OPERATING PERMIT APPLICATION

Langboard, Inc. > Willacoochee, Georgia

Title V Operating Permit Renewal Application

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1. INTRODUCTION

Through this application, Langboard, Inc. (Langboard) is seeking a renewal of Title V Operating Permit No. 2493-003-0013-V-05-0, which expires on August 7, 2017. This Title V permit regulates Langboard's Medium Density Fiberboard (MDF) manufacturing facility in Willacoochee, Atkinson County, Georgia (Willacoochee facility). The Willacoochee facility is a major source pursuant to section 391 3-1-.03(10), "Title V Operating Permits," of Georgia's Rules for Air Quality Control, Chapter 391 3 1 (Effective August 14, 2016) (GRAQC) as potential emissions of criteria pollutants exceed the applicable threshold of 100 tons per year (tpy).

Langboard is submitting this Title V permit renewal application prior to February 7, 2017, pursuant to General Condition 8.5.1 and GRAQC 391-3-1-.03(10)(d)1(i), which requires renewal applications to be submitted at least six (6) months but not more than eighteen (18) months prior to the date of permit expiration.

The permit application includes a description of the operations, a summary of air emissions from the Willacoochee facility, an identification of applicable and non-applicable air pollution control requirements, and requested permit condition changes for the current version of the Title V permit. The appendices of this document contain process flow diagrams for the operations, emissions calculation documentation, and the current Title V permit. Please note that this application has been submitted into the Georgia Environmental Online System (GEOS), Application No. 43242, and submittal into GEOS serves as certification for the application.

At the Willacoochee facility, Langboard owns and operates the MDF mill and the adjacent TLC Mouldings plant. An area map and facility plot plan have been provided in previous permit application submittals for the operations, and therefore are not included in this permit renewal application since no significant equipment changes are included. The Willacoochee facility is located just off of Highway 135 in Atkinson County.

Langboard produces MDF using southern pine chips, shavings and sawdust as a basic raw material. The Willacoochee facility is also able to use mixed southern hardwood chips as raw material. The resin used as the binder is a urea formaldehyde low-emitting resin. Primary emission sources at the Willacoochee facility include a wood-fired combustion unit, three (3) flash tube dryers, and a board press.

The process flow diagrams included in Appendix A are separated by production area as follows to provide suitable detail of individual unit operations, control devices, and emission points.

- Figure A-1: Facility Overview
- Figure A-2: Raw Material Handling and Storage
- Figure A-3: Wood Refining and Drying
- Figure A-4: Mat Forming and Press
- Figure A-5: Board Finishing
- Figure A-6: Fuel Handling and Energy System
- Figure A-7: TLC Mouldings Operations

2.1. RAW MATERIAL STORAGE AND HANDLING

Chips, shavings, and sawdust used as raw materials are received at the site by truck or railcar. Shavings and sawdust are also produced at the mill through the board finishing process, and this material is used to supplement the raw material stream or as fuel in the fluidized bed combustion unit.

Chips are stored in an open pile on a concrete pad, while sawdust and shavings are stored in a covered storage structure. The three types of raw materials are transferred from the storage areas to reclaim hoppers by front-end loaders. One conveyor is then used to alternately transfer chips or shavings/sawdust to two dedicated silos– the "Shavings" and "Chip" silos.

From the Shavings Silo, a mixture of shavings and sawdust are pneumatically conveyed to the top of the digester area. A baghouse (Shavings and Sawdust Relay System – C003) is used to separate the shavings/sawdust mixture from the air stream. From the Chip Silo, chips are mechanically conveyed to a chips screening and washing system. Fines separated in the chip washing process are used as fuel in the fluidized bed combustion unit while oversized chips are rechipped and sent back through the process. Properly sized chips that pass through the washing system are mechanically conveyed to the top of the digester area.

To reduce potential for fugitive particulate matter (PM) emissions from the chip screening process, a baghouse (Chips Shaker Screen Baghouse - C001) is used to pull a draft on the screen area, which reduces fugitive particulate matter emissions from this process. A process flow diagram in Appendix A (Figure A-2) depicts the Shavings and Sawdust Relay System baghouse and the Chips Shaker Screen Baghouse.

2.2. REFINERS AND FLASH TUBE DRYERS

In the digester area, the production process is split into three lines termed the face, swing, and core lines. The Face line produces fiber used on the surfaces of the MDF board while the Core line produces fiber used in the middle of the MDF board. The Swing line, as the name implies, can be switched between either producing face or core fibers as needed.

Chips and shavings/sawdust conveyed from the raw material handling area are metered into separate digesters for the face, swing, and core lines. Here steam is added to soften the chips and wax is added to impart desired fiber properties. The material in each digester is then driven by steam pressure through a refiner where a rotating metal disc rips the wood material into fibers of the desired size and characteristic for making MDF board. Steam pressure continues to drive the fiber from the refiners through a blow line to the entrance of the flash tube dryers. A resin mixture is added to the wood fiber in the blowline between each refiner and flash tube dryer.

In the flash tube dryers, the resinated wood fiber is put in direct contact with the hot exhaust gas from the fluidized bed combustion unit. As the fiber exhaust stream is pulled through the flash tubes, the fiber moisture content is reduced to approximately ten percent (10%). After exiting the dryers, the fiber and air are separated by a set of primary cyclones. The air stream exhaust from these cyclones is pulled through a wet electrostatic precipitator (WESP, C005) before exhausting to the Bioscrubber (C006) and then to the atmosphere. The dry resinated fibers from the primary cyclones are relayed through a series of secondary cyclones termed the Face, Swing and Core Relay System (C008, C009, C010) that drop the fibers from each line into storage bins where they are held prior to being introduced to the forming machine. A process flow diagram (Figure A-3) shows the process exhaust flow in detail.

2.3. FORMER AND PRESS

At the former, fiber mats are built up on a moving screen with a vacuum hold-down system. Three layers (face, core, then another face) are placed on the screens to form the mats. From the former, the fiber mats are trimmed to proper dimensions by the face and core shaveoff systems and trim saw. From the saws the fiber mats are routed to the mat reject system, which can be used if necessary to remove undesirable mats from the conveyor before they are sent to the press. Relay and transfer systems are used to recover the board trim and rejected mats for reuse as fuel or fiber. A number of bag filters are used to control particulate emissions from these relay and transfer systems (C011, C012, C013, and C014). The process flow diagram in Appendix A (Figure A-4) provides additional details.

From the forming line, the fresh fiber mats are conveyed to a multi-opening batch press. The steam-heated press activates the heat-set resins and binds the fibers together in a panel under high temperature and pressure. Upon removal from the press, the MDF boards are conveyed through a board cooler system before entering the finishing area. A draft is maintained at pick-up ducts in the press area to draw in press exhaust air. Air from the board cooler is also collected and ducted back to the press area to be included in the exhaust drawn from the press area. A portion of the exhaust stream collected from the press area is routed back to the fluidized bed combustion unit for control. The balance is ducted to a packed tower scrubber (C022) before the exhaust stream is controlled by the Bioscrubber (C006) and then to the atmosphere.

2.4. FINISHING OPERATIONS

After boards have exited from the board cooler, fork trucks are used to move the unfinished boards to the sander line. Langboard uses a primary and secondary sander in the finishing process. Cyclones are used to separate sanderdust from the exhaust air, which is then routed to one of two baghouses (C015 and C016). The sanderdust collected is pneumatically transferred to a baghouse (C017) associated with a sanderdust silo.

After being sanded, the boards are strapped and moved to the warehouse or are taken to the specialty saws for further dimensioning. Depending on production requirements, panel sizing may be done with cross cut saws. Langboard uses one baghouse (C019) to control emissions from the saw operations. Sawdust separated is pneumatically transferred to a baghouse (C021) associated with the sawdust silo. As needed, sanderdust and sawdust from their silos are pneumatically conveyed to the fuel bins serving the fluidized bed combustion unit via the Saw/Sanderdust Relay System (C018). Figure A-5 provides details of the board finishing operations.

2.5. FLUIDIZED BED COMBUSTION UNIT

A fluidized bed combustion unit is used to generate hot combustion gases for the direct-contact flash tube dryers and steam for the press. Fuels are predominately bark received by truck or railcar, saw and sander dust from the finishing operations, and fines screened from the raw material streams. The fluidized bed receives several volatile organic compound (VOC)-laden streams from the process. The fluidized bed combustion unit is equipped with a selective non-catalytic reduction (SNCR) system, consisting of ammonia injection into the overfire air, for control of nitrogen oxides (NO_X).

A portion of the combustion gas from the fluidized bed unit is directed through a boiler where steam used in the digester/refiner area and in the press is generated. The boiler exhaust gases are then passed through a multiclone and economizer. Ash fallout from the boiler is reinjected back into the combustion unit. Ash from the multiclone and economizer are both conveyed to an ash storage silo (EU26). The exhaust gases from the boiler system and the balance directly from the combustor are mixed in a blend chamber and are then routed through a dry ESP (C025). The dry ESP removes PM from the combustor exhaust gas before it is delivered to the flash tube dryers. The flash tube dryer cyclones and WESP also provide secondary particulate control for the fluidized bed gases. The large ductwork that transfers the cleaned combustion gases to the flash tube dryers is equipped with an abort stack. A damper on this stack is used to help balance the pressure and heat load on the flash tubes. The abort stack also allows the fluidized bed system to continue operating during flash tube downtimes.

2.6. WAX PLANT AND PREMIER OPERATIONS

The Willacoochee facility operations include a wax emulsion process that is used to homogenize materials, which are essential to the production of MDF. Tanks are heated using excess steam from the fluidized bed combustion unit. The MDF Mill includes a 10.5 million British thermal unit per hour (MMBtu/hr) propane-fired package boiler to provide backup steam supply source for the Wax Plant operations.[1]

Langboard operations include a mixing process (Premier) that blends several materials, primarily emulsion liquids and powders. The product of the mixing process is used along with other waxes and resins in the production of MDF. Essentially, Langboard purchases the raw materials and blends on-site to reduce costs associated with buying the blended product directly.

[1] Note that the tanks associated with the wax emulsion process are not subject to NSPS Subpart Kb.

2.7. TLC MOULDINGS OPERATIONS

The raw material for the TLC Mouldings operations is principally MDF panels. The panels are first processed through the Sawing and Moulding Lines (T001). Here, the panels are cut into boards, sawed to desired dimensions, and then profiled through moulders that route out designs to create the moulding products. The Sawing and Moulding Lines consist of all moulding equipment and associated sets of saws and sawing equipment at the Willacoochee facility.

After the cutting and routing operations are complete, the mouldings produced can be transferred to the Painting and Finishing Operations (T002), or be shipped out unfinished. Currently, there are two painting lines in place. Paint Line 1 consists of initial sanding, primer coating, drying, secondary sanding, secondary coating, drying, buffing, and packaging. Paint Line 2 consists of sanding, coating, drying, buffing, and packaging. This paint line also employs a small components processing station where mouldings can be cut to particular sizes.

Hot air is supplied to two of the drying ovens (one on Paint Line 1 and one on Paint Line 2) using two propane-fired small boilers. A separate dryer on Paint Line 1 receives its heat via combustion air from a set of propane-fired burners. Total heat input to each dryer is less than 1.0 MMBtu/hr. The first drying oven on Paint Line 1, which is directly heated with propane burners, is an insignificant emission source. Likewise, the two small boilers used to provide hot air to the other drying oven on Paint Line 1 and the drying oven on Paint Line 2 are also insignificant emission sources.

The primary source of air emissions at the TLC plant is the Sawing and Moulding Lines (T001), which generate sawdust (i.e., PM). The sawdust from these operations is collected via pickup point ducts and pneumatically conveyed to the Saws and Moulders Baghouse System (TC01). The Painting and Finishing Operations (T002) generate PM emissions at various polish sanding and buffing stations on the lines. Sanderdust generated from these stations is collected via pickup point ducts and pneumatically conveyed to the Painting and Finishing Baghouse System (TC02). Any sawdust generated in the small components area of Paint Line 2 is pulled into the same pneumatic system that controls the entire Painting and Finishing Operations. The Painting and Finishing Operations are also a small source of VOC emissions from the use of water-based coatings.

The pellet mill operations process the sawdust collected in the baghouses into a fuel product. Sawdust collected in the baghouses is pneumatically conveyed to a cyclone on top of the pellet mill (T003). In the pellet mill, water and pressure are used to extrude the sawdust through orifices to form solid pellets, which are mechanically conveyed to a truck loadout storage bin. The solid pellets are loaded into trucks and delivered to the adjacent MDF Mill for use as fuel. The pellets can also be sold to third parties for use as a fuel. Exhaust from the pellet mill cyclone is routed back to the pneumatic system under the Saws and Moulders Baghouse System (TC01), resulting in a closed-loop system.

The Willacoochee facility is a source of regulated air pollutant emissions including total suspended particulate (TSP), particulate matter less than 10 µm in size (PM_{10}), VOC, NO_X, carbon monoxide (CO), and greenhouse gases (GHG). Appendix C contains emission calculations for the different operations supporting this permit application. The combustion of wood in the Fluidized Bed Energy System (EU24) and the combustion of propane in the Wax Plant Boiler (EU25) create by-product pollutants such as PM, CO and NO_X. In addition to combustion process emissions, the transfer and handling of the raw and processed materials results in PM and VOC emissions. PM emissions are minimized through the inherent use of cyclones and baghouses, which are designed to retain the process materials and to recover wood by-products for combustion. The Fluidized Bed Energy System controls a portion of the VOC emissions.

In June 2014, the U.S. Supreme Court ruled that sources of GHG cannot be regulated under the Prevention of Significant Deterioration (PSD) and Title V programs based solely on GHG emissions. As a result of the court ruling, the United States Environmental Protection Agency (USEPA) vacated the portions of the Tailoring Rule that included the carbon dioxide equivalent (CO_2e) major source threshold of 100,000 tpy for Title V and PSD.[2] Therefore, Langboard has not compared the potential GHG emissions for the Willacoochee facility to any major source threshold for determination of major source status for the PSD permitting program. Nonetheless, Langboard has conservatively included the potential CO_2e emissions for the Willacoochee facility in this application.

3.1. COMBUSTION EMISSIONS

Langboard operates two significant combustion sources: the Wax Plant Boiler (EU25) and the Fluidized Bed Energy System (EU24). In addition to these units, Langboard also operates propane-fired units in the TLC Mouldings Area. Emissions from the TLC Mouldings sources are discussed at the end of this section. Potential emissions of criteria pollutants, GHGs, and HAP from the Wax Plant Boiler are estimated based on emission factors from AP-42 Section 1.5 *Liquefied Petroleum Gas Combustion* and the potential annual fuel consumption.[3] Langboard requests an annual operation limit of 876 hr/yr in the renewed permit such that this unit may be classified as a limited-use unit under the provisions of the Major Source Boiler MACT.[4] A sample calculation for NO_X is included below:

Potential Annual NO_X Emissions from the Wax Plant Boiler (EU25):

$$Potential\ Annual\ NO_x\ Emissions = Emission\ Factor\ \left(\frac{lb}{Mgal}\right) x\ Annual\ Fuel\ Consumption\ \left(\frac{Mgal}{yr}\right) x \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ NO_x\ Emissions = 13.0\ \left(\frac{lb}{Mgal}\right) x\ 102\ \left(\frac{Mgal}{yr}\right) x\ \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ NO_x\ Emissions = 0.66 \left(\frac{tons}{yr}\right)$$

[2] Based on June 23, 2014 U.S. Supreme Court ruling, the federal PSD and Title V regulations have been amended to no longer include a major source threshold for GHG emissions. Please refer to Section 4.1.3 of this application for more information regarding the Tailoring Rule applicability for the Willacoochee facility.

[3] AP-42 Section 1.5 Liquefied Petroleum Gas Combustion, (7/08).

[4] Please note that as an alternative to a limit on operational hours, Langboard will accept a limit on fuel usage equivalent of 10% annual operation at maximum heat input capacity.

The Fluidized Bed Energy System has a heat input capacity of 185 MMBtu/hr and combusts bark and wood residue. The system emissions are controlled by an SNCR and an ESP. Exhaust from the ESP is then routed directly to the Flash Tube Dryers (EU05-EU07) which are controlled by a WESP and a Bioscrubber. Specific Condition 3.2.3 of the Permit V-05-0 limits CO, PM, and VOC emissions from the Bioscrubber to 50 lb/hr, 25 lb/hr, and 54.4 lb/hr, respectively. In addition to the Flash Tube Dryers and the Fluidized Bed Energy System, the Bioscrubber also controls emissions from the Press Vent System (EU22). Potential annual emissions from the Flash Tube Dryers, the Press Vent System, and the Fluidized Bed Energy System are collectively estimated based on the permitted emission limits for the Bioscrubber and continuous operation (8,760 hr/yr). The potential annual VOC emissions calculation for the emission units controlled by the Bioscrubber is provided below:

Potential Annual VOC Emissions from the Flash Tube Dryers (EU05-EU07), Press Vent System (EU22), and the Fluidized Bed Energy System (EU24):

$$Potential\ Annual\ VOC\ Emissions = Emission\ Limit\ \left(\frac{lb}{hr}\right) x\ Hours\ of\ Operation\ \left(\frac{hr}{yr}\right) x\ \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ VOC\ Emissions = 54.4\ \left(\frac{lb}{hr}\right) x\ 8{,}760\ \left(\frac{hr}{yr}\right) x\ \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ VOC\ Emissions = 238\ \left(\frac{tons}{yr}\right)$$

GHG and HAP emissions from the combustion of wood in the Fluidized Bed Energy System are estimated based on the heat input capacity of the unit and emission factors from AP-42 Section 1.6 – *Wood Residue Combustion in Boilers*. Potential annual emissions are calculated assuming continuous operation. Methane (CH_4) and nitrous oxide (N_2O) emissions are converted to carbon dioxide equivalent (CO_2e) based on their respective global warming potentials (GWP).[5] A sample calculation for potential CH_4 emissions and conversion to CO_2e is included below:

Potential Annual CH_4 Emissions from the Fluidized Bed Energy System (EU24):

$$Potential\ Annual\ CH_4\ Emissions = Emission\ Factor\ \left(\frac{lb}{MMBtu}\right) x\ Heat\ Input \left(\frac{MMBtu}{hr}\right) x\ Hours\ of\ Operation\ \left(\frac{hr}{yr}\right) x\ \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ CH_4\ Emissions = 0.021\ \left(\frac{lb}{MMBtu}\right) x\ 185 \left(\frac{MMBtu}{hr}\right) x\ 8{,}760\ \left(\frac{hr}{yr}\right) x\ \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ CH_4\ Emissions = 17.0\ \left(\frac{tons}{yr}\right)$$

$$CO_2e = Potential\ Annual\ CH_4\ Emissions\ \left(\frac{ton}{yr}\right) x\ GWP\ \left(\frac{ton\ CH_4}{ton\ CO_2}\right)$$

[5] Global warming potentials obtained from Table A-1 to Subpart A of 40 CFR 98 (74 FR 56395).

$$CO_2e = 17.0\ \left(\frac{ton}{yr}\right) x\ 21\ \left(\frac{ton\ CH_4}{ton\ CO_2}\right)$$

$$CO_2e =\ 357\ (\frac{tons}{yr})$$

The TLC Mouldings plant operates three (3) small combustion sources, all of which are insignificant activities: two small propane-fired water heater boilers (< 1.0 MMBtu/hr) and a set of propane burners in the first drying oven on Painting Line 1 (< 1.0 MMBtu/hr, total). Exhaust from the water heater boilers vents through the Painting and Finishing Lines Baghouse (TC02) while exhaust from the drying oven propane burners is part of the dryer exhaust. Potential emissions from these sources are estimated using emission factors from AP-42 Section 1.5 *Liquefied Petroleum Gas Combustion* and the potential annual fuel consumption.[6]

3.2. PM PROCESSING EMISSIONS

Langboard operates a number of bin vents and filters that are sources of process PM emissions. These units have PM PSD-Avoidance limits (lb/hr) that were established based on design outlet grain loadings and baghouse flow rates.[7] Potential annual PM emissions for each of these sources are estimated by multiplying the hourly emission limit by the potential hours of operation. All sources are permitted to operate continuously with the exception of the Reject Relay System (EU13), which is permitted to operate a maximum of seven (7) hours per week.[8]

PM emissions are generated from the sawing, moulding, sanding, and buffing operations at the TLC Mouldings plant. Small amounts of fugitive PM emissions occur from the loadout of sawdust and/or sawdust pellets at the truck loadout bin.

Condition 3.2.17 of Permit V-05-0 limits PM emissions from the Sawing and Moulding Lines Baghouse (TC01) to 8.0 tpy and the Painting and Finishing Operations Baghouse (TC02) to 2.0 tpy.

3.3. PAINTING AND FINISHING VOC EMISSIONS

Low VOC-content coatings are applied to mouldings and related products produced at the TLC Mouldings plant. The only significant source of VOC emissions come from the Willacoochee facility's Painting and Finishing Operations (T002). Specific Condition 3.2.18 of the Title V permit limits VOC emissions from T002 to 10.3 tpy. Langboard is requesting a revised VOC emission limit of 9.0 tpy of VOC for T002. The potential VOC emissions from T002 are estimated based on a composite average VOC content for coatings used and maximum anticipated usage rate. The calculation of potential annual VOC emissions from the Painting and Finishing Operations are shown below.

Potential Annual VOC Emissions from the Painting and Finishing Operations (T002):

$$Potential\ Annual\ VOC\ Emissions = VOC\ Content\ \left(\frac{lb\ VOC}{gal}\right) x\ Annual\ Coating\ Consumption\ \left(\frac{gal}{yr}\right) x \frac{1\ ton}{2{,}000\ lb}$$

[6] AP-42 Section 1.5 Liquefied Petroleum Gas Combustion, (7/08).

[7] Calculated outlet emissions of less than 1 lb/hr were set to permit limits of 1.0 lb/hr.

[8] Specific Condition 3.2.7 of Title V Permit No. 2493-003-0013-V-05-0.

$$Potential\ Annual\ VOC\ Emissions = 0.1\ \left(\frac{lb\ VOC}{gal}\right) x\ 180{,}000\ \left(\frac{gal}{yr}\right) x \frac{1\ ton}{2{,}000\ lb}$$

$$Potential\ Annual\ VOC\ Emissions = 9.0\ \left(\frac{tons}{yr}\right)$$

A small amount of fugitive VOC emissions may also result from printing of company labels on products at the Willacoochee facility.[9] Potential emissions from the miscellaneous coating operation are estimated based on the maximum anticipated coating usage rate. Langboard conservatively assumes that 50% of the coating will be released to the atmosphere as VOC.

3.4. EMERGENCY ENGINES

Langboard operates three (3) emergency engines at the Willacoochee facility: two (2) emergency generators and an emergency fire pump engine. The emergency generators have maximum horsepower ratings of 480 hp and 749 hp and the fire pump has a maximum site rating of 310 hp. All three (3) of the emergency engines combust diesel fuel (No. 2 fuel oil) only. Langboard utilized emission factors from AP-42 Section 3.3 for Gasoline and Diesel Stationary Internal Combustion Engines to estimate potential emissions of criteria pollutants, GHGs, and HAP.

Per GRAQC 391-3-1-.03(10)(g)(iv)(V), an emergency generator can operate up to 500 hr/yr in Atkinson County and can still be classified as an insignificant activity. Therefore, Langboard assumes an annual operation of 500 hr/yr for these units (activities).

3.5. FACILITY-WIDE SUMMARY

Total facility-wide emissions for the Willacoochee facility (MDF Mill and the TLC Mouldings operations) are shown in Table 3-1. Detailed calculations and documentation of emission factors are provided in Appendix C of this permit application.

[9] Miscellaneous coating operations with ID No. MISC is located right after the sawdust pickup system (EU19).

Table 3-1. Facility-Wide Emissions

Pollutant	Facility-Wide Emissions (tpy)	Title V Applicability MST (tpy)	Title V Applicability Applicable? (Yes/No)[1]	PSD Applicability MST (tpy)[2]	PSD Applicability Applicable? (Yes/No)[2]
CO	222.7	100	Yes	250	No
NO_X	232.8	100	Yes	250	No
SO_2	48.6	100	No	250	No
Filterable PM	244.1	100	Yes	250	No
Total PM	244.1	100	Yes	250	No
Total PM_{10}	244.1	100	Yes	250	No
Total $PM_{2.5}$	244.1	100	Yes	250	No
VOC	248.8	100	Yes	250	No
Max. Individual HAP	3.57	10	No	N/A	No
Total HAP	7.15	25	No	N/A	No

1. Please note that the current facility-wide HAP emissions are less than major source thresholds. However, the Willacoochee facility is subject to the PCWP MACT because the site was classified as a HAP major source on October 1, 2007 (compliance date of the PCWP MACT for existing sources). If the site is classified as a HAP major source at the initial compliance date of the MACT Rule, then the site is subject to that Rule as a major source in perpetuity.

2. HAP emissions are not regulated under the PSD program.

4. REGULATORY APPLICABILITY ANALYSIS AND REQUIREMENTS

The Willacoochee facility is subject to certain federal and state air regulations. This section summarizes the air permitting requirements and the key air quality regulations that apply to the Willacoochee facility. Specifically, applicability of PSD requirements, Title V of the 1990 Clean Air Act Amendments, Compliance Assurance Monitoring (CAM), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Stratospheric Ozone Protection, and State of Georgia State Implementation Plan (SIP) regulations are addressed.

Applicable requirements contained within existing permits are also summarized. This review is presented to supplement and/or add clarification to the information provided on the Georgia Title V permit renewal application, which together fulfill the requirement to include citations and descriptions of applicable statutory and administrative code requirements.

GRAQC 391-3-1-.03(10)(d)6, *Permit Shield*, provides that Georgia EPD may expressly include a provision in the Title V Operating Permit stating that compliance with the conditions of the Permit shall be deemed compliance with all applicable requirements as of the date of permit issuance if:

- Such applicable requirements are included and are specifically identified in the permit; or
- The Director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

Langboard is requesting through this application that Georgia EPD include permit shield provisions in its Operating Permit consistent with this regulation. Therefore, in addition to providing a summary of applicable requirements, this section of the application also provides non-applicability determinations for certain regulations allowing Georgia EPD to confirm that identified regulations are not applicable to the Langboard operations at the Willacoochee facility. Note that this non-applicability review is limited to those regulations for which there may be some question of applicability specific to the Willacoochee facility. Regulations that are categorically non-applicable are not discussed (e.g., NSPS Subpart J, *Standards of Performance for Petroleum Refineries*).

4.1. FEDERAL REGULATORY APPLICABILITY

4.1.1. Prevention of Significant Deterioration Applicability

The Willacoochee facility is located in Atkinson County. This area has been designated as an attainment or unclassifiable area for all criteria pollutants with respect to the National Ambient Air Quality Standards (NAAQS).[10] Thus, the Willacoochee facility is potentially subject to PSD permitting requirements for all applicable pollutants. Since the Willacoochee facility is not included on the so-called "list of 28" source categories included in 40 CFR §52.21, the 100 tpy threshold does not apply to this facility. Thus, the PSD "major" source threshold is 250 tpy for each regulated pollutant.

As shown in Table 3-1, the facility-wide potential emissions of all PSD-regulated pollutants are less than the applicable PSD major source thresholds. Therefore, the Willacoochee facility is a minor source with respect to the PSD program.

4.1.2. Title V Applicability

The major source thresholds with respect to the Georgia Title V regulations are 10 tpy of any single hazardous air pollutant (HAP), 25 tpy of any combination of HAP, and 100 tpy of other regulated pollutants. Facility-wide emissions of CO, NO_X, PM_{10}, and VOC exceed the 100 tpy major source threshold. Thus, a Title V Permit is required for the Willacoochee facility. The initial Title V permit for the facility was issued in 2001.

Langboard is submitting this Title V permit renewal application prior to February 7, 2017, pursuant to part (c)(1)(iii) of Georgia's Title V regulations, which requires renewal application submittal at least 6 months but not more than 18 months prior to the date of permit expiration.

4.1.3. EPA's GHG Tailoring Rule

On May 13, 2010, the EPA finalized the Tailoring Rule (published at 75 FR 31514 on June 3, 2010) which established an approach to addressing greenhouse gases (GHGs) from stationary sources under the Clean Air Act (CAA) permitting programs (PSD and Title V). GHGs became subject to regulation under the CAA on January 2, 2011 when EPA's Light Duty Vehicle Rule became effective. The rule established a schedule for the phase in of CAA permitting requirements for GHGs via two initial steps: Step 1 for the time period from January 2, 2011 through June 30, 2011, and Step 2 for the time period from July 1, 2011 through June 30, 2013.

In June 2014, the U.S. Supreme Court ruled that sources of GHG cannot be regulated under the PSD and Title V programs based solely on GHG emissions. As a result of the court ruling, the USEPA vacated the portions of the Tailoring Rule that included the CO_2e major source threshold of 100,000 tpy for Title V and PSD. Therefore, as the Willacoochee facility is a minor source with respect to PSD, PSD permitting cannot be triggered for GHG alone. Therefore, Langboard has not compared the potential GHG emissions for the Willacoochee facility to any major source threshold for determination of major source status for the PSD permitting program.

With respect to the Title V permitting program, existing Title V major sources such as the Willacoochee facility are also potentially subject to Title V requirements for GHGs. Since the Willacoochee facility is a Title V major source for other criteria and HAP pollutants, the requirements for GHG under Title V potentially apply. In accordance with the GHG Tailoring Rule, this permit application addresses GHG emissions. However, until the Willacoochee facility actually triggers PSD for GHGs, there are no applicable requirements with respect to GHGs

[10] 40 CFR § 81.311.

to incorporate into the current Title V permit, so other than including GHG emissions in this permit renewal application, no other information is required to be submitted by Langboard.

4.1.4. New Source Performance Standards

NSPS require new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology as specified in the applicable provisions. Potentially applicable NSPS are discussed in this section.

4.1.4.1. NSPS Subpart A – General Provisions

All sources subject to a source specific NSPS are also subject to the general provisions of NSPS Subpart A unless specifically excluded. NSPS Subpart A generally requires the following:

- Initial construction/reconstruction notification
- Initial startup notification
- Performance tests
- Performance test date initial notification
- General monitoring and recordkeeping requirements
- Semiannual monitoring system and/or excess emission reports

In the case of the Energy System, a single source-specific NSPS applies: NSPS Subpart Db discussed below. Therefore, NSPS Subpart A applies and Langboard will comply with all applicable requirements listed in the subpart.

4.1.4.2. NSPS Subpart Db

The NSPS Subpart Db applicability definition of 40 CFR §60.40b(a) provides:

The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (100 million Btu/hr).

The combustion unit comprising the Energy System has a heat input capacity of 185 MMBtu/hr. Additionally, the Energy System meets the definition of a steam generating unit as listed in the Rule. Thus, NSPS Subpart Db applies.

NSPS Subpart Db limits filterable PM emissions to 0.10 lb/MMBtu and exhaust gas opacities to not more than 20% (except for one period per hour of not more than 27%) as measured by an opacity monitor. The NSPS Subpart Db NO_X and SO_2 emission limits do not apply to the Energy System as it only fires wood.

4.1.4.3. NSPS Subpart Dc

The NSPS Subpart Dc applicability definition of 40 CFR §60.40c(a) provides:

The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 9, 1989, and that has a maximum design heat input capacity of 29 megawatts (100 million Btu/hr) or less, but greater than or equal to 2.9 megawatts (10 million Btu/hr).

The Wax Plant Boiler has a heat input capacity greater than 10 million Btu/hr, but was originally manufactured in 1987, before the NSPS Subpart Dc applicability date. Therefore, the Wax Plant Boiler is not subject to NSPS Subpart Dc.

The two (2) hot water boilers and the propane heater in the TLC Mouldings operations are all less than 10 MMBtu/hr. Therefore, NSPS Subpart Dc does not apply to these units.

4.1.4.4. NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Per the NSPS Subpart IIII applicability definition of 40 CFR §60.4200(a)(2), this subpart is applicable to stationary compression ignition (CI) internal combustion engines that commenced construction after July 11, 2005 and were manufactured after April 1, 2006.

The Willacoochee facility includes two (2) diesel fired emergency generators and one diesel-fired fire pump engine. One generator is a Caterpillar SR4, Model 3412 with a maximum engine rating of 749 hp (558.5 kW), and the other generator is a Caterpillar LC6, Model C9 with maximum engine rating of 480 hp (358 kW). The fire pump is a Clarke Model DDFP-L6FA with a maximum horsepower rating of 310 hp. The Caterpillar SR4 engine and the fire pump were both installed prior to the July 11, 2005 applicability date and are therefore not subject to NSPS Subpart IIII. The Caterpillar LC6 engine was manufactured after July 11, 2005, and installed at the facility in 2009. This engine is therefore considered a new emergency engine and is subject to the applicable requirements of NSPS Subpart IIII. The engine is certified by the manufacturer to meet EPA Tier III standards for non-road engines and will meet the applicable emission limits per 40 CFR §89.112(a) and 40 CFR §89.113(a) in accordance with 40 CFR §60.4205(b). Per 40 CFR §60.4214(b), for an emergency stationary internal combustion engine, Langboard was not required to submit an initial notification.

Langboard only fires diesel fuel with a sulfur content of 15 ppm or less per 40 CFR §60.4207(b) in the engine. As required by 40 CFR §60.4209(a), the engine is equipped with a non-resettable hour meter. Per 40 CFR §60.4211(e), Langboard limits operation of the engine to no more than 100 hours per year for maintenance checks and readiness testing.

4.1.4.5. Non- Applicability of All Other Currently Promulgated NSPS

NSPS are primarily developed for particular industrial source categories. Therefore, the applicability of a particular NSPS to a facility can be readily ascertained based on the industrial source category covered. All NSPS regulations besides those specifically discussed above are categorically not applicable to the Willacoochee facility.

4.1.5. National Emission Standards for Hazardous Air Pollutants

NESHAP establish the maximum degree of HAP emission reductions that is achievable for new or existing sources in specific categories. Potentially applicable NESHAP are discussed in this section. Please note that the current facility-wide HAP emissions as shown in Table 3-1 are less than major source thresholds. However, the Willacoochee facility is subject to the PCWP MACT because the site was classified as a HAP major source on October 1, 2007 (compliance date of the PCWP MACT for existing sources). If the site is classified as a HAP major source at the initial compliance date of the MACT Rule, then the site is subject to that Rule as a major source in perpetuity.

4.1.5.1. NESHAP Subpart A - General Provisions

If a source is subject to a specific NESHAP, then the general provisions of NESHAP Subpart A will apply. As implied, this subpart contains requirements relevant to all affected sources under a specific NESHAP.

4.1.5.2. NESHAP Subpart DDDD – Plywood and Composite Wood Products

The existing dryers, Energy Systems, and press are existing sources subject to the Plywood and Composite Wood Products (PCWP) MACT standard. The PCWP MACT outlines three (3) potential methods of demonstrating compliance with emission limits for existing and new sources. The first option for demonstrating compliance is a production-based limit on HAP emissions. The second option is an "add-on control system" with a corresponding concentration or percent reduction limit for the outlet of the add-on control system. The third option is an emissions averaging compliance option, which applies to existing sources only. Each affected source must meet only one of the three compliance options. Langboard elected to utilize the add-on control system compliance option and installed the Bioscrubber (C006) downstream of the existing packed tower scrubber and WESP to reduce formaldehyde emissions by at least 90%.

Bioscrubbers are not listed as a specific add-on control technology within the PCWP MACT to achieve HAP emissions control. As such, specific requirements for testing, monitoring, record keeping, and reporting for the use of a bioscrubber are not established within the rule. Therefore, Langboard demonstrated compliance with the emissions limitation in accordance with the compliance plan provided to EPD and USEPA to establish site-specific operating parameters pursuant to Table 2 to Subpart DDDD. The WESP and packed tower scrubber are also part of the facility's HAP control system, in addition to the Bioscrubber. The requested compliance plan requirements are included in the Title V permit, and Langboard demonstrates compliance with the PCWP MACT by completing these monitoring, record keeping, and reporting requirements.

4.1.5.3. NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT)

Boiler MACT applies to certain boilers and process heaters located at major sources of HAP. The requirements that apply to the boiler or process heater can depend on whether the unit is considered new, reconstructed, or existing, the fuels fired in the boiler, certain design specifications of the unit (in some cases), and the purpose for which the unit operates.

The Fluidized Bed Energy System (EU24) combusts wood and is located at a major source of HAP emissions. However, the unit will not be subject to Subpart DDDDD as the primary purpose of the combustion unit is to transport and dry wood flakes. This rule regulates combustion units for which the primary purpose is indirect heat exchange. The USEPA revised NESHAP Subpart DDDD (PCWP) to clarify that the Energy System is only subject to the PCWP MACT standard.[11]

> *The affected source is the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations…*[12]

[11] Federal Register [FR 71 (32) 8342-8387], February 16, 2006.

[12] 40 CFR §63.2232(b).

Therefore, the Energy System is subject to Subpart DDDD and not Subpart DDDDD.

The Wax Plant Boiler is propane-fired with a maximum heat input capacity of 10.5 MMBtu/hr that operates at a major source of HAP (since no HAP synthetic minor emissions limitation requested and incorporated into permit prior to the rule compliance date for the unit – January 31, 2016), and is not already regulated by the PCWP MACT. A boiler or process heater is considered new or reconstructed if construction or reconstruction commenced after June 4, 2010.[13] If an affected boiler is not considered new or reconstructed, the boiler is considered existing.[14] As the Wax Plant Boiler was installed prior to June 4, 2010 and has not since been modified or reconstructed, the Wax Plant Boiler is an existing unit under the Boiler MACT.

As the Wax Plant Boiler combusts liquefied petroleum gas only, the boiler qualifies as a "unit designed to burn Gas 1 fuels." [15] There are no emission limitations for Gas 1 units, but work practice standards do apply. Additionally, Langboard only operates the Wax Plant Boiler in the event that the Energy Systems are not already operating as the Energy Systems provide enough steam for the Wax Plant operations. As the Energy Systems are operating on a near continual basis, the Wax Plant Boiler operates less than 876 hr/yr and may be classified as a "limited-use boiler" under the Rule.[16] The work practice standards for a Gas 1 limited-use boiler under the Boiler MACT include the following:

- Conduct a tune-up every five (5) years[17]
- Keep fuel use records during operation[18]
- Submit a compliance report through USEPA's CDX/CEDRI online database every five (5) years[19]
- Submittal of the initial Notification of Compliance Status (NOCS)[20]

Pursuant to 40 CFR 63.7500(c), an energy assessment was not required for this unit. Langboard will complete the required tune-ups and compliance reporting requirements as detailed in the Rule. Langboard requests that EPD include a 10% annual capacity factor limitation for the Wax Plant Boiler in the renewed permit such that this unit may demonstrate compliance as a limited-use unit.

The TLC Mouldings operations include two (2) hot water boilers and a propane burner. Pursuant to 40 CFR 63.7491(d), units that meet the definition of a hot water boiler are not subject to the provisions of the Boiler MACT. Additionally, per the definition of process heater in 40 CFR 63.7575, a direct-fired burner is not considered a process heater under the Rule. As the propane burner is a direct-fired unit, it will also not be subject to the provisions under the Boiler MACT.

4.1.5.4. NESHAP Subpart QQQQ – Surface Coating of Wood Building Products

NESHAP Subpart QQQQ, *Surface Coating of Wood Building Products*, establishes emission standards for wood building product surface coating operations. The TLC Painting and Finishing Operations (T002) is an existing

[13] 40 CFR 63.7490(b),(c)

[14] 40 CFR 63.7490(d)

[15] Pursuant to 40 CFR 63.7575, *unit designed to burn gas 1 subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels…*

[16] 40 CFR 63.7575 defines limited-use boiler or process heater as *any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable annual capacity factor of no more than 10 percent.*

[17] 40 CFR 63.7500(c).

[18] 40 CFR 63.7525(k).

[19] 40 CFR 63.7557(c)(1).

[20] 40 CFR 63.7545(e).

affected source subject to the requirements of Subpart QQQQ. The TLC Mouldings plant submitted an initial notification of applicability to EPA on September 16, 2003, and complies with the requirements of this regulation using the Compliant Material option.[21]

In accordance with the Compliant Material option, TLC Mouldings only uses materials that meet the requirements of 40 CFR §63.4690(b). Detailed records are maintained onsite including a current copy of the manufacturer's formulation data, a summary of manufacturer's testing, or a complete copy of the test report of facility material testing that identifies the mass fraction of organic HAP, volume fraction of coating solids (coatings only), and density for each coating, thinner, and cleaning material used at the Willacoochee facility in accordance with 40 CFR §63.4730(b).

Since TLC Mouldings uses the Compliance Material option, there are no applicable operating limits or work practice standards.[22] Langboard submits semi-annual compliance reports as required by 40 CFR §63.4720(a) and maintains all records required by 40 CFR §63.4730.

4.1.5.5. NESHAP Subpart ZZZZ – Reciprocating Internal Combustion Engines

NESHAP Subpart ZZZZ, *Reciprocating Internal Combustion Engines*, regulates owners and operators of various size stationary internal combustion engines (ICE), including small engines located at major and area sources of HAP. The Willacoochee facility includes two emergency generators and an emergency fire pump engine described in Section 4.1.4.4.

The Caterpillar SR4 engine is considered a large (> 500 HP) existing emergency engine located at a major HAP source. The engine serves as a back-up source of power and only operates for the purpose of maintenance checks, readiness testing, and during emergency situations. As the engine was installed prior to December 12, 2002 it is considered an existing source; therefore, there are no applicable requirements under Subpart ZZZZ or Subpart A per 40 CFR §63.6590(b)(3)(iii).

The Caterpillar LC6 engine serves as a back-up source of power for the Bioscrubber and only operates for the purpose of maintenance checks, readiness testing, and during emergency situations. Since the engine has a rating less than 500 HP and was installed at a major HAP source after June 12, 2006, it is considered a new emergency engine.[23] Per 40 CFR §63.6590(c)(6), the engine must meet the requirements of Subpart ZZZZ by complying with the requirements of NSPS Subpart IIII, which were previously summarized in Section 4.1.4.4.

The Clark Model DDFP-L6A diesel-fired fire pump serves as an emergency engine in the event of a fire. Langboard only operates the engine during emergency situations or for the purposes of maintenance and readiness testing. Since the engine has a site rating less than 500 HP and was installed at a major HAP source prior to June 12, 2006, it is considered an existing emergency engine under the Rule. There are no emission limits or performance test requirements for this engine, but several work practice standards do apply. These work practice standards include the following:[24]

- Limit of 100 hr/yr for maintenance and testing (no limit on emergency operation)
  - Up to 50 hr/yr can be non-emergency operation
- Minimize startup time to less than 30 minutes

[21] 40 CFR §63.4691(a).

[22] 40 CFR §63.4692(a) and 40 CFR §63.4693(a).

[23] 40 CFR §63.3590(a)(2)(ii).

[24] 40 CFR §63.6602 and Table 2c, Item 1.

- Change oil and filter every 500 hours of operation or annually, whichever comes first
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first
- Install and maintain a non-resettable hour meter
- Keep and maintain a log that includes the duration, reason, and purpose for all operation
- Maintain and operate the engine according to the manufacturer's written emission-related instructions (or, alternatively, implement a maintenance plan that demonstrates good air pollution control practices)

Langboard will continue to comply with the requirements of Subpart ZZZZ.

4.1.5.6. Non – Applicability of All Other Currently Promulgated NESHAPs

As with NSPS, NESHAP are primarily developed for particular industrial source categories. Therefore, the applicability of a particular NESHAP to a facility can be readily ascertained based on the industrial source category covered. All NESHAP regulations, both in 40 CFR §61 and 40 CFR §63, besides those specifically discussed above are categorically not applicable to the Willacoochee facility.

4.1.6. Compliance Assurance Monitoring

Under the Compliance Assurance Monitoring (CAM) regulations at 40 CFR §64, facilities are required to prepare and submit monitoring plans for certain emissions units with the initial or renewal Title V Operating Permit application. The CAM Plans are intended to provide an on-going and reasonable assurance of compliance with emission limits. Under the general applicability criteria, this regulation only applies to emission units that use a control device to achieve compliance with an emission limit and whose pre-controlled emission levels exceed the major source thresholds under the Title V Operating program.

At the Willacoochee facility, no new units with control devices have been added to the facility operations. The Title V permit renewal submitted in 2005 added CAM Plan requirements for subject control devices at the Willacoochee facility. No additional CAM Plans are required as part of this Title V permit renewal application.

4.1.7. Stratospheric Ozone Protection Regulations

The requirements originating from Title VI of the Clean Air Act, entitled *Protection of Stratospheric Ozone,* are contained in 40 CFR §82. Subparts A through E and Subpart G and H of 40 CFR §82 are not applicable to the Willacoochee facility. 40 CFR §82 Subpart F, *Recycling and Emissions Reduction*, potentially applies if the Willacoochee facility maintains, repairs, services, or disposes of appliances that utilize Class I or Class II ozone depleting substances. Subpart F generally requires persons completing the repairs, service, or disposal to be properly certified. An appropriately certified technician completes all repairs, service, and disposal of ozone depleting substances from the air conditioners at the facility.

4.2. GEORGIA RULES FOR AIR QUALITY CONTROL

In addition to federal air regulations, GRAQC establishes regulations applicable at the emission unit level (source specific) and at the facility level. The rules also contain requirements related to the need for construction and/or operating permits. Generally applicable facility provisions (e.g., restrictions on open burning) are not included in this discussion.

4.2.1. Visible Emissions

Georgia Rule 391-3-1-.02(b) *Visible Emissions* limits opacity to 40% except whenever a more stringent limit is given (e.g., Rule (d) for fuel burning). The baghouses within the process are subject to this limit.

4.2.2. Fuel Burning Equipment

Georgia Rule 391-3-1-.02(d) *Fuel Burning Equipment* limits emissions from fuel burning equipment based on heat input capacity. In addition opacity is limited to 20% except for one six-minute period per hour, which may be up to 27%. The Energy System and Wax Plant Boiler are subject to this rule. Two small boilers at the TLC Mouldings operations used to provide heated air to drying ovens on the painting lines are subject to Rule (d). Based on their size (< 1 MMBtu/hr) and fuel (propane), these small boilers are presumptively in compliance with Rule (d).

4.2.3. Particulate Emission from Manufacturing Processes

Georgia Rule 391-3-1-.02(e) *Particulate Emission from Manufacturing Processes* regulates the manufacturing of materials that have the potential to emit particulate emissions. Equations are used to determine the allowable PM emissions from subject processes. The baghouses and ESP are subject to this rule. However, Langboard operates under more stringent limits taken to avoid classification as a PSD major source.

4.2.4. Sulfur Dioxide

Georgia Rule 391-3-1-.02(2)(g) *Sulfur Dioxide* requires that the maximum sulfur content of any fuel combusted in a fuel-burning source with a heat input capacity less than 100 million Btu/hr not exceed 2.5 percent by weight and any combustion source with a heat input capacity greater than 100 million Btu/hr not exceed 3.0 percent by weight. The Energy System (heat input capacity of 185 MMBtu/hr) and Wax Plant Boiler (heat input capacity of 10.5 MMBtu/hr) are subject to this rule, as well as the two small boilers and direct-heat drying oven located at the TLC Mouldings operations.

4.2.5. Fugitive Dust

Georgia Rule 391-3-1-.02(2)(n) *Fugitive Dust* requires that facilities, which may generate fugitive dust, take all reasonable precautions to prevent such dust from becoming airborne. This rule limits opacity from any fugitive dust source to 20%.

4.2.6. Atlanta Ozone Non-Attainment Area Combustion Source Rules

Georgia EPD has promulgated (e.g., February 16, 2000 and subsequent amendments) restrictions on the NO_X emissions from combustion sources for facilities located in or near the Atlanta ozone non-attainment area. Specifically, these regulations limit NO_X emissions from fuel burning equipment, stationary gas turbines and reciprocating engines. The Willacoochee facility is located in Atkinson County, which is outside the designated counties. As such, any stationary emergency generators or fuel burning equipment is not subject to these rules.

4.2.7. Excess Emissions

GRAQC 391-3-1-.02(2)(a)(7) (i.e., Subsection 7) is a conditional exemption for excess emissions resulting from startup, shutdown or malfunction. Such excess emissions are allowed, provided that (i) best operational practices to minimize emissions are followed, (ii) all associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions, and (iii) the duration of

excess emissions is minimized. Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction are prohibited. The exemption applies to all non-NSPS-based limits. Subsection 7 remains effective unless and until USEPA approves EPD's submittal of SIP revisions related to subsections 11, 12, and 13. Subsections 11 and 12 become void (and subsection 7 again becomes applicable) if EPA's June 12, 2015 Startup, Shutdown and Malfunction (SSM) SIP Call is subsequently ruled to be invalid. If subsection 11 becomes effective, it establishes startup and shutdown regulations applicable to referenced SIP-approved rules. Similarly, if subsection 12 becomes effective, it establishes malfunction regulations applicable to referenced SIP-approved rules.

4.2.8. Non-Applicability of Other SIP Rules

The VOC emission limits found in Chapter 391-3-1-.02(2)(jj), "VOC Emissions from Surface Coating of Flat Wood Paneling" do not apply to the type of operation at the TLC Mouldings plant, namely the coating of MDF boards. All other VOC emission limits found in 391-3-1-.02(2) are categorically not applicable.

5. REQUESTED PERMIT CONDITION CHANGES

Although there have not been any significant changes to emission units during the last five (5) years, there are a few items that Langboard requests EPD consider incorporating into the renewed permit. These requested changes are discussed in detail in this section.

- Langboard requests that EPD removes the requirements to conduct scrubbant flow and differential pressure monitoring on the Packed Tower Scrubber (C022). These requirements are included in Conditions 3.3.7(a) and (c) of Permit V-05-0, respectively, and are detailed below.

  3.3.7 For the operation of the packed tower scrubber with ID No. C022, the Permittee shall: [40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

  a. Maintain the 3-hour block average scrubbant flow rate, determined in accordance with Condition 6.2.10.a, at or above 325 gallons per minute (gpm) or the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3.d and 4.2.4.

  c. Maintain the 3-hour block average differential pressure across C022, determined in accordance with Condition 6.2.10.c, at or above the acceptable range of differential pressure established in accordance with Conditions 4.2.3d and 4.2.4.

  There is not a specific requirement to monitor differential pressure or scrubbant flow listed in the PCWP MACT. Furthermore, the packed tower scrubber is primarily used to control HAP, and not PM. While PM fluctuates with differential pressure and scrubbant flow, pH is the main indicator for HAP emissions control by proper operation on the unit. Additionally, the exhaust from the packed tower scrubber is also further controlled by the Bioscrubber (C006), which also controls HAP emissions. Therefore, Langboard requests that the following conditions be removed from the renewed permit: 3.3.7(a) and (c), 5.2.2(d) and (f), 6.1.7(c)(iv) and (vi), 6.2.10(a) and (c).

- Langboard requests that the VOC emission limit of 10.30 tons per consecutive 12-month period listed in Condition 3.2.18 be updated to 9.0 tons per consecutive 12-month period for the purposes of maintaining minor source status with respect to PSD. Langboard has conservatively included an annual operation of 500 hr/yr for the emergency engine operations and has included these operations into the potential emissions inventory. Therefore, Langboard requests the lower VOC limit of 9.0 tons per 12-month period to ensure that compliance maintained with PSD.

- Langboard requests that the Subpart ZZZZ requirements for the diesel fire pump engine be incorporated into the renewed permit. The applicable requirements are discussed in detail in Section 4.1.5.5 of this application.

- Langboard requests that a 10% annual capacity factor limit[25] for the Wax Plant Boiler be included in the renewed permit as this will allow classification of the Wax Plant Boiler as a "limited-use" Gas 1 boiler at a major source of HAP. Langboard also requests that the "limited-use" Gas 1 boiler subcategory requirements of the Boiler MACT (Subpart DDDDD) for the Wax Plant Boiler be incorporated into the renewed permit.

[25] Please note that a 10% annual capacity factor is essentially a limit on fuel use. The requested limitation enables the Wax Plant Boiler to combust the equivalent of 10% of potential fuel usage at maximum rated capacity.

- Langboard requests a minor administrative update to Condition 3.1 in Permit V-05-0. The footnote for the Energy System (EU24) was omitted. Please see Condition 3.1 of Permit V-04-0 to include in the renewed permit.

- Finally, Langboard is planning on adding some new process equipment as part of the TLC Mouldings operations at the Willacoochee facility. The new equipment will include a new paint and a new finger-jointing line. Exhaust from the new paint line will be routed to the existing baghouse (TC02), whereas exhaust from the new finger-jointing line will be routed to a new baghouse (TC03). As this project will involve construction of new process equipment, Langboard will submit a separate construction permit application to EPD prior to installation. However, as this project will result in some minor revisions to the Title V Permit, Langboard requests that EPD go ahead and incorporate the updates into the renewed permit. The SIP construction permit application will be submitted separately during the first half of 2017, and will include detailed condition change requests for EPD to incorporate into the renewed Title V permit.

This Title V permit renewal application is being submitted electronically in GEOS by Langboard's responsible official (RO) for air quality compliance, who certifies that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

6.1. CERTIFICATION

An electronic certification is provided with the electronic Title V application.

6.2. INFORMATION ON DETERMINATION OF COMPLIANCE STATUS

Compliance requirements applicable to the facility include federally enforceable numeric mass emissions limits established in the current operating permit. The existing permit also contains operating restrictions, and enforceable requirements for emissions and operations monitoring, recordkeeping, and reporting. Langboard has assessed and verified compliance with these requirements in conjunction with preparing this Title V permit renewal application.

The most recent semi-annual compliance report and annual compliance certification was prepared and submitted for the semi-annual and annual period ending June 30, 2016 and December 31, 2015, respectively. Please refer to these reports for a summary of deviations from permit requirements.

6.3. COMPLIANCE PLAN

6.3.1. Emission Units Currently in Compliance

In accordance with provisions contained in GRAQC 391-3-1-.03(10), which references 40 CFR §70.5(c)(8)(ii)(A), Langboard will continue to comply with the applicable requirements identified in this permit application for all units currently in compliance.

6.3.2. Compliance with New Requirements

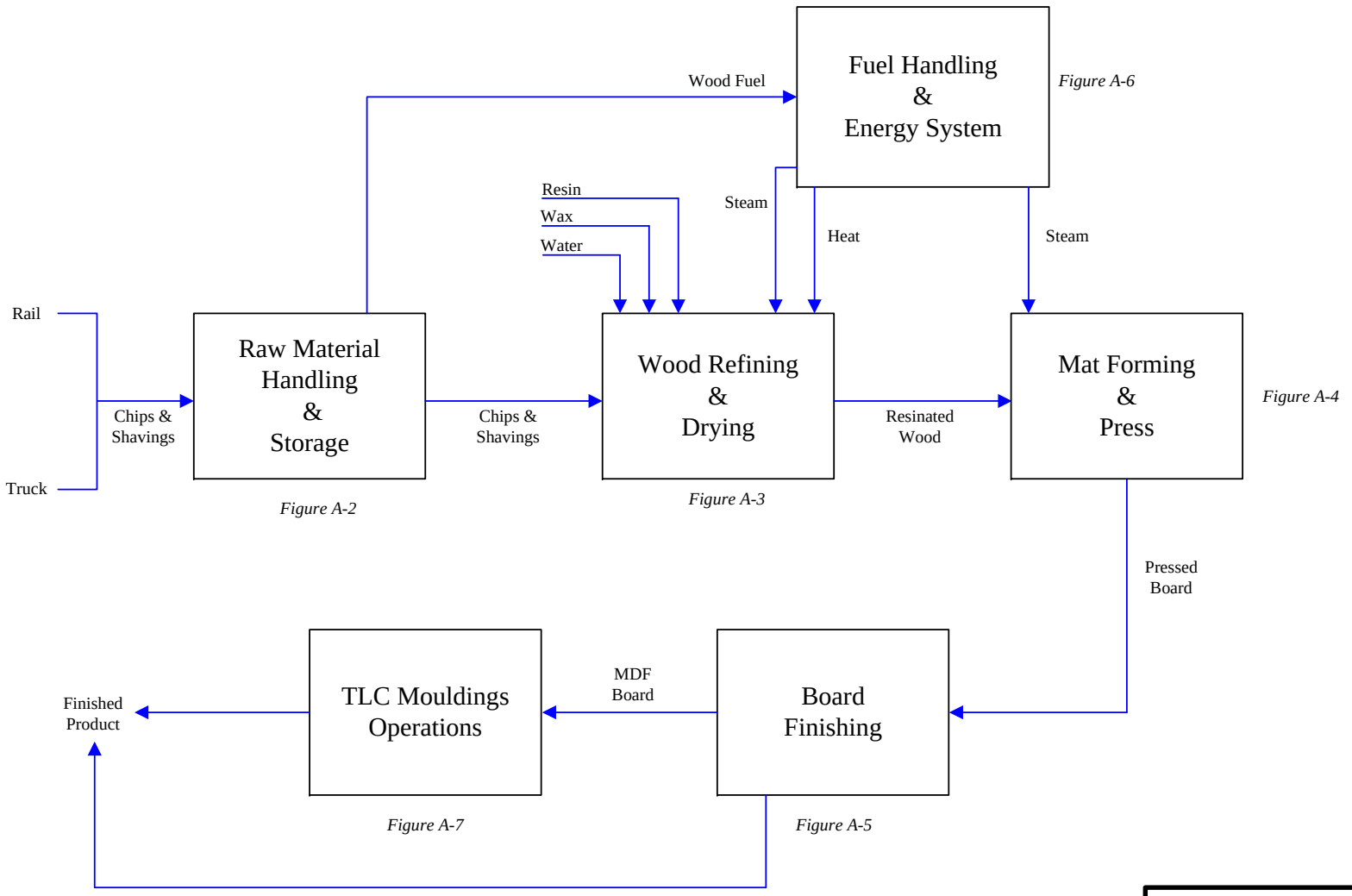
In accordance with provisions contained in GRAQC 391-3-1-.03(10)(c)(2), which references 40 CFR §70.5(c)(8)(ii)(B), Langboard will meet, on a timely basis, all new applicable requirements that become effective during the permit term.

6.4. SCHEDULE FOR SUBMISSION OF COMPLIANCE CERTIFICATIONS

In accordance with provisions contained in GRAQC 391-3-1-.03(10)(d)(3), which incorporates 40 CFR §70.6(c), Langboard will provide written certification to Georgia EPD, at least annually, of compliance with the Title V Operating Permit Conditions. The annual written certifications are postmarked no later than February 28 of each year and shall include identification of each term or condition, status of compliance with each term and condition, identification of the method used to determine the compliance status, and any other information specifically requested by Georgia EPD.

APPENDIX A: DIAGRAMS

Process Flow Diagrams



Langboard, Inc.
Willacoochee, Georgia

Figure A-1 Process Overview

Trinity Consultants

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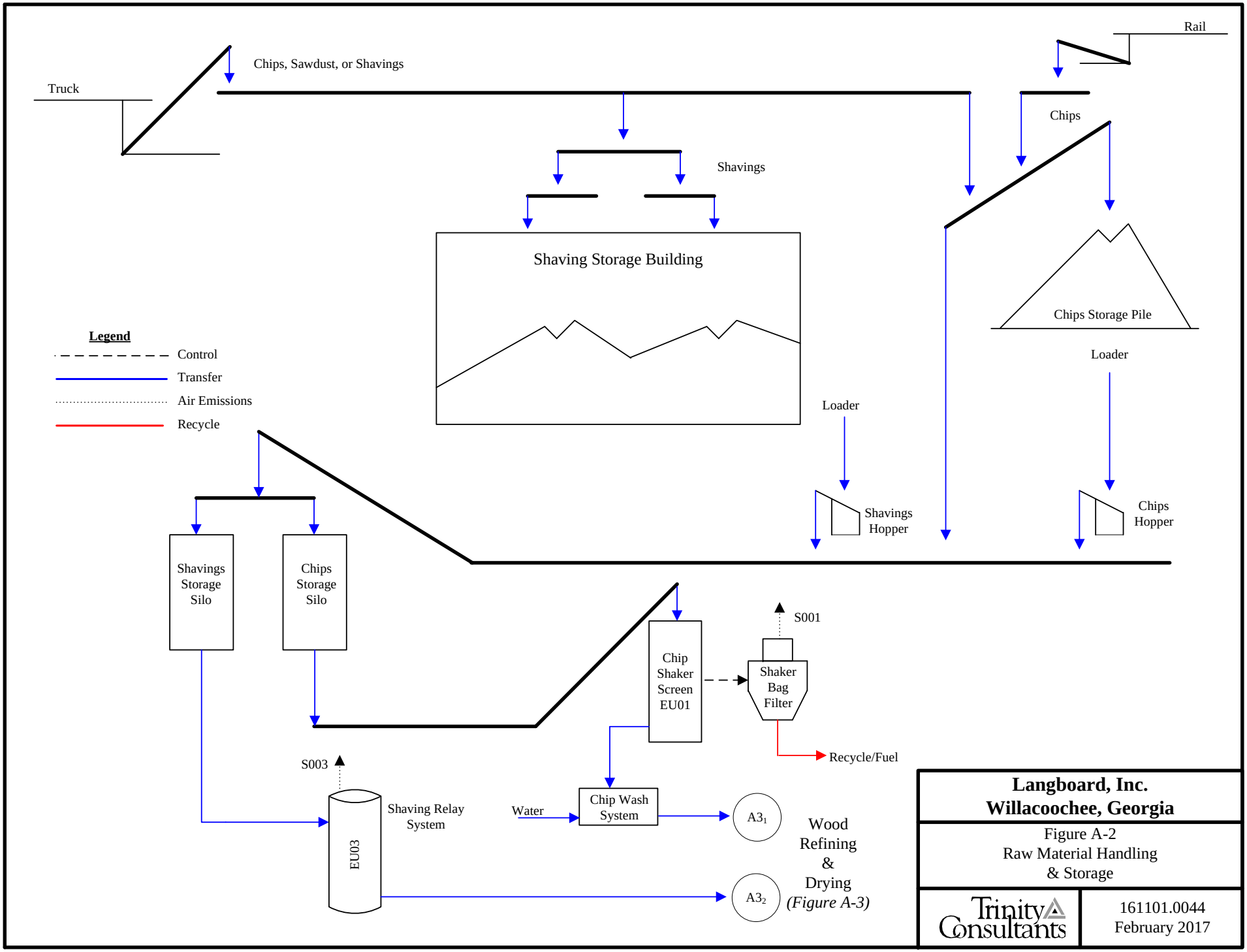
February 2017



Langboard, Inc.
Willacoochee, Georgia

Figure A-2
Raw Material Handling
& Storage

Trinity Consultants

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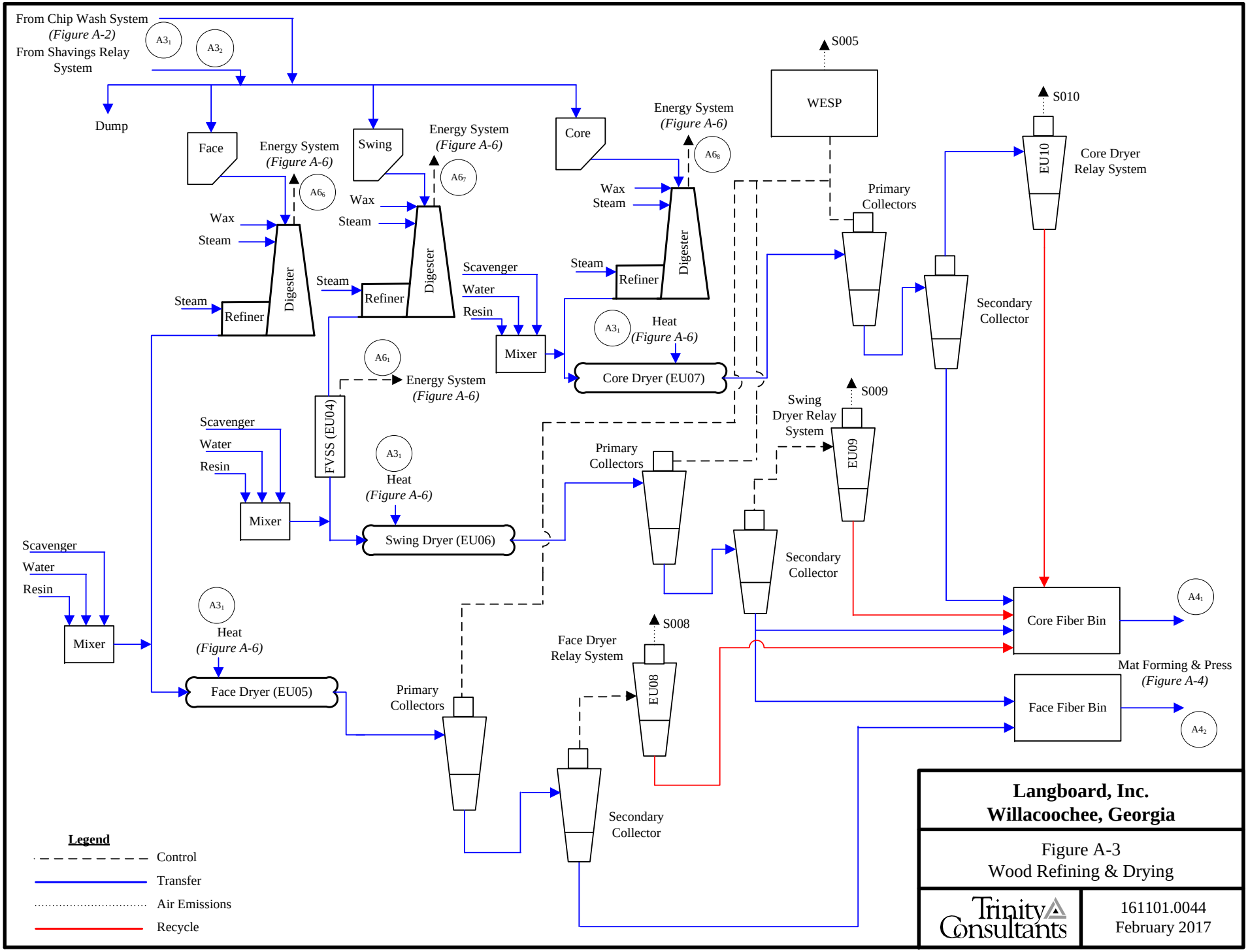
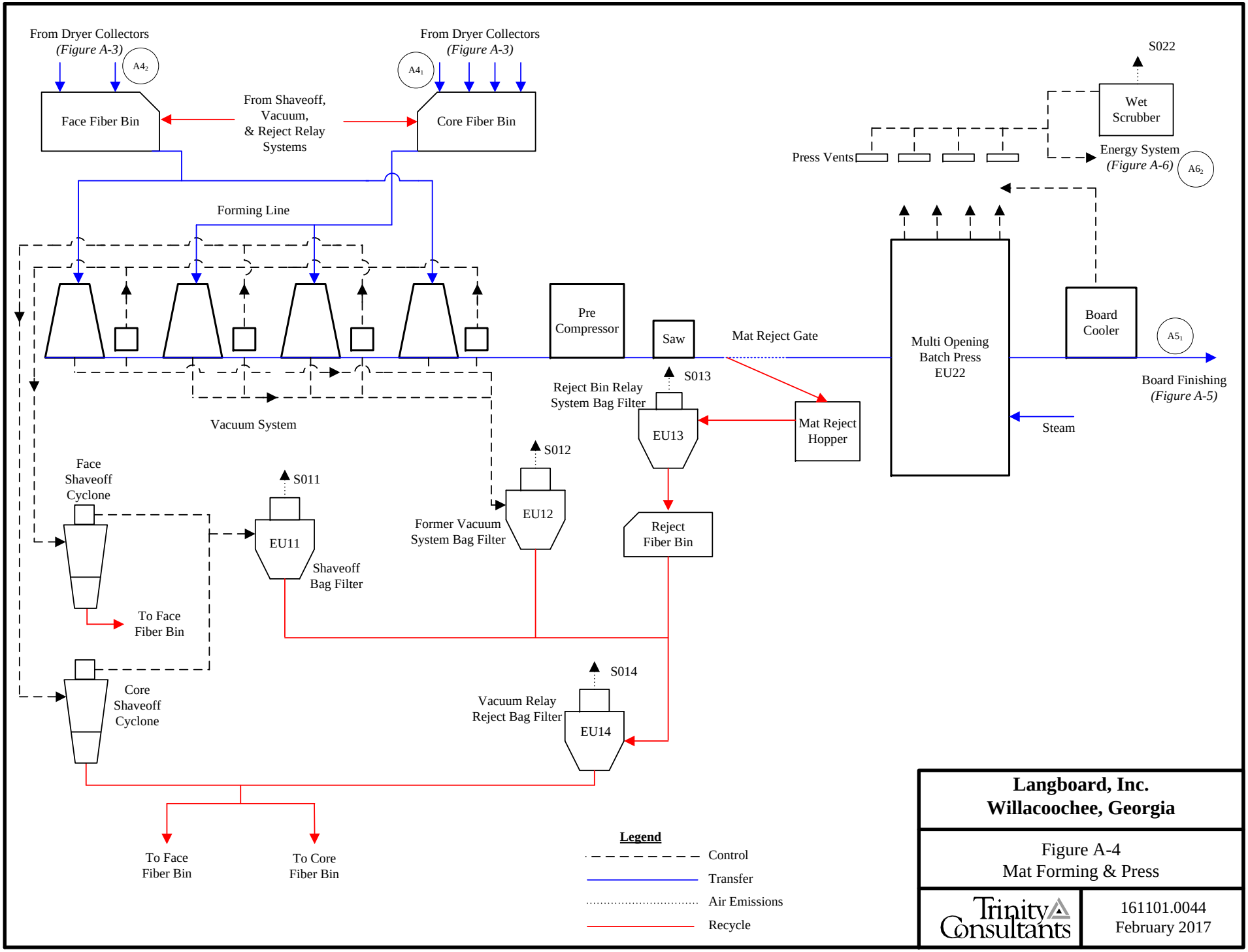
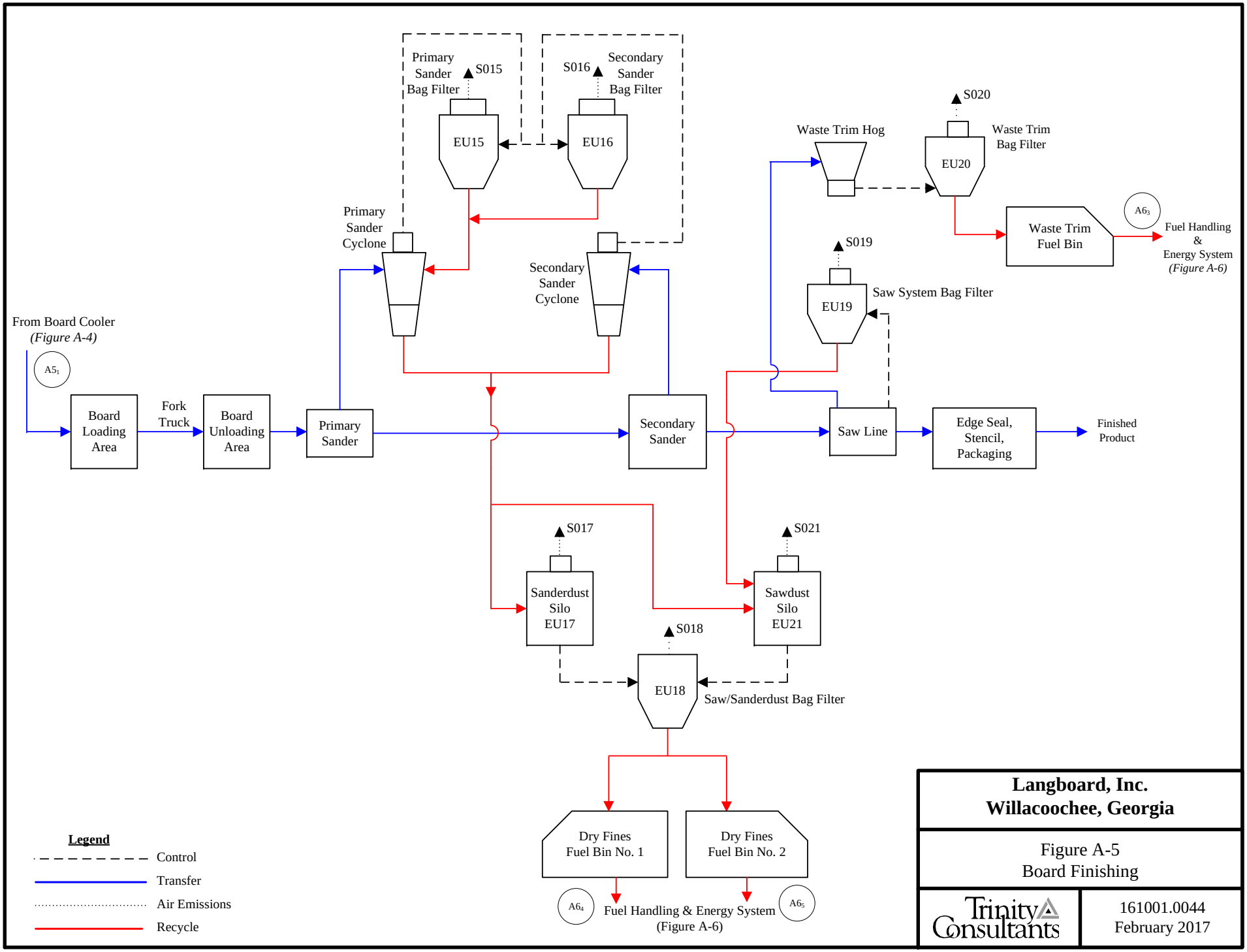
February 2017


From Chip Wash System
(Figure A-2)
From Shavings Relay System
A3₁
A3₂
Dump
Face
Swing
Core
Energy System
(Figure A-6)
A6₆
A6₇
A6₈
Wax
Steam
Digester
Refiner
Scavenger
Water
Resin
Mixer
A3₁
Heat
(Figure A-6)
Core Dryer (EU07)
A6₁
Energy System
(Figure A-6)
FVSS (EU04)
Swing Dryer (EU06)
Face Dryer (EU05)
WESP
S005
S010
EU10
Core Dryer
Relay System
Primary
Collectors
Secondary
Collector
S009
Swing
Dryer Relay
System
EU09
S008
Face Dryer
Relay System
EU08
Core Fiber Bin
Face Fiber Bin
A4₁
A4₂
Mat Forming & Press
(Figure A-4)
Legend
Control
Transfer
Air Emissions
Recycle
Langboard, Inc.
Willacoochee, Georgia
Figure A-3
Wood Refining & Drying
Trinity Consultants
161101.0044
February 2017


From Dryer Collectors
(Figure A-3)
A4₂
From Dryer Collectors
(Figure A-3)
A4₁
Face Fiber Bin
From Shaveoff,
Vacuum,
& Reject Relay
Systems
Core Fiber Bin
S022
Wet
Scrubber
Press Vents
Energy System
(Figure A-6)
A6₂
Forming Line
Pre
Compressor
Saw
Mat Reject Gate
Multi Opening
Batch Press
EU22
Board
Cooler
A5₁
Board Finishing
(Figure A-5)
S013
Reject Bin Relay
System Bag Filter
EU13
Mat Reject
Hopper
Steam
Vacuum System
S012
Face
Shaveoff
Cyclone
S011
EU12
Former Vacuum
System Bag Filter
Reject
Fiber Bin
EU11
Shaveoff
Bag Filter
To Face
Fiber Bin
S014
Core
Shaveoff
Cyclone
Vacuum Relay
Reject Bag Filter
EU14
To Face
Fiber Bin
To Core
Fiber Bin
Legend
Control
Transfer
Air Emissions
Recycle
Langboard, Inc.
Willacoochee, Georgia
Figure A-4
Mat Forming & Press
Trinity Consultants
161101.0044
February 2017

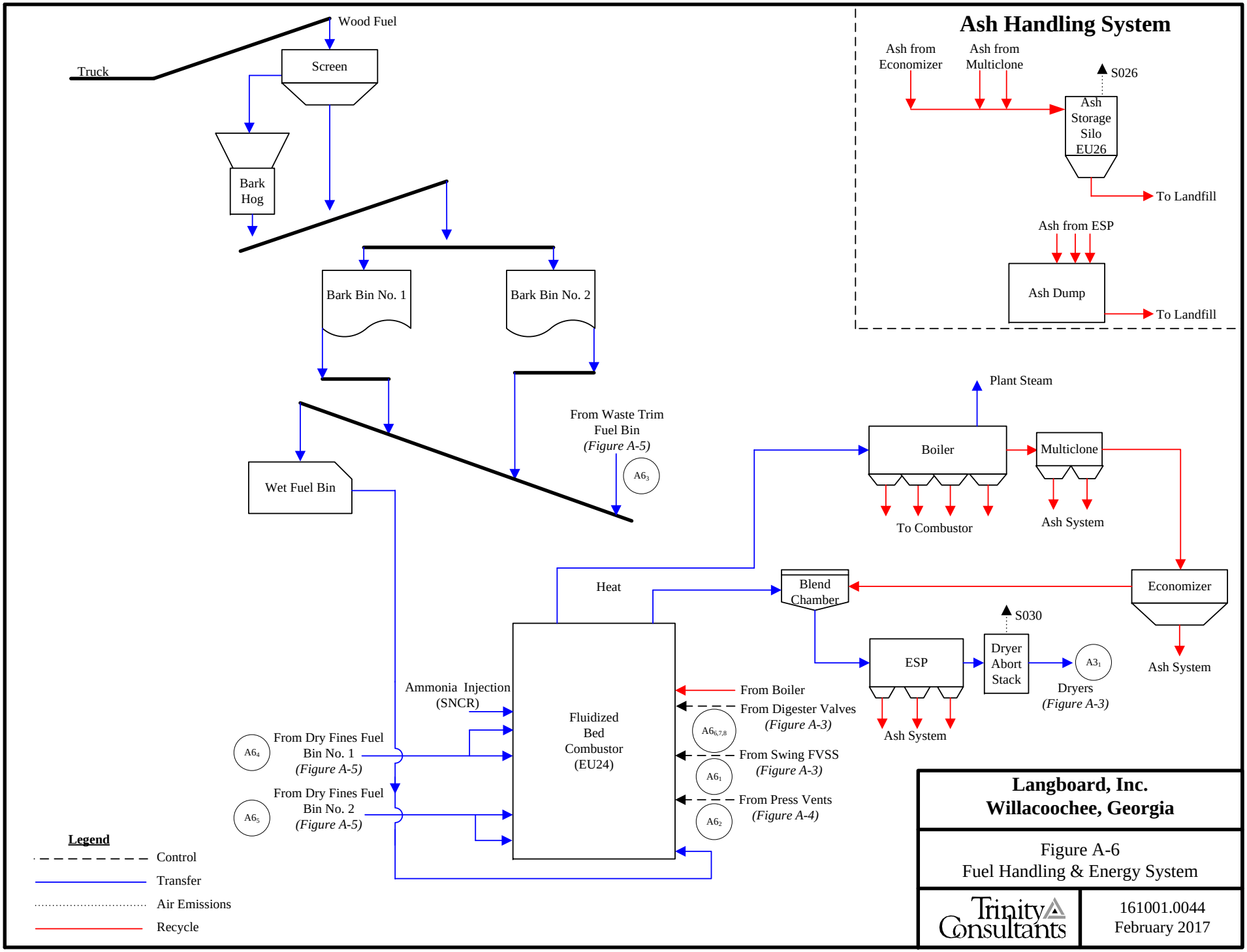


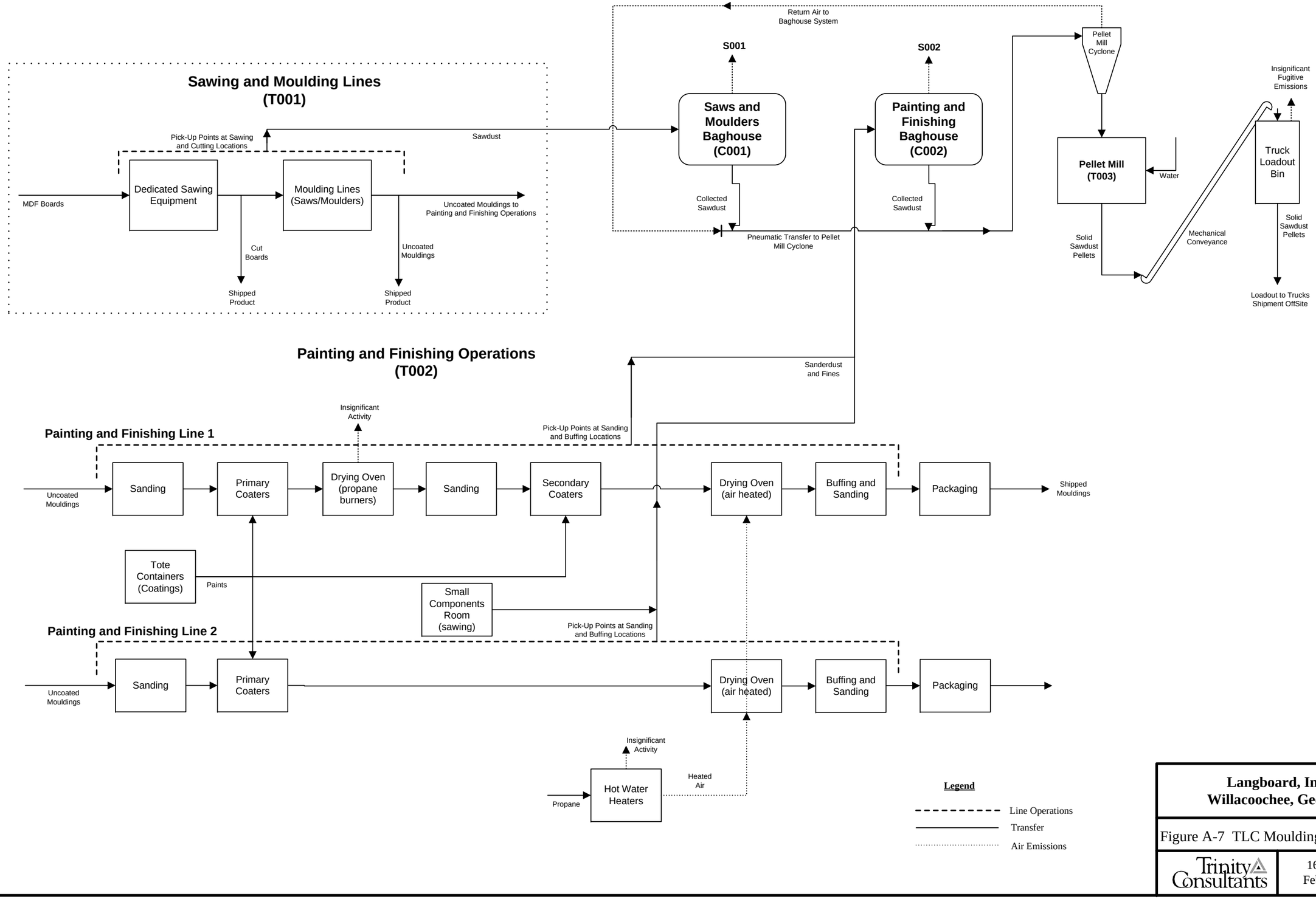
Langboard, Inc.
Willacoochee, Georgia

Figure A-5
Board Finishing

Trinity Consultants

161001.0044
February 2017


Ash Handling System
Ash from Economizer
Ash from Multiclone
S026
Ash Storage Silo EU26
To Landfill
Ash from ESP
Ash Dump
To Landfill
Wood Fuel
Truck
Screen
Bark Hog
Bark Bin No. 1
Bark Bin No. 2
From Waste Trim Fuel Bin
(Figure A-5)
A6 3
Wet Fuel Bin
Plant Steam
Boiler
Multiclone
To Combustor
Ash System
Heat
Blend Chamber
Economizer
S030
ESP
Dryer Abort Stack
A3 1
Dryers
(Figure A-3)
Ash System
Ash System
Ammonia Injection (SNCR)
Fluidized Bed Combustor (EU24)
From Boiler
From Digester Valves
(Figure A-3)
A6 6,7,8
From Swing FVSS
(Figure A-3)
A6 1
From Press Vents
(Figure A-4)
A6 2
A6 4
From Dry Fines Fuel Bin No. 1
(Figure A-5)
A6 5
From Dry Fines Fuel Bin No. 2
(Figure A-5)
Legend
Control
Transfer
Air Emissions
Recycle
Langboard, Inc.
Willacoochee, Georgia
Figure A-6
Fuel Handling & Energy System
Trinity Consultants
161001.0044
February 2017



Langboard, Inc.
Willacoochee, Georgia

Figure A-7 TLC Mouldings Operations

Trinity Consultants

161101.0044
February 2017

Title V Operating Permit (V-05-0)

Part 70 Operating Permit

Permit Number: **2493-003-0013-V-05-0** **Effective Date:** **August 7, 2012**

Facility Name: **Langboard – Willacoochee**

Facility Address: 548 Langboard Road
Willacoochee, Georgia 31650, Atkinson County

Mailing Address: 548 Langboard Road
Willacoochee, Georgia 31650

Parent/Holding Company: Langdale Industries

Facility AIRS Number: 04-13-003-00013

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

The operation of a medium density fiberboard manufacturing facility.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the effective date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application No. TV-20211 signed on January 31, 2011, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **55** pages.

[Signed]

Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.1 Site Determination

Langboard MDF and TLC Mouldings, Inc. are one site with regard to the Title V Program. The facilities previously had separate AIRS numbers (003-00013 and 003-00015, respectively) and separate Title V permits. With the issuance of Permit No. 2493-003-0013-V-04-0, the Title V permits for the two companies were combined into one permit.

1.2 Previous and/or Other Names

Langboard MDF
TLC Mouldings, Inc.
Langboard MDF Value Added Products Plant

1.3 Overall Facility Process Description

Langboard MDF

Langboard MDF produces medium density fiberboard (MDF) utilizing southern pine chips and shavings as the basic raw material. Wood is delivered to the site by truck or rail in the form of chips and shavings. This material is then transferred from the initial storage area to reclaim hoppers by front-end loaders. This raw material is screened for fines and oversized chips before entering the storage silos. From the silos, the raw materials are moved to three refiners, which separate fibers from the rest of the wood and add resin and wax. The wood fibers are then routed through the direct contact flash tube dryers and stored prior to being used in the forming machine. The forming machine produces fiber mats that are cut into sections, pressed several minutes, at a high temperature and pressure, into board and then trimmed to size, sanded, graded, and packaged for shipment.

TLC Mouldings, Inc.

Coated and uncoated moulding and related wood products are manufactured at TLC Mouldings, Inc. Wood panels are first processed through a set of sawing and moulding equipment. Here, they are cut into boards, sawed to desired dimensions, and then profiled through moulders that route out designs to create the moulding products. The moulding can then be sanded, coated with paint, dried, buffed, and packaged for shipment.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
EU01	Chip Shaker Screen Area	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.1, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C001	Bag Filter
EU03	Shavings and Sawdust Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.2, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C003	Bag Filter
EU05 EU06 EU07	Flash Tube Dryers #1, #2, and #3	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.3, 3.3.5, 3.3.6, 3.3.8, 3.3.9, 3.3.10, 3.3.11, 3.3.13, 3.4.1, 3.4.3, 4.2.1, 4.2.3 through 4.2.6, 5.2.2 through 5.2.6, 5.2.9, 5.2.11, 6.2.1, 6.2.2, 6.2.10 through 6.2.18	C005 C006	Wet ESP Bioscrubber
EU08	Face Dryer Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C008	Bag Filter
EU09	Swing Dryer Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C009	Bag Filter
EU10	Core Dryer Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C010	Bag Filter
EU11	Face/Core Shave-off Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.5, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C011	Bag Filter
EU12	Former Vacuum System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.6, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C012	Bag Filter
EU13	Reject Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.7, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2, 6.2.3	C013	Bag Filter
EU14	Vacuum Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.8, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C014	Bag Filter
EU15 EU16	Sanderdust Pickup Systems #1 and #2	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.9, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C015 C016	Bag Filter Bag Filter
EU17	Sanderdust Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.10, 3.4.1, 3.4.3, 5.2.8, 6.2.2	C017	Bag Filter
EU18	Saw/Sanderdust Boiler Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.11, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C018	Bag Filter
EU19	Sawdust Pickup System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.12, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C019	Bag Filter
EU20	Hogged Trim Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.13, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C020	Bag Filter
EU21	Saw Trim Relay System	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.14, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C021	Bag Filter
EU22	Press Vent System	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.3, 3.3.5 through 3.3.13, 3.4.1, 3.4.3, 4.2.1, 4.2.3 through 4.2.5, 5.2.2, 5.2.3, 5.2.5, 5.2.6, 6.2.2, 6.2.10 through 6.2.18	C022 C006	Packed Tower Scrubber Bioscrubber

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
EU24	Fluidized Bed Energy System**	40 CFR 60, Subpart A 40 CFR 60, Subpart Db 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-1-.02(2)(d)2.(ii) 391-3-1-.02(2)(g)2.	3.2.3, 3.2.15, 3.3.1 through 3.3.11, 3.3.13, 3.4.4, 3.5.1, 4.2.1, 4.2.3 through 4.2.6, 5.2.1 through 5.2.6, 5.2.9, 5.2.10, 6.2.2, 6.2.4, 6.2.9, 6.2.10 through 6.2.18	C024 C025 (C005) (C006)	SNCR ESP (Wet ESP) (Bioscrubber)
EU25	Wax Plant Boiler	391-3-1-.02(2)(d)2.(ii) 391-3-1-.02(2)(g)2. 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDDD	3.3.17, 3.4.2, 3.4.4	None	None
EU26	Ash Storage Silo	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.16, 3.4.1, 3.4.3, 5.2.2, 5.2.7, 5.2.8, 6.2.2	C026	Bag Filter
T001	TLC Sawing and Moulding Lines	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.17, 3.3.5, 3.4.1, 3.4.3, 4.2.2, 5.2.2, 5.2.7, 5.2.8, 6.2.2, 6.2.6 through 6.2.8	TC01	Baghouse
T002	TLC Painting and Finishing Operations	40 CFR 63, Subpart A 40 CFR 63, Subpart QQQQ 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.2.17, 3.2.18, 3.3.14, 3.3.15, 3.3.16, 3.4.1, 3.4.3, 4.2.2, 5.2.2, 5.2.7, 5.2.8, 6.2.2, 6.2.5 through 6.2.8, 6.2.19 through 6.2.25	TC02	Baghouse
T003	Pellet Mill Operations	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	3.4.1, 3.4.3	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

3.2.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the chip shaker screen area with ID No. EU01, PM emissions in excess of 1.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the shavings and sawdust relay system with ID No. EU03, PM emissions in excess of 3.50 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the outlet of the bioscrubber with ID No. C006:
[PSD Avoidance - 40 CFR Part 52.21]

a. Volatile organic compound (VOC) emissions in excess of 54.4 lb/hr.

b. Carbon monoxide (CO) emissions in excess of 50.0 lb/hr.

c. PM emissions in excess of 25.0 lb/hr.

3.2.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from each of the face dryer relay system with ID No. EU08, the swing dryer relay system with ID No. EU09, and the core dryer relay system with ID No. EU10, PM emissions in excess of 1.50 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.5 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the face/core shave-off relay system with ID No. EU11, PM emissions in excess of 2.30 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.6 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the former vacuum system with ID No. EU12, PM emissions in excess of 3.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.7 The Permittee shall not operate the reject relay system with ID No. EU13 more than seven hours per week and shall not discharge, or cause the discharge, into the atmosphere, PM emissions in excess of 3.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.8 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the vacuum relay system with ID No. EU14, PM emissions in excess of 1.36 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.9 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from each of the sanderdust pickup systems with ID Nos. EU15 and EU16, PM emissions in excess of 2.40 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.10 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the sanderdust relay system with ID No. EU17, PM emissions in excess of 1.36 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.11 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the saw/sanderdust boiler relay system with ID No. EU18, PM emissions in excess of 1.36 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.12 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the sawdust pickup system with ID No. EU19, PM emissions in excess of 1.70 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.13 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the hogged trim relay system with ID No. EU20, PM emissions in excess of 1.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.14 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the saw trim relay system with ID No. EU21, PM emissions in excess of 1.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.15 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the fluidized bed energy system with ID No. EU24, nitrogen oxides (NOx) emissions in excess of 50.0 lb/hr, based on a 30-day rolling average.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.16 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the ash storage silo with ID No. EU26, PM emissions in excess of 1.00 lb/hr.
[PSD Avoidance - 40 CFR Part 52.21]

3.2.17 The Permittee shall not discharge, or cause the discharge into the atmosphere, from the baghouses that control the TLC sawing and moulding lines with ID No. T001 and the TLC painting and finishing operations with ID No. T002, PM emissions in excess of the following limits during any twelve consecutive months as determined in accordance with the equation in Condition 6.2.8:
[PSD Avoidance - 40 CFR Part 52.21]

a. 8.00 tons from the baghouse with ID No. TC01.

b. 2.00 tons from the baghouse with ID No. TC02.

3.2.18 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the TLC painting and finishing operations with ID No. T002, VOC emissions in excess of 10.30 tons during any twelve consecutive months.
[PSD Avoidance - 40 CFR Part 52.21]

3.3 Equipment Federal Rule Standards

40 CFR 60 Subpart Db

3.3.1 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A – "General Provisions," and Subpart Db – "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units," for the operation of the fluidized bed energy system with ID No. EU24.
[40 CFR 60 Subparts A and Db]

3.3.2 The Permittee shall be allowed to burn plant and office waste (but not hazardous waste) in the fluidized bed energy system with ID No. EU24 up to 2 percent of total fuel heat input. For purposes of this Permit, hazardous waste is defined in 40 CFR Part 261.3.
[40 CFR 60.41b]

3.3.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the fluidized bed energy system with ID No. EU24, PM emissions in excess of 0.10 lb/MMBtu input.
[40 CFR 60.43b(c)(1) and 391-3-1-.02(2)(d)2.(ii) (subsumed)]

3.3.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the fluidized bed energy system with ID No. EU24, any visible emissions, the opacity of which is equal to or greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
[40 CFR 60.43b(f) and 391-3-1-.02(2)(d)3.]

40 CFR 63 Subpart DDDD

3.3.5 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – "General Provisions," and Subpart DDDD – "National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products" for the operation of the flash tube dryers with ID Nos. EU05, EU06, and EU07, the press vent system with ID No. EU22, the fluidized bed energy system with ID No. EU24, and the TLC sawing and moulding lines with ID No. T001.
[40 CFR 63 Subparts A and DDDD]

3.3.6 The Permittee shall operate the wet electrostatic precipitator (wet ESP) with ID No. C005, the packed tower scrubber with ID No. C022, and the bioscrubber with ID No. C006 at all times that the flash tube dryers with ID Nos. EU05, EU06, and EU07, the press vent system with ID No. EU22, and the fluidized bed energy system with ID No. EU24 are in operation, and reduce formaldehyde emissions by 90 percent or more.
[40 CFR 63.2240(b) and Item 5 of Table 1B to NESHAP Subpart DDDD]

3.3.7 For the operation of the packed tower scrubber with ID No. C022, the Permittee shall:
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

a. Maintain the 3-hour block average scrubbant flow rate, determined in accordance with Condition 6.2.10a, at or above 325 gallons per minute (gpm) or the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3d and 4.2.4.

b. Maintain the 3-hour block average scrubbant pH, determined in accordance with Condition 6.2.10b, at or above 6 or the acceptable range of scrubbant pH established in accordance with Conditions 4.2.3d and 4.2.4.

c. Maintain the 3-hour block average differential pressure across C022, determined in accordance with Condition 6.2.10c, at or above the acceptable range of differential pressure established in accordance with Conditions 4.2.3d and 4.2.4.

3.3.8 For the operation of the bioscrubber with ID No. C006, the Permittee shall maintain the following parameters within the associated acceptable ranges established in accordance with Conditions 4.2.3d and 4.2.4:
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

a. The 3-hour block average scrubbant flow rate, determined in accordance with Condition 6.2.10d.

b. The 3-hour block average aeration tank temperature, determined in accordance with Condition 6.2.10e.

c. The 3-hour block average scrubbant pH, determined in accordance with Condition 6.2.10f.

d. The weekly aeration tank dissolved oxygen level, determined in accordance with Condition 5.2.3.

3.3.9 The Permittee shall be in compliance with Conditions 3.3.6, 3.3.7, and 3.3.8 at all times, except during periods of process unit or control device startup, shutdown, and malfunction.
[40 CFR 63.2250(a)]

3.3.10 The Permittee shall operate and maintain the affected source, as specified in Condition 3.3.6, including air pollution control and the use of monitoring equipment, in a manner consistent with safe and good air pollution control practices, to minimize emissions, per 40 CFR 63.6(e)(1)(i).
[40 CFR 63.2250(b)]

3.3.11 The Permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).
[40 CFR 63.2250(c)]

3.3.12 The Permittee shall install, operate, and maintain a wood products enclosure around the press vent system with ID No. EU22 and vent the captured emissions from the wood products enclosure to the packed tower scrubber with ID No. C022 and bioscrubber with ID No. C006. The wood products enclosure shall comply with the following criteria:
[40 CFR 63.2267 and 40 CFR 63.2292]

a. Any natural draft opening shall be at least four equivalent opening diameters from each HAP-emitting point, except for where the board enters and exits the enclosure, unless otherwise specified by the Director.

b. The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.

c. The average facial velocity of air through all natural draft openings shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all natural draft openings shall be into the enclosure.

d. All access doors and windows whose areas are not included in Paragraph b of this Condition, and are not included in the calculation of facial velocity in Paragraph c of this Condition, shall be closed during routine operation of the process.

e. The enclosure is designed and maintained to capture all emissions for discharge through a control device.

3.3.13 The Permittee shall develop and implement a plan to address how organic HAP captured in the wastewater from the wet ESP with ID No. C005 and the packed tower scrubber with ID No. C022 is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. Such plan must be submitted to the Division, for review and approval, with the Notification with Compliance Status specified in Condition 4.2.5.
[40 CFR 63.2268]

40 CFR 63 Subpart QQQQ

3.3.14 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – "General Provisions," and Subpart QQQQ – "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products" for the operation of the TLC painting and finishing operations with ID No. T002.
[40 CFR 63 Subparts A and QQQQ]

3.3.15 The Permittee shall limit organic HAP emissions into the atmosphere, from the TLC painting and finishing operations with ID No. T002, to no more than the emission limit specified in the following table.
[40 CFR 63.4690(b) and Item 5 of Table 2 to NESHAP Subpart QQQQ]

Table 3.3.1 – 40 CFR 63 Subpart QQQQ Emission Limits

Subcategory	Emission Limit – Determined monthly as a rolling 12-month emission rate, in grams HAP/liter solids (lb HAP/gallon solids)
Doors, windows, and miscellaneous. (Includes doors, windows, finished doorskins, and door and window components such as millwork, moulding, or trim, and other miscellaneous wood building products including, but not limited to, all moulding and trim, shingles, and shutters.)	231 (1.93)

3.3.16 The Permittee shall only use coatings that comply with the emission limit in Condition 3.3.15, use thinners and cleaning materials that contain no organic HAP, keep records and document the calculations required by Conditions 6.2.20 through 6.2.25, and provide reports as required by Condition 6.2.19. Materials with "no HAP content" are defined as materials containing no carcinogenic HAP greater than 0.1% by mass and containing no other HAP (or combination of HAPs) greater than 1.0% by mass. Emission limit compliance calculations shall be carried out using the contents of each material as received from its manufacturer or supplier, prior to any alteration.
[40 CFR 63.4691]

3.3.17 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – "General Provisions," and Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" for the wax plant boiler with ID No. EU25
[40 CFR 63 Subparts A and DDDDD]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not discharge or cause the discharge, into the atmosphere, from any emission unit, except the fluidized bed energy system with ID No. EU24 and the wax plant boiler with ID No. EU25, which are subject to a more stringent limit, any gases which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

3.4.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the wax plant boiler with ID No. EU25, any gases which:

a. Contain particulate emissions equal to or exceeding the rate derived from $P=0.5*(10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU.
[391-3-1-.02(2)(d)2.(ii)]

b. Exhibit visible emissions, the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)3.]

3.4.3 The Permittee shall not discharge or cause the discharge, into the atmosphere, from each process, except the fluidized bed energy system with ID No. EU24 and the wax plant boiler with ID No. EU25, PM emissions equal to or in excess of the rate derived from:
[391-3-1-.02(2)(e)1.(i)]

a. $E = 4.1 * P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

b. $E = 55 * P^{0.11} – 40$; for process input weight rate above 30 tons per hour.

where P equals process input weight rate in tons per hour and E equals the allowable emission rate in pounds per hour.

3.4.4 The Permittee shall not fire any fuel in the fluidized bed energy system with ID No. EU24 and the wax plant boiler with ID No. EU25 that contains greater than 2.5-weight percent sulfur, by weight.
[391-3-1-.02(2)(g)2.]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

3.5.1 The Permittee shall keep the temperature in the main chamber of the fluidized bed energy system with ID No. EU24 at or above 1,400° F at all times the system is in operation, except during periods of startup, shutdown, and malfunction.
[391-3-1-.03(2)(c)]

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division ("Division"). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]

4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

a. Method 1 shall be used for the determination of sample point locations and velocity traverses.

b. Method 2 shall be used for the determination of stack gas flow rate.

c. Method 3 or 3A shall be used for the determination of stack gas molecular weight.

d. Method 3B shall be used for the determination of the emission rate correction factor or excess air (Method 3A may be used as an alternative to Method 3B).

e. Method 4 shall be used for the determination of stack gas moisture.

f. Method 5 shall be used for the determination of the particulate matter concentration for emission units other than the flash tube dryers with ID Nos. EU05, EU06, EU07 and the press vent system with ID No. EU22.

g. Method 5T shall be used for the determination of the particulate matter concentration the flash tube dryers with ID Nos. EU05, EU06, EU07 and the press vent system with ID No. EU22 (Method 5 with Method 202 may be used as an alternate method).

h. Method 9 and the procedures contained in Section 1.3 of the above referenced document shall be used for the determination of opacity.

i. Method 10 or 10B shall be used for the determination of the carbon monoxide concentration.

j. Method 24 shall be used for the determination of the mass fraction of nonaqueous volatile matter for coatings.

k. Method 25 shall be used for the determination of VOC concentration, as carbon. Method 25A may be used for this purpose with the approval of the Division. Appropriate conversion factors must be used to convert the VOC (as carbon) to actual VOC. A conversion factor of 1.2 may be used if industry specific data is not available.

l. Method 311, according to the procedures in 40 CFR 63.4741(a)(1), shall be used for the determination of the mass fraction of organic HAP for each coating, thinner, and cleaning material.

m. Method 316 or Method 320 in appendix A to 40 CFR part 63, Method 0011 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication No. SW–846); the NCASI Method CI/WP–98.01 (IBR, see §63.14(f)), the NCASI Method IM/CAN/WP–99.02 (IBR, see §63.14(f)), or the NCASI Method ISS/FP–A105.01 (IBR, see §63.14(f)) shall be used for the determination of formaldehyde emission rate.
[Item 8 of Table 4 to NESHAP Subpart DDDD]

n. Methods 204 and 204A through 204F of 40 CFR part 51, appendix M, shall be used for the demonstration of the wood products enclosure. As an alternative to Methods 204 and 204A through 204F, the facility may use the tracer gas method contained in Appendix A to NESHAP Subpart DDDD.
[Item 9 of Table 4 to NESHAP Subpart DDDD]

o. ASTM Method D2697 or D6093 shall be used for the determination of the volume fraction of coating solids for each coating material.

p. ASTM Method D1475 shall be used for the determination of density for each coating.

q. The monitoring system required by Condition 5.2.1a shall be used to demonstrate compliance with the NOx emission requirements of Condition 3.2.15.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

PSD Avoidance - 40 CFR Part 52.21

4.2.1 The Permittee shall conduct the following performance tests, at the frequency specified, to verify compliance with the emission limits specified in Conditions 3.2.3 a and c.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3), and 391-3-1-.02(6)(b)1]

a. VOC emissions from the outlet of the bioscrubber with ID No. C006 shall be tested once every 2 years, at 24-month intervals; the frequency may be reduced to once per 4 years, if testing demonstrates that emissions of VOC are less than 75% of the emission limit specified in Condition 3.2.3a. If any 4-year test indicates VOC emissions of 75 percent of the emission limit specified in Condition 3.2.3a or above, the performance testing frequency shall be reverted to once per 2 years.

b. PM emissions from the outlet of the bioscrubber with ID No. C006 shall be tested once every 2 years, at 24-month intervals; the frequency may be reduced to once per 4 years, if testing demonstrates that emissions of PM are less than 75% of the emission limit specified in Condition 3.2.3c. If any 4-year test indicates PM emissions of 75 percent of the emission limit specified in Condition 3.2.3c or above, the performance testing frequency shall be reverted to once per 2 years.

4.2.2 The Permittee shall conduct performance tests for PM emissions from the baghouses with ID Nos. TC01 and TC02 at least once every 48 months to establish short-term PM emission rates from TC01 and TC02 to assure compliance with the emission limits specified in Condition 3.2.17. Tests shall be conducted under conditions (process rates and routing configurations) that will yield baghouse inlet loadings equivalent to those likely under normal operating conditions. During the performance tests, the Permittee shall record the process rate for each piece of equipment generating PM collected in TC01 or TC02, as applicable.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3), and 391-3-1-.02(6)(b)1]

40 CFR 63 Subpart DDDD

4.2.3 The Permittee shall conduct performance tests for formaldehyde from the bioscrubber with ID No. C006 at least once every 48 months. The performance test shall be used to demonstrate compliance with the 90-percent formaldehyde destruction efficiency specified in Condition 3.3.6 as follows. The next performance test is due by May 13, 2013. The Division reserves the rights to amend the testing frequencies pending the results of each performance test.
[40 CFR 63.2260(a), 63.2261(a), 63.2262(a), GA EPD Consent Order No. EPD-AQC-6027 dated December 17, 2008, 40 CFR 70.6(a)(3), and 391-3-1-.02(6)(b)1]

a. The test shall be conducted under representative operating conditions of the flash tube dryers with ID Nos. EU05, EU06, and EU07, the press vent system with ID No. EU22, and the fluidized bed energy system with ID No. EU24.
[40 CFR 63.2262(b)(2)]

b. A minimum of 3 test runs shall be carried out per test and each test run shall be performed for a minimum of 1 hour, unless otherwise indicated.
[40 CFR 63.2262(c)]

c. The formaldehyde emission rate shall be sampled and measured at the following three locations:
[40 CFR 63.2262(d)(1)]

i. Inlet of the wet ESP with ID No. C005.

ii. Inlet of the packed tower scrubber with ID No. C022.

iii. Outlet of the bioscrubber with ID No. C006.

d. The continuous parameter monitoring system (CPMS) data shall be collected at least every 15 minutes during the entire performance test, and the parameter for the operating requirements specified in Conditions 3.3.7 and 3.3.8 shall be determined during the performance test.
[40 CFR 63.2262(e)]

e. All non-detect data must be treated as one-half of the method detection limit when determining formaldehyde emission rates.
[40 CFR 63.2262(g)(1)]

f. The percent reduction of formaldehyde across the control combination of C005/C022/C006 must be calculated using the following equation:
[40 CFR 63.2262(h)]

$$PR = CE \times \frac{ER_{in} - ER_{out}}{ER_{in}} \times 100$$

Where:
PR = Precent reduction, percent.
CE = Capture efficiency, 100 percent. (The wood products enclosure, defined in 40 CFR 63.2292, was demonstrated in a performance test conducted on August 26, 2008.)
ER_{in} = Combined emission rates of formaldehyde at the inlet of C005 and C022, pounds per hour.
ER_{out} = Emission rate of formaldehyde at the outlet of C006, pounds per hour.

g. A written notification of intent to conduct a performance test shall be submitted at least 60 calendar days before the performance test is scheduled to begin.
[40 CFR 63.2280(c)]

4.2.4 The Permittee shall use the operating parameter data, required to be obtained by Condition 4.2.3d, to establish the acceptable range of each operating parameter specified in Conditions 3.3.7 and 3.3.8.
[Item 4 of Table 5 to NESHAP Subpart DDDD, 40 CFR 70.6(a)(3) and 391-3-1-.02(6)(b)1]

4.2.5 The Permittee shall submit a Notification of Compliance Status, as specified in 40 CFR 63.9(h)(2)(ii), before the close of business on the 60th calendar day following the completion of the performance test specified in Condition 4.2.3. Such Notification of Compliance Status must include the following information:
[40 CFR 63.2280(d)(2), 40 CFR 70.6(a)(3), and 391-3-1-.02(6)(b)1]

a. The description of the representative operating conditions, during the performance test specified in Condition 4.2.3, and why they are representative.
[40 CFR 63.2262(b)(2)]

b. The results of the performance test specified in Condition 4.2.3.

c. The acceptable range of each operating parameter determined in accordance with Condition 4.2.4.

d. The plan, specified in Condition 3.3.13, that addresses how organic HAP captured in the wastewater from the wet ESP with ID No. C005 and the packed tower scrubber with ID No. C022 is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained.

For the purpose of this Permit, the Notification of Compliance Status is not the test report and must be submitted to the Division's Stationary Source Compliance Program.

4.2.6 The Permittee may elect to re-establish the acceptable level of secondary power to the wet ESP with ID No. C005 during the performance test specified in Condition 4.2.3, if compliance with the PM limit specified in Condition 3.2.3c is demonstrated during the test. The Permittee may also elect to re-establish the acceptable level of secondary power to each field of the wet ESP with ID No. C005 during the performance tests specified in Condition 4.2.1b.
[40 CFR 70.6(a)(3) and 391-3-1-.02(6)(b)1]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. A Continuous Emission Rate Monitoring System (CERMS) for the measurement of NOx and the gas flow rate from the fluidized bed energy system with ID No. EU24. The output of the CERMS shall be in pounds of NOx per hour, expressed as pounds of nitrogen dioxide per hour. The applicable performance specifications (PS) for this system are PS 2 and PS 6 of 40 CFR 60 Appendix B and Appendix F. Procedure 1 applies for ongoing Quality Assurance.
[PSD Avoidance - 40 CFR Part 52.21]

b. A Continuous Opacity Monitoring System (COMS) for the measurement of opacity from the fluidized bed energy system with ID No. EU24. The system shall conform to the requirements of Section 1.4 and performance specification 1 of Appendix B of the Procedures for Testing and Monitoring Sources of Air Pollutants.
[40 CFR 60.48b(a)]

5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. A device to continuously measure and record the total secondary voltage (kilovolts) of each field of the ESP with ID No. C025 and the wet ESP with ID No. C005.

b. A device to continuously measure and record the total secondary current (milliamps) of each field of the ESP with ID No. C025 and the wet ESP with ID No. C005.

c. A temperature sensor to continuously measure and record the gas stream temperature at the inlet and outlet of the wet ESP with ID No. C005. The temperature sensor must have an accuracy of 1 percent (˚F) of the temperature being measured. The Permittee shall record and maintain records of the 12-hour rolling average inlet and outlet temperature of C005.

d. A flow meter to continuously measure and record the scrubbant flow rate through the packed tower scrubber with ID No. C022. The scrubbant flow meter must be certified by the manufacturer to be accurate within 5 percent of the design scrubbant flow rate of C022.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

e. A pH indicator to continuously measure and record the pH of the scrubbant of the packed tower scrubber with ID No. C022. The pH indicator must be certified by the manufacturer to be accurate within 0.5 pH unit.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

f. A differential pressure indicator to continuously measure and record the pressure drop across the packed tower scrubber with ID No. C022. The differential pressure indicator must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

g. A flow meter to continuously measure and record the scrubbant flow rate through the bioscrubber with ID No. C006. The scrubbant flow meter must be certified by the manufacturer to be accurate within 5 percent of the design scrubbant flow rate of C006.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

h. A temperature sensor, which meets the specifications defined in Condition 5.2.6, to continuously measure and record the temperature in the aeration tank of the bioscrubber with ID No. C006.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

i. A pH indicator to continuously measure and record the pH of the scrubbant at the aeration tank of the bioscrubber with ID No. C006. The pH indicator must be certified by the manufacturer to be accurate within 0.5 pH unit.
[40 CFR 63.2240(b) and Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD]

j. A differential pressure indicator, on each of the bag filters with ID Nos. C001, C003, C008 through C016, C018 through C021, C026, TC01, and TC02, to continuously measure and record the pressure drop across each of the bag filters. The differential pressure indicator must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation.

k. A temperature sensor to continuously measure and record the combustion zone temperature of the fluidized bed energy system with ID No. EU24 at a position prior to any substantial heat loss/exchange. The temperature sensor must have an accuracy of 1 percent (˚F) of the temperature being measured. The Permittee shall record and maintain records of the 3-hour rolling average combustion zone temperature of EU24.

l. A device to continuously determine when exhaust gases from the flash tube dryers with ID Nos. EU05, EU06, and EU07, and press vent system with ID No. EU22 are diverted (bypassed) from their control devices into the atmosphere while EU05, EU06, EU07, and EU22 are in operation.

5.2.3 The Permittee shall measure and record the dissolved oxygen levels in the aeration tank of the bioscrubber with ID No. C006 once per week. The Permittee shall also dose a sample of water from the aeration tank and monitor the decrease of dissolved oxygen level to ensure that the microorganisms in the aeration tank sample are healthy.
[40 CFR 63.2240(b), Item 4 of Table 2 and Item 1 of Table 7 to NESHAP Subpart DDDD, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1]

The Permittee shall develop and submit to the Division for approval the procedures for measuring the dissolved oxygen levels in the aeration tank and the procedures for water sample dosing, before the initial startup of the bioscrubber with ID No. C006.

5.2.4 The Permittee shall, using the hourly secondary voltages and secondary currents, obtained in accordance with Conditions 5.2.2 a and b, and the following equation, determine and record the total secondary power for each of the electrostatic precipitators with ID Nos. C005 and C025:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

$$P_t = \sum_{i=1}^{n} V_i I_i$$

Where:
P_t = Total ESP power (watts)
V_i = Secondary volts (kV), ESP field i
I_i = Secondary current (ma), ESP field i
n = Total number of fields

These records shall be kept in a form suitable for inspection or submittal to the Division.

5.2.5 The Permittee shall meet the following requirements for operating each continuous parameter monitoring system (CPMS) required by Conditions 5.2.2 d through i:
[40 CFR 63.2269(a), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1]

a. The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.

b. At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

c. Record the results of each inspection, calibration, and validation check.

5.2.6 The Permittee shall meet the following requirements for operating the temperature sensor specified in Condition 5.2.2h:
[40 CFR 63.2269(b), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1]

a. Locate the temperature sensor in a position that provides a representative temperature of the aeration tank of the bioscrubber with ID No. C006.

b. The temperature sensor must have a minimum accuracy of 4°F or 0.75 percent of the temperature value, whichever is larger.

c. If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20°F.

d. Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, the Permittee shall conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30°F of the process temperature sensor's reading.

e. Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

f. At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

5.2.7 The Permittee shall use a Preventive Maintenance Program for the bag filters with ID Nos. C001, C003, C008 through C016, C018 through C021, C026, TC01, and TC02 to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and modification by the Division and shall include the pressure drop ranges that indicate proper operation for each bag filter. At a minimum, the following operation and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. Record the pressure drop across each bag filter and ensure that it is within the appropriate range.

b. For bag filters equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.

c. For bag filters equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.

d. Check dust collector hoppers and conveying systems for proper operation.

5.2.8 The Permittee shall perform a check to determine if visible emissions are present from the bag filters with ID Nos. C001, C003, C008 through C021, C026, TC01, and TC02. The checks shall be conducted at least once for each day or portion of each day of operation of the emission units controlled by the bag filters are operated. The Permittee shall retain a record in a visible emissions (VE) log suitable for inspection or submittal. The checks shall be conducted using the following procedure:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1]

a. The person performing the determination shall stand at a distance of at least 15 feet, which is sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140º sector at his/her back. Consistent with this requirement, the determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one exhaust point shall be in the line of sight at any time when multiple emission points are in proximity to each other.

b. For each source that exhibits visible emissions, the Permittee shall determine the cause and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the visible emissions, the pressure drop, any other pertinent operating parameters, and the corrective action taken in the maintenance log.

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

Emission Unit	Pollutant
Fluidized Bed Energy System (EU24)	Particulate Matter (PM)
Flash Tube Dryers #1, #2, and #3 (EU05, EU06, and EU07)	Particulate Matter (PM)

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

5.2.10 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from the fluidized bed energy system with ID No. EU24 that is controlled by the ESP with ID No. C025.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	**Indicator No. 1 Total Secondary Power**	**Indicator No. 2 Continuous Opacity Monitoring System**
A. Data Representativeness [64.3(b)(1)]	Appropriate monitoring equipment installed in the ESP per the manufacturer's design.	Appropriate monitoring equipment installed in the ESP per the manufacturer's design.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	N/A	N/A
C. QA/QC Practices and Criteria [64.3(b)(3)]	Operators check the data for completeness, legibility, reasonableness, and accuracy on a routine basis; performance testing conducted at approximately 48-month intervals to ensure system is operating properly.	Operators check the data for completeness, legibility, reasonableness, and accuracy on a routine basis; performance testing conducted at approximately 48-month intervals to ensure system is operating properly.
D. Monitoring Frequency [64.3(b)(4)]	Secondary voltages and currents are recorded continuously. Hourly average secondary voltages and amperage are used to calculate hourly total secondary power, using the equations in Condition 5.2.4, for each hour of operation.	Opacity is recorded every minute and a 6 minute average is calculated when the unit is operating.
E. Data Collection Procedures [64.3(b)(4)]	Records of parametric monitoring, required maintenance, and corrective actions will be maintained at the mill site, either in organized paper files or electronically. The data will be retained for the period of time specified in the permit.	Records of parametric monitoring, required maintenance, and corrective actions will be maintained at the mill site, either in organized paper files or electronically. The data will be retained for the period of time specified in the permit.
F. Averaging Period [64.3(b)(4)]	3-hour average total secondary power.	6 minute average opacity.

5.2.11 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from the flash tube dryers with ID Nos. EU05, EU06, and EU07 that is controlled by the wet ESP with ID No. C005.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	**Indicator No. 1 Total Secondary Power**	**Indicator No. 2 Gas Stream Inlet/Outlet Temperature**
A. Data Representativeness [64.3(b)(1)]	Appropriate monitoring equipment installed in the WESP per the manufacturer's design	Appropriate monitoring equipment installed in the WESP per the manufacturer's design
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	N/A	N/A
C. QA/QC Practices and Criteria [64.3(b)(3)]	Operators check the data for completeness, legibility, reasonableness, and accuracy on a routine basis; performance testing conducted at approximately 48-month intervals to ensure system is operating properly.	Operators check the data for completeness, legibility, reasonableness, and accuracy on a routine basis; performance testing conducted at approximately 48-month intervals to ensure system is operating properly.
D. Monitoring Frequency [64.3(b)(4)]	Secondary voltages and currents are recorded continuously. Hourly average secondary voltages and amperage are used to calculate hourly total secondary power, using the equations in Condition 5.2.4, for each hour of operation.	Temperature is recorded every 15 minutes and a 1-hour average is calculated for each hour of operation.
E. Data Collection Procedures [64.3(b)(4)]	Records of parametric monitoring, required maintenance, and corrective actions will be maintained at the mill site, either in organized paper files or electronically. The data will be retained for the period of time specified in the permit.	Records of parametric monitoring, required maintenance, and corrective actions will be maintained at the mill site, either in organized paper files or electronically. The data will be retained for the period of time specified in the permit.
F. Averaging Period [64.3(b)(4)]	3-hour average total secondary power.	12-hour average inlet and outlet temperature.

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.
[391-3-1-.03(10)(d)1.(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

a. The date, place, and time of sampling or measurement;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions as existing at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

i. Any six-minute average opacity, as recorded by the COMS specified in Condition 5.2.1b, that exceeds 20 percent, except that one six-minute average per hour of up to 27 percent need not be reported.
[40 CFR 60.49b(h)(3)]

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Any 30-day rolling average nitrogen oxide emission rate, as measured by the NOx CERMS specified in Condition 5.2.1a, which is greater than or equal to 50.0 lb/hour. A new 30-day rolling average emission rate is calculated each operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.
[PSD Avoidance - 40 CFR Part 52.21]

ii. Any time the rolling 12-month total of VOC emissions, determined in accordance with Condition 6.2.5, from the TLC painting and finishing operations with ID No. T002 exceeds 7.2 tons.
[PSD Avoidance - 40 CFR Part 52.21]

iii. Any use of a coating, thinner, or cleaning material at the TLC painting and finishing operations with ID No. T002 that does not meet the emission limits in Condition 3.3.15.

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

i. Any three-hour period during which the average total secondary power (arithmetic average of three contiguous one-hour periods), as determined by the equation in Condition 5.2.4, to the ESP with ID No. C025, is less than 5.04 kilowatts.

ii. Any three-hour period during which the average total secondary power (arithmetic average of three contiguous one-hour periods), as determined by the equation in Condition 5.2.4, to the wet ESP with ID No. C005, is less than 15.8 kilowatts or 70 percent of the value determined and reported in accordance with Condition 4.2.6.

iii. Any 12-hour period during which the average of the inlet or outlet temperature for the wet ESP with ID No. C005, determined in accordance with Condition 5.2.2c, is greater than 150° F.

iv. Any three-hour block average scrubbant flow rate of the packed tower scrubber with ID No. C022, determined in accordance with Condition 6.2.10a, that is less than 400 gallons per minute (gpm) or is outside the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3d and 4.2.4.

v. Any three-hour block average scrubbant pH of the packed tower scrubber with ID No. C022, determined in accordance with Condition 6.2.10b, that is less than 6 or is outside the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3d and 4.2.4.

vi. Any three-hour block average pressure drop across the packed tower scrubber with ID No. C022, determined in accordance with Condition 6.2.10c, that is outside the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3d and 4.2.4.

vii. Any three-hour block average scrubbant flow rate of the bioscrubber with ID No. C006, determined in accordance with Condition 6.2.10d, that is outside the acceptable range of scrubbant flow rate established in accordance with Conditions 4.2.3d and 4.2.4.

viii. Any three-hour block average aeration tank (of the bioscrubber with ID No. C006) temperature, determined in accordance with Condition 6.2.10e, that is outside the acceptable range of aeration tank temperature established in accordance with Conditions 4.2.3d and 4.2.4.

ix. Any three-hour block average scrubbant pH at the aeration tank of the bioscrubber with ID No. C006, determined in accordance with Condition 6.2.10f, that is outside the acceptable range of aeration tank scrubbant pH established in accordance with Conditions 4.2.3d and 4.2.4.

x. Any 3-hour period during which the fluidized bed energy system (ID No. EU24) average combustion chamber temperature, determined in accordance with Condition 5.2.2k, is less than 1400° F.

xi. Any weekly dissolved oxygen level measurement, required in Condition 5.2.3, which is outside the acceptable range of aeration tank (of the bioscrubber with ID No. C006) dissolved oxygen level established in accordance with Conditions 4.2.3d and 4.2.4.

xii. Any weekly aeration tank water sample dosing test, required in Condition 5.2.3, that does not result in any decrease of dissolved oxygen level in the water sample, which may indicate that the microorganisms do not exist or are not healthy enough to digest dissolved formaldehyde.

xiii. Any visible emissions from any of the bag filters with ID Nos. C001, C003, C008 through C021, C026, TC01, and TC02, which occurs for two consecutive determinations, required by Condition 5.2.8.

xiv. Any calendar week, during which the reject relay system with ID No. EU13 operates more than seven hours per week, when recorded as required in Condition 6.2.3.

xv. Any time fuel containing more than 2.5 percent sulfur, by weight, is fired in the fluidized bed energy system with ID No. EU24 or the wax plant boiler with ID No. EU25.

xvi. Any failure to collect and keep appropriate records as required by Conditions 6.1.5 and 6.2.20 through 6.2.25, per 40 CFR 63 Subpart QQQQ.

xvii. Any recorded bypass period, determined in accordance with Condition 5.2.2l, that is more than one hour.

6.2 Specific Record Keeping and Reporting Requirements

6.2.1 The Permittee shall maintain records, suitable for inspection, of the total dry process weight rate in tons per hour through the flash tube dryers with ID Nos. EU05, EU06, and EU07 for each hour of operation.
[40 CFR 70.6(a)(3)(i), 391-3-1-.03(2)(c), and 391-3-1-.02(6)(b)1.]

6.2.2 The Permittee shall maintain records describing the routine maintenance performed on all air pollution control equipment.
[40 CFR 70.6(a)(3)(i), 391-3-1-.03(2)(c), and 391-3-1-.02(6)(b)1.]

6.2.3 The Permittee shall record, on a weekly basis, the hours of operation of the reject relay system with ID No. EU13.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.4 The Permittee shall calculate and record, from the CERMS, the hourly NOx emissions from the fluidized bed energy system with ID No. EU24. A new 30-day rolling average emission rate is calculated for each fluidized bed energy system operating day as the average of all of the hourly NOx emission data during which the system operated for the preceding 30 fluidized bed energy system operating days. A fluidized bed energy system operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is burned at any time in the fluidized bed energy system. It is not necessary for fuel to be burned continuously for the entire 24-hour period. These records shall be retained in a form suitable for inspection.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

The Permittee shall obtain NOx emissions data for at least 75 percent of the operating hours in at least 22 out of 30 successive fluidized bed energy system operating days. If this minimum data requirement is not met, the Permittee shall supplement the emissions data with data collected with other monitoring systems, reference methods or procedures approved by the Division.

6.2.5 The Permittee shall keep records of all VOC coating material usage and the VOC content of all materials used in the TLC painting and finishing operations with ID No. T002 and calculate the monthly and 12 month rolling total VOC emissions.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.6 The Permittee shall maintain daily records of the hours of operation of the TLC sawing and moulding lines with ID No. T001 and the TLC painting and finishing operations with ID No. T002.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.7 The Permittee shall use the records required by Condition 6.2.6, and the results of the most recent Division-approved performance tests, to calculate and record the monthly PM emissions from each baghouse with ID Nos. TC01 and TC02 for each calendar month, using the following equation:
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

$$E = EF \times H \times 1.15$$

Where:
E = PM emissions from a baghouse (TC01 or TC02), in pounds per month
EF = the average short-term PM emissions from a baghouse (TC01 or TC02) as established during the most recent performance test, in pounds per hour (which shall be the average of the emission rate during that test, unless otherwise specified by the Division)
H = the total hours of operation of the TLC sawing and moulding lines with ID No. T001 or the total hours of operation of the TLC painting and finishing operations with ID No. T002, determined in accordance with Condition 6.2.6, during each calendar month
1.15 = the uncertainty factor

6.2.8 The Permittee shall use the monthly PM emission rates, calculated as per Condition 6.2.7, to calculate the rolling 12-month total PM emissions from each baghouse with ID Nos. TC01 and TC02 for each calendar month. The Permittee shall notify the Division, in writing, if PM emissions from Baghouse TC01 exceed 1,333 lb during any calendar month, or if PM emissions from Baghouse TC02 exceed 333 lb during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the facility intends to maintain compliance with the emission limitations specified in Condition 3.2.17.
[PSD Avoidance - 40 CFR Part 52.21, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

40 CFR 60 Subpart Db

6.2.9 The Permittee shall record and maintain daily records of the amounts of each fuel combusted in the fluidized bed energy system with ID No. EU24, and calculate the annual capacity factor for wood and the amount of office waste burned for each calendar quarter to verify compliance with the annual capacity factor limit and the limit on the office waste that can be burned. The annual capacity factor is determined on a 12-month rolling total basis with a new annual capacity factor calculated at the end of each calendar month. These records shall be maintained in a format suitable for inspection or submittal at all times.
[40 CFR 60.49b(d), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

40 CFR 63 Subpart DDDD

6.2.10 The Permittee shall use the continuous parameter monitoring system (CPMS) specified in Conditions 5.2.2d through i to determine, record, and maintain records of the following:
[40 CFR 63.2270(d), 63.2271(a), Item 1 of Table 7 to NESHAP Subpart DDDD, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. The 3-hour block average scrubbant flow rate through the packed tower scrubber with ID No. C022.

b. The 3-hour block average scrubbant pH in the packed tower scrubber with ID No. C022.

c. The 3-hour block average differential pressure, across the packed tower scrubber with ID No. C022.

d. The 3-hour block average scrubbant flow rate through the bioscrubber with ID No. C006.

e. The 3-hour block average temperature in the aeration tank of the bioscrubber with ID No. C006.

f. The 3-hour block average scrubbant pH in the aeration tank of the bioscrubber with ID No. C006.

For the purpose of this Permit, a 3-hour block average of all recorded readings must be calculated after every 3 hours of operation as the average of the evenly spaced recorded readings in the previous 3 operating hours (excluding periods described in Conditions 6.2.11 a and b).

6.2.11 The Permittee shall monitor and collect data required by Conditions 5.2.2 d through i and 6.2.10 according to the following requirements:
[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)1.]

a. Except for, as appropriate, monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee must conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, the Permittee must not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities. The Permittee must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
[40 CFR 63.2270(b)]

b. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities; or data recorded during periods of startup, shutdown, and malfunction in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The Permittee must use all the data collected during all other periods in assessing the operation of the control system.
[40 CFR 63.2270(c)]

c. To calculate the data averages for each 3-hour averaging period, the Permittee must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (i.e., not from periods described in paragraphs a and b of this Condition).
[40 CFR 63.2270(f)]

6.2.12 The Permittee shall notify the Director within 30 days before the Permittee takes any of the following actions with regard to requirements of 40 CFR 63 Subpart DDDD.
[40 CFR 63.2280(g), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. Modify or replace any of the wet ESP with ID No. C005, the packed tower scrubber with ID No. C022, or the bioscrubber with ID No. C006.

b. Change a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for the wet ESP with ID No. C005, the packed tower scrubber with ID No. C022, or the bioscrubber with ID No. C006.

6.2.13 The Permittee shall submit, with the report required by Condition 6.1.4, a semiannual compliance report that contains the following records for the operation of the flash tube dryers with ID Nos. EU05, EU06, and EU07; the press vent system with ID No. EU22; and the fluidized bed energy system with ID No. EU24. The records shall be available for inspection or submittal to the Division upon request and contain:
[40 CFR 63.2281(a), 63.2281(b)(5), Item 1 of Table 9 to NESHAP Subpart DDDD, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. Company name and address.
[40 CFR 63.2281(c)(1)]

b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
[40 CFR 63.2281(c)(2)]

c. Date of report and beginning and ending dates of the reporting period.
[40 CFR 63.2281(c)(3)]

d. If the Permittee had a startup, shutdown, or malfunction during the reporting period and actions consistent with the SSMP were taken, the report must include the information specified in 40 CFR 63.10(d)(5)(i).
[40 CFR 63.2281(c)(4)]

e. The results of any performance tests conducted during the semiannual reporting period.
[40 CFR 63.2281(c)(6)]

f. If there were no deviations from any applicable compliance option or operating requirement, and there were no deviations from the work practice requirements in Table 8 to 40 CFR 63 Subpart DDDD, the report must include a statement that there were no deviations from the compliance options, operating requirements, or work practice requirements during the reporting period.
[40 CFR 63.2281(c)(7)]

g. If there were no periods during which any continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control as specified in 40 CFR 63.8(c)(7), the report must include a statement that there were no periods during which any CMS was out-of-control during the reporting period.
[40 CFR 63.2281(c)(8)]

h. For each of the deviations (excursions) specified in Conditions 6.1.7c. iv through ix, the report must contain the information in the following sub-paragraphs, when applicable. This includes periods of startup, shutdown, and malfunction.
[40 CFR 63.2271(b) and 40 CFR 63.2281(e)]

i. The date and time that each malfunction started and stopped.

ii. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).

iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; or during another period.

v. A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes.

vii. A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

viii. A brief description of the process units.

ix. A brief description of the CMS.

x. The date of the latest CMS certification or audit.

xi. A description of any changes in CMS, processes, or controls since the last reporting period.

6.2.14 The Permittee shall report all deviations as defined in 40 CFR 63, Subpart DDDD in the semiannual monitoring report required by Condition 6.1.4. If the Permittee submits a compliance report pursuant to Condition 6.2.13 along with, or as part of, the semiannual monitoring report required by Condition 6.1.4, and the compliance report includes all required information concerning deviations from any compliance option, operating requirement, or work practice requirement in 40 CFR 63, Subpart DDDD, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the Permittee may have to report deviations from permit requirements to the Division.
[40 CFR 63.2281(g), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.15 The Permittee shall furnish the Division an immediate startup, shutdown, malfunction report if the Permittee had a startup, shutdown, or malfunction that is not consistent with the SSMP specified in Condition 3.3.11, in accordance with the following procedures:
[40 CFR 63.2281(a), Item 2 of Table 9 to NESHAP Subpart DDDD, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. The Permittee shall report actions taken for the event by fax or telephone within 2 working days after starting actions inconsistent with the SSMP.

b. The Permittee shall report the information required by 40 CFR 63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless the Permittee has made alternative arrangements with the Division.

6.2.16 The Permittee shall keep the following records:
[40 CFR 63.2282(a), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. A copy of each notification and report that the Permittee submitted to comply with 40 CFR 63 Subpart DDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

b. The records required by 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

c. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

6.2.17 The Permittee shall maintain records required by Conditions 6.2.10 through 6.2.13 to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies to the Permittee.
[40 CFR 63.2282(b), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.18 The Permittee shall maintain the records specified in Conditions 6.2.10 through 6.2.13 and 6.2.15 through 6.2.17 in accordance with the following:
[40 CFR 63.2283, 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. The records must be in a form suitable and readily available for expeditious review as specified in 40 CFR 63.10(b)(1).

b. The Permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR 63.10(b)(1). The Permittee can keep the records offsite for the remaining 3 years.

40 CFR 63 Subpart QQQQ

6.2.19 The Permittee shall submit, with the report required by Condition 6.1.4, a semiannual compliance report that contains the following records for the operation of the painting and finishing operations with ID No. T002:
[40 CFR 63.4720(a), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

a. The following information must be included in all reports, regardless of the compliance option.

i. Company name and address.

ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 3-month period ending on March 31, June 30, September 30, and December 31 of each year. Note that the information reported for each of the 3 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

iv. Identification of the compliance option that the Permittee used for each coating operation during the reporting period.

v. If there were no deviations from the emission limitations in Condition 3.3.15, the report must include a statement that there were no deviations from the emission limitations during the reporting period.

b. If there was a deviation from the applicable organic HAP content limit in Condition 3.3.15, the report must contain the information in paragraphs (b)(i) through (iv).

i. Identification of each coating used that deviated from the applicable emission limit, and each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.

ii. The calculation of the organic HAP content (using the equation specified in Condition 6.2.22) for each coating identified in paragraph (b)(i) of this condition.

iii. The determination of the mass fraction of organic HAP for each thinner and cleaning material identified in paragraph (b)(i) of this condition.

iv. A statement of the cause of each deviation.

6.2.20 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a current copy of the manufacturer's formulation data, a summary of manufacturer's testing, or a complete copy of the test report of facility material testing that identifies the mass fraction of organic HAP, volume fraction of coating solids (coatings only), and density for each coating, thinner and cleaning material used.
[40 CFR 63.4730(b), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.21 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a record of the coating operations at which each compliance option was used and the time periods (beginning and ending date and times) that each option was used.
[40 CFR 63.4730(c)(1), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.22 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a record of the calculation of the organic HAP content for each coating, using the following equation. The organic HAP emission limit for each coating shall be included in the record.
[40 CFR 63.4730(c)(2), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

$$H_c = \frac{D_c W_c}{V_s}$$ (Equation 2 of 40 CFR 63.4741)

Where:
H_c = Organic HAP content of the coating, grams (lb) organic HAP emitted per liter (gal) coating solids used.
D_c = Density of coating, grams (lb) coating per liter (gal) coating, determined according to paragraph (c) of 40 CFR 63.4741.
W_c = Mass fraction of organic HAP in the coating, grams (lb) organic HAP per gram (lb) coating, determined according to paragraph (a) of 40 CFR 63.4741
V_s = Volume fraction of coating solids, determined according to paragraph (b) of 40 CFR 63.4741.

6.2.23 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a record of the name and volume of each coating, thinner and cleaning material used during each compliance period. Purchase records may be used in lieu of usage records. The weight may be recorded in lieu of volume if the Permittee purchases materials or monitors consumption by weight instead of volume.
[40 CFR 63.4730(d), 63.4751(d), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.24 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a record of the mass fraction of organic HAP in each coating, thinner and cleaning material used during each compliance period.
[40 CFR 63.4730(e), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

6.2.25 The Permittee shall, for the operation of the painting and finishing operations with ID No. T002, maintain a record of the density and the volume fraction of coating solids for each coating used during each compliance period.
[40 CFR 63.4730(f), 40 CFR 70.6(a)(3)(i), and 391-3-1-.02(6)(b)1.]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.1 Operational Flexibility

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.

b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.

b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the Permit shield in Condition 8.16.1.

d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act. [Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements
[White Paper #2]

Not Applicable.

7.4 Insignificant Activities
(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

7.5 Temporary Sources
[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable.

7.6 Short-term Activities
(see Form D5 "Short Term Activities" of the Permit application and White Paper #1)

Not Applicable.

7.7 Compliance Schedule/Progress Reports
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

Not Applicable.

7.8 Emissions Trading
[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable.

7.9 Acid Rain Requirements

Not Applicable.

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)
[391-3-1-.02(10)]

7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.

a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.

b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1a. and the following additional requirements:

i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)

c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1a., 7.10.1b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1a., 7.10.1b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175

e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*eSubmit (information for establishing an account can be found at www.epa.gov/emergencies/content/rmp/rmp_esubmit.htm). Electronic Signature Agreements should be mailed to:

MAIL

Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038

COURIER & FEDEX

Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: “MVAC-like appliance” is defined in 40 CFR 82.152.]

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
2493-003-0013-V-04-0	May 22, 2009

7.13 Pollution Prevention

None applicable.

7.14 Specific Conditions

None applicable.

PART 8.0 GENERAL PROVISIONS

8.1 Terms and References

8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.

8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence. [391-3-1-.02(2)(a)2]

8.2 EPA Authorities

8.2.1 Except as identified as "State-only enforceable" requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]

8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, "Inspections, Monitoring, and Entry."
[40 CFR 70.6(f)(3)(iv)]

8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, "Emergency Powers."
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]

8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]

8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

8.5.1 This Permit shall remain in effect for five (5) years from the effective date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]

8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]

8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

Air and EPCRA Enforcement Branch – U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. 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.
[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division.
[391-3-1-.03(10)(c)5]

8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall also furnish to the Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]

a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if the effective date of the requirement is later than the date on which the Permit is due to expire, unless the original permit or any of its terms and conditions has been extended under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]

b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)

c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]

d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]

8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]

8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]

8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]

8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.

8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

8.13.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;

b. The Permitted facility was at the time of the emergency being properly operated;

c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and

d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

a. The identification of each term or condition of the Permit that is the basis of the certification;

b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;

c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;

d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and

e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]

i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.

b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties.[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]

c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]

i. The best operational practices to minimize emissions are adhered to;

ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and

iii. The duration of excess emissions is minimized.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[391-3-1-.02(2)(a)7(ii)]

c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

8.15 Circumvention

State Only Enforceable Condition.

8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.16 Permit Shield

8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]

8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not

limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition.

8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia's Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.
$E = 55P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$E = 4.1P^{0.67}$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

8.22 Fugitive Dust
[391-3-1-.02(2)(n)]

8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser unless the following requirements for control of emissions of the volatile organic compounds are satisfied: [391-3-1-.02(2)(ff)1]

a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,

b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,

c. If the solvent volatility is 0.60 psi or greater measured at 100 ºF, or if the solvent is heated above 120 ºF, then one of the following control devices must be used:

i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or

ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or

iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.

d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and

e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator, in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]

a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.

b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.

8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

8.24.3 No person shall cause or allow particles to be emitted from an incinerator which are individually large enough to be visible to the unaided eye.

8.24.4 No person shall operate an existing incinerator unless:

a. It is a multiple chamber incinerator;

b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800^{o}F; and

c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500^{o}F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Rule 391-3-1-.02(2)(vv) "Volatile Organic Liquid Handling and Storage" is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information,

relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

8.27.1 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart IIII – "Standard of Performance for Stationary Compression Ignition Internal Combustion Engines," for diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005. Such requirements include but are not limited to:
[40 CFR 60.4200, 391-3-1-.02(8)(b)77]

a. Equip all emergency generator engines with non-resettable hour meters.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division.

8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart JJJJ – "Standard of Performance for Stationary Spark Ignition Internal Combustion Engines," for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230, 391-3-1-.02(8)(b)79]

8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart ZZZZ – "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."
[40 CFR 63.6580, 391-3-1-.02(9)(b)118]

8.28 Boilers and Process Heaters

8.28.1 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart JJJJJJ – "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers."
[40 CFR 63.11193]

8.28.2 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A – "General Provisions" and 40 CFR 63 Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."
[40 CFR 63.7480]

Attachments

A. List of Standard Abbreviations and List of Permit Specific Abbreviations
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
C. List of References

ATTACHMENT A

List Of Standard Abbreviations

AIRS	Aerometric Information Retrieval System	PM	Particulate Matter
APCD	Air Pollution Control Device	PM_{10} (PM10)	Particulate Matter less than 10 micrometers in diameter
ASTM	American Society for Testing and Materials	PPM (ppm)	Parts per Million
BACT	Best Available Control Technology	PSD	Prevention of Significant Deterioration
BTU	British Thermal Unit	RACT	Reasonably Available Control Technology
CAAA	Clean Air Act Amendments	RMP	Risk Management Plan
CEMS	Continuous Emission Monitoring System	SIC	Standard Industrial Classification
CERMS	Continuous Emission Rate Monitoring System	SIP	State Implementation Plan
CFR	Code of Federal Regulations	SO_2 (SO2)	Sulfur Dioxide
CMS	Continuous Monitoring System(s)	USC	United States Code
CO	Carbon Monoxide	VE	Visible Emissions
COMS	Continuous Opacity Monitoring System	VOC	Volatile Organic Compound
dscf/dscm	Dry Standard Cubic Foot / Dry Standard Cubic Meter		
EPA	United States Environmental Protection Agency		
EPCRA	Emergency Planning and Community Right to Know Act		
gr	Grain(s)		
GPM (gpm)	Gallons per minute		
H_2O (H2O)	Water		
HAP	Hazardous Air Pollutant		
HCFC	Hydro-chloro-fluorocarbon		
MACT	Maximum Achievable Control Technology		
MMBtu	Million British Thermal Units		
MMBtu/hr	Million British Thermal Units per hour		
MVAC	Motor Vehicle Air Conditioner		
MW	Megawatt		
NESHAP	National Emission Standards for Hazardous Air Pollutants		
NO_x (NOx)	Nitrogen Oxides		
NSPS	New Source Performance Standards		
OCGA	Official Code of Georgia Annotated		

List of Permit Specific Abbreviations

TSDF	Treatment, Storage, and Disposal Facility		
ESP	Electrostatic Precipitator		
SNCR	Selective Non Catalytic Reduction System		

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	1
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows: i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	
	4. Stationary engines burning: i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	2
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	1
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	3
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	2
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	1
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour: i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that: i) Activity is performed indoors; & ii) No significant fugitive particulate emissions enter the environment; & iii) No visible emissions enter the outdoor atmosphere.	
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	5
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	1
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	8

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Raw Material Storage Pile - Boiler Feed	1
Raw Material Storage Pile - Wood Chip Fines	2
Raw Material Storage Pile - Wood Chips	2
Raw Material Unloading - Railcar	1
Raw Material Unloading – Truck	1
Resin Storage Tanks	8
Wood Dust Loading Bin	1

ATTACHMENT B (continued)

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
#1 Face Fiber Bin	1	X	X	
Reject Fiber Bin	1	X	X	
#2 Core Fiber Bin	1	X	X	
Direct-Fired Oven (TLC)	1	X	X	

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d).Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	0
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	0
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	0

ATTACHMENT C

LIST OF REFERENCES

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.

2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.

3. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.***

4. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees***.

5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/ap42/index.html*.

6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/software/tanks/index.html*.

7. The Clean Air Act (42 U.S.C. 7401 et seq).

8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).

9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).

Potential Emissions Calculations

Table C-1. Summary of Facility-Wide Potential Emissions

Unit ID	Emission Unit Description	Control Device ID	Control Device	Filterable PM (tpy)	Total PM (tpy)	Total PM_{10} (tpy)	Total $PM_{2.5}$ (tpy)	VOC (tpy)	NO_X (tpy)	CO (tpy)	SO_2 (tpy)	CO_2e (tpy)	Max. Individual HAP[5] (tpy)	Total HAP (tpy)
EU01	Chip Shaker Screen Area	C001	Bag Filter	4.38	4.38	4.38	4.38	-	-	-	-	-	-	-
EU03	Shavings and Sawdust Relay System	C003	Bag Filter	15.3	15.3	15.3	15.3	-	-	-	-	-	-	-
EU05[1]														
EU06	Flash Tube Dryer Nos. 1, 2, and 3	C005 C006	Wet ESP, Bioscrubber	110	110	110	110	238.3	219	219	47.8	161,573	3.57	5.66
EU07														
EU08	Face Dryer Relay System	C008	Bag Filter	6.57	6.57	6.57	6.57	-	-	-	-	-	-	-
EU09	Swing Dryer Relay System	C009	Bag Filter	6.57	6.57	6.57	6.57	-	-	-	-	-	-	-
EU10	Core Dryer Relay System	C010	Bag Filter	6.57	6.57	6.57	6.57	-	-	-	-	-	-	-
EU11	Face/Core Shave-off Relay System	C011	Bag Filter	10.1	10.1	10.1	10.1	-	-	-	-	-	-	-
EU12	Former Vacuum System	C012	Bag Filter	13.1	13.1	13.1	13.1	-	-	-	-	-	-	-
EU13	Reject Relay System	C013	Bag Filter	0.55	0.55	0.55	0.55	-	-	-	-	-	-	-
EU14	Vacuum Relay System	C014	Bag Filter	5.96	5.96	5.96	5.96	-	-	-	-	-	-	-
EU15	Sander Pickup System No. 1	C015	Bag Filter	10.5	10.5	10.5	10.5	-	-	-	-	-	-	-
EU16	Sander Pickup System No. 2	C016	Bag Filter	10.5	10.5	10.5	10.5	-	-	-	-	-	-	-
EU17	Sanderdust Relay System	C017	Bin Vent	5.96	5.96	5.96	5.96	-	-	-	-	-	-	-
EU18	Saw/Sander Dust Boiler Relay System	C018	Bag Filter	5.96	5.96	5.96	5.96	-	-	-	-	-	-	-
EU19	Sawdust Pickup System	C019	Bag Filter	7.45	7.45	7.45	7.45	-	-	-	-	-	-	-
EU20	Hogged Trim Relay System	C020	Bag Filter	4.38	4.38	4.38	4.38	-	-	-	-	-	-	-
EU21	Saw Trim Relay System	C021	Bin Vent	4.38	4.38	4.38	4.38	-	-	-	-	-	-	-
EU22[2]	Press Vent System	C022, C006	Scrubber, Bioscrubber	-	-	-	-	-	-	-	-	-	-	-
EU24[3]	Fluidized Bed Energy System	C024, C025	SNCR, ESP	-	-	-	-	-	-	-	-	-	-	-
EU25	Wax Plant Boiler	-	-	1.02E-02	3.56E-02	3.56E-02	3.56E-02	5.08E-02	0.66	0.38	1.27E-02	649	-	8.51E-03
EU26	Ash Storage Silo	C026	Bag Filter	4.38	4.38	4.38	4.38	-	-	-	-	-	-	-
T001	Sawing and Molding Lines	TC01	Baghouse	8.00	8.00	8.00	8.00	-	-	-	-	-	-	-
T002	Painting and Finishing Operations	TC02	Baghouse	2.00	2.00	2.00	2.00	9.0	1.26	0.73	0.02	1,236	-	1.62E-02
T003[4]	Pellet Mill Operations	-	-	-	-	-	-	-	-	-	-	-	-	-
MISC	Miscellaneous Coating Operations	-	-	-	-	-	-	0.54	-	-	-	-	-	-
INS	Caterpillar LC6 Emergency Generator	-	-	0.26	0.26	0.26	0.26	0.30	3.72	0.80	0.25	138	-	0.45
INS	Caterpillar SR4 Emergency Generator	-	-	0.41	0.41	0.41	0.41	0.46	5.80	1.25	0.38	215.3	-	0.71
INS	Clark Model DDFP-L6FA Fire Pump	-	-	0.17	0.17	0.17	0.17	0.19	2.40	0.52	0.16	89.1	-	0.29
INS	#1 Face Fiber Bin	C027	Bin Vent	0.35	0.35	0.35	0.35	-	-	-	-	-	-	-
INS	Reject Fiber Bin	C028	Bin Vent	0.35	0.35	0.35	0.35	-	-	-	-	-	-	-
INS	#2 Core Fiber Bin	C029	Bin Vent	0.35	0.35	0.35	0.35	-	-	-	-	-	-	-
INS	Wax Plant Tanks	-	-	-	-	-	-	0.02	-	-	-	-	-	-
INS	Premier Plant Tanks	-	-	-	-	-	-	0.02	-	-	-	-	-	-
			Facility-Wide Total:	**244.1**	**244.1**	**244.1**	**244.1**	**248.8**	**232.8**	**222.7**	**48.6**	**163,901**	**3.57**	**7.15**

1. Includes emissions from the Flash Tube Dryers, the Press Vent System, and the Fluidized Bed Energy System which are all controlled by the Bioscrubber.

2. Emissions from the Press Vent System are controlled by the Bioscrubber and are included under EU05-EU07 above.

3. Exhaust from the Fluidized Bed Energy System is first controlled by a SNCR (C024) and ESP (C025), then is sent through EU05-EU07, which are controlled by a WESP (C005) and Bioscrubber (C006). Potential emissions for the Fluidized Bed Energy System are included under EU05-EU07 due to no separate emission point.

4. The Pellet Mill emissions are included with T001 as exhaust from the pellet mill cyclone is routed back to the pneumatic system under Baghouse TC01.

5. Facility-Wide Maxiumum HAP is Hydrogen Chloride.

Table C-2. Potential Emissions from Flash Tube Dryer Nos. 1, 2, and 3 (EU05, EU06, EU07)

Pollutant[1,2]	Emission Source ID	Emission Unit Description	Control Device ID	Control Device Description	Potential Emissions[3-5] (lb/hr)	(tpy)
CO	EU05 EU06 EU07	Flash Tube Dryer No. 1 Flash Tube Dryer No. 2 Flash Tube Dryer No. 3	C005 C006	Wet ESP, Bioscrubber	50.0	219.0
NO_X					See Note 5	
SO_2					See Note 5	
Filterable PM					25.0	109.5
Filterable PM_{10}					25.0	109.5
Filterable $PM_{2.5}$					25.0	109.5
Condensable PM					-	-
Total PM					25.0	109.5
Total PM_{10}					25.0	109.5
Total $PM_{2.5}$					25.0	109.5
VOC					54.4	238.3
CO_2e					See Note 5	

1. The Flash Tube Dryers are controlled by a wet ESP and Bioscrubber. Specific Condition 3.2.3 of the Title V permit limits CO, PM, and VOC emissions from the Bioscrubber to 50 lb/hr, 25 lb/hr, and 54.4 lb/hr, respectively.

2. Assuming that there is no condensable PM.

3. Conservatively assumed Total PM = Total PM_{10} = Total $PM_{2.5}$.

4. In addition to the Flash Tube Dryers, the Bioscrubber also controls emissions from the Press Vent System (EU22) and the Fluidized Bed Energy System (EU24).

Potential emissions include emissions from the Press Vent System and the Fluidized Bed Energy System due to no separate emission point.

5. All NO_X, SO_2, and greenhouse gases from the combustion of wood in the Fluidized Bed Energy System are assumed to pass through the dryers uncontrolled and are quantified in a separate table.

Table C-3. Fluidized Bed Energy System (EU24) Parameters

Parameter Description	Value	Units
Max Heat Input Capacity:	185	MMBtu/hr
Fuel Higher Heating Value:[1]	6,250	Btu/lb
Maximum wet fuel firing rate:	29,600	lb/hr

1. Based on 50% hog fuel (wet) and 50% dry fuel.

Table C-4. Potential Emissions for EU24

Pollutant	Controlled Emission Factor (lb/MMBtu)	Ref.	Potential Hourly Emissions[6,7] (lb/hr)	Potential Annual Emissions[8,9] (tpy)
CO	0.60	1	Included in Table C-2.	
NO_X	0.194	2,3	50.0	219.0
SO_2	0.059	2	10.9	47.8
Filterable PM	0.054	1	Included in Table C-2.	
Filterable PM_{10}	0.040	1		
Filterable $PM_{2.5}$	0.035	1		
Condensable PM	0.017	1		
Total PM	-	1		
Total PM_{10}	-	1		
Total $PM_{2.5}$	-	1		
VOC	0.017	1		
CH_4	0.021	4	3.89	17.0
N_2O	0.013	4	2.41	10.5
CO_2	195	4	36,075	158,009
CO_2e	199	5	36,889	161,573

1. Emissions of CO, PM, and VOC are included in the flash tube dryer emissions in Table C-2.
2. Vendor estimates.
3. NO_X control efficiency of 50% applied for SNCR.
4. AP-42 Section 1.6 Wood Residue Combustion in Boilers, Table 1.6-3 Emission Factors for Speciated Organic Compounds, CH_4, N_2O, and CO_2 from Wood Residue Combustion. (9/03)

5. CO_2e emission factor estimated using the Global Warming Potentials (GWPs) in 40 CFR 98 Subpart A.

Pollutant	GWP
CO_2	1
CH_4	25
N_2O	298

6. Specific Condition 3.2.15 of Title V Permit No. 2493-003-0013-V-05-0 limits NO_X emissions from EU24 to 50 lb/hr.
7. Potential Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) x Boiler Heat Input Rating (MMBtu/hr)

8. Exhaust from the Fluidized Bed Energy System is first controlled by a SNCR (C024) and ESP (C025), then is sent through EU05-EU07, which are controlled by a WESP (C005) and Bioscrubber (C006). Specific Condition 3.2.3 of the Title V permit limits CO, PM, and VOC emissions from the Bioscrubber to 50 lb/hr, 25 lb/hr, and 54.4 lb/hr, respectively. Potential CO, PM, and VOC emissions from the Fluidized Bed Energy System are included under EU05-EU07 due to no separate emission point. All NO_X, SO_2, and greenhouse gases are assumed to pass through the dryers uncontrolled.
9. Potential Annual Emissions (tons/yr) = Potential Hourly Emissions (lb/hr) x 8760 Hours of Operation (hrs/yr) / 2000 (lbs/ton)

Table C-5. Fluidized Bed Energy System (EU24) Parameters

Parameter	Value	Units
Boiler heat input rating:	185	MMBtu/hr
Fuel heating value:[1]	6,250	Btu/lb
Maximum wet fuel firing rate:	29,600	lb/hr
Potential Annual Operation:	8,760	hr/yr

1. Based on 80% hog fuel and 20% dry fuel.

Table C-6. Potential HAP Emissions for EU24

Pollutant	Biomass Combustion Emission Factor[1] (lb/MMBtu)	Control Efficiency[2] (%)	Potential Emissions[3,4] (lb/hr)	(tpy)
1,1,1-Trichloroethane	3.10E-05	90%	5.74E-04	2.51E-03
1,2-Dibromoethene	5.50E-05	90%	1.02E-03	4.46E-03
Acetaldehyde	8.30E-04	90%	1.54E-02	6.73E-02
Acetophenone	3.20E-09	90%	5.92E-08	2.59E-07
Acrolein	4.00E-03	90%	7.40E-02	3.24E-01
Antimony	7.90E-06	95%	7.31E-05	3.20E-04
Arsenic	2.20E-05	95%	2.04E-04	8.91E-04
Benzene	4.20E-03	90%	7.77E-02	3.40E-01
Beryllium	1.10E-06	95%	1.02E-05	4.46E-05
Bis(2-ethylhexyl)phthalate	4.70E-08	90%	8.70E-07	3.81E-06
Bromomethane	1.50E-05	90%	2.78E-04	1.22E-03
Cadmium	4.10E-06	95%	3.79E-05	1.66E-04
Carbon tetrachloride	4.50E-05	90%	8.33E-04	3.65E-03
Chlorine	7.90E-04	-	1.46E-01	6.40E-01
Chlorobenzene	3.30E-05	90%	6.11E-04	2.67E-03
Chloroform	2.80E-05	90%	5.18E-04	2.27E-03
Chromium	2.10E-05	95%	1.94E-04	8.51E-04
Chromium VI	3.50E-06	95%	3.24E-05	1.42E-04
Cobalt	6.50E-06	95%	6.01E-05	2.63E-04
1,2-Dichloroethane	2.90E-05	90%	5.37E-04	2.35E-03
1,2-Dichloropropane	3.30E-05	90%	6.11E-04	2.67E-03
2,4-Dinitrophenol	1.80E-07	90%	3.33E-06	1.46E-05
Ethyl benzene	3.10E-05	90%	5.74E-04	2.51E-03
Formaldehyde	4.40E-03	90%	8.14E-02	3.57E-01
Hydrogen Chloride	4.40E-03	-	8.14E-01	3.57E+00
Lead	4.80E-05	95%	4.44E-04	1.94E-03
Manganese	1.60E-03	95%	1.48E-02	6.48E-02
Mercury	3.50E-06	95%	3.24E-05	1.42E-04
Methyl chloride (chloromethane)	2.30E-05	90%	4.26E-04	1.86E-03
Methylene chloride (dichloromethane)	2.90E-04	90%	5.37E-03	2.35E-02
Naphthalene	9.70E-05	90%	1.79E-03	7.86E-03
Nickel	3.30E-05	95%	3.05E-04	1.34E-03
4-Nitrophenol	1.10E-07	90%	2.04E-06	8.91E-06
Pentachlorophenol	5.10E-08	90%	9.44E-07	4.13E-06
Phenol	5.10E-05	90%	9.44E-04	4.13E-03
Phosphorus	2.70E-05	95%	2.50E-04	1.09E-03
Selenium	2.80E-06	95%	2.59E-05	1.13E-04
Styrene	1.90E-03	90%	3.52E-02	1.54E-01
2,3,7,8-Tetrachlorodibenzo-p-dioxins	8.60E-12	90%	1.59E-10	6.97E-10
Tetrachlorobiphenyl	2.50E-09	90%	4.63E-08	2.03E-07
Toluene	9.20E-04	90%	1.70E-02	7.45E-02
Trichloroethylene (trichloroethene)	3.00E-05	90%	5.55E-04	2.43E-03
2,4,6-Trichlorophenol	2.20E-08	90%	4.07E-07	1.78E-06
Vinyl chloride	1.80E-05	90%	3.33E-04	1.46E-03
o-Xylene	2.50E-05	90%	4.63E-04	2.03E-03
Total HAP			**1.29**	**5.66**

1. Emission factors from AP-42 Section 1.6, Tables 1.6-3 and 1.6-4 (9/03).

2. Organic HAP emissions are controlled by a Bioscrubber (C006). Pursuant to compliance with the add-on control compliance option with the PCWP MACT, Langboard must achieve a 90% emissions reduction in formaldehyde at the outlet of the Bioscrubber. Langboard has maintained compliance with this limit and has applied a 90% control efficiency to all organic HAP. Additionally, Langboard operates a dry ESP (C025) on the combustion exhaust gases from the Energy Systems and operates a Wet ESP (C005) on the flash tube dryers (exhaust also passes through the dryers), which both serve to control PM emissions. Therefore, Langboard has applied a 95% control efficiency to all metal HAP emissions.
3. Hourly emissions are calculated as follows: Emissions (lb/hr) =[Wood Combustion EF (lb/MMBtu) × Heat Input Capacity (MMBtu/hr)] × (1 - Control efficiency (%)

4. Annual emissions are calculated as follows: Emissions (tpy) = Hourly emissions (lb/hr) × Operation (hr/yr) / 2,000 (lb/ton)

Table C-7. Wax Plant Boiler (EU25) Operating Parameters

Parameter Description	Value	Units
Manufacturer:	Hurst	N/A
Model No.:	S2-GA2-250-150	N/A
Manufactured:	1987	N/A
Installed:	2005	N/A
Fuel Used:	Propane	N/A
Higher Heating Value: [1]	90,500	Btu/gal
Rated Horsepower:	250	hp
Heat Input:	10.50	MMBtu/hr
Hourly Fuel Consumption:	116	gal/hr
Annual Operation:[2]	876	hr/yr
Fuel Consumption:	102	Mgal/yr

1. Per AP-42 Section 1.5, Liquefied Petroleum Gas Combustion, default HHV.

2. As this unit does not operate often (only during cold shutdown periods), Langboard requests that the Wax Plant Boiler be limited to 876 hr/yr (10% of continuous operation) such that this unit may be classified as a limited-use unit under the Boiler MACT (Subpart DDDDD). Langboard will track fuel usage and operational hours.

Table C-8. Potential Emissions for EU25

Pollutant	Emission Factor (lb/Mgal)[1-4]	Potential Emissions (lb/hr)[5]	Potential Emissions (tpy)[6]
NO_X	13.0	1.51	0.66
CO	7.5	0.87	0.38
SO_2	0.3	2.90E-02	1.27E-02
Filterable PM	0.2	2.32E-02	1.02E-02
Total PM_{10}	0.7	8.12E-02	3.56E-02
Total $PM_{2.5}$	0.7	8.12E-02	3.56E-02
VOC	1.0	0.12	5.08E-02
CH_4	0.2	2.32E-02	1.02E-02
N_2O	0.9	0.10	4.57E-02
CO_2	12,500	1,450	635
CO_2e	12,773	1,482	649

1. AP-42 Section 1.5 Liquefied Petroleum Gas Combustion, Table 1.5-1 - Emission Factors for LPG Combustion. (7/08)

2. The AP-42 SO_2 emission factor includes an "S" term. "S" indicates that the given emission factor should be multiplied by the weight % of sulfur in the oil. Per Condition 3.4.4 of Title V Permit No. 2493-003-0013-V-05-0.

Permitted fuel sulfur content: 2.5 %

3. Conservatively assumed Total PM = Total PM_{10} = Total $PM_{2.5}$.

4. CO_2e emission factor estimated using the Global Warming Potentials (GWPs) in 40 CFR 98 Subpart A.

Pollutant	GWP
CO_2	1
CH_4	25
N_2O	298

5. Potential Hourly Emissions (lb/hr) = Emission Factor (lb/Mgal) x Maximum Hourly fuel consumption (gal/hr) / 1,000(gal/Mgal)

6. Potential Annual Emissions (tons/yr) = Potential Hourly Emissions (lb/hr) x Annual Operation (hrs/yr) / 2000 (lbs/ton)

Table C-9. Wax Plant Boiler (EU25) Operating Parameters

Parameter Description	Value	Units
Heat Input:	10.5	MMBtu/hr
Natural Gas Heating Value:[1]	1,020	MMBtu/MMscf
Propane Heating Value:[2]	90,500	Btu/gal
Max. Natural Gas Consumption:	1.03E-02	MMscf/hr
Max. Propane Gas Consumption:	116	gal/hr
Annual Operation:	876	hr/yr

1. Per AP-42 Section 1.4, average HHV.
2. Per AP-42 Section 1.5, Liquefied Petroleum Gas Combustion, default HHV.

Table C-10. Potential HAP Emissions for EU25

Pollutant	Emission Factors[1] (lb/MMscf)	Potential Emissions (lb/hr)[2]	Potential Emissions (tpy)[3]
2-Methylnaphthalene	2.40E-05	2.47E-07	1.08E-07
3-Methylchloranthrene	1.80E-06	1.85E-08	8.12E-09
7,12-Dimethylbenz(a)anthracene	1.60E-05	1.65E-07	7.21E-08
Arsenic	2.00E-04	2.06E-06	9.02E-07
Benzene	2.10E-03	2.16E-05	9.47E-06
Beryllium	1.20E-05	1.24E-07	5.41E-08
Cadmium	1.10E-03	1.13E-05	4.96E-06
Chromium	1.40E-03	1.44E-05	6.31E-06
Cobalt	8.40E-05	8.65E-07	3.79E-07
p-Dichlorobenzene (1,4-Dichlorobenzene)	1.20E-03	1.24E-05	5.41E-06
Formaldehyde	7.50E-02	7.72E-04	3.38E-04
Hexane	1.80E+00	1.85E-02	8.12E-03
Lead	5.00E-04	5.15E-06	2.25E-06
Manganese	3.80E-04	3.91E-06	1.71E-06
Mercury	2.60E-04	2.68E-06	1.17E-06
Naphthalene	6.10E-04	6.28E-06	2.75E-06
Nickel	2.10E-03	2.16E-05	9.47E-06
Selenium	2.40E-05	2.47E-07	1.08E-07
Toluene	3.40E-03	3.50E-05	1.53E-05
Total HAP		**1.94E-02**	**8.51E-03**

1. Emission factors taken from AP-42 Chapter 1.4, "Natural Gas Combustion," Tables 1.4-2, 1.4-3 and 1.4-4 (July 1998). These factors are assumed to also be representative for any liquid propane combustion.

2. Emission Rate (lb/hr) = Maximum Hourly Fuel Consumption (MMscf/hr) × Emission Factor (lb/MMscf).
3. Annual Emissions $(tons/yr)_{(Potential)}$ = Hourly Emissions (lb/hr) × Potential Annual Operation (hr/yr) × (1 ton/2000 lb).

Table C-11. Painting and Finishing Operations (T002) Potential Emissions

Pollutant	Source ID	Description	Control Device ID	Control Device Description	Emission Factor[1-5] (lb/Mgal)	Potential Emissions[6]	
						(lb/hr)[7]	(tpy)[8]
NO_X	T002	Painting and Finishing Operations	TC02	Baghouse	13.0	0.29	1.26
CO					7.5	0.17	0.73
SO_2					0.3	5.52E-03	2.42E-02
Filterable PM					-	0.46	2.00
Total PM_{10}					-	0.46	2.00
Total $PM_{2.5}$					-	0.46	2.00
VOC					-	2.05	9.0
CH_4					0.2	4.42E-03	1.94E-02
N_2O					0.9	0.02	8.71E-02
CO_2					12,500	276	1,210
CO_2e					12,773	282	1,236

1. AP-42 Section 1.5 Liquefied Petroleum Gas Combustion, Table 1.5-1 - Emission Factors for LPG Combustion. (7/08)

2. The AP-42 SO_2 emission factor includes an "S" term. "S" indicates that the given emission factor should be multiplied by the weight % of sulfur in the oil. Per Condition 3.4.4 of Title V Permit No. 2493-003-0013-V-05-0.

Permitted fuel sulfur content: 2.5 %

3. Specific Condition 3.2.17 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from TC02 to 2 tons per consecutive 12-month period. Please note that total PM emissions are a sum of propane combustion emissions and mechanical processes (e.g., sanding). It is conservatively assumed that PM = PM_{10} = $PM_{2.5}$.

4. Specific Condition 3.2.18 of Title V Permit No. 2493-003-0013-V-05-0 limits current VOC emissions from T002 to 10.3 tons per consecutive 12-month period. Langboard requests a limit of 9.0 tons of VOC per consecutive 12-month period as part of this renewal application. Please note that VOC emissions are a sum of propane combustion emissions and painting/finishing processes.

This increase in emissions will be off-set by the requested lower VOC emission limit for the Bioscrubber (C006). Hourly emissions estimated based on the requested annual limit and continuous operation (8,760 hr/yr).

5. CO_2e emission factor estimated using the Global Warming Potentials (GWPs) in 40 CFR 98 Subpart A.

Pollutant	GWP
CO_2	1
CH_4	25
N_2O	298

6. Potential emissions estimated based on a maximum heat input rating for the propane fired boilers and heaters of 2 MMBtu/hr and a heating value for propane of 90,500 Btu/gal.

Combustion Parameters	Value	Units
Max heat input	2	MMBtu/hr
HHV of propane	90,500	Btu/gal
Hourly fuel consumption	22.1	gal/hr
Annual fuel consumption	193.6	Mgal/yr

7. Potential Hourly Emissions (lb/hr) = Emission Factor (lb/Mgal) x Hourly Fuel Consumption (gal/hr) / 1,000(gal/Mgal)

8. Potential Annual Emissions (tons/yr) = Potential Hourly Emissions (lb/hr) x Hours of Operation (hr/yr) / 2000 (lbs/ton)

Table C-12. T002 Combustion Operating Parameters

Parameter Description	Value	Units
Heat Input:	2	MMBtu/hr
Natural Gas Heating Value:[1]	1,020	MMBtu/MMscf
Propane Heating Value:[2]	90,500	Btu/gal
Max. Natural Gas Consumption:	1.96E-03	MMscf/hr
Max. Propane Gas Consumption:	22.1	gal/hr
Annual Operation:	8,760	hr/yr

1. Per AP-42 Section 1.4, average HHV.
2. Per AP-42 Section 1.5, Liquefied Petroleum Gas Combustion, default HHV.

Table C-13. Potential HAP Emissions for T002

Pollutant	Emission Factors[1] (lb/MMscf)	Potential Emissions (lb/hr)[2]	Potential Emissions (tpy)[3]
2-Methylnaphthalene	2.40E-05	4.71E-08	2.06E-07
3-Methylchloranthrene	1.80E-06	3.53E-09	1.55E-08
7,12-Dimethylbenz(a)anthracene	1.60E-05	3.14E-08	1.37E-07
Arsenic	2.00E-04	3.92E-07	1.72E-06
Benzene	2.10E-03	4.12E-06	1.80E-05
Beryllium	1.20E-05	2.35E-08	1.03E-07
Cadmium	1.10E-03	2.16E-06	9.45E-06
Chromium	1.40E-03	2.75E-06	1.20E-05
Cobalt	8.40E-05	1.65E-07	7.21E-07
p-Dichlorobenzene (1,4-Dichlorobenzene)	1.20E-03	2.35E-06	1.03E-05
Formaldehyde	7.50E-02	1.47E-04	6.44E-04
Hexane	1.80E+00	3.53E-03	1.55E-02
Lead	5.00E-04	9.80E-07	4.29E-06
Manganese	3.80E-04	7.45E-07	3.26E-06
Mercury	2.60E-04	5.10E-07	2.23E-06
Naphthalene	6.10E-04	1.20E-06	5.24E-06
Nickel	2.10E-03	4.12E-06	1.80E-05
Selenium	2.40E-05	4.71E-08	2.06E-07
Toluene	3.40E-03	6.67E-06	2.92E-05
Total HAP		**3.70E-03**	**1.62E-02**

1. Emission factors taken from AP-42 Chapter 1.4, "Natural Gas Combustion," Tables 1.4-2, 1.4-3 and 1.4-4 (July 1998). These factors are assumed to also be representative for any liquid propane combustion.

2. Emission Rate (lb/hr) = Maximum Hourly Fuel Consumption (MMscf/hr) × Emission Factor (lb/MMscf).
3. Annual Emissions $(tons/yr)_{(Potential)}$ = Hourly Emissions (lb/hr) × Potential Annual Operation (hr/yr) × (1 ton/2000 lb).

Table C-14. Potential Process PM Potential Emissions

Source ID	Source	Control Device ID	Control Device	Permitted PM Emission Limit		Ref.	Potential Total PM Emissions (tpy)[17,18]
EU01	Chip Shaker Screen Area	C001	Bag Filter	1.00	lb/hr	1	4.38
EU03	Shavings and Sawdust Relay System	C003	Bag Filter	3.50	lb/hr	2	15.3
EU08	Face Dryer Relay System	C008	Bag Filter	1.50	lb/hr	3	6.57
EU09	Swing Dryer Relay System	C009	Bag Filter	1.50	lb/hr	3	6.57
EU10	Core Dryer Relay System	C010	Bag Filter	1.50	lb/hr	3	6.57
EU11	Face/Core Shave-off Relay System	C011	Bag Filter	2.30	lb/hr	4	10.1
EU12	Former Vacuum System	C012	Bag Filter	3.00	lb/hr	5	13.1
EU13	Reject Relay System	C013	Bag Filter	3.00	lb/hr	6	0.55
EU14	Vacuum Relay System	C014	Bag Filter	1.36	lb/hr	7	5.96
EU15	Sander Pickup System No. 1	C015	Bag Filter	2.40	lb/hr	8	10.5
EU16	Sander Pickup System No. 2	C016	Bag Filter	2.40	lb/hr	8	10.5
EU17	Sanderdust Relay System	C017	Bag Filter	1.36	lb/hr	9	5.96
EU18	Saw/Sander Dust Boiler Relay System	C018	Bag Filter	1.36	lb/hr	10	5.96
EU19	Sawdust Pickup System	C019	Bag Filter	1.70	lb/hr	11	7.45
EU20	Hogged Trim Relay System	C020	Bag Filter	1.00	lb/hr	12	4.38
EU21	Saw Trim Relay System	C021	Bag Filter	1.00	lb/hr	13	4.38
EU26	Ash Storage Silo	C026	Bag Filter	1.00	lb/hr	14	4.38
T001	TLC Sawing and Moulding Lines	TC01	Baghouse	-	-	15	8.00
T003	Pellet Mill Operations	-	-	-	-	16	-

1. Specific Condition 3.2.1 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU01 to 1 lb/hr.
2. Specific Condition 3.2.2 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU03 to 3.5 lb/hr.
3. Specific Condition 3.2.4 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU08, EU09, and EU10 to 1.5 lb/hr each.
4. Specific Condition 3.2.5 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU11 to 2.3 lb/hr.
5. Specific Condition 3.2.6 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU12 to 3 lb/hr.
6. Specific Condition 3.2.7 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU13 to 3 lb/hr and hours of operation to 7 hours per week. Annual emissions are based on the emission unit operating 7 hours per week (364 hr/yr).
7. Specific Condition 3.2.8 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU14 to 1.36 lb/hr.
8. Specific Condition 3.2.9 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU15 and EU16 to 2.4 lb/hr each.
9. Specific Condition 3.2.10 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU17 to 1.36 lb/hr.
10. Specific Condition 3.2.11 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU18 to 1.36 lb/hr.
11. Specific Condition 3.2.12 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU19 to 1.7 lb/hr.
12. Specific Condition 3.2.13 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU20 to 1 lb/hr.
13. Specific Condition 3.2.14 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU21 to 1 lb/hr.
14. Specific Condition 3.2.16 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from EU26 to 1 lb/hr.
15. Specific Condition 3.2.17 of Title V Permit No. 2493-003-0013-V-05-0 limits PM emissions from TC01 to 8 tons per consecutive 12-month period.
16. Pellet Mill emissions are included with T001 as exhaust from the pellet mill cyclone is routed back to the pneumatic system under Baghouse TC01.
17. As there is no combustion, it is assumed that there is no condensable PM. Therefore, filterable PM = total PM.
18. Conservatively assumed Total PM = Total PM_{10} = Total $PM_{2.5}$.

Table C-15. Miscellaneous Coating Operations (MISC)

Source	Description[1]	Potential Coating Usage[2] (gal/yr)	Average Coating Density[3] (lb/gal)	Potential VOC Emissions[4] (tpy)
MISC	Miscellaneous Coating Operations	268	8.0	0.54

1. Includes printing of company logos.
2. Worst-case coating usage based on maximum rated production capacity of mill and maximum painted surface area of product.
3. Assumed average coating density.
4. Potential emissions assumes 50% of coating usage is released into atmosphere.

Table C-16. Emergency Engine Operating Parameters

Source	Parameter	Value	Units
Caterpillar LC6 Emergency Generator	HP Rating	480	hp
	Annual Operation[1]	500	hr/yr
Caterpillar SR4 Emergency Generator	HP Rating	749	hp
	Annual Operation[1]	500	hr/yr
Clark Model DDFP-L6FA Fire Pump	HP Rating	310	hp
	Annual Operation[1]	500	hr/yr

1. Per GRAQC 391-3-1-.03(10)(g)(iv)(V), an emergency generator can operate up to 500 hr/yr in Atkinson County. Emergency generators firing diesel fuel (and other stationary engines firing diesel fuel with a hp rating of less than 400 hp) are considered to be insignificant with respect to Title V. Therefore, these units are not included as significant emissions sources. However, as these engines could be subject to federal NESHAP and NSPS provisions, greater detail is provided in the application narrative.

Table C-17. Potential Criteria Pollutant Emissions from Emergency Engines

Pollutant	Emission Factor (lb/hp-hr)[1]	Potential CAP Emissions					
		CAT LC6 EM GEN		CAT SR4 EM GEN		Clark FP	
		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
NO_X	0.031	14.9	3.72	23.2	5.80	9.61	2.40
CO	6.68E-03	3.21	0.80	5.00	1.25	2.07	0.52
SO_2	2.05E-03	0.98	0.25	1.54	0.38	0.64	0.16
Total PM	2.20E-03	1.06	0.26	1.65	0.41	0.68	0.17
Total PM_{10}	2.20E-03	1.06	0.26	1.65	0.41	0.68	0.17
Total $PM_{2.5}$	2.20E-03	1.06	0.26	1.65	0.41	0.68	0.17
VOC	2.47E-03	1.19	0.30	1.85	0.46	0.77	0.19
CO_2	1.15	552	138	861.4	215.3	356.5	89.1

1. AP-42 Section 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1 - Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines. (10/96)

Table C-18. Potential HAP Emissions from Emergency Engines

Pollutant	Emission Factor (lb/hp-hr)[1]	Potential HAP Emissions					
		CAT LC6 EM GEN		CAT SR4 EM GEN		Clark FP	
		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
Benzene	9.33E-04	0.45	0.11	0.70	0.17	0.29	0.07
Toluene	4.09E-04	0.20	0.05	0.31	0.08	0.13	0.03
Xylenes	2.85E-04	0.14	0.03	0.21	0.05	0.09	0.02
1,3-Butadiene	3.91E-05	0.02	0.00	0.03	0.01	0.01	0.00
Formaldehyde	1.18E-03	0.57	0.14	0.88	0.22	0.37	0.09
Acetaldehyde	7.67E-04	0.37	0.09	0.57	0.14	0.24	0.06
Acrolein	9.25E-05	0.04	0.01	0.07	0.02	0.03	0.01
Naphthalene	8.48E-05	0.04	0.01	0.06	0.02	0.03	0.01
Total HAP		**1.82**	**0.45**	**2.84**	**0.71**	**1.18**	**0.29**

1. AP-42 Section 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1 - Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines. (10/96)

Insignificant Activities

Table C-19. Insignificant Activities - PM Sources

Source	Control Device	Control Device ID	Exhaust Flow (acfm)	Equiv Loading (gr/cf)	PM_{10} (lb/hr)	PM_{10} (tpy)
#1 Face Fiber Bin	Bin Vent	C027	1,850	0.005	0.08	0.35
Reject Fiber Bin	Bin Vent	C028	1,850	0.005	0.08	0.35
#2 Core Fiber Bin	Bin Vent	C029	1,850	0.005	0.08	0.35

Table C-20. Insignificant Activities - Storage Tanks

Source	Control Device	Potential VOC Emissions (tpy)
Wax Plant Tanks	-	0.02
Premier Plant Tanks	-	0.02

1. Emissions estimated using EPA's TANKS program.