STATEMENT OF BASIS
NSSG Holdings, LLC
Scotch Gulf Lumber, LLC - Fulton
Fulton, Clarke County, Alabama
Facility/Permit No. 102-S003

This proposed Title V Major Source Operating Permit (MSOP) renewal has been developed in accordance with the provisions of ADEM Admin. Code chap. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

The initial MSOP for Scotch Gulf Fulton (SGF) was issued on October 23, 2000. This is the fifth issuance of this MSOP. The current MSOP was effective on May 26, 2021, modified on November 8, 2022, and is scheduled to expire on October 23, 2025. The initial application for this renewal was received on December 16, 2024, and the application was deemed complete on July 11, 2025.

The facility is located in Clarke County, which is currently listed as attainment/unclassifiable with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against SGF necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at https://echo.epa.gov/ (Search using Facility ID AL000000010250S003).

Permit History

Table 1: ***The following is a history of previously issued permits which established current permit limits for this facility.***

Issuance No./ Permit No.	Issuance Date	Limit(s) Established	Limit(s) Basis/ Reasoning
X011 (EU006)	March 3, 2025	• Green Fuel Silo with Pneumatic Conveyance System to a Target Box, Emission Limit: 0.9lb/hr for TSP, 0.0133 lb/hr for PM_{10}, and 0.0009 lb/hr for $PM_{2.5}$.	ADEM Admin. Code r. 335-3-4-.04(SIP) (SMS)
X012 (EU007)	April 4, 2019	• 11.4 MBF/hr Continuous Direct-fired Lumber Dry Kiln (CDK-4) with a Sawdust-fired 40 MMBtu/hr Burner, Emission Limit: 1.6 lb/hr for TSP, 1.2 lb/hr for PM_{10}, 1.13 lb/hr $PM_{2.5}$, 4.0 lb/ MBF as WPP1 for VOC, and 4.0 lb/MMBtu for SO2.	ADEM Admin. Code r. 335-3-4-.04(SIP), PSD (SMS), (BACT)
X013 (008A)	April 4, 2019	• Planer Mill (PM) with Pneumatic Conveyance System to Quad Pack Cyclones, Emission Limits: 0.78 lb/hr for TSP, PM_{10} and $PM_{2.5}$.	ADEM Admin. Code r. 335-3-4-.04(SIP), PSD (SMS)

X013 (008B)	April 4, 2019	• Planer Mill (PM) with Pneumatic Conveyance System to High Efficiency Cyclones, Emission Limits: 0.32 lb/hr for TSP, $PM_{10 \text{ and }} PM_{2.5}$.	ADEM Admin. Code r. 335-3-4-.04(SIP), PSD (SMS)
X014 (EU009)	December 20, 2023	• One 100 MBF/hr CDKs with 40 MMBtu/hr Sawdust Burners, Emission Limits: 1.6 lb/hr for TSP, 4.0 lb/MBF as WPP1, 4.0 lb/MMBtu as heat input for SO2.	ADEM Admin. Code r. 335-3-4-.04(SIP), PSD (SMS) BACT-VOC
X014 (EU010)	December 20, 2023	• One 100 MBF/hr CDKs with 40 MMBtu/hr Sawdust Burners, Emission Limits: 1.6 lb/hr for TSP, 4.0 lb/MBF as WPP1, 4.0 lb/MMBtu as heat input for SO2.	ADEM Admin. Code r. 335-3-4-.04(SIP), PSD (SMS) BACT-VOC
X015 (EU011)	December 20, 2023	• One Green Fuel Silos, 1.6 lb/hr for TSP	ADEM Admin. Code r. 335-3-4-.04(SIP)
X015 (EU012)	December 20, 2023	• One Green Fuel Silos, 1.6 lb/hr for TSP	ADEM Admin. Code r. 335-3-4-.04(SIP)

Facility Operations

SGF operates a lumber production facility in Fulton, Clarke County, Alabama. The facility process begins as tree length southern pine logs are brought to the facility and temporarily stored in the log yard. Logs are then cut to size and debarked. Bark in then conveyed to a bark hog where it is reduced to a more uniform particle size. Debarked logs are then conveyed into the sawmill where they are sawed and trimmed to desired dimensions. Wood scrap from the sawmill is conveyed to a chipper where the size is reduced. The chips are then conveyed to a truck bin where they are stored until sold.

The rough-cut lumber from the Sawmill has a moisture content of approximately 50 percent. The lumber is then dried with one of the existing Direct-fired CDKs, CDK 4 (EU007), CDK 5 (EU009) or CDK 6 (EU010), to reduce the moisture content.

Green sawdust fuel for Dry Kilns 4, 5 and 6 are stored in Fuel Silo No. 1 (EU006), Fuel Silo No. 2 (EU011) and Fuel Silo No. 3 (EU012), respectively. Green sawdust from the sawmill is pneumatically conveyed into the fuel silos via a target box positioned on the top of each silo.

After lumber is dried in the kilns, it is sent to Planer Mill where the lumber is planned to its final dimensions. Then grated, sorted and sold as final product. Dry shavings from the Planer Mill are collected and pneumatically conveyed via a Quad Pack Cyclone (EU008-A) and High Efficiency Cyclone (EU008-B) to a truck bin where the shavings are stored until sold.

Proposed Changes

The MSOP renewal would incorporate the following changes:

1. Removal of Emission Unit No. 1 (98.5 MMBtu/hr Wellons Wood-fired Boiler) provisos and regulatory requirements.

2. Removal of Emission Unit No. 002-004 (Dry Kilns No. 1-3) provisos and regulatory requirements.

3. Incorporation of the provisos of Air Permit No. X011, Green Sawdust Fuel Silo No. 1, (EU006) to reflect the recently removed cyclone and update language to reflect the recently installed target box.

4. Incorporation of the requirements of Air Permit No. X014 for the for 2-100 MMBF/yr Continuous Direct-Fired Lumber Dry Kilns with Sawdust-fired Burners (CDK-5) and (CDK-6) (EU009 and EU010).

5. Incorporation of the requirements of Air Permit No. X015 for Green Fuel Silos No. 2 and No. 3 each with a Target Box (EU011 and EU012).

Federal Regulations

Title V

This facility is a major source under Title V regulations because potential emissions for particulate volatile organic compounds (VOC) exceed the 100 TPY major source threshold. It is also a major source of Hazardous Air Pollutants (HAP) because individual HAP potential emissions are greater than 10 TPY (Methanol has a PTE of 29.16 TPY) and the total HAP potential emissions are greater than 25 TPY (48.08 TPY).

Prevention of Significant Deterioration (PSD)

This facility is in an attainment area for all criteria pollutants and the facility operations are not one of the 28 listed major source categories listed in ADEM Admin. Code r. 335-3-14-.04(2)(a)(i); therefore, the major source threshold of concern is 250 TPY for criteria pollutants. The facility is a major source for PSD because the facility-wide potential VOC emissions exceed 250 TPY.

CDK No. 4 (EU007) is subject to a BACT limitation of 4.0 lb/MBF VOC as WPP1 (46 lb/hr equivalent) and utilizes proper maintenance and operating practices as recommended by the manufacturer for BACT. To avoid exceeding significance thresholds for particulate matter, synthetic minor source limits were established on the cyclones (the Quad Pack Cyclones and the High Efficiency Cyclone) on the Planer Mill Pneumatic Conveyance System, the Target Box on the Green Sawdust Fuel Silo No. 1, and CDK No. 4's Sawdust Burner. SGF elected to retain the synthetic minor limitations to avoid triggering PSD Significant Emission Rates for particulate for the following units:

Listed as lb/hr	Fuel Silo No. 1 with Target Box	CDK No. 4 Sawdust Burner (EU007)	Quad Pack Cyclones (EU008A)	High Eff. Cyclone (EU008B)

	(EU006)			
PM	0.9	1.6	0.78	0.32
PM_{10}	0.0133	1.2	0.78	0.32
t's$PM_{2.5}$	0.0009	1.13	0.78	0.32

NSPS

40 CFR Part 60, Subpart Dc,I Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to steam generating units with a heat input capacity of greater than or equal to 10 MMBtu/hr and less than or equal to 100 MMBtu/hr that have been constructed, modified, or reconstructed after June 9, 1989. The kilns and their associated sawdust-fired burners are not subject to Subpart Dc because the heated air from the burners directly contacts the lumber during the drying process.

40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)

The emergency diesel fire pump engine is subject to 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which applies to owners/operators of stationary fire pump engine CI ICE that commence construction after July 11, 2005, and are manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006 [§60.4200(a)(2)(ii)]. Since the engine was manufactured in 2023, it would be subject to this NSPS.

The application indicates that the proposed engine is certified to meet the applicable emission standards in Table 4 to Subpart IIII as required by §60.4205(c) and §60.4202(d) for engines with a displacement of less than 30 liters per cylinder. The NSPS also has fuel requirements for the sulfur content of the fuel (≤15 ppm) and the Cetane index (≥40) or aromatic content (≤35% by volume). In accordance with §60.4209(a), the engine must be equipped with a non-resettable hour meter. The application indicated the engine would be equipped with a non-resettable hour meter. This engine is required by §60.4211(f), to limit the engine operation to emergency situations and 100 hours per year for maintenance checks and readiness testing.

In accordance with Table 4 to this subpart, the engine must meet a NOx + NMHC emission standard of 3.0 g/HP-hr, a CO emission standard of 2.6 g/HP-hr, and a PM emission standard of 0.15 g/HP-hr. The Permittee must operate and maintain the engine in a manner that meets these emission standards over the certified emissions life of the engine. There would be no testing requirements for the fire pump engine since it is certified by the manufacturer.

MACT

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)

All stationery reciprocating internal combustion engines are affected sources under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT). The engine is considered a new affected source since it was constructed after June 12, 2006. According to 40 CFR §63.6590(b)(1)(i), any new emergency stationery RI ICE with a site rating >500 bhp located at a major source of HAP emissions does not have to meet the requirements of Subpart ZZZZ or Subpart A (General Provisos) except for the initial notification.

However, in the definition of "Emergency Stationary RICE" 40 CFR 63.6675, a source must comply with the operational limitations in 40 CFR §63.6640(f) to meet the definition of an emergency RI ICE. 40 CFR §63.6640(f) limits the operation to emergency situations, 100 hours per year for maintenance checks and readiness testing, and 50 hours per year for non-emergency situations (this operation counts towards the 100 hours allowed for maintenance and readiness testing). The 50 hours per year for non-emergency situations cannot be used for peak shavings or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Sulfur Dioxide

The Emergency Diesel Fire Pump Engine (EU 013) is limited to diesel fuel that does not exceed 15 ppm of SO_2.

PCWP MACT (40 CFR Part 63, Subpart DDDD)

The facility is considered a major source for HAP emissions. The CDKs are an affected source under 40 CFR Part 63, Subpart DDDD, NESHAP for Plywood and Composite Wood Products (the "PCWP MACT"). The only applicable requirement for this unit is the submittal of an Initial Notification. The application to construct the continuous dry kilns served as the initial notification as an affected source under PCWP MACT. The application was received on March 6, 2017.

State Regulations

Particulate Matter

The CDKs, Planer Mill Pneumatic Conveyance System and Fuel Silos with attached Target Boxes are subject to the particulate matter (as TSP) emission limitations of ADEM Admin. Code r. 335-3-4.04 for Process Industries-General. The allowable emission rate for each process is calculated using one of the following process weight equations:

$$E = 3.59P^{0.62} \ (P < 30 \text{ tons per hour}) \text{ OR}$$

$$E = 17.31P^{0.16} \ (P \geq 30 \text{ tons per hour})$$

where E = Emissions in pounds per hour and
P = Process weight per hour in tons per hour

In addition to the above limitations, ADEM Admin. Code r. 335-3-4-.01(1) sets forth a visible emissions standard which states that each stationary source at the facility shall not emit particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, more than once during any 60-minute period, and shall not at any time emit particulate of an opacity greater than forty percent (40%), as determined by a six-minute average.

Fuel Burning Equipment

The CDKs are not subject to ADEM Admin. Code r. 335-3-4-.03(1) because the kilns are direct fired, and therefore, not considered "fuel-burning equipment". The fire pump engine is not subject to this regulation because its function is to supply water in the event of a fire, and therefore, not considered "fuel burning equipment".

Sulfur Dioxide (SO2)

The CDKs are subject to the State sulfur dioxide emission standard of 4.0 lb/MMBtu of heat input [ADEM Admin. Code r. 335-3-5-.01(1)(b)]. However, AP-42 emission factors are utilized to calculate the potential emissions in the application in lieu of the higher State allowable for applicability purposes under the Title V and PSD regulations. Although the fire pump engine is a fuel combustion source, it is not subject to any sulfur dioxide (SO_2) emission limitation of ADEM Admin. Code r. 335-3-5 since it does not meet the definition of fuel burning equipment.

Fugitive Dust and Fugitive Emissions

ADEM Admin. Code r. 335-3-4-.02 requires that precautions be taken to prevent particulate matter from becoming airborne. This rule is applicable. The facility submitted a fugitive dust plan on April 8, 2025. The dust plan will be included in Appendix A of the permit.

Compliance Assurance Monitoring (CAM)

40 CFR Part 64, Compliance Assurance Monitoring, applies to processes that utilize an active control device to meet an emission limitation. The permittee does not operate any equipment that is considered an active control device. The cyclone associated with the planer mill's pneumatic conveyance system is considered process equipment.

Emission Testing and Monitoring

Green Fuel Silo No. 1 (EU006), 2 (EU011) and 3 (EU012) each with a Target Box

Currently, emission testing is not recommended for the Fuel Storage Silos and associated Target Boxes. The potential emissions for Particulate Matter (PM) would be minimal during the estimated

8,760 operating hours. However, if emission problems are observed or a valid complaint is submitted to ADEM, testing may be required.

Each fuel storage silo's target box would be subject to the following monitoring requirements as:

- At least weekly during daylight hours, while the process is operating, the permittee shall visually observe the target box and vents for any visible emissions.

- Whenever visible emissions are observed, corrective action to eliminate the visible emissions shall be initiated as soon as practicable but no longer than 24 hours from the time of observation, followed by an additional observation to confirm that visible emissions were reduced to normal.

- The target box and associated pneumatic lines shall be physically inspected to assure that the device has been properly maintained and operates as designed at least annually, but more frequently whenever visible emissions are observed from the target box, fuel silo's vents and exhaust. If the results of the inspection indicate that cleaning or maintenance is needed, such action shall be initiated, as soon as practicable but no longer than 24 hours from the completion of the inspection.

Continuous Dry Kiln (EU007, EU009 and EU10)

The CDKs minimize energy use by heat transfer from exiting newly dried wood to incoming green wood. Air emissions from each kiln exhaust through exhaust stacks located at the top of each kiln and through the kiln openings. Due to the nature of the emissions from the kiln, emission testing and monitoring for the SIP visible emission and particulate standards is not considered practical. To ensure that the maximum capacity of the kilns is not exceeded, SGF is required to calculate the kiln production for each kiln on a monthly and 12-month rolling total basis, to be updated within ten (10) days of the end of each calendar month.

No emission testing is required for the CDKs, as it is expected that the CDKs will comply with State allowable particulate emission rates and BACT emission limits based on calculations provided. If emission problems are observed in the future from these emission sources, testing may be required at that time.

Planer Mill Pneumatic Conveyance System (EU008)

No emission testing is required on the cyclone exhaust, as it is expected to be able to comply with the applicable emission limitation. SG is required to perform the following emission monitoring for the planer mill cyclones emission point associated with the pneumatic conveyance system:

- While the process is operating, someone familiar with the process shall observe the visible emissions from all cyclones associated with this process a minimum of once daily during daylight hours for greater than normal visible emissions as determined by previous observations.

- Whenever the observed emissions are greater than normal, the permittee shall initiate corrective action as soon as practicable but no longer than 24 hours from the time of observation followed by an additional observation to confirm that visible emissions have been reduced to normal.

- The cyclones shall be physically inspected to ensure that the device has been properly maintained and operates as designed at least annually, but more frequently whenever observed visible emissions are greater than normal. If the results of the inspection indicate that cleaning or maintenance is needed, such action shall be initiated within 24 hours of completing the inspection

Emergency Diesel Fire Pump Engine (EU 013)

The permittee is required to operate and maintain this unit in strict accordance with the manufacturer's emission-related guidelines, as outlined in the manufacturer's written instructions. Alternatively, the permittee must develop and implement a maintenance plan that ensures, to the maximum extent feasible, the engine is operated and maintained in a manner that aligns with the best practices in air pollution control. This includes ensuring that operational procedures and maintenance activities are conducted to minimize emissions, thereby adhering to established emission reduction standards and optimizing the engine's performance in terms of emission control efficiency.

Recordkeeping and Reporting Requirements

The permittee would be required to maintain records of the dates, times, and results of all emission monitoring performed; the dates, times, nature, and duration of all excursions from an emission monitoring parameter; the dates, times, and nature of all corrective actions taken when an excursion from an emission monitoring parameter occurred; and the monthly and 12-month rolling totals for hours of operation of the planer mill pneumatic conveyance system and continuous drying kilns. The permittee would be required to submit Semiannual Monitoring Reports (SMR) to certify whether all emission monitoring was conducted as required, and if not, the dates and reasons why it was not conducted. In addition, the SMR would include the monthly and 12-month rolling totals of the operating hours for the planer mill and CDKs.

The Permittee would be required to make a record of the operation of the engine in emergency and non-emergency service as recorded by the non-resettable hour meter. The Permittee would be required to record the date, time, duration, and purpose of operation of the engine each time the engine operates. To demonstrate compliance with the fuel limitations, the Permittee would be required to maintain records of the sulfur content and either the Cetane index or aromatic content of the diesel fuel that is burned in the engine. The Permittee would be required to maintain these records in a permanent form suitable for inspection and shall make the records readily available for inspection upon request. The records would be required to be retained for a period of 5 years from the generation of each record.

SGF would be required to submit an Annual Compliance Certification (ACC) for each source to the Air Division no later than 60 days following the anniversary of the issuance of the MSOP. The compliance certification should include the following:

- The identification of each term or condition of this permit that is the basis of this certification.
- The compliance status, whether continuous or intermittent.
- The method(s) used for determining the compliance status of the source, currently and over the reporting period.
- Other facts the Department may require determining the compliance status of the source.

The compliance certification shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

Air Quality Impact

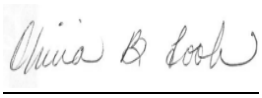
This facility is located in Clarke County, which is an attainment area for all criteria pollutants, and is not located within a 100 km radius of any PSD Class I Area. Therefore, the emissions from this facility are not expected to have any significant impact on the area.

Public Notice

The renewal of this Title V MSOP will require a 30-day public comment period and a 45-day EPA review period.

Recommendation

I recommend that SGF's MSOP be renewed with the conditions noted above, pending the resolution of any comments received during the 30-day public comment period and 45-day EPA review period.



Olivia B. Toole
Chemical Branch
Air Division

July 29, 2025
Date