

ENVIRONMENTAL PROTECTION DIVISION

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NARRATIVE

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FROM: Dawn Wu

DATE: June 14, 2022

Facility Name:	UFP Real Estate, LLC (Sterling)
AIRS No.:	127-00027
Location:	Brunswick, GA (Glynn County)
Application #:	28405
Date of Application:	May 12, 2022

Background Information

UFP Real Estate, LLC (Sterling) (hereinafter "facility") is located west of Interstate 95 on Georgia Highway 99 (Grants Ferry Road) in Brunswick, Glynn County. The facility is a lumber mill and a lumber treating plant. UFP Real Estate, LLC (Sterling) is currently operating under Title V Air Quality Permit Nos. 2421-127-0027-V-04-0 and 2421-127-0027-V-04-1.

The ownership change from Georgia-Pacific Wood Products LLC (Sterling) to UFP Real Estate, LLC (Sterling) occurred on October 12, 2021. Since the ownership change, UFP Real Estate, LLC (Sterling) has removed Sawmill, De-barker, Hammer Mill, and several insignificant activities.

Green dimensional lumber is dried in two direct-fired continuous drying kilns (ID Nos. 200a and 200b). The green lumber has an approximate moisture content of 50%. The maximum total capacity of each kiln is 153,608 bf per 17- hour charge. Two Suspension burners (27.5 MMBtu/hr each) utilize dry planer shavings as fuel supply heat to the kilns.

Finished dimensional lumber, posts, and landscape timbers are received from off-site sources and pressure treated in a vacuum cylinder with one of two pressure treating solution. Each treatment solution contains dilute aqueous solutions of Ecolife or MCA. Color, moldicide and biocide are added to each of the solutions prior to pressure treatment. Lumber is moved in and out of the pressure cylinder in packs on a tram system. Freshly treated wood is allowed to remain on a covered drip pad until the packs are drip free. The treated lumber packs are removed from the pads and stored on-site prior to shipment.

The dried lumber is planned and trimmed in the Planer Mill (ID No. 301), sorted by length, size and grade, then transported by truck or rail for delivery to the customer. Wood residuals from the Planer Mill are transferred to the Trim Block Hog (ID No. 302) to generate wood chips. The wood chips are then transferred to a chip truck bin via the Trim Hog Cyclone (ID No. CB). The chip truck bin is periodically dumped into a chip holding shed. The dry shavings produced in the Planer Mill are pneumatically conveyed via the Planer Mill Cyclone (ID No. CA) to a metering bin and then to a storage silo to be used as fuel in the dry kilns or transferred off-site.

Purpose of Application

UFP Real Estate, LLC (Sterling) submitted Application No. 28405 on May 12, 2022, to request a synthetic minor permit. The facility has reviewed future expected potential emissions. Based on future operation projections, the facility determined that potential emissions would stay below the Title V Major Source thresholds. Therefore, the facility requested a synthetic minor status. Since there is no emissions increase, a public advisory is not needed.

Updated Equipment List

Emission Units		Associated Control Devices		
Source Code	Description	Installation Date	Source Code	Description
200a	Direct Fired Lumber Drying Kiln	1981	n/a	none
200b	Direct Fired Lumber Drying Kiln	1981	n/a	none
301	Planer Mill Process	1981	CA	Shavings Cyclone
302	Trim Block Hog	1981	СВ	Trim Block Hog Cyclone
500	Pressure Treating Plant	existing	n/a	none

The facility has removed following emission units or insignificant activities from the facility:

- Sawmill,
- De-barker,
- Hammer Mill,
- Log Yard Activities & Bark Handling & Storage,
- Tipple Slab Chipper,
- Saw Edge Slab Chipper,
- Trim Block Chipper,
- Bark Hog w/Truck Loading,
- Shaker Screen Conveying,
- Core Machine,

• Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent,

• Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning,

• 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,

• All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid,

• Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons,

- Ink Stamp,
- Sawdust Truck Unloading,
- Bark truck unloading,
- Logo stamp, and
- Emergency Fire Water Pump Engine.

Emissions Summary

	Potential Emissions				
Pollutant	Before Mod.	After Mod.	Emissions Change		
РМ	62.31	24.86	-37.45		
PM ₁₀	49.10	22.84	-26.26		
PM _{2.5}	24.13	11.72	-12.41		
NOx	43.21	11.09	-32.12		
SO ₂	6.12	1.54	-4.58		
СО	132.78	33.78	-99		
VOC	250.92	98	-152.92		
Max. Individual HAP	15.72	4.84	-10.88		
Total HAP	24.13	7.83	-16.3		
Total GHG (if applicable)	49,896	8,353	-41,535		

Facility-Wide Emissions

(in tons per year)

Regulatory Applicability

Georgia Rule 391-3-1-.02(2)(b), "Visible Emissions", applies to the facility's emission sources.

Georgia Rule 391-3-1-.02(2)(e), "Particulate Emissions from Manufacturing Processes", applies to any facility involved in any sort of manufacturing process.

Georgia Rule 391-3-1-.02(2)(g), "Sulfur Dioxide", applies to the fuel burning sources.

Georgia Rule 391-3-1-.02(2)(n), "Fugitive Dust", applies to the facility.

The drying kilns at the facility are not subject to the plywood and composite wood product MACT (40 CFR 63 Subpart DDDD) since the facility is not a major source of HAPs anymore.

40 CFR 63 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), regulates HAP emissions from RICE located at major and area sources of HAP. The stationary compression ignition (CI) RICE, a 183 bhp emergency fire water pump has been removed from the facility; therefore this rule is not applicable.

The wood preservation treatment operations are subject to 40 CFR 63 Subpart QQQQQQ, "National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources." However, the rule contains requirements for only treatment process with wood preservatives containing chromium, arsenic, dioxins, or methylene chloride. The facility has confirmed that the wood preservation treatment doesn't use the CCA formulation or have any process associated with Dioxin or Methylene Chloride in the email

of 09/01/2022. Therefore, the wood preservation treatment operations are not subject to the requirements of 40 CFR 63 Subpart QQQQQQ.

Permit Conditions

Condition 2.1 states a 98-ton per year facility-wide VOC limit for Title V Avoidance.

Condition 2.2 states the requirements of Georgia Rule (b).

Condition 2.3 sates the requirements of Georgia Rule (e).

Condition 2.4 sates the requirements of Georgia Rule (g).

Condition 2.5 subjects the facility to Georgia Rule (n).

Condition 5.1 is the monitoring requirement for the cyclones (ID Nos. CA and CB).

Condition 7.1 through 7.6 are recordkeeping and reporting requirements for facility wide VOCs to maintain compliance with the emission limit in Condition 2.1.

Toxic Impact Assessment

A TIA is not needed since the facility only removed some emission units and the HAPs emissions are decreased.

Summary & Recommendations

UFP Real Estate, LLC (Sterling) in Brunswick is considered a synthetic minor source due to 98 tpy facility wide emission limit on VOC. A public advisory is not needed because emissions are expected to decrease when "downsizing" the facility from a Title V major source to a synthetic minor source. As a synthetic minor source, compliance responsibility is assigned to SSCP. I recommend issuance of Air Permit No. 2421-127-0027-S-05-0 to UFP Real Estate, LLC (Sterling) in Brunswick.