operated on and off site One 8,000 gal diesel tank and one 1,600 gal gasoline tank.
- Green or wet sawdust/chip/bark handling or transferring at the sawmill for onsite use and sell offsite.
- Log storage and handling
- Green and finished lumber storage.

RR1. Reporting Schedule. This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	**Reporting Deadline(s)**	**Related Condition(s)**
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
EAOR Title V Annual Emissions Fee Invoice and Fee Payment	April 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV17
Test Reports	Maximum 45 days following compliance tests	TR8

{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}

RR2. Reports of Problems.

a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.

b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   (1) A description of and cause of noncompliance; and
   (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately".

[Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

RR3. Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. *Rule 62-210.700(6)*: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

RR4. Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]

RR5. Annual Operating Report. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C.
[Rules 62-210.370(2) & (3), 62-210.900 and 62-213.440(3)(a)2., F.A.C.]

RR6. EAOR Title V Annual Emissions Fee Invoice and Fee Payment. Each Title V source permitted to operate in Florida must pay between January 15 and April 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

a. If the Department has not received the fee by March 1 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by April 1.- If the fee is not postmarked or electronically submitted by April 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. -If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid.- The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. -The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than one percent of the fee due, up to $50.00.- The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. -Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five years and shall be made available to the Department upon request.
c. A copy of the EAOR Title V Annual Emissions Fee Invoice generated by the electronic annual operating report (EAOR) application, must be submitted along with the annual emissions fee payment.

[Rules 62-210.370(3), 62-210.900 and 62-213.205, F.A.C.]

RR7. Annual Statement of Compliance.

a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:
   (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
   (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
a. Typographical errors noted in the permit;
b. Name, address or phone number change from that in the permit;
c. A change requiring more frequent monitoring or reporting by the permittee;
d. A change in ownership or operational control of a facility, subject to the following provisions:
   (1) The Department determines that no other change in the permit is necessary;
   (2) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
   (3) The new permittee has notified the Department of the effective date of sale or legal transfer.
e. Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

f. Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
g. Any other similar minor administrative change at the source.

[Rule 62-210.360, F.A.C.]

RR9. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

RR10. Report Submission. The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}

RR11. EPA Report Submission. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.

RR12. Acid Rain Report Submission. Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.

RR13. Report Certification. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]

RR14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

RR15. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]

RR16. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at: http://www.dep.state.fl.us/air/rules/forms.htm.

a. Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) (Effective 12/31/2013)
b. Statement of Compliance Form (Effective 06/02/2002).
c. Responsible Official Notification Form (Effective 06/02/2002).

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 3/9/2015)

Unless otherwise specified in a specific rule, this permit, or other order, the following testing requirements apply to each emissions unit for which testing is required. An emissions test is an emissions rate test, a concentration test, or an opacity test.

TR1. Required Number of Test Runs. For emission rate or concentration limitations, an emissions test shall consist of three valid test runs to determine the total air pollutant emission rate or concentration through the test section of the stack or duct. A valid test run is a test run that meets all requirements of the applicable test method. An emissions test shall also consist of three distinct determinations of any applicable process parameters corresponding to the three distinct test run time periods during which the emission rate or concentration was measured when such data are needed in conjunction with emissions data to compare the emissions test results with the applicable emission limiting standards. Such data shall be obtained pursuant to condition **TR5.** [subsection 62-297.310(6), F.A.C.]. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, results of the two valid runs shall be accepted, provided that the arithmetic mean of the results of the two valid runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(2), F.A.C.]

TR2. Operating Conditions during Emissions Testing. Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted.

a. Combustion Turbines. (Reserved)
b. All Other Sources. Testing capacity is defined as at least 90 percent of the maximum operation rate specified by the permit.

[Rule 62-297.310(3), F.A.C.]

TR3. Calculation of Emission Rate or Concentration. The emission rate or concentration used for comparison with the relevant standard shall be the arithmetic average of the emission rate or concentration determined by each of the three valid test runs unless otherwise specified in an applicable rule or test method. Data collected during periods of soot blowing shall not be excluded from any calculation of emission rate or concentration. [Rule 62-297.310(4), F.A.C.]

TR4. Required Sampling Times and Observation Periods. Unless otherwise specified in an applicable test method, rule, permit, or other order, the owner or operator shall conduct emissions tests in accordance with the following procedures:

a. *Emission Rate or Concentration Tests*. The required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes, except that for operations that are typically completed within less than the minimum required sampling time, the duration of each test run shall include each occurrence of the operation during the minimum required sampling time. The test period shall include the period of typical operation during which the highest representative emissions are expected to occur.
b. *Opacity Tests*. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a visible emissions test shall be 60 minutes for emissions units that are subject to a multiple-valued opacity standard, and 30 minutes for all other emissions units, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall

include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rule 62-297.310(5), F.A.C.]

TR5. Determination of Process Parameters.

a. *Required Process Equipment*. The owner or operator of an emissions unit for which emissions tests are required shall install, operate, and maintain equipment or instruments necessary to determine process parameters, when such data are needed in conjunction with emissions data to compare emissions test results with applicable emission limiting standards.

b. *Accuracy of Process Measurement Equipment*. Equipment or instruments used to directly or indirectly determine process parameters shall be calibrated and adjusted so as to determine the value of the process parameter to within 10 percent of its true value.

[Rule 62-297.310(6), F.A.C.]

TR6. Required Emissions Testing Facilities.

a. The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required, shall provide emissions testing facilities that meet the requirements of 40 CFR 60.8(e), adopted and incorporated in Rule 62-204.800, F.A.C.

b. *Permanent Emissions Testing Facilities.* The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required on at least an annual basis, shall install and maintain permanent emissions testing facilities.

c. *Temporary Emissions Testing Facilities*. The owner or operator of an emissions unit that is not required to conduct an emissions test on at least an annual basis may use permanent or temporary emissions testing facilities. If the owner or operator chooses to use temporary emissions testing facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

[Rule 62-297.310(7), F.A.C.]

TR7. Frequency of Emissions Tests. The following provisions apply only to those emissions units that are subject to an emissions-limiting standard for which emissions testing is required.

a. *Annual Emissions Tests Required*.

(1) Where used in Rules 62-210.310, 62-297.310, or Chapter 62-296, F.A.C., to refer to frequency of required emissions tests, the terms “annual”, “annually”, and “annually thereafter” shall mean no less frequently than once every calendar year (January 1 – December 31).

(2) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for each of the following pollutants that has an emissions-limiting standard for which emissions testing is required:

(a) Each hazardous air pollutant regulated by 40 CFR Part 61, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; and

(b) Any other regulated air pollutant, as defined at Rule 62-210.200, F.A.C., or a pollutant designated as a surrogate to a regulated air pollutant by an applicable rule or order, if allowable emissions equal or exceed 100 tons per year.

(3) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for visible emissions, if there is an applicable standard other than the general opacity standard of subparagraph 62-296.320(4)(b)1., F.A.C.

(4) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually if a rule, permit or other order issued after March 9, 2015, requires an initial emissions test but is silent as to the frequency of additional testing. A rule, permit, or other order that states that no further testing is required after an initial test, or which expressly lists or describes the tests that shall be conducted annually, is not considered silent as to the frequency of additional testing. Annual testing is not required where a permit or other order issued prior to March 9, 2015, is silent as to the frequency of additional testing.

(5) Exemptions from paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.].

(a) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires emissions testing at some other specific frequency. If multiple applicable rules, permits, or other orders, other than paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.], require different testing frequencies, testing must comply with the frequency requirements of each such rule, permit, or order.

(b) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the pollutant emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(c) An annual emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(d) An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.

(e) An annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel, provided that the emissions unit does not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during the calendar year. If an emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined during the calendar year, other than during startup, an emissions test shall be completed no later than 60 days after the emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined, or by the end of the calendar year, whichever is later.

(f) An annual emissions test shall not be required for each fuel-specific emissions limit, provided the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during the calendar year. If an emissions unit burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during the calendar year, an emissions test for that fuel or fuel blend shall be completed no later than 60 days after the unit's burning of that fuel or fuel blend exceeds 400 hours, or by the end of the calendar year, whichever is later.

(g) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7.** [subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit next starts up.

(h) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting an annual emissions test to meet the frequency requirements of this condition **TR7.** [subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(i) An annual emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or, emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

b. *Emissions Tests Prior to Obtaining an Air Operation Permit*.

(1) Unless exempted by paragraph b.(3), below [subparagraph 62-297.310(8)(b)3., F.A.C.], prior to obtaining an initial or renewal air operation permit for any emissions unit that is subject to any emission-limiting standard, the owner or operator shall have an emissions test conducted for each such standard to assist in providing reasonable assurance, per Rule 62-4.070, F.A.C., that the emission-limiting standard can be met and shall submit the test report as specified in subsection 62-297.310(10), F.A.C. For an emissions unit at a Title V source, such prior emissions testing is not required provided that an emissions testing compliance plan is included in the Title V permit.

(2) For the purpose of renewal of an air operation permit, the owner or operator may satisfy the requirements of paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.], for any emissions unit by submitting the most recent emissions test, as specified in condition **TR9.** [subsection 62-297.310(10), F.A.C.], provided such test occurred within the term of the current operation permit.

(3) Exemptions from paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.].

(a) An emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(b) An emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(c) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit that, in the previous five-year period of permitted operation, operated for 400 hours or less (including during startup and shutdown) during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently exceeds 400 hours of operation during a calendar year,

emissions must be tested no later than 60 days after 400 hours of operation is exceeded in that calendar year, or by the end of that calendar year, whichever is later.

(d) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel provided that, in the previous five-year period of permitted operation, the emissions unit did not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns any liquid fuel or solid fuel or fuel blend for more than 400 hours combined during a calendar year, emissions must be tested no later than 60 days after the emissions unit's combined burning of any liquid fuel or solid fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(e) An emissions test shall not be required for each fuel-specific emissions limit prior to the renewal of an air operation permit for an emissions unit provided that, in the previous five-year period of permitted operation, the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during any calendar year, an emissions test for that fuel or fuel blend must be completed no later than 60 days after the emissions unit's burning of that fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(f) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7.** [subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit starts up.

(g) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting the emissions test to meet the frequency requirements of this condition **TR7.** [subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(h) An emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

c. *Special Compliance Tests*. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of condition **TR9.** [subsection 62-297.310(10), F.A.C.].

[Rule 62-297.310(8), F.A.C.]

TR8. Scheduling and Notification. At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit,

unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

TR9. Test Reports.

a. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the compliance authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.

b. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT) (http://www.epa.gov/ttnchie1/ert/), the written report specified in paragraph a., above [paragraph 62-297.310(10)(a), F.A.C.], need not be submitted, provided the conditions of paragraphs (1) – (3), below [subparagraphs 62-297.310(10)(b)1. through 3., F.A.C.], are met:
   (1) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;
   (2) The test information shall provide, as a minimum, the information specified in paragraphs c.(1) – (24), below [subparagraphs 62-297.310(10)(c)1. through 24., F.A.C.]; and
   (3) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
   (1) The type, location, and identification number of the emissions unit tested.
   (2) The facility at which the emissions unit is located.
   (3) The owner and, if other than the owner, operator of the emissions unit.
   (4) The type and amount of fuels and materials typically used and processed, and the actual types and amounts of fuels used and material processed during each test run.
   (5) If necessary in order to compare the emissions test results with an applicable emission limiting standard, the means, raw data, and computations used to determine the amount of fuels used and materials processed.
   (6) The type of air pollution control devices installed on the emissions unit, their general condition, their typical operating parameters, and their actual operating parameters during each test run.
   (7) A diagram of the sampling location, including the distance to any upstream and downstream bends or other flow disturbances.
   (8) The date, starting time, and duration of each sampling run.
   (9) The test procedures, including any authorized alternative procedures, used.
   (10) The number of points sampled, and the configuration and location of the sampling plane.
   (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack or duct, temperatures, average meter temperatures, and sample time per point.

(12) The type, manufacturer, and configuration of the sampling equipment used.
(13) Data related to the required calibration of the test equipment.
(14) Data on the identification, processing, and weights of all filters used.
(15) Data on the types and amounts of any chemical solutions used.
(16) For each sampling run, data on the amount of pollutant collected from each sampling probe.
(17) For each sampling run, data on the amount of pollutant collected from the filters.
(18) For each sampling run, data on the amount of pollutant collected from the impingers.
(19) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
(20) All measured and calculated data required to be determined by each applicable test procedure for each run.
(21) The detailed calculations for one run that relate the collected data to the calculated emission rate or concentration, as applicable.
(22) The applicable emission standard, and the resulting maximum allowable emission rate or concentration for the emissions unit, as applicable, plus the test result in the same form and unit of measure.
(23) When an emissions test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or owner's authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his or her knowledge.
(24) For non-Title V sources, a certification by the owner or owner's authorized agent that, to his or her knowledge, all data submitted are true and correct.
(25) Any report submitted for a Title V source shall contain certification by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-297.310(10), F.A.C.]

Operation

TV1. General Prohibition. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]

TV2. Validity. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]

TV3. Proper Operation and Maintenance. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]

TV4. **Not Federally Enforceable.** Health, Safety and Welfare. To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]

TV5. Continued Operation. An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program and applicable requirements of the CAIR Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]

TV6. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:

a. Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
   (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
   (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.

[Rule 62-213.410, F.A.C.]

TV7. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

Compliance

TV8. Compliance with Chapter 403, F.S., and Department Rules. Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

TV9. Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

TV10. Binding and enforceable. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]

TV11. Timely information. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]

TV12. Halting or reduction of source activity. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]

TV13. Final permit action. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]

TV14. Sudden and unforeseeable events beyond the control of the source. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]

TV15. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program or the CAIR Program. [Rule 62-213.460, F.A.C.]

TV16. Compliance With Federal Rules. A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

Permit Procedures

TV17. Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).

TV18. Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]

TV19. Insignificant Emissions Units or Pollutant-Emitting Activities. The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.

TV20. Savings Clause. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

TV21. Suspension and Revocation.

a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
   (1) Submitted false or inaccurate information in his application or operational reports.
   (2) Has violated law, Department orders, rules or permit conditions.
   (3) Has failed to submit operational reports or other information required by Department rules.
   (4) Has refused lawful inspection under Section 403.091, F.S.
d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(5), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

TV22. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

TV23. Emissions Unit Reclassification.

a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

TV24. Transfer of Permits. Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

Rights, Title, Liability, and Agreements

TV25. Rights. As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

TV26. Title. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.]

TV27. Liability. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

TV28. Agreements.

a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   (1) Have access to and copy any records that must be kept under conditions of the permit;
   (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
   (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

TV28. Continued:

b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

TV29. Permit. The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

TV30. Recordkeeping.

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
c. Records of monitoring information shall include:
   (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
   (2) The person responsible for performing the sampling or measurements;
   (3) The dates analyses were performed;
   (4) The person and company that performed the analyses;
   (5) The analytical techniques or methods used;
   (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

TV31. Emissions Computation. Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

TV31. Continued:

a. *Basic Approach*. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

b. *Continuous Emissions Monitoring System (CEMS)*.

(1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

(a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,

(b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

(a) A calibrated flowmeter that records data on a continuous basis, if available; or

(b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

c. *Mass Balance Calculations.*

(1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

(a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,

(b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

TV31. Continued:

(2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

d. *Emission Factors.*

(1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

(a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

(c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

(2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

e. *Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS*. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

f. *Accounting for Emissions During Periods of Startup and Shutdown.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

g. *Fugitive Emissions.* In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

h. *Recordkeeping.* The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

Responsible Official

TV32. Designation and Update. The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

Prohibitions and Restrictions

TV33. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

TV34. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

TV35. Open Burning Prohibited. Open burning is prohibited unless performed in accordance with the provisions of Rule 62-296.320(3) or Chapter 62-256, F.A.C.

TV36. Heavy-Duty Vehicle Idling Reduction. The permittee shall only allow idling of heavy-duty diesel engine powered motor vehicles in accordance with the following provisions:

a. *Applicability*. This rule applies to any heavy-duty diesel engine powered motor vehicle. For the purposes of this rule:
   (1) Heavy-duty diesel engine powered motor vehicle means a motor vehicle:
      (a) With a gross vehicle weight rating equal to or greater than 8,500 pounds;
      (b) Used on roads for the transportation of passengers or freight; and
      (c) Serving a commercial, governmental, or public purpose.
   (2) Gross vehicle weight rating means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

b. *Requirement*. Owners or operators of heavy-duty diesel engine powered motor vehicles are prohibited from idling for more than five consecutive minutes. Idling is the continuous operation of a vehicle's main drive engine while the vehicle is stopped.

c. *Exemptions*. The idling restriction of subsection 62-285.420(2), F.A.C., shall not apply:
   (1) To idling while stopped for traffic conditions over which the driver has no control, including being stopped for an official traffic control device or signal, in a line of traffic, at a railroad crossing, at a construction zone, or at the direction of law enforcement;
   (2) To idling of buses 10 minutes prior to passenger loading and when passengers are onboard if needed for passenger comfort;
   (3) To idling of an armored vehicle in which a person remains inside the vehicle while guarding the contents of the vehicle or while the vehicle is being loaded or unloaded.
   (4) If idling is necessary for a police, fire, ambulance, public safety, military, or other vehicle being used in an emergency or training capacity;
   (5) If idling is necessary to verify that the vehicle is in safe operating condition as required by law and that all equipment is in good working order, either as part of a daily vehicle inspection or as otherwise needed, provided that engine idling is mandatory for such verification;
   (6) If idling is necessary to accomplish work for which the vehicle was designed, other than propulsion, for example: collecting solid waste or recyclable material; controlling cargo temperature; or operating a lift, crane, pump, drill, hoist, mixer, or other auxiliary equipment other than a heater or air conditioner;

TV31. Continued:

(7) If idling is necessary to operate defrosters, heaters, air conditioners, or other equipment to prevent a safety or health emergency, but not solely for the comfort of the driver;
(8) To idling while the driver is sleeping or resting in a sleeper berth. This exemption expires at midnight September 30, 2013.

[Rule 62-285.420, F.A.C.]

APPENDIX U

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES.

Unregulated Emissions Units and/or Activities: An emission unit (EU) which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No.	**Brief Description of Emissions Units and/or Activity**
-003	Board Planing Mill
-002	Bark and Sawdust Silo with Baghouse
-005	# 2 Fuel System with Baghouse

TECHNICAL EVALUATION

&

PRELIMINARY DETERMINATION

APPLICANT

Gilman Building Products, LLC
3823 Owens Road,
Yulee, Florida 32097

Perry Mill
ARMS Facility ID No. 1230033

PROJECT

Project No. 1230033-012-AC

Kiln Replacement

COUNTY

Taylor County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

February 6, 2014

1. APPLICATION INFORMATION

1.1. Applicant Name and Address

Gilman Building Products, LLC (Gilman)
581705 White Oak Road
Yulee, Florida 32097

Authorized Representative: Mr. Victor H. Garrett, President

1.2. Permitting Schedule

- December 12, 2013: Received an air construction permit application.
- February 6, 2014: Department issued Draft Permit Package.

1.3. Facility Location

Gilman operates the Perry Mill in the City of Perry in Taylor County Florida. The Perry Mill processes south pine logs into chips, bark and graded finished lumber. The facility currently consists of a 46 million British units per hour (MMBtu/hr) wood-fired boiler that supplies heat to two indirect-fired lumber kilns. One kiln has an annual capacity of 63 million board feet (MBF/yr) while the other has an annual capacity of 33 MB/yr. In addition, there is one direct-fired lumber kiln with an annual capacity of 60 MBF/yr. There are also several unregulated emission units. The Perry Mill is a lumber production facility with a Standard Industrial Classification (SIC) Code of 2421, (Sawmills and Planning Mills, General).

The Perry Mill's address is 1509 South Byron Butler Parkway, Perry Florida 32348. The Universal Transverse Mercator (UTM) coordinates of the facility are 250.7 kilometers (km) east and 332.5 km north (UTM Zone 17, NAD83). The location of Taylor County is shown in **Figure** 1 while a satellite view of the facility is shown in **Figure 2**.

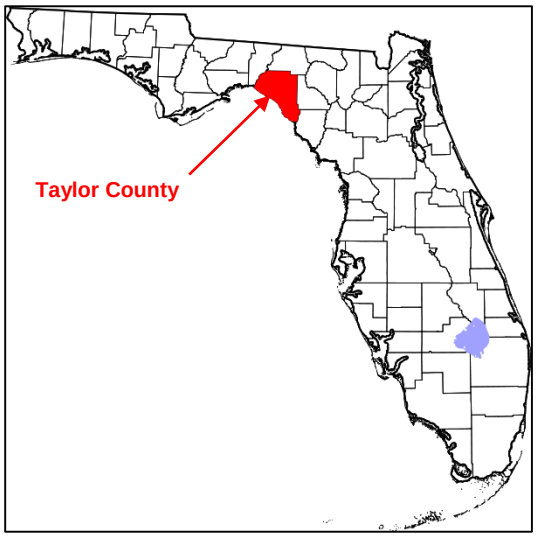

Figure 1 – Suwannee County, Florida.

Figure 2 – Satellite View of the Perry Mill.

1.4. Project Description

Gilman is proposing to replace the two older indirect-fired lumber kilns with a new direct-fired lumber kiln with a capacity of 90 MBF/yr at its Perry Mill. As a result of this project, the two indirect-fired lumber kilns along with the wood-fired boiler will be permanently shut down.

1.5. Facility Emission Units

Table 1 indicates the emissions units (EU) at the facility, including the new direct-fired lumber kiln. The emission units that will be retired as a result of this project are highlighted in yellow. The new emission unit is highlighted in green.

TABLE 1. EXISTING EMISSION UNITS AT THE PERRY MILL.

Facility ID No. 1230033	
EU ID No.	**Emission Unit Description**
Regulated Emissions Units	
001	Wood-fired Boiler with two multi-cyclone collectors in a series
004	#3 Direct Fired Lumber Drying Kiln
008	#4 Direct Fired Lumber Drying Kiln
Unregulated Emission Units	
002	Bark and Sawdust Silo with Baghouse
005	# 2 Fuel System with Baghouse
006	#1 Indirect Fired Lumber Drying Kiln
007	#2 Indirect Fired Lumber Drying Kiln

2. APPLICABLE REGULATIONS

2.1. State 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:

TABLE 2. APPLICABLE RULES FROM THE F.A.C.

Chapter	Description
62-4	Permits
62-204	Air Pollution Control – General Provisions
62-210	Stationary Sources of Air Pollution – General Requirements
62-212	Stationary Sources – Preconstruction Review
62-213	Operation Permits for Major Sources (Title V) of Air Pollution
62-214	Requirements for Sources Subject to the Federal (Title IV) Acid Rain Program
62-296	Stationary Sources – Emission Standards
62-297	Stationary Sources – Emissions Monitoring

In particular, the new direct-fired lumber kiln (EU 008) is subject to State Rule 62-296.410(2)(b), F.A.C. – Carbonaceous Fuel Burning Equipment. For a piece of equipment whose burners have a capacity of equal to or greater than 30 MMBtu/hr of total heat input, this rule sets emission limits for visible emissions (opacity) of 30 percent (%) and for PM of 0.2 pounds per MMBtu (lb/MMBtu) of heat input of carbonaceous fuel plus 0.1 lb/MMBtu of heat input of fossil fuel. The new direct-fired kiln has a burner capacity of 40 MMBtu/hr.

2.2. Federal Regulations

The U.S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40, Code of Federal Regulations, part 60 (40 CFR 60) that identifies New Source Performance Standards (NSPS) for a variety of industrial activities. 40 CFR 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP). 40 CFR 63 specifies NESHAP provisions based on the Maximum Achievable Control Technology (MACT) for given source categories.

Federal regulations adopted by reference are given in Rule 62-204.800, F.A.C. State regulations approved by EPA are given in 40 CFR 52, Subpart K – Florida, also known as the State Implementation Plan (SIP) for Florida. The following federal regulations apply to the Perry Mill and this project.

- The existing 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 and Rule 62-210.200 (Definitions), F.A.C.
- This project (as discussed below) **does** trigger a PSD review and a requirement to conduct Best Available Control Technology (BACT) determinations pursuant to Department Rule 62-212.400, F.A.C.
- The existing facility is a major source of hazardous air pollutants (HAP).
- The existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The proposed project includes units subject to the NESHAP of 40 CFR 63

2.3. PSD Major Stationary Source Applicability Overview

The Department regulates major stationary sources in accordance with Florida's PSD program pursuant to Rule 62-212.400, F.A.C. PSD preconstruction review is required in areas that are currently in attainment with the state and federal ambient air quality standards (AAQS) or areas designated as "unclassifiable" for these regulated pollutants. Commonly addressed PSD pollutants in the lumber industry include: carbon monoxide (CO), NO_X, particulate matter (PM), PM with a mean diameter of 10 microns or less (PM_{10}), PM with a mean diameter of 2.5 microns or less ($PM_{2.5}$), sulfur dioxide (SO_2), volatile organic and compounds (VOC).

Additional PSD pollutants that are more common to certain other industries include: lead (Pb), fluorides (F), sulfuric acid mist (SAM), mercury (Hg), hydrogen sulfide (H_2S), TRS including H_2S, reduced sulfur compounds (RSC) including H_2S, municipal waste combustor (MWC) organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans (dioxin/furan), MWC metals measured as PM; MWC acid gases measured as SO_2 and HCl, and MSW landfill emissions as non-methane organic compounds (NMOC).

As defined in Rule 62-210.200(189)(a)1, F.A.C., a stationary source is a "major stationary source" (major PSD source) if it emits or has the potential to emit (PTE):

- 250 tons per year (TPY) or more of any PSD pollutant; <u>or</u>
- 100 TPY or more of any PSD pollutant <u>and</u> the facility belongs to one of the 28 listed PSD major facility categories.

The PSD major facility categories does not include the sawmill category. The Perry Mill is a major stationary source based on the potential to emit 250 TPY or more of several individual PSD pollutants.

For major stationary sources such as the Perry Mill, PSD applicability for modification projects is based on thresholds known as the significant emission rates (SER) as defined in Rule 62-210.200(274), F.A.C. Any "net emissions increase" as defined in Rule 62-210.200(204), F.A.C. of a PSD pollutant from the project that equals or exceeds the respective SER is considered "significant". SER also means any emissions rate or any net emissions increase of a PSD pollutant associated with a major stationary source

or major modification which would construct within 10 km of a Class I area and have an impact on such area equal to or greater than 1 gram per cubic meter, 24-hour average.

Although a facility may be "major" (i.e. emits or has the potential to emit 100 or 250 TPY as applicable) for only one PSD pollutant, a project must include BACT controls for any PSD pollutant that exceeds the corresponding SER given in **Table 3**.

According to 40 CFR 52.21, six greenhouse gases (GHG), are also subject to regulation at new stationary sources that will emit or have the potential to emit 100,000 TPY expressed as the carbon dioxide equivalent emissions (CO_2e). The PSD SER for CO_2e is 75,000 TPY. This requirement has not been incorporated into Department rules but is a separate requirement of the EPA.

TABLE 3. LIST OF SER BY PSD-POLLUTANT. [1]

Pollutant	SER (TPY)	Pollutant	SER (TPY)
CO	100	NO_X	40
$PM/PM_{10}/PM_{2.5}$	25/15/10	Ozone (VOC) [2]	40
$PM_{2.5}$ (NO_X)	40	$PM_{2.5}$ (SO_2)	40
Ozone (NO_X) [2]	40	SAM	7
SO_2	40	Pb	0.6
Hg	0.1	GHG (CO_2e)	75,000 [3]

1. Excluding fluoride and those pollutants defined for Pulp and Paper, MWC, MSW landfills.
2. Ozone (O_3) is regulated by its precursors (VOC and NO_X). PSD for $PM_{2.5}$ can be triggered by its precursors (NO_X and SO_2).
3. GHG is subject to federal regulation for projects at this stationary source that will result in an emissions increase 75,000 TPY of GHG (as CO2e) or more. GHG regulations have not been incorporated into Department rules. FPL has submitted an PSD GHG application to EPA region 4 in Atlanta, GA.

The project is located in Taylor County, which is in an area that is currently in attainment with the state and federal AAQS or otherwise designated as unclassifiable. The Perry Mill kiln replacement project will emit, on a net basis, the following PSD-pollutants SO_2, VOC and CO_2e. In addition, the project will result in increases in the HAPs methanol (CH_4O) and formaldehyde (CH_2O).

2.4. PSD Applicability for the Project

2.4.1. Applicant Analysis

Table 4 provides PSD applicability calculations from the applicant based on the net emission increases expected to result from the kiln replacement project. The net emissions take into account the emissions of the new direct-fired #4 kiln (EU 008) minus the emissions of indirect-fired #1 kiln (EU 006), indirect-fired #2 kiln (EU 007) and the wood-fired boiler (EU 001) that will be retired as a result of this project. The maximum 2 year average for the netting calculation shown in **Table 4** was based on the years 2010 to 2011 that were selected by the applicant**.** GHG emissions expressed as CO_2e emissions are also included for comparison with federal greenhouse gas PSD applicability criteria.

TABLE 4. NET PSD POLLUTANT EMISSION INCREASES DUE TO THE KILN REPLACEMENTE PROJECT IN TONS PER YEAR (TPY).

Pollutant	Emissions Increase New Kiln [1]	Max. 2-Year Average Existing Units [2, 3, 4]	Net Increase [5]	SER	PSD Applies? (Yes, No)
NO_X	9.5	(23.1)	-13.7	40	No
$PM/PM_{10}/PM_{2.5}$	16.7	(21.8)	-5.1	25/15/10	No
CO	40.1	(63.1)	-23.0	100	No
SO_2	4.4	(2.6)	1.8	40	No
VOC	171.0	(96.9)	74.1	40	**Yes**

Pollutant	Emissions Increase New Kiln [1]	Max. 2-Year Average Existing Units [2, 3, 4]	Net Increase [5]	SER	PSD Applies? (Yes, No)
CH_2O	3.5	(0.9)	2.6	N/A	---
CH_4O	9.1	(5.1)	4.0	N/A	---
CO_2e	36,154	(21,685)	14,469	75,000	No

1. Emission factors (EF) for new kiln: PM, National Council for Air and Stream Improvement (NCASI) Reference; SO_2, AP-42; NO_X, NCASI Reference; CO, NCASI Reference; VOC, NCASI Reference; CH_2O, NCASI Reference; CH_4O, NCASI Reference; and CO_2e, 40 CFR 98.
2. Emission factors (EF) for wood-fired boiler: PM, Permit Limit; SO_2, AP-42; NO_X, AP-42; CO, AP-42; VOC, AP-42; CH_2O, AP-42; CH_4O, AP-42; and CO_2e, 40 CFR 98.
3. Emission factors (EF) for indirect-fired kilns: PM, NCASI Reference; SO_2, AP-42; NO_X, AP-42; CO, AP-42; VOC, NCASI Reference; CH_2O, NCASI Reference; CH_4O, NCASI Reference; and CO_2e, 40 CFR 98.
4. A number in parentheses represent a negative value for PSD applicability with regard to TPY increase for the specified pollutant and SER.
5. Total project increase minus the maximum 2-year average from the existing units (two kilns and one boiler) for each pollutant. The year's select to compute the average were 2010 and 2011.

As seen from **Table 4**, according to the applicant, the Perry Mill kiln replacement project triggers a PSD preconstruction review with an associated BACT determination for emissions of VOC under the Departments' rules.

2.4.2. Departments Analysis

The Department conducted is own netting analysis based on air operating reports (AOR) data for the three existing emission units that are to be retired as a result of this project. Emissions for the new kiln are the same as provided by the applicant. Results are summarized in **Table 5**.

TABLE 5. DEPARTMENTS NETTING ANALYSIS OF KILE REPLACEMENT PROJECT.

Pollutant	Emissions Increase New Kiln [1]	Max. 2-Year Average Existing Units, AOR Data [2, 3]				Net Increase [5]	SER	PSD Applies? (Yes, No)
		Kiln 1	Kiln 2	Boiler	Total			
NO_X	9.5	---	---	(22.6)	(22.6)	-13.1	40	No
$PM/PM_{10}/PM_{2.5}$	16.7	---	---	(31.6)	(31.6)	-14.9	25/15/10	No
CO	40.1	---	---	(60.2)	(60.2)	-20.1	100	No
SO_2	4.4	---	---	---	---	4.4	40	No
VOC	171.0	(71.9)	(38.3)	---	(110.2)	60.8	40	**Yes**
CH_2O	3.5	(0.54)	(0.30)	---	(0.84)	2.66	N/A	---
CH_4O	9.1	(0.63)	(0.89)		(1.62)	7.48	N/A	---
CO_2e [5]	---	---				---	75,000	No

1. Emission factors (EF) for new kiln: PM, National Council for Air and Stream Improvement (NCASI) Reference; SO_2, AP-42; NO_X, NCASI Reference; CO, NCASI Reference; VOC, NCASI Reference; CH_2O, NCASI Reference; CH_4O, NCASI Reference; and CO_2e, 40 CFR 98.
2. Highest 2 year period average from AOR database for each pollutant.
3. A number in parentheses represent a negative value for PSD applicability with regard to TPY increase for the specified pollutant and SER.
4. Total project increase minus the maximum 2-year average from the existing units (two kilns and one boiler) for each pollutant from AOR data. Two years select to compute the average varies by pollutant.
5. CO_2e is currently not reported to the AOR database.

As seen from **Table 5**, the Departments' netting analysis generally concurs with that of the applicant's. The only pollutant for which PSD is triggered thereby requiring a BACT determination is VOC.

3. REVIEW OF OTHER KEY REGULATORY PROVISIONS FOR APPLICABILITY TO PROJECT

Rule 62-204.800(11), F.A.C., 40 CFR 63, NESHAP.

The following provisions incorporated into Rule 62-204.800(11), F.A.C. adopted from 40 CFR 63 and incorporated into this rule apply to this project:

- 40 CFR 63, Subpart A – General Provisions (Link to Subpart A); and
- 40 CFR 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products (Link to Subpart DDDD). For the new kilns, Subpart DDDD states (bold highlight added):

  §63.2252 What are the requirements for process units that have no control or work practice requirements?

  For process units not subject to the compliance options or work practice requirements specified in §63.2240 (including, but not limited to, ***lumber kilns****), you are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in §63.9(b).*

Consequently, the new direct-fired lumber kiln at the Perry Mill **is not** required to comply with the compliance options, work practice requirements, performance testing, monitoring, startup, shutdown, and malfunction (SSM) plans, and recordkeeping or reporting requirements of Subpart DDDD.

4. BACT REVIEW LUMBER DRYING KILN (EU 008)

Based on the discussion in **subsection 2.4** above, a BACT determination is required for VOC for the new indirect-fired lumber #4 kiln (EU 008).

Rule 62-210.200, F.A.C. defines "BACT" as:

An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account:

1. *Energy, environmental and economic impacts, and other costs;*
2. *All scientific, engineering, and technical material and other information available to the Department; and*
3. *The emission limiting standards or BACT determinations of Florida and any other state; determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.*

If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation. Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63.

4.1. Applicant's Review and Proposal

The applicant identified several possible VOC control technologies in use at other types of wood products manufacturing facilities. The candidate control options are listed below:

- Wet Scrubbers;
- Condensation;
- Thermal or Catalytic Oxidation;
- Activated Carbon (Carbon Absorption);
- Bio Filtration (Biofilters); and
- Proper Design and Operation (Process Controls).

The applicant reviewed each technology and concluded that wet scrubbers, condensation, thermal or catalytic oxidation, activated carbon (carbon absorption) and bio filtration (biofilters) were not practicable and/or cost effective. The applicant selected proper design and operation (process control) as BACT. A brief overview of each control technology along with the rationale for rejection is given below.

- *Wet Scrubber*: Scrubbing of gas or vapor pollutants from a gas stream is usually accomplished in a packed column (or other type of column) where pollutants are absorbed by counter-current flow of a scrubbing liquid. Wet scrubbing is only effective for water soluble VOC. VOC emissions from lumber drying kilns are principally terpenes which have low water solubility. Also the condensate from the scrubber would cause frequent plugging of the equipment. Consequently, wet scrubbing is not considered technically feasible.

- *Condensation*: VOC emissions are condensed and removed from the exhaust by chilling the exhaust gases. VOCs condense when the concentration of organics in the gas exceed their vapor pressure at the condenser temperature. The condensed VOC are then destroyed in a separate combustion device or the materials are recovered for sale.

  Condensation is only effective to the extent that the temperature of the emissions can be cooled to a temperature necessary to cause condensation to occur. To reduce the vapor pressure of terpenes, the primary constituent of lumber kiln emissions, to 100 parts per million (ppm) as compound (1,000 ppm as C), the temperature would need to be reduced to 32 °F. At these temperatures, the unit would plug up with ice from the water vapor. This VOC removal technology is clearly not practical for lumber kilns.

- *Thermal and Catalytic Oxidation*: VOCs are oxidized to carbon dioxide (CO_2) and water vapor (H_2O) at a high temperature with a residence time between one-half second and one second. Thermal oxidizers (TO) can be designed as conventional thermal units, recuperative units (RU), or regenerative thermal oxidizers (RTO). A conventional TO does not have heat recovery capability. Therefore, the fuel cost is extremely high and is not suitable for high volume flow applications. In a RU, the contaminated inlet air is preheated by the combustion exhaust gas stream through a heat exchanger.

  An RTO can achieve a heat recovery higher than a RU. An RTO generally consists of at least two chambers packed with ceramic media. The VOC-laden gas enters one hot ceramic bed where the gas is heated to the desired combustion temperature. Auxiliary fuel may be required in this stage, depending on the heating value of the inlet gas. After reacting in the combustion zone, the gas then passes through the other ceramic bed, where the heat released from combustion is recovered and stored in the bed. The process flow then is switched so that the polluted gas is preheated by the ceramic bed. The system is operated in an alternating cycle, recovering up to ninety-five percent of the thermal energy during normal operation.

Similar to an RTO, a regenerative catalytic oxidizer (RCO) oxidizes VOC to CO_2 and H_2O. However, an RCO uses catalysts to lower the activation energy required for the oxidation so that the oxidation can be accomplished at a lower temperature than in an RTO. Thus, the necessity for auxiliary fuel is lower for an RCO than for an RTO.

Several factors make the use of RU, RTO and RCO units technically infeasible for controlling VOC emissions from lumber kilns. The most important factor is the ability to control the oxidation process temperature. RU, RTO and RCO burners are sized to bring the oxidation chamber to the desired operating temperature in a reasonable amount of time when the unit is drawing ambient air with no VOC. They are turned down during normal operation to supply just enough heat to keep the process at the desired temperature. The burners have a limited turndown ratio, so they cannot be operated below a certain Btu output. The VOC being burned also supply heat to keep the temperature high. When the combined heat input from the VOC and the burner raise the combustion temperature above the safe operating range of the unit (thermal overload), it will shut down.

The potential to thermally overload an RU, RCO or RTO is severe for lumber kilns because of the widely varying emission flow rate and VOC concentrations. The RU/RTO/RCO must be designed to accommodate the highest kiln exhaust rate at the lowest VOC concentration. They must also handle the lowest expected flow rate at the highest VOC concentration. At the low exhaust flow rate and high VOC concentration conditions, the RU/RTO/RCO will be thermally overloaded and shut down.

Maintaining a minimum flow through an RU/RTO/RCO is not an option. The exhaust rate from the kiln is set by the necessary ventilation and circulation patterns required to maintain the proper moisture content and temperature during the various drying cycle stages. Potential back-pressure from a blower-generated vacuum would disrupt the controlled drying environment and adversely affect the lumber product quality.

Finally, the combustion of natural gas as an auxiliary fuel would increase NO_X emissions. The creation of NO_X emissions simply to reduce VOC emissions may not yield any environmental benefit, as both pollutants contribute to ambient ozone formation.

For the reasons discussed above, TO,RU, RTO and RCO are not feasible control technologies for lumber kiln VOC emissions.

- *Activated Carbon (Carbon Absorption)*: Carbon adsorption systems can potentially be used to remove VOC from exhaust gas streams. The core component of a carbon adsorption system is an activated carbon bed contained in a steel vessel. The VOC-laden gas passes through the carbon bed where the VOC is adsorbed on the activated carbon. The cleaned gas is discharged to the atmosphere. The spent carbon is regenerated either at an on-site regeneration facility or by an off-site activated carbon supplier. Spent carbon is regenerated by using steam to displace adsorbed organic compounds at high temperatures.

  Several factors hinder the implementation of carbon adsorption on lumber kiln exhaust gases. First, carbon adsorption is not recommended for exhaust streams with greater than fifty percent relative humidity and temperatures greater than 150 °F. Water vapor preferentially condenses on the activated carbon above a relative humidity of about fifty percent, drastically reducing the efficiency and overall effectiveness of the adsorbent. Furthermore, the emission temperatures are too high for activated carbon.

  For the reasons discussed above, carbon adsorption is not a feasible control technology for lumber kiln VOC emissions.

- *Bio Filtration (Biofilters)*: Biofiltration is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and humidity through a special filter material containing microorganisms. As exhaust gases pass through the

biofilter, VOC is absorbed on the filter material and the micro-organisms break down the compounds and transform them into CO_2 and H_2O with varying efficiency.

One limiting parameter of biofiltration is its operating temperature. The maximum operating temperature of biofilters is approximately 100 °F. At higher temperatures the micro-organisms that comprise the biofilter cease absorbing and metabolizing VOC. Cooling the emissions to biofilter operating temperatures is difficult to achieve, requiring either massive heat exchangers or large amounts of dilution air. It is not feasible to cool the emissions to less than 100 °F.

Due to the temperature requirement, the large land requirement, and the unproven ability of biofiltration to operate successfully for VOC removal from lumber kiln emissions, this control technology is considered technically infeasible for this project and would not be practical because of the high moisture content of the exhaust air from the kilns.

- *Proper Design and Operation (Process Controls)*: Operational factors that may influence the amount of VOC emitted during the lumber drying process include drying temperature and humidity control. Both of these closely controlled drying kiln parameters can vary based on the lumber product being produced.

  The physical and operating characteristics of lumber kilns as well as the nature of their VOC emissions support a determination that BACT would not involve applying add on control technology to lumber kilns. However, precedent within the industry was also considered by the applicant performing of a search of the Reasonably Available Control Technology (RACT), BACT and Lowest Achievable Emission Rate (LAER) database typically called the RBLC database. The objective of the search was to identify the emission control technologies and emission levels that were determined by permitting authorities for lumber drying kilns in the wood products industry. The search included the current database containing all RBLC entries for the past 10 years.

  Selective results from the search of the RBLC database provided by the applicant are provided in **Table 6**. The Champion International Corporation McDavid Lumber Mill is included in the table because (although beyond 10 years old) it is relatively large and located in Florida.

TABLE 6. EMISSION LIMITS/ESTIMATES FROM LUMBER KILNS SIMILAR TO PROPOSED PROJEC FROM THE RBLC DATEBASE SUBMITTED BY THE APPLICANT.

Facility	RBLC ID	Date	VOC Limit (lb/MBF) [1]	Type of Control	Type of Kiln [2]
Elliot Sawmilling Co. South Carolina	SC-0085	5/2004	4.5	Work Practices	DF
Waldo, Arkansas,	AR-0080	1/2005	3.5	No Specified	IF
Potlatch Corp., Arkansas	AR-0083	7/2005	3.5 119 lb/hr	Proper Operation	IF
Sierra Pacific Industries Skagit County, Washington	WA-0327	1/2006	3.6	Computerized Steam Management System	DF
Champion International Corp., Florida (09/1999)	---	---	3.3 (short term) 2.8 (long term)	Work Practices	DF
Wright City Complex, Oklahoma	OK-113	7/2006	4.8	None Specified	None Specified
Albertville Sawmill, Alabama	AL-0235	4/2008	7.0	Management Practices	IF
Bibler Brothers Lumber, Arkansas	AK-0101	8/2008	3.8 46.5 lb/hr	None Specified	DF

Joyce Mill, Louisiana	LA-0252	8/2011	6.2	Proper Design and Operation	IF
West Fraser Lumber, Texas	TX-0607	12/2011	3.5	Proper Design and Operation	Not Defined
Simpson Lumber, Georgia	GA-0146	4/2012	3.83 Kiln 3 3.93 Kiln 4	Proper design and Operation	DF DF
Conway Plant, South Carolina	SC-0135	9/2012	4.2	Proper Design and Operation	IF
Newberry Lumber Mill, South Carolina	SC-0151	4/2013	3.76	Proper Design and Operation	DF
Opelika Lumber Mill, Alabama	AL-0257	9/2013	3.6	Proper Design and Operation	DF

1. Units are in pounds per thousand board feet (lb/MBF)
2. IF = Indirect-Fired Kiln while DF = Direct-Fired Kiln

In addition to the VOC emission limits and estimates provided in **Table 6** by the applicant from the RBLC database, the Department query the database and came up with the additional facilities given in **Table 7**.

TABLE 7. EMISSION LIMITS/ESTIMATES FROM LUMBER KILNS SIMILAR TO PROPOSED PROJEC FROM THE RBLC DATEBASE RESEARCH BY THE DEPARTMENT.

ID	State	Company/Facility	Capacity (MBF/YR)	Permit Date	Limit (lb/MBF) [1]	Control type
OR-0049	OR	Gilchrist Facility	---	5/22/2006	1.69	Good Design
FL-0315	FL	North Florida Lumber/Bristol Saw Mill	92000	8/4/2009	2.54 [2]	Good Design
AR-0046	AR	Potlatch - Ozan Unit	230000	3/8/2001	3.5	
AR-0065	AR	West Fraser (south), Inc. - Huttig Mill	230000	11/7/2002	3.5	
SC-0070	SC	Charles Ingram Lumber Company	110000	8/15/2001	3.5 [2]	Good Design
LA-0187	LA	Holden Wood Products Mill	44000	6/18/2003	3.62	
SC-0090	SC	New South Lumber Company, Inc.-Conway Plant		9/5/2003	4.2	Good Design
MS-0048	MS	International Paper Company Morton Lumber Mill	30000	9/5/2001	5.2	
AL-0225	AL	T.R. Miller Mill	125	5/16/2002	6.78	Good Design
AL-0195	AL	Albertville Sawmill	150	6/4/2003	7	Good Design
SC-0059	SC	Collum's Lumber Mill	55750	4/8/2002	7 [2]	

1. Units are in pounds per thousand board feet (lb/MBF)
2. Value calculated

The RBLC search results indicate that the operation of the kilns without VOC controls is the only feasible approach and is consistent with approved industry practices for other new kiln projects. The applicant proposes to limit emissions to 3.8 lb/MBF by proper design and operation. The applicant proposes compliance to be verified by recording annual production.

4.2. Department's Review and Preliminary Determination

The applicant suggested an emissions factor of 3.8 lb/MBF of VOC as BACT based on emissions factors derived from the National Council for Air and Stream Improvement (NCASI) emission factors in

Technical Bulletin No. 845, "A Comparative Study of VOC Emissions from Small-Scale and Full-Scale Lumber Kilns Drying Southern Pine," May 2002.

The suggested emissions factor is a sum of VOC, methanol, and formaldehyde for steam heated kilns. The average emission factors do not include methanol and formaldehyde because they may not be fully detected by EPA Method 25A as carbon. If compliance testing were to be performed it is likely that EPA Method 25A would be the preferred method. As such, the Department's preliminary determination is that the most commonly used RBLC emissions factor of 3.5 lb/MBF VOC is BACT for this project with compliance to be verified by recording annual production.

In 2004, EPA promulgated NESHAP Subpart DDDD - Plywood and Composite Wood Products. MACT emission standards or control/work practices are given in NESHAP Subpart DDDD. Plywood and composite wood products also include the subcategory of kiln-dried lumber. As previously mentioned, according to 40 CFR 63.2252, process units not subject to the compliance options or work practice requirements specified in section 63.2240 (including, but not limited to, lumber kilns):

"are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, startup/shutdown/maintenance plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in section 63.9(b)".

The applicant's proposal and the Department's preliminary BACT determination are consistent with the MACT determination conducted by EPA for the industry. While this is not generally a sufficient criterion to justify a BACT determination, it add further justification to the preliminary determination for this project.

5. AIR QUALITY IMPACT ANALYSIS

5.1. Introduction

The proposed project will increase emissions of the PSD-pollutant VOC at a level in excess of the PSD SER. For this pollutant the applicant must provide a demonstration using approved air quality models that project emissions will not cause or contribute to a violation of an ambient air quality standard (AAQS) or PSD increment for the pollutants when they apply. There are no applicable PSD increments, AAQS, significant impact or de minimis monitoring levels for VOC. Consequently the primary concern with respect to VOC emissions is the influence of such emissions on the formation of ozone.

5.2. Major VOC Stationary Sources Near the Perry Mill

To provide some perspective on the relative scale of the proposed project, **Table 8** list the largest stationary VOC sources near the Perry Mill. The maximum expected future emissions in TPY from the proposed Perry Mill kiln replacement project is shown for comparison (**bold text**).

TABLE 8. LARGEST SOURCES OF VOC NEAREST TO THE PERRY MILLT (TONS/YEAR).

Owner/Company Name	Site Name	County	Emissions
Buckeye Florida	Buckeye Florida	Taylor	617
Gilman Building Products	Gilman Building Products (Perry Mill)	Taylor	216
Gilman Building Products	Gilman Building Products, L. Butler	Union	149
Sebring Marine Industries	Williston Airport Plant	Levy	90
Gilman Building Products	**New Kiln Project**	**Taylor**	**74**
Sivance	Sivance	Alachua	58
Florida Gas Transmission Co	Bradford Co Station #16	Bradford	57

5.3. Ambient Ozone Air Monitoring Surrounding Proposed Facility

The State ambient air monitoring network operated by the Department and its partners (local air pollution control programs) includes monitors in counties containing over 90% of the population. The ambient air monitoring sites are concentrated in areas of high population density, along the coasts and near major highways in the interior portion of the state.

Ozone is a key indicator of the overall state of regional air quality. It is not emitted directly from combustion processes. Rather it is formed from VOC and NO_X emitted primarily from regional industrial and transportation sources. VOC is also emitted from authorized agricultural fires, natural drought-related fires and natural emissions from vegetation. These two precursors participate in photochemical reactions that occur on an area-wide basis and are highly dependent on meteorological factors.

The ozone monitor in Wakulla County was selected as representative because it is located in a rural area which is near and similar to the Perry Mill site. From **Figure 3**, it is clear that the ozone monitor in Wakulla County along with the other monitors highlighted in the figure have very similar ozone design values. In addition, all of them are below the 8-hour standard of 75 ppb for ozone (see **Table 9** for the Wakulla monitor summary).

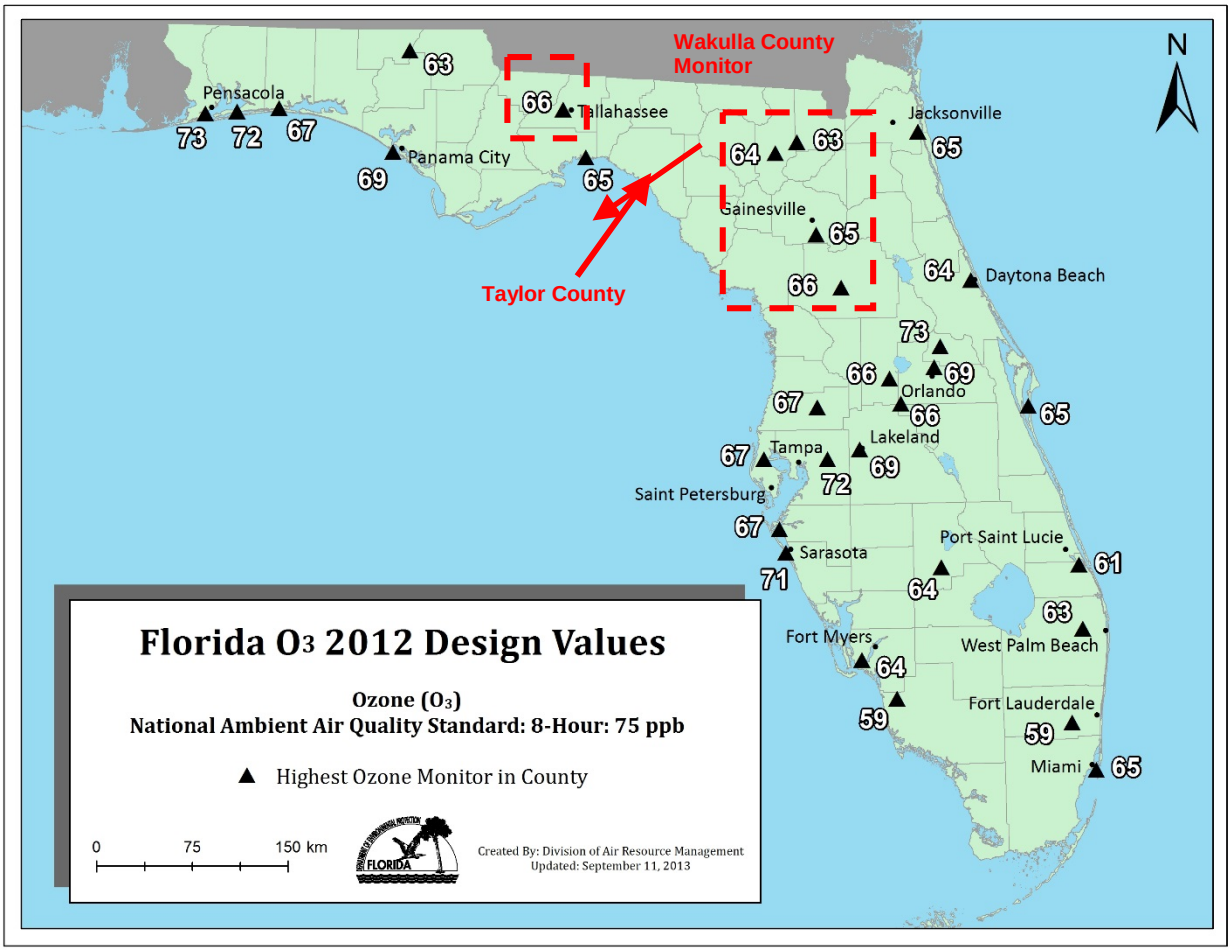

Figure 4 - Ozone Monitors and Design Values in Florida With Wakulla County Highlighted.

TABLE 9. OZONE AIR QUALITY MEASUREMENT NEAREST TO THE PERRY MILL (2010-2012).

Pollutant	Location (Site Number)	Averaging Period	Ambient Concentration			
			Compliance Period	Value	Standard	Units [a]
Ozone	Wakulla County (A1290002)	8-hour [b]	2010-2012	65	75	ppb

a. Units are in parts per billion (ppb).
b. Three-year average of the annual 4th highest daily 8-hour maximum.

5.4. Ozone Modeling

Generally speaking, within the Southeastern states, ozone formation in the non-coastal areas is significantly influenced by natural VOC emissions emitted by forested areas. Pine forest emissions such as isoprene readily participate in ozone formation. Because of the large pools of available VOC to participate in ozone formation, the southeastern U.S. is considered a NO_X-limited atmosphere with respect to ozone formation.

Projects with VOC and NO_X emissions greater than 100 tons/year are required to perform an ambient impact analysis for ozone including the gathering of preconstruction ambient air quality data. The applicant estimated annual potential VOC and NO_X emissions from the project to be 74.1 and (-13.7) TPY, respectively. The Departments' estimate of VOC and NO_X emissions as a result of the project are 60.8 and (-13.1) TPY, respectively. In both cases, emission are below the 100 TPY threshold for VOC modeling. Consequently, an ambient impact analysis for ozone along with the gathering of preconstruction ambient air quality data is not required for the project. It should be note that in actuality the project results in a net decrease in NO_X emissions of approximately 13 TPY. As stated in the previous paragraph, NO_X is the limiting pollutant with regard to regional ozone formation in the southeast. Consequently, this project in theory should reduce ozone, not increase it.

5.5. Additional Impacts Analysis

5.5.1. Growth-Related Impacts Due to the Proposed Project

A growth analysis is intended to quantify the amount of new growth that is likely to occur as a result of the project and to estimate emissions resulting from the associated growth. Associated growth includes residential and commercial/industrial growth resulting from the new kiln project at the Perry Mill. Residential growth depends on the number of new employees and the availability of housing in the area, while associated commercial and industrial growth consists of new sources providing services to the new employees and the mill.

According to the applicant, the project will result in only a minimal, if any, increase in the work force at the mill nor is residential or commercial growth expected to increase. Consequently, there is expected to be negligible growth related impacts as a result of the kiln replacement project.

5.5.2. Impact on Soils, Vegetation, and Wildlife

Due the majority of pollutants emission decreasing as a result of the project, and minimal increases in other emissions, the impacts on soils, vegetation, and wildlife should be minimal.

5.5.3. Visibility

Visibility impacts from the project for the reason discussed in **subsection 5.5.2** above should be minimal.

CONCLUSION

The Department makes a preliminary determination that the 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 application, the reasonable assurances provided by the applicant, and the conditions specified in the Draft permit. Further details of the analyses may be obtained by contacting: David Read, PE by email at david.read@dep.state.fl.us or by phone at 850-717-9075.

Table 1, Summary of Air Pollutant Standards and Terms

Gilman Building Products, LLC
GBP Perry Mill

Permit No.: 1230033-013-AV
Facility ID No.: 1230033

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

					Allowable Emissions			Equivalent Emissions*			See Permit
EU ID No.	EU Description	Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	Condition(s)
004	#3 Direct-Fired Kiln	Visible Emissions	Dried Wood Waste	8760	20%, except 27% <6min/hr					Rule 62-296.410(2)(a), F.A.C.	III.B.5.
008	#4 Direct-Fired Kiln	Visible Emissions	Dried Wood Waste	8760	30%, except 33% <6min/hr					Rule 62-296.410(2)(b), F.A.C.	III.A.10.
008	#4 Direct-Fired Kiln	Particulate Matter	Dried Wood Waste	8760	0.2 lb/MMBtu			8.0		Rule 62-296.410(2)(b), F.A.C.	III.A.9.
008	#4 Direct-Fired Kiln	VOC	Dried Wood Waste	8760	3.5 lb/Mbf					1230033-012-AC, BACT	III.A.7.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

Table 2, Summary of Compliance Requirements

Gilman Building Products, LLC
GBP Perry Mill

Permit No.: 1230033-013-AV
Facility ID No.: 1230033

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

EU ID No.	EU Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
004	#3 Direct-Fired Kiln	Visible Emissions	Dried Wood Waste	EPA Method 9	Annually				III.B.6., B.7.
004	#3 Direct-Fired Kiln	VOC	Dried Wood Waste	Recordkeeping	Annually				III.B.11.
008	#4 Direct-Fired Kiln	VOC	Dried Wood Waste	BMP Plan					III.A.8.
008	#4 Direct-Fired Kiln	Visible Emissions	Dried Wood Waste	EPA Method 9	Annually				III.A.13.(a)
008	#4 Direct-Fired Kiln	Particulate Matter	Dried Wood Waste	EPA Method 5	Annually				III.A.13.(b)

Notes:
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
**CMS [=] continuous monitoring system

Table H: Permit History

Gilman Building Products, LLC

Permit No.: 1230033-013-AV
Facility ID No.: 1230033

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type[1]
All	Facility	1230033-013-AV	05/19/2015	05/19/2020	Permit Renewal
001, 006, 007, 008	Wood Fire Boiler, #1 IDF Kiln, #2 IDF Kiln, #4 DF Kiln	1230033-012-AC (PSD-FL-427)	04/01/2014	04/08/2017	AC
002 005	Bark & Sawdust Silo #2 Fuel System	1230033-011-AC	11/04/2013	11/04/2013	AC Modification
All	Facility	1230033-010-AV	11/16/2013	05/18/2015[2]	Permit Renewal
All	Facility	1230033-009-AV	3/17/2009	3/17/2014	Permit Renewal
All	Facility	1230033-007-AV	10/13/2005	10/13/2010	Revision
003	Planer Mill	1230033-006-AC	8/17/2005	8/17/2006	AC
All	Facility	1230033-005-AV	12/09/2003	12/09/2008	Renewal
All	R.O. Change	1230033-003-AV	05/22/2001		Admin. Correction
All	Facility	1230033-003-AV	01/20/1998	01/20/2003	Initial
004	#3 DF Kiln	1230033-002-AC	03/14/1996	03/14/2001	AC
005	#2 Fuel System	1230033-002-AC	03/14/1996	03/14/2001	AC
002	Bark & Sawdust Silo	AC62-248334	07/27/1994	11/15/1994	AC
001	Wood Fire boiler	AC62-173530	03/01/1990	01/31/1991	AC
003	Planer Mill	AC62-253367	10/05/1994	04/05/1995	AC

[1] Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).
[2] Expired early upon final issuance of 1230033-013-AV (early renewal).