

**MODIFICATION ANALYSIS  
FOR  
C.A. LANGFORD COMPANY, INC.  
711-0002-X017**

C.A. Langford Company, Inc., (Langford) of Guntersville, Alabama, has applied to the ADEM – Air Division to replace the 300 TPH crusher in its current secondary crushing, screening, and conveying circuit. Langford also requested to establish synthetic minor limitations to ensure facility wide emissions are limited below Title V major source thresholds. The Synthetic Minor Operating Permits (SMOPs) would authorize the modification and operation of Langford’s existing 120 TPH Asphalt Batch Plant, 500 TPH Portable Track Trommel, and its primary and secondary crushing, screening, and conveying circuit at their existing quarry facility located at 2120 Warrenton Road, Guntersville, Marshall County.

C.A. Langford Company, Inc., currently holds Air Permits for the following crushing, screening, and conveying circuits at this site:

**X009-** 300 TPH Secondary Crushing, Screening, and Conveying Circuit with Wet Suppression

**X010-** 400 TPH Pugmill System with Corresponding Conveyors and Wet Suppression

**X012-** 700 TPH Crushing and Conveying Circuit with Wet Suppression

**X013-** 150 TPH Portable Screening and Conveying Circuit with Wet Suppression

**X014-** 400 TPH Crushing, Screening and Conveying Circuit with Wet Suppression

**X016-** 500 TPH Portable Track Trommel with Wet Suppression

C.A. Langford Company, Inc., also holds an Air Permit for the following asphalt plant at this site:

**X015-** 120 TPH Asphalt Batch Plant with Baghouse

**C.A. Langford Company, Inc., has applied for the following SMOPs:**

**X017-700 TPH Primary and 400 TPH Secondary Crushing, Screening, and Conveying Circuit with Wet Suppression (NSPS-OOO); Including One 375 Hp CAT Engine and One 100 Hp CAT Engine (NSPS-III)**

**X016- 500 TPH Portable Track Trommel with Wet Suppression (NSPS-OOO); Including One 134 Hp CAT Engine and One 133 Hp John Deere Engine (NSPS-III)**

**X015-120 TPH Asphalt Batch Plant with Baghouse (NSPS-I)**

SMOP Limitations:

- Annual Operating Hour Limit of 4,200 hours per year (rolling average)
- Fuel oil usage limit of 1,800,000 gallons per year (rolling average)

C.A. Langford Company, Inc.'s current 400 TPH Pugmill System with Corresponding Conveyors and Wet Suppression (X010) will not be modified.

### **X017 Process Description:**

This process would involve the modification of the current X009 circuit. The equipment in the X012, X013, and X014 circuits are used in conjunction with the current X009 circuit; therefore, Air Permits X009, X012, X013, and X014 will be replaced by Permit X017. Aggregate material is fed, by excavator or haul truck, into the existing primary crushing, screening, and conveying circuit (X012). Material flows through the primary circuit where it is moved into the existing X014 circuit for further processing.

The main function of the 400 TPH Sandvik Jaw Crusher (X014) is to serve as the primary crusher when the 700 TPH Trio Jaw Crusher (X012) is down for maintenance. The Sandvik and Trio Crushers usually operate separately but may run simultaneously if necessary. After being processed in circuit X014, material is conveyed to a surge pile where it is then gravity fed to the Trio Tunnel Feeder in the existing secondary crushing circuit (X009). Processed material from the secondary circuit is then fed to the wash plant or to the existing X013 circuit for further processing. Processed material from the X013 circuit is conveyed to the wash plant. Material from the wash plant is conveyed to different sizing stockpiles. (See flow diagram in the application.)

The modification of the X009 circuit would replace the existing 300 TPH Stedman 48x60 Impact Crusher with a 400 TPH Superior Patriot FP300 Cone Crusher. The new crusher would be subject to the 40 CFR Part 60 – New Source Performance Standard Subpart- OOO (NSPS-OOO). This NSPS limits emissions from uncontrolled crushers to 12% opacity.

All equipment associated with this process is subject to either the State Implementation Plan (SIP) or the New Source Performance Standards (40 CFR Part 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants). All equipment associated with circuit X017 that was manufactured after August 31, 1983, but prior to April 22, 2008, except the vibrating/grizzly feeders, would be subject to NSPS-OOO. This NSPS limits fugitive emissions from uncontrolled crushers to 15% opacity and limits fugitive emissions from grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations, or from any other affected facility to 10% opacity. All equipment associated with circuit X017 that was manufactured on or after April 22, 2008, except the vibrating/grizzly feeders, would be subject to NSPS-OOO, applicability date, April 22, 2008. This NSPS limits fugitive emissions from uncontrolled crushers to 12% opacity and limits fugitive emissions from grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations, or from any other affected facility to 7% opacity. Wet material processing operations as defined in 60.671 of 40 CFR Part 60 are exempt from Subpart OOO. In addition to the opacity requirements, there are periodic monitoring and testing requirements, as well as recordkeeping requirements to remain in compliance with NSPS Subpart OOO, as promulgated on April 28, 2009. Monthly inspections are required for all spray nozzles in wet suppression areas and for areas controlled by carryover moisture from upstream wet suppression. If inspections of the upstream spray nozzles are not conducted, the carryover areas will be subject to the five-year interval retest requirement. All areas not controlled by wet suppression or carryover shall be required to retest every five years. Records of all periodic monitoring inspections, dates,

results, and any corrective action taken shall be kept at the facility site, available for inspection and shall be retained for a minimum of five years.

C.A. Langford Company, Inc., will be required to conduct EPA Method 9 Visible Emissions Observations on the NSPS equipment associated with this circuit. Any equipment exempt from NSPS is subject to the State Implementation Plan (SIP).

The following chart lists each piece of equipment in the circuit, whether testing would be required, and the emission limitation that each piece of equipment is subject to:

<b><i>Manufacturer</i></b>	<b><i>Type</i></b>	<b><i>Maximum Operating Capacity</i></b>	<b><i>Manufacturer's Date</i></b>	<b><i>NSPS Limit</i></b>	<b><i>Testing?</i></b>
Trio	Dump Hopper	700 TPH	2016	SIP	No
Trio	3254 Jaw Crusher (Primary)	700 TPH	2016	12%	No (Previously Tested)
Trio	42" Conveyor	700 TPH	2016	7%	No (Previously Tested)
Hopper	Trio to Jones	700 TPH	2016	SIP	No
Jones	42" Conveyor	700 TPH	2016	7%	No (Previously Tested)
Hopper	Jones to SMCO	700 TPH	2016	SIP	No
Sandvik	Feeder	400 TPH	2020	SIP	No
Sandvik	Jaw Crusher (Primary)	400 TPH	2020	12%	No (Previously Tested)
SMCO	42 x 275 Conveyor	700 TPH	1997	10%	No (Previously Tested)
Trio/Weir	4 x 10 Scalping Screen	700 TPH	2018	7%	No (Previously Tested)
Chute	≥ 6" Material	700 TPH	2018	SIP	No
SMCO	36 x 100 Conveyor	700 TPH	1978	SIP	No (Tested Although Not Required)
SMCO	36 x 125 Conveyor	700 TPH	1978	SIP	No (Tested Although Not Required)
Trio	EF Series Pan Feeder 2404b	Approx. 180 TPH	Approx. 2018	SIP	No
Conveyor	30 x 210 (Tunnel Belt)	Approx. 325 TPH	Approx. 1977	SIP	No (Tested Although Not Required)
Conn Weld	5 x 14 Two-Deck Scalping Screen	Approx. 325 TPH	2023	7%	Yes (5/10/23 Replacement)
* Superior	Patriot Cone Crusher	400 TPH	2024	12%	Yes
SMCO	30 x 262 Conveyor	425 TPH	2000	10%	No (Previously Tested)
Simplicity	8 x 24 Screen	300 TPH	2000	10%	No (Previously Tested)

Trio	TC36 348 Cone Crusher	250 TPH	2013	12%	Yes (Have Not Tested Previously)
SMCO	24 x 128 Conveyor	Approx. 250 TPH	Approx. 1997	10%	No (Previously Tested)
Chute	¼" Material	300 TPH	2000	SIP	No
Sandvik	QA441 Screen	150 TPH	2018	7%	No (Previously Tested)
Edge	MS65 Conveyor	200 TPH	2018	7%	No (Previously Tested)
Wash Conveyor	24 x 282	Approx. 250 TPH	Approx. 1997	0%	No (Wet Process)
**Pioneer	5 x 14 Three-Deck Wash Screen	150 TPH	Approx. 1976 (Install date)	0%	No (Wet Process)
Wash Conveyor	24 x 210	Approx. 150 TPH	Approx. 1997	0%	No (Wet Process)
Wash Conveyor	24 x 249	Approx. 150 TPH	Approx. 1997	0%	No (Wet Process)
Wash Conveyor	24 x 171	Approx. 150 TPH	Approx. 1997	0%	No (Wet Process)
Wash Conveyor	24 x 417	Approx. 150 TPH	Approx. 1997	0%	No (Wet Process)

*\*Replacement equipment*

*\*\*Have a 2023 Conn Weld 5x14 Wash Screen that will replace the Pioneer Wash Screen. The Conn Weld screen has not been installed.*

The total expected fugitive emissions rate for this circuit would be **23.32 TPY**. There is no allowable emissions rate for fugitive or dust emissions. Therefore, the uncontrolled, controlled, and expected emission rate calculations for this circuit can be found in Appendix A. Note: these calculations are furnished as public information and used to demonstrate the effectiveness of wet suppression systems based on emission factors taken from an EPA approved source of emission factors. By definition, fugitive emissions from this process would not be considered in determining Prevention of Significant Deterioration (PSD) applicability. Also, emissions from this facility are below the Title V major source threshold.

C.A. Langford Company, Inc., will utilize two diesel-fired engines to supply power for circuit X017. These engines currently supply power to circuits X013 (Sandvik Screen) and X014 (Sandvik Crusher). Also, two diesel-fired engines currently supply power for circuit X016. The engines are affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (the "RICE MACT"). The engines are considered new affected sources since all four engines were constructed after June 12, 2006. According to §63.6590(c), any new stationary "RICE" located at an area source of HAP emissions must meet the requirements of the "RICE MACT" by meeting the requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Engine manufacturers' certifications were provided with the applications.

Potential emissions from the diesel engines and the asphalt plant have been calculated and can be found in Appendix A. Since potential emissions for NO<sub>x</sub> are above the 100 TPY threshold, an hours of operation limitation of 4,200 hours during any consecutive twelve (12) month rolling period will be included in the permit. Due to the hours of operation limit, emissions of criteria pollutants would not meet or exceed the

major source threshold for Title V sources (see Appendix A, calculations). Since potential emissions based on estimates for SO<sub>2</sub> are above the 100 TPY Title V threshold, C.A. Langford Company, Inc., has proposed a fuel oil usage limitation of 1,800,000 gallons of oil per consecutive twelve (12) month rolling period. Fuel oil sulfur content may be no greater than 0.7% and ash content may be no greater than 1%. Calculations have been performed based on the fuel oil limitation of 1,800,000 gallons/year. Emissions of criteria pollutants will not meet or exceed the major source threshold for Title V sources (see Appendix A, calculations).

This facility is located within 100 km of the Sipsey Class I Wilderness Area. The modification and operation of this facility is not anticipated to significantly impact this area.

In accordance with ADEM Admin. Code R. 335-3-14, 335-3-15, and 335-3-16, this facility would not be considered “major” for any criteria pollutant and, therefore, would not be required to undergo a PSD review. C.A. Langford Company, Inc., would be required to complete a 15-day public comment period. This analysis indicates that this source would meet the requirements of all applicable rules and regulations of the ADEM - Air Division; therefore, I recommend that the Synthetic Minor Operating Permits be issued to C.A. Langford Company, Inc., incorporating the provisions of Appendix B and Appendix C, and the cover letter.

*Emily Williams*

Emily Williams  
Energy Branch  
Air Division

August 28, 2025

Date

**APPENDIX A  
CALCULATIONS  
FOR  
C.A. LANGFORD COMPANY, INC.  
GUNTERSVILLE, ALABAMA  
711-0002-X017**

X017 – 700 TPH Primary and 400 TPH Secondary Crushing, Screening, and Conveying Circuit with Wet Suppression (NSPS-OOO); Including One 375 Hp CAT Engine and One 100 Hp CAT Engine (NSPS-III)

*Equipment:* 4 Crushers, 4 Screens, and 16 Associated Belt Conveyors (including 7 Hoppers/Chutes)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Wet Suppression

**Allowable Emission:** There is no allowable particulate emission rate limiting fugitive emissions for any of these processes.

**Uncontrolled Emissions:** Emission factors taken from EPA AP-42, Table 11.19.2-2

Source			Uncontrolled		Controlled	
		Units	Total PM	PM-10	Total PM	PM-10
<b>Crushing Emission Factor</b>		lb/Ton	<b>0.0054</b>	<b>0.0024</b>	<b>0.0012</b>	<b>0.00054</b>
Capacity	700	TPH				
<b>Total</b> (# TPH * EF# lb/Ton)		lb/hr	3.78	1.68	0.84	0.378
	8760	hrs/yr				
<b>Total</b> (#lb/hr*#hrs/yr*(1/2000)Ton/lbs)		TPY	16.5564	7.3584	3.6792	1.65564
	4200	hrs/yr				
<b>Expected/Limited</b> (#lb/hr*exp#hrs/yr*(1/2000)Ton/lbs)		TPY	7.938	3.528	1.764	0.7938
<b>Screening Emission Factor</b>		lb/Ton	<b>0.025</b>	<b>0.0087</b>	<b>0.0022</b>	<b>0.00074</b>
Capacity	700	TPH				
<b>Total</b> (# TPH * EF# lb/Ton)		lb/hr	17.5	6.09	1.54	0.518
	8760	hrs/yr				
<b>Total</b> (#lb/hr*#hrs/yr*1/2000Ton/lbs)		TPY	76.65	26.6742	6.7452	2.26884
	4200	hrs/yr				
<b>Expected/Limited</b> (#lb/hr*exp#hrs/yr*1/2000Ton/lbs)		TPY	36.75	12.789	3.234	1.0878
<b>Conveying/ Transfer Point Emission Factor</b>		lb/Ton	<b>0.003</b>	<b>0.0011</b>	<b>0.00014</b>	<b>0.000046</b>
Capacity	700	TPH				
<b>Total</b> (# TPH * EF# lb/Ton)		lb/hr	2.1	0.77	0.098	0.0322
	8760	hrs/yr				
<b>Total</b> (#lb/hr*#hrs/yr*1/2000Ton/lbs)		TPY	9.198	3.3726	0.42924	0.141036
	4200	hrs/yr				
<b>Expected/Limited</b> (#lb/hr*exp#hrs/yr*1/2000Ton/lbs)		TPY	4.41	1.617	0.2058	0.06762

**Total Uncontrolled Fugitive Emissions:**

Crushing	$16.56 \text{ TPY} \times 4 \text{ Crushers} = 66.24 \text{ TPY}$
Screening	$76.65 \text{ TPY} \times 4 \text{ Screens} = 306.60 \text{ TPY}$
<u>Conveying</u>	<u><math>9.20 \text{ TPY} \times 16 \text{ Conveyors} = 147.20 \text{ TPY}</math></u>
<b>Total</b>	<b>520.04 TPY at 8760 hrs/yr</b>

**Total Controlled Fugitive Emissions:**

Crushing	$3.68 \text{ TPY} \times 4 \text{ Crushers} = 14.72 \text{ TPY}$
Screening	$6.75 \text{ TPY} \times 4 \text{ Screens} = 27.00 \text{ TPY}$
<u>Conveying</u>	<u><math>0.43 \text{ TPY} \times 16 \text{ Conveyors} = 6.88 \text{ TPY}</math></u>
<b>Total</b>	<b>48.60 TPY at 8760 hrs/yr</b>

**Expected/Limited Fugitive Emissions:** Based on 4200 Limited Hours of Operation and the AP-42 total particulate controlled emission factor.

Crushing	$1.76 \text{ TPY} \times 4 \text{ Crushers} = 7.04 \text{ TPY}$
Screening	$3.23 \text{ TPY} \times 4 \text{ Screens} = 12.92 \text{ TPY}$
<u>Conveying</u>	<u><math>0.21 \text{ TPY} \times 16 \text{ Conveyors} = 3.36 \text{ TPY}</math></u>
<b>Total</b>	<b>23.32 TPY at 4200 hrs/yr</b>



## CALCULATIONS FOR ENGINES

*Equipment:* One 375 Hp CAT Engine (Sandvik Crusher)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Manufacturer certification

**Allowable Emission Rate:** 40 CFR 60, Subpart IIII

**Uncontrolled Emissions:** Emission factors taken from AP-42 Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Engines.

### NO<sub>x</sub> Emissions

NO<sub>x</sub> Emission Factor 0.031 lb/Hp-hr, AP-42 Table 3.3-1.

375 Hp	0.031 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 24.41 T Yr
--------	-------------------	----------------	-----------------	-----------------

**Total:** 24.41 TPY

### SO<sub>x</sub> Emissions

SO<sub>x</sub> Emission Factor 2.05 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

375 Hp	0.00205 lb HP-hr	4200 hrs Yr	1 T 2000 lbs	= 1.61 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 1.61 TPY

### CO Emissions

CO Emission Factor 6.68 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

375 Hp	0.00668 lb Hp-hr	4200 hrs 1Yr	1 T 2000 lbs	= 5.26 T Yr
--------	---------------------	-----------------	-----------------	----------------

**Total:** 5.26 TPY

### PM Emissions

PM Emission Factor 2.20 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

375 Hp	0.00220 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 1.73 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 1.73 TPY

*Equipment:* One 100 Hp CAT Diesel Engine (Sandvik Screen)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Manufacturer certification

**Allowable Emission Rate:** 40 CFR 60, Subpart IIII

**Uncontrolled Emissions:** Emission factors taken from AP-42 Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Engines.

### **NO<sub>x</sub> Emissions**

NO<sub>x</sub> Emission Factor 0.031 lb/Hp-hr, AP-42 Table 3.3-1.

100 Hp	0.031 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 6.51 T Yr
--------	-------------------	----------------	-----------------	----------------

**Total:** 6.51 TPY

### **SO<sub>x</sub> Emissions**

SO<sub>x</sub> Emission 2.05 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

100 Hp	0.00205 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.43 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.43 TPY

### **CO Emissions**

CO Emission Factor 6.68 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

100 Hp	0.00668 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 1.40 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 1.40 TPY

### **PM Emissions**

PM Emission Factor 2.20 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

100 Hp	0.00220 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.46 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.46 TPY

## CALCULATIONS FOR PERMIT NO. 711-0002-X016

**X016-** 500 TPH Portable Track Trommel with Wet Suppression (NSPS Subpart OOO/SIP); Including One 134 Hp CAT Engine and One 133 Hp John Deere Engine (NSPS-III)

*Equipment:* 2 Screens and 8 Associated Conveyors (including 2 Feeders)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Wet Suppression

**Allowable Emission:** There is no allowable particulate emission rate limiting fugitive emissions for any of these processes.

**Uncontrolled Emissions:** Emission factors taken from EPA AP-42, Table 11.19.2-2

Source			Uncontrolled		Controlled	
		Units	Total PM	PM-10	Total PM	PM-10
<b>Screening Emission Factor</b>		lb/Ton	<b>0.025</b>	<b>0.0087</b>	<b>0.0022</b>	<b>0.00074</b>
Capacity	500	TPH				
<b>Total (# TPH * EF# lb/Ton)</b>		lb/hr	12.5	4.35	1.1	0.37
	8760	hrs/yr				
<b>Total</b> (#lb/hr*#hrs/yr*1/2000Ton/lbs)		TPY	54.75	19.053	4.818	1.6206
	4200	hrs/yr				
<b>Expected/Limited</b> (#lb/hr*exp#hrs/yr*1/2000Ton/lbs)		TPY	26.25	9.135	2.31	0.777
<b>Conveying/ Transfer Point Emission Factor</b>		lb/Ton	<b>0.003</b>	<b>0.0011</b>	<b>0.00014</b>	<b>0.000046</b>
Capacity	500	TPH				
<b>Total (# TPH * EF# lb/Ton)</b>		lb/hr	1.5	0.55	0.07	0.023
	8760	hrs/yr				
<b>Total</b> (#lb/hr*#hrs/yr*1/2000Ton/lbs)		TPY	6.57	2.409	0.3066	0.10074
	4200	hrs/yr				
<b>Expected/Limited</b> (#lb/hr*exp#hrs/yr*1/2000Ton/lbs)		TPY	3.15	1.155	0.147	0.0483

**Total Uncontrolled Fugitive Emissions:**

Screening	$54.75 \text{ TPY} \times 2 \text{ Screens} = 109.50 \text{ TPY}$
<u>Conveying</u>	<u><math>6.57 \text{ TPY} \times 8 \text{ Conveyors} = 52.56 \text{ TPY}</math></u>
<b>Total</b>	162.06 TPY at 8760 hrs/yr

**Total Controlled Fugitive Emissions:**

Screening	$4.82 \text{ TPY} \times 2 \text{ Screens} = 9.64 \text{ TPY}$
<u>Conveying</u>	<u><math>0.31 \text{ TPY} \times 8 \text{ Conveyors} = 2.48 \text{ TPY}</math></u>
<b>Total</b>	12.12 TPY at 8760 hrs/yr

**Expected/Limited Fugitive Emissions:** Based on 4200 Limited Hours of Operation and the AP-42 total particulate controlled emission factor.

Screening	$2.31 \text{ TPY} \times 2 \text{ Screens} = 4.62 \text{ TPY}$
<u>Conveying</u>	<u><math>0.15 \text{ TPY} \times 8 \text{ Conveyors} = 1.20 \text{ TPY}</math></u>
<b>Total</b>	5.82 TPY at 4200 hrs/yr

## CALCULATIONS FOR ENGINES

*Equipment:* One 134 Hp CAT Diesel Engine (Trommel)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Manufacturer certification

**Allowable Emission Rate:** 40 CFR 60, Subpart IIII

**Uncontrolled Emissions:** Emission factors taken from AP-42 Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Engines.

### NO<sub>x</sub> Emissions

NO<sub>x</sub> Emission Factor 0.031 lb/Hp-hr, AP-42 Table 3.3-1.

134 Hp	0.031 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 8.72 T Yr
--------	-------------------	----------------	-----------------	----------------

**Total:** 8.72 TPY

### SO<sub>x</sub> Emissions

SO<sub>x</sub> Emission 2.05 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

134 Hp	0.00205 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.58 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.58 TPY

### CO Emissions

CO Emission Factor 6.68 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

134 Hp	0.00668 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 1.88 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 1.88 TPY

### PM Emissions

PM Emission Factor 2.20 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

134 Hp	0.00220 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.62 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.62 TPY

*Equipment:* One 133 Hp John Deere Diesel Engine (Kleemann Screen)

*Hours of Operation:* SMOP Limitation of 4,200 hours/year (rolling average)

*Pollution Control:* Manufacturer certification

**Allowable Emission Rate:** 40 CFR 60, Subpart IIII

**Uncontrolled Emissions:** Emission factors taken from AP-42 Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Engines.

### **NO<sub>x</sub> Emissions**

NO<sub>x</sub> Emission Factor 0.031 lb/Hp-hr, AP-42 Table 3.3-1.

133 Hp	0.031 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 8.66 T Yr
--------	-------------------	----------------	-----------------	----------------

**Total:** 8.66 TPY

### **SO<sub>x</sub> Emissions**

SO<sub>x</sub> Emission 2.05 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

133 Hp	0.00205 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.57 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.57 TPY

### **CO Emissions**

CO Emission Factor 6.68 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

133 Hp	0.00668 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 1.87 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 1.87 TPY

### **PM Emissions**

PM Emission Factor 2.20 E-03 lb/Hp-hr, AP-42, Table 3.3-1.

133 Hp	0.00220 lb Hp-hr	4200 hrs Yr	1 T 2000 lbs	= 0.61 T Yr
--------	---------------------	----------------	-----------------	----------------

**Total:** 0.61 TPY

**CALCULATIONS FOR ASPHALT BATCH PLANT  
PERMIT NO. 711-0002-X015**

*Plant Type:* Batch Mix Asphalt Plant

*Capacity:* 120 TPH

*Control Device:* ALmix BF-160 Baghouse

*Flow Rate:* 24,000 ACFM at 250° F with 20% Moisture

*Operating Hours:* SMOP Limitation of 4,200 hrs./yr.(rolling average)

*Fuel Type:* Natural Gas or Fuel Oil (SMOP Fuel Oil Limitation of 1,800,000 gallons per year-rolling average)

**Particulate Matter Emissions**

**Allowable:**  $\leq 0.04$  gr/dscf from 40 CFR Part 60, Subpart I.

$$VA = \frac{VS (^\circ F) + 460}{530}$$

$$24,000 \text{ acfm} = \frac{VS (250 + 460)}{530}$$

$$24,000 \text{ acfm} = VS (1.34)$$

$$VS = 17,910.45 \text{ scfm}$$

17,910.45 scf	0.80 (20% moisture)	= 14,328.36 dscf
min		min
$\leq 0.04$ gr	14,328.36 dscf	60 min
dscf	min	hr.
		1 lb.
		7000 gr
		= $\leq 4.91$ lbs./hr.

OR  
**21.51 TPY at 8760 hrs./yr.**

**Uncontrolled:** Emission Factor of 28 lbs./T of asphalt produced taken from AP-42, Table 11.1-3

120 T	28 lbs.	= 3,360 lbs./hr.
hr.	T	

OR  
**14,716.80 TPY at 8760 hrs./yr**

**Controlled:** Assuming 99.90% efficiency

3,360 lbs. hr.	0.001 (99.90% efficiency)	= 3.36 lbs./hr.
-------------------	---------------------------	-----------------

OR  
**14.72 TPY at 8760 hrs./yr.**

**Limited (4200 hrs./yr.):**

3.36 lbs. hr.	4200 hrs. yr.	1 T 2000 lbs.	= <b>7.06 TPY</b>
------------------	------------------	------------------	-------------------

**Natural Gas Combustion**

Emission factors taken from AP-42, Table 11.1-7-8

**Potential Emissions (8760 hrs.)**

SO<sub>2</sub>

120 T hr.	0.0034 lb. T	1 T 2000 lbs.	8760 hrs. yr.	= <b>0.41 lbs./hr. or 1.79TPY</b>
--------------	-----------------	------------------	------------------	---------------------------------------

NO<sub>x</sub>

120 T hr.	0.026 lb. T	1 T 2000 lbs.	8760 hrs. yr.	= <b>3.12 lbs./hr. or 13.67 TPY</b>
--------------	----------------	------------------	------------------	---

CO

120 T hr.	0.13 lb. T	1 T 2000 lbs.	8760 hrs. yr.	= <b>15.60 lbs./hr. or 68.33 TPY</b>
--------------	---------------	------------------	------------------	--

VOC

120 T hr.	0.032 lb. T	1 T 2000 lbs.	8760 hrs. yr.	= <b>3.84 lbs./hr. or 16.82TPY</b>
--------------	----------------	------------------	------------------	--



**Limited Emissions (4200 hrs.)****SO<sub>2</sub>**

120 T	0.0034 lb.	1 T	4200 hrs.	= <b>0.41 lbs./hr.</b> or <b>0.86 TPY</b>
hr.	T	2000 lbs.	yr.	

**NO<sub>x</sub>**

120 T	0.026 lb.	1 T	4200 hrs.	= <b>3.12 lbs./hr.</b> or <b>6.55 TPY</b>
hr.	T	2000 lbs.	yr.	

**CO**

120 T	0.13 lb.	1 T	4200 hrs.	= <b>15.60 lbs./hr.</b> or <b>32.76 TPY</b>
hr.	T	2000 lbs.	yr.	

**VOC**

120 T	0.032 lb.	1 T	4200 hrs.	= <b>3.84 lbs.hr.</b> or <b>8.06 TPY</b>
hr.	T	2000 lbs.	yr.	

**X015 Natural Gas Emissions Summary Table**

Pollutant	Allowable		Potential (8760 hrs.)		Limited (4200 hrs.)	
	lbs./hr.	TPY	lbs./hr.	TPY	lbs./hr.	TPY
<b>Particulate (PM10) Process</b>	4.91	21.51	4.91	21.51	3.36	7.06
<b>SO<sub>2</sub>*</b>			0.41	1.79	0.41	0.86
<b>NO<sub>x</sub>*</b>	----	----	3.12	13.67	3.12	6.55
<b>CO*</b>	----	----	15.60	68.33	15.60	32.76
<b>VOC*</b>	----	----	3.84	16.82	3.84	8.06

## Fuel Oil Combustion

### SO<sub>2</sub> Emissions

**Allowable/Limited:** C.A. Langford Company, Inc., has proposed a SMOP fuel oil usage limit of 1,800,000 gallons per year, 12-month rolling average. Sulfur content is limited to  $\leq 0.7\%$ . This will establish the SO<sub>2</sub> allowable emissions rate.

1,800,000 gal	7.5 lbs.	0.007 (0.7% sulfur)	1 T	64 MW SO <sub>2</sub>	= 94.50 TPY
yr.	gal		2,000 lbs.	32 MW S	

Emission factors taken from AP-42, Table 1.3-1 and 1.3-3 for recycled fuel oil combustion for commercial/institutional boilers.

### NO<sub>x</sub> Emissions

47 lbs.	1,800,000 gal	1 T	=	<b>20.14 lbs./hr. or 42.30 TPY at 4200 hrs./yr.</b>
1000 gal	yr.	2000 lbs.		

### CO Emissions

5 lbs.	1,800,000 gal	1 T	=	<b>2.14 lbs./hr. or 4.50 TPY at 4200 hrs./yr.</b>
1000 gal	yr.	2000 lbs.		

### VOC Emissions

1.28 lbs.	1,800,000 gal	1 T	=	<b>0.55 lbs./hr. or 1.15 TPY at 4200 hrs./yr.</b>
1000 gal	yr.	2000 lbs.		

### X015 Fuel Oil Emissions Summary Table

Pollutant	Allowable/Limited	
	lbs./hr.	TPY
<b>Particulate (PM10) Process</b>	4.91/ 3.36	21.51/ 7.06
<b>SO<sub>2</sub>*</b>	45.00	94.50
<b>NO<sub>x</sub>*</b>	20.14	42.30
<b>CO*</b>	2.14	4.50
<b>VOC*</b>	0.55	1.15

*(\*Based on 12-month rolling fuel limitation of 1,800,000 gallons, worst case fuel oil)*

**Total Facility Emissions Summary Table**

<b>Pollutant</b>	<b>Expected/Limited (4200 hrs.)</b>				
	<b>X017</b>	<b>X016</b>	<b>**X015</b>	<b>*X010</b>	<b>Total</b>
<b>PM</b>	12.15 lbs/hr or 25.51 TPY	3.36 lbs/hr or 7.05 TPY	3.36 lbs/hr or 7.06 TPY	0.12 lbs/hr or 0.14 TPY	<b>18.99 lbs/hr or 39.76 TPY</b>
<b>SO<sub>2</sub></b>	0.97 lbs/hr or 2.04 TPY	0.55 lbs/hr or 1.15 TPY	45.00 lbs/hr or 94.50 TPY	----	<b>46.52 lbs/hr or 97.69 TPY</b>
<b>NO<sub>x</sub></b>	14.72 lbs/hr or 30.92 TPY	8.28 lbs/hr or 17.38 TPY	20.14 lbs/hr or 42.30 TPY	----	<b>43.14 lbs/hr or 90.60 TPY</b>
<b>CO</b>	3.17 lbs/hr or 6.66 TPY	1.79 lbs/hr or 3.75 TPY	15.60 lbs/hr or 32.76 TPY	----	<b>20.56 lbs/hr or 43.17 TPY</b>

*\*Permit No. X010 does not have an hours of operation limit. Calculations for Permit X010 based on normal operating hours (2250 hrs/yr)*

*\*\*Based on 12-month rolling fuel limitation of 1,800,000 gallons, worst case fuel oil or natural gas.*

**APPENDIX B**  
**C.A. LANGFORD COMPANY, INC.**  
**Guntersville, Alabama**  
**PERMIT NO. 711-0002-X017**  
**PROVISOS**

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
5. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shut down as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events **that exceed 1 hour** within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
6. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained, and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
7. This permit expires, and the application is canceled if construction has not begun within 24 months of the date of issuance of the permit.
8. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.

**Permit Number: 711-0002-X017**

9. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written test results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	( )
Volatile Organic Compounds	( )	Visible Emissions	(X)

10. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
14. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations. To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:
- (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
  - (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
  - (c) A description of the processes to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

**Permit Number: 711-0002-X017**

- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

15. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

16. If this plant relocates to another site, this plant's Air Permit remains valid for this site unless or until it is revoked for failure to comply with ADEM Air Division Rules and Regulations. The owner or operator of this plant must provide written notification of the intent to relocate the plant to this site at least two weeks in advance. The written notification should include the planned construction beginning date and the projected startup date. Failure to provide this written notification is a violation of this permit condition and is grounds for revocation of this permit.

**Permit Number: 711-0002-X017**

17. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.
18. All equipment associated with this process is subject to either the State Implementation Plan (SIP) or the New Source Performance Standards (40 CFR Part 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants). All NSPS – Subpart OOO equipment will be subject to the limitations and opacity limits for fugitive emissions according to the applicability date of 40 CFR Part 60, Subpart OOO that is specific to the equipment.
19. All equipment associated with this process, which was manufactured after August 31, 1983, but prior to April 22, 2008, is subject to the New Source Performance Standards (40 CFR 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants) where applicable. This NSPS limits fugitive emissions from uncontrolled crushers to 15% opacity, and fugitive emissions from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, or from any other affected facility to 10% opacity. This NSPS allows no emissions from wet screening operations.
20. All of the equipment associated with this circuit that was manufactured after April 22, 2008, is subject to the New Source Performance Standards (40 CFR 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants, applicability date, April 22, 2008). This NSPS limits fugitive emissions from uncontrolled crushers to 12% opacity, and fugitive emissions from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, or from any other affected facility to 7% opacity. This NSPS allows no emissions from wet screening operations.
21. Compliance with the opacity standards for sources subject to NSPS-Subpart OOO will be determined by conducting visible emission observations in accordance with the most recent version of EPA Reference Method 9 of Appendix A-4 of the CFR, Title 40, Part 60. When determining compliance with the fugitive emissions standard for grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins and enclosed truck and railcar loading stations or from any other affected facility of this circuit, the duration of the Method 9 observations are required to be 30 minutes or five six minute averages. No more than 3 points may be tested concurrently by the same observer. The specified criteria of NSPS - Subpart OOO must be met.

The required performance testing will be conducted within 60 days of the source achieving maximum production rate but no later than 180 days of initial start-up of the facility. The test reports will be submitted to the Department within 15 days of the test date.

**Permit Number: 711-0002-X017**

22. Periodic monitoring is required for all equipment controlled by wet suppression and/or water carryover that is subject to the April 22, 2008, applicability date for NSPS - Subpart OOO. Each spray nozzle shall be examined monthly to assure water is appropriately supplied to the nozzle and that the water is sprayed from the nozzle correctly. Any corrective action indicated shall be taken within 24 hours of the inspection and completed as expeditiously as possible.
23. Recordkeeping is required for all monthly periodic monitoring inspections. Records shall be kept on the facility site, either in a handwritten logbook or in electronic version suitable for inspection upon request by Air Division inspectors and will be retained for at least five (5) years following the date of the inspection. Records of the inspection date, results, and any corrective action taken shall be recorded. In addition, if wet suppression is not utilized during the inspection, any other control method used should be recorded or circumstances shall be noted.
24. The diesel-fired engines associated with this circuit are affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (the "RICE MACT"). The engines are considered new affected sources since all the engines were constructed after June 12, 2006. Any new stationary "RICE" located at an area source of HAP emissions must meet the requirements of the "RICE MACT" by meeting the requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
25. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
26. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
27. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
28. Upon completion of construction, this facility shall not burn more than 1,800,000 gallons of oil during any consecutive twelve (12) month period with a sulfur content no greater than 0.7% as measured by procedures found in ASTM D129-64 (Reapproved 1978). The fuel oil sample to be tested for sulfur content shall be collected in accordance with ASTM D4177-82 or ASTM D4057-81. Records of oil usage and sulfur content must be kept in permanent form suitable for inspection. The records shall be retained for at least five years and made available upon request.
29. This facility is limited to 4,200 hours of operation during any consecutive twelve (12) month period (12-month rolling average). Recordkeeping is required for the hours of operation. Records shall be kept on the facility site, either in a handwritten logbook or in an electronic version suitable for inspection upon request by Air Division inspectors and will be retained for at least five (5) years following the date of generation.



**Permit Number: 711-0002-X017**

30. The permittee shall submit an annual report by March 15<sup>th</sup> of each calendar year that provides each monthly and 12-month rolling average total of hours of operation and fuel oil usage, including the sulfur and ash content of the oil.
31. Should this facility, at any time, exceed the limits set forth in this permit, this Department must be notified within ten (10) days of the exceedance.

---

Date

**C.A. LANGFORD COMPANY, INC.**  
**Guntersville, Alabama**  
**PERMIT No. 711-0002-X016**  
**PROVISOS**

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
5. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shut down as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events **that exceed 1 hour** within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
6. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained, and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
7. This permit expires, and the application is canceled if construction has not begun within 24 months of the date of issuance of the permit.
8. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.

**Permit Number: 711-0002-X016**

9. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written test results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	( )
Volatile Organic Compounds	( )	Visible Emissions	(X)

10. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
14. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations. To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:
- (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
  - (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
  - (c) A description of the processes to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

**Permit Number: 711-0002-X016**

- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

15. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

16. If this plant relocates to another site, this plant's Air Permit remains valid for this site unless or until it is revoked for failure to comply with ADEM Air Division Rules and Regulations. The owner or operator of this plant must provide written notification of the intent to relocate the plant to this site at least two weeks in advance. The written notification should include the planned construction beginning date and the projected startup date. Failure to provide this written notification is a violation of this permit condition and is grounds for revocation of this permit.

**Permit Number: 711-0002-X016**

17. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.
18. All equipment associated with this process is subject to either the State Implementation Plan (SIP) or the New Source Performance Standards (40 CFR Part 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants). This NSPS limits fugitive emissions from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, or from any other affected facility to 7 % opacity. This NSPS allows no emissions from wet screening operations.
19. Compliance with the opacity standards for sources subject to NSPS-Subpart OOO will be determined by conducting visible emission observations in accordance with the most recent version of EPA Reference Method 9 of Appendix A-4 of the CFR, Title 40, Part 60. When determining compliance with the fugitive emissions standard for grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins and enclosed truck and railcar loading stations or from any other affected facility of this circuit, the duration of the Method 9 observations are required to be 30 minutes or five six minute averages. No more than 3 points may be tested concurrently by the same observer. The specified criteria of NSPS - Subpart OOO must be met.

The required performance testing will be conducted within 60 days of the source achieving maximum production rate but no later than 180 days of initial start-up of the facility. The test reports will be submitted to the Department within 15 days of the test date.

20. Periodic monitoring is required for all affected facilities controlled by direct wet suppression and/or water carryover. Each spray nozzle shall be examined monthly to assure water is appropriately supplied to the nozzle and that the water is sprayed from the nozzle correctly. Any corrective action indicated shall be taken within 24 hours of the inspection and completed as expeditiously as possible.
21. Recordkeeping is required for all monthly periodic monitoring inspections. Records shall be kept on the facility site, either in a handwritten logbook or in electronic version suitable for inspection upon request by Air Division inspectors and will be retained for at least five (5) years following the date of the inspection. Records of the inspection date, results, and any corrective action taken shall be recorded. In addition, if wet suppression is not utilized during the inspection, any other control method used should be recorded or circumstances shall be noted.

**Permit Number: 711-0002-X016**

22. The diesel-fired engines associated with this circuit are affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (the "RICE MACT"). The engines are considered new affected sources since all the engines were constructed after June 12, 2006. Any new stationary "RICE" located at an area source of HAP emissions must meet the requirements of the "RICE MACT" by meeting the requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
23. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
24. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
25. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
26. Upon completion of construction, this facility shall not burn more than 1,800,000 gallons of oil during any consecutive twelve (12) month period with a sulfur content no greater than 0.7% as measured by procedures found in ASTM D129-64 (Reapproved 1978). The fuel oil sample to be tested for sulfur content shall be collected in accordance with ASTM D4177-82 or ASTM D4057-81. Records of oil usage and sulfur content must be kept in permanent form suitable for inspection. The records shall be retained for at least five years and made available upon request.
27. This facility is limited to 4,200 hours of operation during any consecutive twelve (12) month period (12-month rolling average). Recordkeeping is required for the hours of operation. Records shall be kept on the facility site, either in a handwritten logbook or in an electronic version suitable for inspection upon request by Air Division inspectors and will be retained for at least five (5) years following the date of generation.
28. The permittee shall submit an annual report by March 15<sup>th</sup> of each calendar year that provides each monthly and 12-month rolling average total of hours of operation and fuel oil usage, including the sulfur and ash content of the oil.
29. Should this facility, at any time, exceed the limits set forth in this permit, this Department must be notified within ten (10) days of the exceedance.

---

Date

**C.A. LANGFORD COMPANY, INC.**  
**Guntersville, Alabama**  
**PERMIT NO. 711-0002-X015**  
**PROVISOS**

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
5. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
6. All air pollution control equipment shall be operated at all times while this process is operational. In the event of scheduled maintenance, unscheduled maintenance, or a breakdown of the pollution control equipment, the process shall be shut down as expeditiously as possible (unless this act and subsequent re-start would clearly cause greater emissions than continuing operations of the process for a short period). The Department shall be notified of all such events **that exceed 1 hour** within 24 hours. The notification shall include all pertinent facts, including the duration of the process operating without the control device and the level of excess emissions which have occurred. Records of all such events, regardless of reporting requirements, shall be made and maintained for a period of five years. These records shall be available for inspection.
7. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained, and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires, and the application is canceled if construction has not begun within 24 months of the date of issuance of the permit.

**Permit Number: 711-0002-X015**

9. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.
10. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written test results are to be reported to the Department within 15 working days of completion of testing.

Particulates	(X)	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	( )
Volatile Organic Compounds	( )	Visible Emissions	(X)
11. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
12. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
13. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
14. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
15. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations. To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:
  - (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.



**Permit Number: 711-0002-X015**

- (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
- (c) A description of the processes to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.
- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

16. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

**Permit Number: 711-0002-X015**

17. The bucket elevator shall be enclosed and sealed. The dryer shall be hooded at the feed and sealed at the burner end. Dust emissions created by the operation of the dryer shall be exhausted through the ducts and the control system by an enclosed fan. Dust emissions shall not be allowed to escape from enclosures or through seals due to holes or cracks in the enclosures or seals or due to inadequate or poor draft caused by leaks, blockages, or fan malfunctioning. Holes or cracks in enclosures or seals and/or inadequate or poor draft, which allow dust emissions to escape the enclosures and/or seals, must be promptly repaired.
18. A properly maintained and operated device shall be utilized to measure the pressure differential across the baghouse.
19. Upon completion of construction, this facility shall not burn more than 1,800,000 gallons of oil during any consecutive twelve (12) month period with a sulfur content no greater than 0.7% as measured by procedures found in ASTM D129-64 (Reapproved 1978). The fuel oil sample to be tested for sulfur content shall be collected in accordance with ASTM D4177-82 or ASTM D4057-81. Records of oil usage and sulfur content must be kept in permanent form suitable for inspection. The records shall be retained for at least five years and made available upon request.
20. This facility is authorized to burn natural gas or used fuel oil with an ash content not to exceed 1.0 %, as measured by procedures found in ASTM D-482. Records of ash content must be kept in permanent form suitable for inspection. The records shall be retained for five (5) years and made available upon request.
21. Should this facility, at any time, exceed the limits set forth in this permit, this Department must be notified within ten (10) days of the exceedance.
22. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.
23. If this plant relocates to another site, this plant's Air Permit remains valid for this site unless or until it is revoked for failure to comply with ADEM Air Division Rules and Regulations. The owner or operator of this plant must provide written notification of the intent to relocate the plant to this site at least two weeks in advance. The written notification should include the planned construction beginning date and the projected startup date. Failure to provide this written notification is a violation of this permit condition and is grounds for revocation of this permit.
24. This facility is subject to New Source Performance Standards (NSPS), Subpart I, Standards of Performance for Hot Mix Asphalt Facilities. This limits particulate emissions to 0.04 grains per dry standard cubic foot and visible emissions to 20% opacity.

**Permit Number: 711-0002-X015**

25. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
26. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
27. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.
28. This facility is limited to the use of Natural Gas or fuel oil to fire the burner. Any plans to change the type of burner fuel must receive prior approval from this office.
29. This facility is limited to 4,200 hours of operation during any consecutive twelve (12) month period (12-month rolling average). Recordkeeping is required for the hours of operation. Records shall be kept on the facility site, either in a handwritten logbook or in an electronic version suitable for inspection upon request by Air Division inspectors and will be retained for at least five (5) years following the date of generation.
30. The permittee shall submit an annual report by March 15<sup>th</sup> of each calendar year that provides each monthly and 12-month rolling average total of hours of operation and fuel oil usage, including the sulfur and ash content of the oil.

---

Date

## APPENDIX C

Date

Mr. Scott Langford  
C.A. Langford Company, Inc.  
2120 Warrenton Road  
Guntersville, AL 35976

Dear Mr. Langford:

**RE:        Facility No. 711-0002**  
             **Units X015, X016, X017**

The enclosed Synthetic Minor Operating Permits (SMOPs) are issued pursuant to the Department's air pollution control rules and regulations. Please note the conditions (provisions) which must be met in order to retain these Permits.

New sources of air pollution receiving approval by an Air Permit must notify the Chief of the Air Division upon completion of construction and prior to operation. Authorization to Operate must then be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division upon completion of construction and/or operation without authorization can result in the revocation of the Air Permit.

Upon receiving the enclosed Air Permits, please review **all** of the provisions.

Should you have any questions or if clarification of permit conditions is required, please do not hesitate to contact Emily Williams at (334) 270-5681 in Montgomery.

Sincerely,

Aubrey H. White III, Chief  
Air Division

AHW/ew

Enclosures

# Synthetic Minor Operating Permit

**PERMITTEE:** C.A. LANGFORD COMPANY, INC.  
**FACILITY NAME:** GUNTERSVILLE QUARRY  
**LOCATION:** GUNTERSVILLE, ALABAMA

<b>PERMIT NUMBER</b>	<b>DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE</b>
711-0002-X015	X015-120 TPH Asphalt Batch Plant with Baghouse (NSPS-I)

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

**ISSUANCE DATE:**

# Synthetic Minor Operating Permit

**PERMITTEE:** C.A. LANGFORD COMPANY, INC.  
**FACILITY NAME:** GUNTERSVILLE QUARRY  
**LOCATION:** GUNTERSVILLE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
711-0002-X016	500 TPH Portable Track Trommel with Wet Suppression (NSPS-OOO); Including One 134 Hp CAT Engine and One 133 Hp John Deere Engine (NSPS-III)

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

**ISSUANCE DATE:**

## Synthetic Minor Operating Permit

**PERMITTEE:** C.A. LANGFORD COMPANY, INC.  
**FACILITY NAME:** GUNTERSVILLE QUARRY  
**LOCATION:** GUNTERSVILLE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
711-0002-X017	700 TPH Primary and 400 TPH Secondary Crushing, Screening, and Conveying Circuit with Wet Suppression (NSPS-OOO); Including One 375 Hp CAT Engine and One 100 Hp CAT Engine (NSPS-III)

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

**ISSUANCE DATE:**