PERMIT NO. 2679-159-0017-S-01-0
ISSUANCE DATE:

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality Permit

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

Facility Name:	**Profile Products LLC**
Facility Address:	**791 Georgia-Pacific Road** **Monticello, Georgia 31064 (Jasper County)**
Mailing Address:	**219 Simpson Street** **Conover, NC 28613**
Facility AIRS Number:	**04-13-159-00017**

is issued a Permit for the following:

Construction and operation of a facility for the manufacture of erosion and sediment control products, turf establishment products, and complementary accessories. This Permit is issued for the purpose of establishing practically enforceable emission limitations such that the facility will not be considered a major source with respect to Title V of the Clean Air Act Amendments of 1990.

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.

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; or for any misrepresentation made in Application No. 28288 dated February 2nd, 2022; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or 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 **9** pages.

STATE OF GEORGIA
CONSTITUTION
WISDOM JUSTICE MODERATION
1776

Richard E. Dunn, Director
Environmental Protection Division

1. General Requirements

1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this 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 information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.

1.2 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 that is based on the concentration of a pollutant in the gases discharged into the atmosphere.

1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such 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. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change.

1.4 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 shall be retained for at least five (5) years following the date of entry.

1.5 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.

2. Allowable Emissions

2.1 The Permittee shall not discharge or cause the discharge into the atmosphere from the entire facility volatile organic compounds (VOC) in amounts equal to or exceeding 98 tons during any consecutive 12-month period.
[Title V Avoidance for VOC]

2.2 The Permittee shall not discharge or cause the discharge into the atmosphere from the entire facility any single hazardous air pollutant (HAP) which is listed in Section 112 of the Clean Air Act, in an amount equal to or exceeding 10 tons during any twelve consecutive months, or any combination of such listed pollutants in an amount equal to or exceeding 25 tons during any twelve consecutive months.
[Title V Avoidance for HAP]

2.3 The Permittee shall operate the control devices at all times while the associated emission units are in operation.
[Title V Avoidance for PM]

2.4 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions," and Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of Boiler ES-02.
[40 CFR 60 Subpart A and Subpart Dc]

2.5 The Permittee shall comply with the following fuel requirements:

a. The Permittee shall not fire any fuel other than natural gas in Boiler ES-02.
[391-3-1-.03(2)(c); 391-3-1-.02(2)(g)2. (subsumed); and Avoidance of 40 CFR 63 Subpart JJJJJJ – 40 CFR 63.11195]

b. The Permittee shall not fire any fuel other than natural gas in the dryer burner (ID No. ES-01).
[391-3-1-.03(2)(c); 391-3-1-.02(2)(g)2. (subsumed)]

2.6 The Permittee shall not cause, let, suffer, permit, or allow any emissions from any manufacturing process that contain visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

2.7 The Permittee shall not cause, let, suffer, permit, or allow any emissions from any fuel burning equipment which:

a. Contain fly ash and/or other particulate matter in amounts equal to or exceeding the rate derived from the equation noted below:
[391-3-1-.02(2)(d)2.(ii)]

$P = 0.5(10/R)^{0.5}$ (for fuel burning equipment greater than or equal to 10 MMBtu/hr and less than or equal to 250 MMBtu/hr)

Where P equals the allowable PM emission rate in pounds per million BTU and R equals the heat input in millions BTU per hour.

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

2.8 The Permittee shall not cause, let, suffer, permit, or allow the emission from any manufacturing processes which contains particulate matter (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit:
[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: E = allowable emission rate in pounds per hour;
P = process input weight rate in tons per hour.

2.9 The Permittee shall not cause, let, suffer, permit, or allow emissions of NOx, from Boiler ES-02, exceeding 30 parts per million (ppm) corrected to 3% oxygen on a dry basis. This condition applies during the period from May 1 through September 30 of each year.
[391-3-1-.02(2)(lll)1.]

3. Fugitive Emissions

3.1 The Permittee shall take all reasonable precautions with any operation, process, handling, transportation, or storage facilities to prevent fugitive emissions of air contaminants.

4. Process & Control Equipment

4.1 Routine maintenance shall be performed on all air pollution control equipment. The Permittee shall record and maintain records of routine maintenance in a form suitable for inspection or submittal to the Division.

5. Monitoring

5.1 Any monitoring system or device installed by the Permittee shall be in continuous operation except during calibration checks, zero and span adjustments or periods of repair. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.

5.2 The Permittee shall, each calendar year, monitor emissions of nitrogen oxides (NO_x) from Boiler ES-02, unless the boiler will not operate during the ozone season (May 1 through September 30 of each year), by performing a tune-up for the boiler to demonstrate compliance with the NO_x concentration limit of Condition 2.9 using the following procedures:
[391-3-1-.02(6)(b)1 and PTM Section 2.119]

a. The tune-up shall be performed no earlier than March 1 and no later than May 1 of each calendar year. In the case of initial startups that occur after May 1 but before September 30, tune-ups shall be performed no later than 120 hours after startup. The tune-up shall be performed at the normal maximum operating load expected during the period from May 1 to September 30 of each year.

b. The tune-up shall be performed by using the manufacturer recommended settings for reduced NO_x emissions or by using a NO_x analyzer. Adjustments shall be made, as needed, so that NO_x emissions are reduced in a manner consistent with good combustion practices and safe fuel-burning equipment operation.

c. Following the adjustments, or determination that adjustments are not required, the Permittee shall perform a minimum of three emissions test (measurement) runs to demonstrate that the emissions are less than or equal to the NO_x concentration limit of Condition 2.9. Each test run shall be a minimum of 30 minutes in length and shall measure the average NO_x concentration over the test duration. Following any test run which results in an average NO_x concentration that exceeds the NO_x limit of Condition 2.9, the Permittee shall make adjustments to the boiler and conduct a new set of test runs within one day. Subsequent adjustments followed by test runs shall be continued until the results of 3 consecutive test runs do not exceed the NO_x concentration limit of Condition 2.9.

d. All measurements of NO_x and oxygen concentrations in paragraphs b. and c. of this condition shall be conducted using procedures of the American Society for Testing and Materials (ASTM) Standard Test Method for Determination of NO_x, Carbon Monoxide (CO), and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, ASTM D 6522-00; procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Conditional Test Method (CTM-30) Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers; or procedures of EPA Reference Method 7E and 3A.

e. The Permittee shall maintain records of all tune-ups performed in accordance with this condition. These records shall include the following:

   i. date and time the tune-up was performed

   ii. the boiler settings for each test run

   iii. the average NO_x concentration (in ppm at 3% O_2, dry basis) for each test run

   iv. what operating parameters were adjusted to minimize NO_x emissions

   v. an explanation of how the final (compliant) settings were determined

f. Following the tune-up, from the period May 1 through September 30 of each year, the Permittee shall operate each affected boiler using the settings determined during the annual tune-up. If no parameters can be monitored to indicate the performance of a specific boiler, the Permittee shall certify that no adjustments have been made to the boiler by the Permittee and/or any third party since the most recent successful tune-up was completed. This certification shall be made in writing no later than October 15 of each year and shall be maintained with the records required by paragraph e. of this condition.

g. If a boiler is capable of operating for 3 consecutive test runs with average NO_x concentrations of less than or equal to 15 ppm corrected to 3 percent oxygen, the Permittee may conduct the next subsequent tune-up in the fourth calendar year following the demonstration of 15 ppm or less. Performance of tests and tune-ups, maintenance of records, and subsequent boiler operation shall otherwise be conducted as described in paragraphs a through f of this condition. The Permittee shall continue to make annual certifications of no adjustments since the previous tune-up.

h. As an alternative to complying with the requirements in this condition, the Permittee shall submit documentation no later than April 30 of each year confirming that an affected unit will not operate during the months of May through September. As a minimum, the documentation shall include the identification of the facility, the permit number, and the specific affected units that will not be operated.

5.3 The Permittee shall install, calibrate, maintain, and operate a differential pressure indicator on the dual cyclone (ID No. CD-01) and quad-cyclone (ID No. CD-03) to measure the pressure drop across each of the control devices. Data shall be recorded for each day the associated emission unit or process is in operation.
[391-3-1-.02(6)(b)1.]

6. Performance Testing

6.1 The Permittee shall cause to be conducted a performance test at any specified emission point when so directed by the Division. The following provisions shall apply with regard to such tests:

a. All 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.

b. All test results shall be submitted to the Division within sixty (60) days of the completion of testing.

c. The Permittee shall provide the Division thirty (30) days 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.

d. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

7. Notification, Reporting and Record Keeping Requirements

7.1 The Permittee shall submit written notification of startup to the Division within 15 days after such date. The notification shall be submitted to:
Mr. Sean Taylor
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta GA 30354

7.2 The Permittee shall record and maintain records of the amount of natural gas combusted in Boiler ES-02 during each calendar month. Records shall be maintained in an order suitable for Inspection by or submission to the Division upon request for a period of two (2) years from the date of creation.
[40 CFR 60.48c(g)(2) and 40 CFR 60.48c(i)]

As an alternative to the requirements specified in Condition 7.2, the Permittee may elect to record and maintain records of the total amount of natural gas being delivered to the facility during each calendar month.
[40 CFR 60.48c(g)(3)]

7.3 The Permittee shall retain the following records:
[391-3-1-.02(6)(b)1]

a. The amount of softwood processed in the dryer (ID No. ES-01), in tons per month.

b. The amount of hardwood processed in the dryer (ID No. ES-01), in tons per month.

7.4 The Permittee shall use the following equation to calculate monthly VOC emissions from wood fiber drying (ID No. ES-01):
[391-3-1-.02(6)(b)1(i)]

$$V_M = \frac{(S_M * 1.55) + (H_M * 0.155)}{2000}$$

Where:

V_M = Monthly VOC emissions, in tons

S_M = Amount of softwood processed in the dryer (ID No. ES-01) during each calendar month, determined in accordance with Condition 7.3a., in tons per month.

H_M = Amount of hardwood processed in the dryer (ID No. ES-01) during each calendar month, determined in accordance with Condition 7.3b., in tons per month.

1.55 = VOC emission factor for softwood drying, in lbs/ton

0.155 = VOC emission factor for hardwood drying, in lbs/ton

2000 = Conversion factor, in lbs/ton

The Permittee shall notify the Division in writing if the facility-wide VOC emissions equal or exceed 8.16 tons 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 Permittee intends to maintain compliance with the emission limit in Condition 2.1.

7.5 The Permittee shall use the data calculated per Condition 7.4 to determine the 12-month rolling total of VOC emissions from the entire facility ending in each calendar month. The Permittee shall notify the Division in writing if the total VOC emissions equal or exceed 98 tons during any twelve consecutive months. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit in Condition 2.1.
[391-3-1-.02(6)(b)1(i)]

7.6 The Permittee shall calculate the facility-wide HAP emissions as follows:
[391-3-1-.02(6)(b)1(i)]

a. The Permittee shall use the following equation to calculate monthly HAP emissions from the dryer (ID No. ES-01):

$$H_D = \frac{(S_D * HAPEF)}{2000}$$

Where:

H_D = Monthly emission rate for each HAP from wood drying, in tons

S_D = Amount of softwood processed in the dryer (ID No. ES-01) during each calendar month, determined in accordance with Condition 7.3a., in tons per month.

HAPEF = HAP emission factor for softwood drying (see table below), in lbs/ton

Pollutant	Dryer ES-01 HAP E.F. (lb/ton)
Acetaldehyde	0.019
Acrolein	0.0027
Formaldehyde	0.0368
Methanol	0.0575
Phenol	0.0036

2000 = Conversion factor, in lbs/ton

b. The Permittee shall use the following equation to calculate monthly HAP emissions from the dryer burner and Boiler ES-02:

$$H_F = \frac{(V_F * HAPEF)}{2000}$$

Where:

H_F = Monthly emission rate for each HAP from fuel combustion, in tons

V_F = Facility-wide amount of natural gas consumption during each calendar month, determined in accordance with Condition 7.2, in MMcf/month.

HAPEF = HAP emission factor for fuel combustion (see table below), in lbs/MMcf

Pollutant	Fuel HAP E.F. (lb/MMcf)
Formaldehyde	0.075
Hexane	1.8

2000 = Conversion factor, in lbs/ton

The Permittee shall calculate the monthly emission rate for each HAP by combining the results obtained in accordance with Paragraphs a. and b. of this Condition. The Permittee shall also calculate the monthly facility-wide combined HAP emission rate by summing the monthly emission rate for each HAP. All demonstration calculations, including any Division-approved emission factor, shall be kept as part of the records required in Condition 7.6. The Permittee shall notify the Division in writing if emissions of any individual hazardous air pollutant equal to or exceed 0.83 tons from the entire facility, or if emissions of all listed hazardous air pollutants combined equal to or exceed 2.08 tons from the entire facility, 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 Permittee intends to maintain compliance with the emission limit in Condition 2.2.

7.7 The Permittee shall use the data calculated per Condition 7.6 to determine the 12-month rolling total of individual HAP emissions and combined HAP emissions from the entire facility. The Permittee shall notify the Division in writing if any individual HAP emissions equal or exceed 10 tons during any twelve consecutive months or any combined HAP emissions equal or exceed 25 tons during any twelve consecutive months. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit in Condition 2.2. [391-3-1-.02(6)(b)1(i)]

8. Special Conditions

8.1 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.

8.2 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Application & Annual Permit Fees."