



Florida Department of Environmental Protection

Northeast District
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Jacksonville, Florida 32256

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE

Hunter Panels, LLC
388 South Enterprise Court
Lake City, Florida 32025

Authorized Representative:
Mr. Michael Varga, Plant Manager

Air Permit No. 0230044-006-AC
Permit Expires: August 3, 2018
Minor Air Construction Permit

Hunter Panels, LLC
Addition of an Automatic Brush
Cleaning System to the OMS
Laminator (EU 001)

PROJECT

This is the final air construction permit, which authorizes the addition of an automatic brush cleaning system to clean foam particles off the side plates of the double belt high speed Laminator manufactured by OMS Group (EU 001) and the installation of ductwork to "tie-in" the automatic brush cleaning system exhaust to the existing Mikro Pulsaire Model 224-10-TRW-A Baghouse serving the Board Cutting Operation (EU 002).

The proposed work will be conducted at the existing Hunter Panels, LLC facility, which is a polyisocyanurate foam insulating panel manufacturing operation used in commercial and industrial roofing applications categorized under Standard Industrial Classification No. 3086- Plastic Foam Products. The existing facility is located in Columbia County at 388 Southeast Enterprise Ct., Lake City, Florida. The UTM coordinates are Zone 17, 347.010 kilometers (km) East, and 3338.874 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

FINAL PERMIT

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Thomas G. Kallemeyn
Permitting Program Administrator

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this permit and all copies were sent on the filing date below to the following listed persons:

Mr. Michael Varga, Plant Manager, Hunter Panels, LLC michael.varga@carlislesyntec.com

Mr. Scott A. Reddig, P.E. Carlisle Construction Materials, LLC scott.reddig@carlisleccm.com

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Clerk

August 3, 2017

Date

FACILITY DESCRIPTION**Existing Facility**

This facility manufactures polyisocyanurate foam insulating panels for use in commercial and industrial roofing applications. The design capacity of the foam board manufacturing line is 200 linear feet of insulating board per minute.

Operations at the facility include unloading and storage of polymeric diphenylmethane diisocyanate (PMDI), polyol (polyester resin), phosphate based flame retardant, potassium octoate, catalysts, and pentane; material blending; panel production; cutting; packaging; and product storage.

A liquid polyester resin (polyol) is combined with a flame retardant, potassium octoate, and catalysts in a blend tank. Pentane is used as an expanding or blowing agent and is injected at high pressure into the mixture. The mixture is then combined with liquid polymeric diphenylmethane diisocyanate (PMDI) which reacts exothermically to create a foam. While the foam is still liquid, it is poured onto a moving paper substrate at the Pour Table where a top sheet is added as it is drawn into a heated upper and lower conveyor (laminator oven). The foam adheres to both the substrate and top sheet, solidifies and becomes rigid.

Following the laminator oven, the rigid foam material is sent to the crosscut saw station where any foam material spreading beyond the substrate/top sheet dimensions is trimmed, and the sheet is cut into long 4-foot wide panels. The long panels are sent to the Gang saw station where additional cross-cutting reduces the panels to the desired lengths, typically 4 or 8 feet.

Foam board is cut into “footers” that are used to form skids for the finished product at the facility. Each footer is approximately 0.1736 cubic feet. Three footers are required to support each 8-foot-long foam unit (bundle) and two footers are required to support each 4-foot-long bundle. This operation releases a percentage of the pentane in the foam board product.

The pour table and laminator exhaust stacks 1 and 2 are a source of potential VOC (pentane) and HAP (MDI) emissions. The pour table exhaust stack is designated as emissions point (EP01), and the laminator exhaust stacks 1 and 2 are designated as emission points (EP 03) and (EP04).

Particulate matter from the cutting operations (crosscut saw station and the gang saw station), are collected and ducted to an outside baghouse. The baghouse consists of a filter section mounted in a hopper separator. The lighter material passes through the filter bags and is returned to the atmosphere. The heavier material drops to the bottom of the hopper. The dirt and foam debris accumulating in the bottom of the hopper pass through an air lock and fall directly into a baler, that compacts the dust/foam material into bricks or bales. The bales are then conveyed into a dumpster for disposal. The baghouse is designated as an Emission Point at the facility.

VOC emissions (pentane) are also released from the cutting operations. These emissions are also emitted from the baghouse.

The following storage tanks are used at the facility to store raw materials used in the manufacturing process.

- (2) 27,000 gallon PMDI Tanks
- (2) 27,000 gallon Polyol Tanks
- (1) 16,000 gallon TCPP (phosphate based flame retardant) Tank
- (1) 16,000 gallon potassium octoate Tank
- (1) 25,000 gallon Pentane Tank

SECTION 1. GENERAL INFORMATION

Potential emissions from the PMDI, Polyol, TCCP flame retardant, and potassium octoate tanks are such that they meet the Generic Emissions Unit or Activity Exemption criteria in Rule 62-210.300(3)(b)1., F.A.C. The Pentane tank is maintained under pressure with a nitrogen blanket, and therefore has no emissions.

The existing facility consists of the following emissions units.

Facility ID No. 0230044	
ID No.	Emission Unit Description
001	Foam Insulation Board Manufacturing
	EP 01 Pour Table Exhaust Stack <i>Stack Parameters:</i> Exhaust gas exits at approximately 85 °F with a volumetric flow rate of 1,671 acfm through a single stack that is approximately 1.42 feet in diameter and 29 feet above ground level
	EP 03 Laminator Exhaust Stack 1 <i>Stack Parameters:</i> Exhaust gas exits at approximately 130 °F with a volumetric flow rate of 7,064 acfm (6,369 dscfm) through a single stack that is approximately 29.33 feet above ground level. The stack diameter is to be determined.
	EP 04 Laminator Exhaust Stack 2 <i>Stack Parameters:</i> Exhaust gas exits at approximately 130 °F with a volumetric flow rate of 7,064 acfm (6,369 dscfm) through a single stack that is approximately 29.33 feet above ground level. The stack diameter is to be determined
002	Board Cutting Operations
	EP 01 Crosscut/Side Trim Saw
	EP02 Gang Saw and Foot Saw
	Particulate Matter emissions from EP 01 and EP 02 are controlled by a baghouse manufactured by Mikropul-Mikro Pulsaire. The baghouse has 224 bags that are 4.5 inch by 12-foot-long, a 3167 square feet of total filter area, 16 oz. polyester material (or equivalent), pulse jet cleaning, and a minimum particulate matter design control efficiency of at least 99.9%. <i>Stack Parameters:</i> Exhaust gas exits at approximately 85 °F with a volumetric flow rate of 29,000 acfm through a single stack that is approximately 6.2 feet in diameter and 47 feet above ground level.

The following emissions units/activities are exempt from the requirement to obtain an air construction permit and Non-Title V Operation permit:

Rule Citation	Description of Activity
62-210.300(3)(a)9., F.A.C.	Space Heaters
62-210.300(3)(a)13., F.A.C.	Brazing, Soldering, Welding
62-210.300(3)(a)33., F.A.C.	Two natural gas fired burners (rated at total combined heat input of 1.586 MMBtu/hr)
62-210.300(3)(a)24., F.A.C.	Triethylene Glycol Parts Cleaning Unit

SECTION 1. GENERAL INFORMATION

62-210.300(3)(b)1., F.A.C.	(2) PMDI Tanks (2) Polyol Tanks (1) TCPP Flame Retardant Tank (1) Potassium Octoate Tank (1) Baler (1) Cool Vent Operation
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PROPOSED PROJECT

The applicant is requesting the addition of an automatic brush cleaning system to clean foam particles off the side plates of the double belt high speed Laminator manufactured by OMS Group (EU 001) and the installation of ductwork to 'tie-in' of the automatic brush cleaning system exhaust to the Mikro Pulsaire Model 224-10-TRW-A Baghouse (EU 002). The automatic brush cleaning system emissions originates at the Laminator (EU 001) but will exhaust at EU 002.

This project will modify the following emissions units.

Facility ID No. 0230044	
ID No.	Emission Unit Description
001	Foam Insulation Board Manufacturing
002	Board Cutting Operations

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not** operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility **is not** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District, Permitting Program, Florida Department of Environmental Protection (Department). The Northeast District's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256, (904) 256-1700. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to Northeast District Office, Compliance Assurance at: The mailing address and phone number of the Northeast District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256, (904) 256-1700.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]
8. Source Obligation:
 - a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

9. Application for FESOP: Subsequent to any construction, reconstruction or modification of a facility or emissions unit authorized by an air construction permit, and demonstration of compliance with the conditions of such air construction permit, the owner or operator of such facility or emissions unit shall obtain an initial air operation permit or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of this chapter and Chapter 62-4, F.A.C. [Rule 62-210.300(2), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 001- Foam Insulation Board Manufacturing

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
001	Foam Insulation Board Manufacturing

EU 001- Foam Insulation Board Manufacturing includes the following components:

A pour table with exhaust stack (EP 01): Exhaust gas exits the stack at approximately 85 °F with a volumetric flow rate of 1,671 acfm through a single stack that is approximately 1.42 feet in diameter and 29 feet above ground level.

Laminator with two exhaust stacks (EP 03 and EU 04): Exhaust gas exits each exhaust stack at approximately 130 °F with a volumetric flow rate of 7,064 acfm (6,369 dscfm) through a single stack that is approximately 29.33 feet above ground level. The stack diameter is to be determined.

{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C.- General Pollutant Emission Limiting Standards}.

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement previously issued air construction permits. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. The Permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, and the like. [Rule 62-4.030 and 62-210.300(1)(b), F.A.C.]

EQUIPMENT MODIFICATION

2. Laminator Automatic Brush Cleaning System: The permittee is authorized to modify the double belt high speed Laminator (manufactured by OMS Group) by adding an automatic 2000 cfm electrically operated brush cleaning system for the cleaning of foam particles from the side plates of the laminator. The automatic brush cleaning system is manufactured by OMS Group. The automatic brush cleaning system will exhaust to the Mikro Pulsaire Model 224-10-TRW-A Baghouse serving the existing Board Cutting Operation (EU 002).

The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

[Design Application No., 0230044-006-AC]

PERFORMANCE RESTRICTIONS

3. Commencement of Construction and Operation – Automatic Brush Cleaning System: The permittee shall submit to the Air Compliance Authority of this Office a written notification of both dates for the following:
 - a. Commencement and completion of construction dates for the installation of the Automatic Brush Cleaning System and necessary appurtenances.
 - b. A notification shall be submitted to Compliance Assurance Section no later than 30 business days following the completion date.
 - c. Submission may be in writing or sent electronically to the Compliance Authority:
Christopher.Kirts@dep.state.fl.us.

[Rule 62-4.070(3), F.A.C.; and Application No. 0230044-006-AC]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 002- Board Cutting Operations

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
002	Board Cutting Operations

The Board Cutting Operation (EU 002) includes the Crosscut/Side Trim Saw (EP 01) and the Gang Saw and Foot Saw (EP 02), and the Automatic Brush Cleaning System (EP 03). Particulate Matter emissions from EP 01, EP 02 and EP 03 are controlled by a baghouse manufactured by Mikropul-Mikro Pulsaire. The baghouse has 224 bags that are 4.5 inch by 12-foot-long, a 3167 square feet of total filter area, 16 oz. polyester material (or equivalent), pulse jet cleaning, and a minimum particulate matter design control efficiency of at least 99.9%.

Stack Parameters: Exhaust gas exits at approximately 85 °F with a volumetric flow rate of 29,000 acfm through a single stack that is approximately 6.2 feet in diameter and 47 feet above ground level.

{Permitting note: This emissions unit is subject to Rule 62-296.320, F.A.C.- General Pollutant Emission Limiting Standards}

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement previously issued air construction permits. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. The Permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, and the like. [Rule 62-4.030, 62-210.300(1)(b), F.A.C.]

EQUIPMENT

2. Duct Work: The permittee is authorized to install ductwork to ‘tie-in’ the automatic brush cleaning system exhaust to the existing Mikro Pulsaire Model 224-10-TRW-A Baghouse serving EU 002 - Board Cutting Operation.

The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

[Application No. 0230044 -006-AC]

3. Laminator Automatic Brush Cleaning System- Operation: The automatic brush cleaning system shall be connected to the existing Mikro Pulsaire Model 224-10-TRW-A Baghouse at all times when the brush cleaning system is in operation. [Application No. 0230044 -006-AC Rule 62-4.070, F.A.C.]
4. Baghouse: The permittee shall operate and maintain the baghouse to control particulate matter emissions and minimize opacity from the board cutting operations to achieve the emissions standards specified by this permit. The baghouse shall be maintained in good operating condition and be used at all times when the manufacturing line is operating. [Rule 62-4.070, F.A.C.; Rule 62-4.160(2), F.A.C.]
5. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emissions of air pollutants without this equipment operating properly. [Application No. 0230044 -006-AC Rule 62-210.650, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 002- Board Cutting Operations

TESTING REQUIREMENTS

6. **Initial Performance Test Volatile Organic Compound (VOC):** After installation of the automatic brush cleaning system and ductwork to ‘tie-in’ the automatic brush cleaning system exhaust to the existing Mikro Pulsaire Model 224-10-TRW-A Baghouse, the Permittee shall conduct a VOC emissions test at the Automatic Brush Cleaning System (EP 03) prior to being vented from the Mikro Pulsaire Model 224-10-TRW-A Baghouse stack. The initial test shall be conducted within 60 days after achieving permitted capacities of the Foam Insulation Board Production and Pentane Usage EU 001- Laminator, but not later than 180 days after initial operation of the unit. {*Permitting Note: This VOC emissions Test shall be in addition to the VOC emissions test at each emission point (EP 03 and EP 04), the Pour Table Exhaust Stack (EP 01) for EU 001, and the Board Cutting Operations Crosscut/Side Trim Saw (EP 01) and Gang Saw & Foot Saw (EP 02) for EU 002 as required by Permit No. 0230044-005-AC. The test results shall be used for the purposes of the facility emissions model and compliance with the facility wide VOC emissions cap as stated in FW Condition 1 of Permit No. 0230044-004-AF.*} [Application No. 0230044 -006-AC, Permit No. 0230044-005-AC, Rules 62-4.070(3) and 62-297.310(8)(b)1, F.A.C.]
7. **Test Requirements:** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]
8. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

9. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.]
10. **Operational Records:** The permittee shall establish and maintain a record of the following onsite and the information shall be made available to the Department or for an inspector’s onsite review upon request:
- Quantity of foam board produced (pounds per month and pounds/ any 12-month period)
 - Quantity of 4 foot and 8-foot foam board units (bundles) produced (number per month and number/any 12-month period)
 - Amount of all VOC and hazardous air pollutants (HAP) containing process substances used (gallons)
 - VOC content of all VOC containing products (Pounds/Gallon)
 - HAP content of all HAP containing process substances used (pounds per gallon)
 - VOC Emissions (Tons/Month and Tons/12-month period)
 - Individual HAP emissions (pounds per month)
 - Total HAP emissions (pounds per month)
 - Pentane usage rate (pounds per month and pounds/any 12-month period)
 - Pounds of Footers produced (pounds per month and pounds/any 12-month period)
 - All emission factors used in determining actual VOC emissions (i.e. percent pentane loss, etc.)

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 002- Board Cutting Operations

{Permitting Note: Applicant determines the pounds of footers produced: Each footer is approximately 0.1736 cubic feet; two footers are required to support each 4-foot-long bundle; three footers are required to support each 8-foot-long bundle; 2 pounds/cubic feet average density of foam board material}

[Rule 62-4.070(3), F.A.C., Application No. 0230044-006-AC and Permit No. 0230044-005-AC]