

*SPECTRUM ENERGY GEORGIA LLC
ADEL, GEORGIA OPERATIONS*

***GREENFIELD WOOD PELLET MILL
CONSTRUCTION (SIP) PERMIT APPLICATION***

*801 COOK STREET
ADEL, GEORGIA 31620
COOK COUNTY*

OCTOBER 2021

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1.0 INTRODUCTION AND PURPOSE

Spectrum Energy Georgia LLC proposes to construct and operate a greenfield wood pellet manufacturing facility located at 801 Cook Street, Adel, Georgia 31620 (Cook County). A site location map is provided in Appendix A. Appendix B provides a plot plan and a tentative site layout. The applicant herein seeks agency authorization to construct and operate the site in accordance with Georgia Rules for Air Quality Control (GRAQC) 391391-3-1-.03(1) and (2). The application narrative that follows is presented in the following format:

- **Introduction and Purpose (Section 1);**
- **Process Description (Section 2);**
- **Emission Calculations (Section 3);**
- **Emission Limits (Section 4); and**
- **Permitting Requirements (Section 5)**

The requisite air toxics dispersion modeling assessment has been submitted under separate cover. The following appendices are offered in support of the forgoing narrative elements:

Appendix A	Site Location Map
Appendix B	Facility Diagrams
Appendix C	Process Flow Diagrams
Appendix D	Emission Calculations
Appendix E	Regulatory Review
Appendix F	Forms

2.0 PROCESS DESCRIPTION

Process flow diagrams are provided in Appendix C. Plant operations will comprise the following eight (8) general process areas and will be constructed in two (2) phases:

P1	Fiber Handling/Storage
P2	Drying
P3	Dry Wood Silos
P4	Hammermills
P5	Pellet Mills/Coolers
P6	Pellet Handling/Storage
P7	Boiler Operations
P8	Miscellaneous Dust Collection

- Phase 1 will utilize four (4) dryers and associated wood-fired burners, two (2) dry wood silos, two (2) hammermills, sixteen (16) pellet mills, and two (2) pellet coolers to produce 600,000 short tons of finished pellets per year. Burner/dryer emissions will be controlled with wet electrostatic precipitators (WESP) followed by a biofilter. All dry wood silo, hammermill, pellet mill, and pellet cooler emissions will be controlled by fabric filters followed by the biofilter.
- Phase 2 will utilize two (2) dryers and associated wood-fired burners, two (2) dry wood silos, six (6) hammermills, thirty-two (32) pellet mills, and four (4) pellet coolers to produce 1,320,000 short tons of finished pellets per year. Burner/dryer emissions will be controlled with wet electrostatic precipitators (WESP) followed by a regenerative thermal oxidizer (RTO). All dry wood silo, hammermill, pellet mill, and pellet cooler emissions will be controlled by a fabric filters followed by the biofilter. The Phase 1 burners and dryers will be retired at the commencement of the Phase 2 operations.
- The proposed biofilter will be equipped with a continuous emission monitor (CEM) for volatile organic compounds (VOC). Both phases will be supported by various raw material handling and storage operations, finished pellet handling and storage operations, a natural gas-fired boiler, and miscellaneous dust control equipment.

3.0 EMISSION CALCULATIONS

Emission calculations are provided in Appendix D. Air emissions include oxides of nitrogen (NOX), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter less than 10 microns in aerodynamic diameter (PM₁₀), particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}), VOC, and hazardous air pollutants (HAP). For the sake of brevity and clarity all particulate matter is assumed to be PM₁₀ and PM_{2.5}. The site-wide potential to emit is based on the unrestricted, maximum potential throughput of all operations under its respective physical and operational design at 8,760 hours of operation. Standard Georgia EPD emission factors have been utilized, supplemented as needed with additional stack test results. Based on these calculations, the proposed operations will be a “minor” source with respect to the New Source Review (NSR) program, a “major” source with respect to the Title V operating permit program, and “area” source with respect to the National Emission Standards for Hazardous air Pollutants (NESHAP) program.

4.0 EMISSION LIMITS

The proposed operations will be potentially subject to the emission limits under one or more of the following regulatory frameworks:

- New Source Performance Standards (NSPS) program codified at 40 CFR Part 60;
- The NESHAP program found at 40 CFR Parts 61 and 63; and
- GRAQC 391-3-1-.02(2) Emission Limitations and Standards.

4.1 NSPS

All Part 60 NSPS promulgated have been adopted by reference in GRAQC 391-3-1-.02(8) New Source Performance Standards. A review of the more salient NSPS is provided immediately below. A review of all potentially applicable NSPS is provided in Appendix E.

4.1.1 40 CFR 60, Subpart A

All operations subject to a category specific NSPS are also subject to the general provisions contained in 40 CFR Part 60, Subpart A [40 CFR 60.1]. The Subpart A general provisions include definitions [40 CFR 60.2], administrative items [40 CFR 60.3 and 60.4], applicability assistance [40 CFR 60.5 and 60.6], notification and recordkeeping provisions [40 CFR 60.7], testing requirements [40 CFR 60.8], monitoring requirements [40 CFR 60.13], control device and work practice requirements [40 CFR 60.18], and general reporting provisions [40 CFR 60.19].

4.1.2 40 CFR 60, Subpart Dc

40 CFR Part 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units potentially applies to each steam generating unit for which construction, modification, or reconstruction commences after June 9, 1989 and that has a maximum design heat input capacity between ten (10) and one hundred (100) million British thermal units per hour (MMBtu/hr). This regulation will apply to the proposed natural gas-fired boiler only.

4.2 NESHAP

All Part 61 and Part 63 NESHAP promulgated have been adopted by reference in GRAQC 391-3-1-.02(9) Emission Standards for Hazardous Air Pollutants. A review of

the more salient NESHAP is provided immediately below. A review of all potentially applicable NESHAP is provided in Appendix E.

4.2.1 40 CFR 63, Subpart A

All operations subject to a category specific NESHAP are also subject to the general provisions contained in 40 CFR Part 63, Subpart A [40 CFR 63.1]. The NESHAP Subpart A general provisions include definitions [40 CFR 63.2], preconstruction review requirements [40 CFR 63.5], testing provisions [40 CFR 63.7], monitoring requirements [40 CFR 63.8], notification requirements [40 CFR 63.9], recordkeeping and reporting provisions [40 CFR 63.10], and control device and work practice requirements [40 CFR 63.11].

4.2.2 40 CFR 63, Subpart JJJJJ

40 CFR Part 63 Subpart JJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources potentially applies to any industrial, commercial, or institutional boiler at area sources of HAP. However, per 40 CFR 63.11195(3), all natural gas-fired boilers at areas source of HAP are wholly exempt. Accordingly, Subpart JJJJJ will not apply.

4.3 GRAQC 391-3-1-.02(2)

In addition to the NSPS and NESHAP noted above, the proposed operations may also be subject to various emission limits noted in GRAQC 391-3-1-.02(2) Emission Limitations and Standards. A review of the more salient GRAQC is provided immediately below. A review of all potentially applicable GRAQC is provided in Appendix E.

4.3.1 GRAQC 391-3-1-.02(2)(b)

GRAQC 391-3-1-.02(2)(b) governs visible emissions and provides no person shall cause, let, suffer, permit, or allow emissions from any source the opacity of which is equal to or greater than forty (40) percent.

4.3.2 GRAQC 391-3-1-.02(2)(d)

GRAQC 391-3-1-.02(2)(d) limits PM emissions from fuel-burning equipment to not more than:

$$P = 0.7 * (10 / R)^{0.202}$$

where P equals the allowable emission rate (lb/MMBtu) and R equals the heat input rate (MMBtu/hr). In addition, GRAQC 391-3-1-.02(2)(b) limits exhaust gas opacities to 20% except for one six-minute period of 27%.

4.3.3 GRAQC 391-3-1-.02(2)(e)

GRAQC 391-3-1-.02(2)(d) governs particulate emissions from manufacturing operations and restricts particulate emissions to not more than the emission rate noted by the following:

$$\begin{array}{ll} \text{For process rates} < 30 \text{ tons per hour:} & E = 4.1P^{0.67} \\ \text{For process rates} > 30 \text{ tons per hour:} & E = 55P^{0.11} - 40 \end{array}$$

where E equals the allowable emission rate (lb/hr) and P equals the process rate (ton/hr).

4.3.4 GRAQC 391-3-1-.02(2)(g)

GRAQC 391-3-1-.02(2)(g) governs SO₂ emissions from fuel combustion operations and provides that applicable sources below 100 MMBtu/hr heat input shall not burn fuel containing more than 2.5 percent sulfur measured by weight.

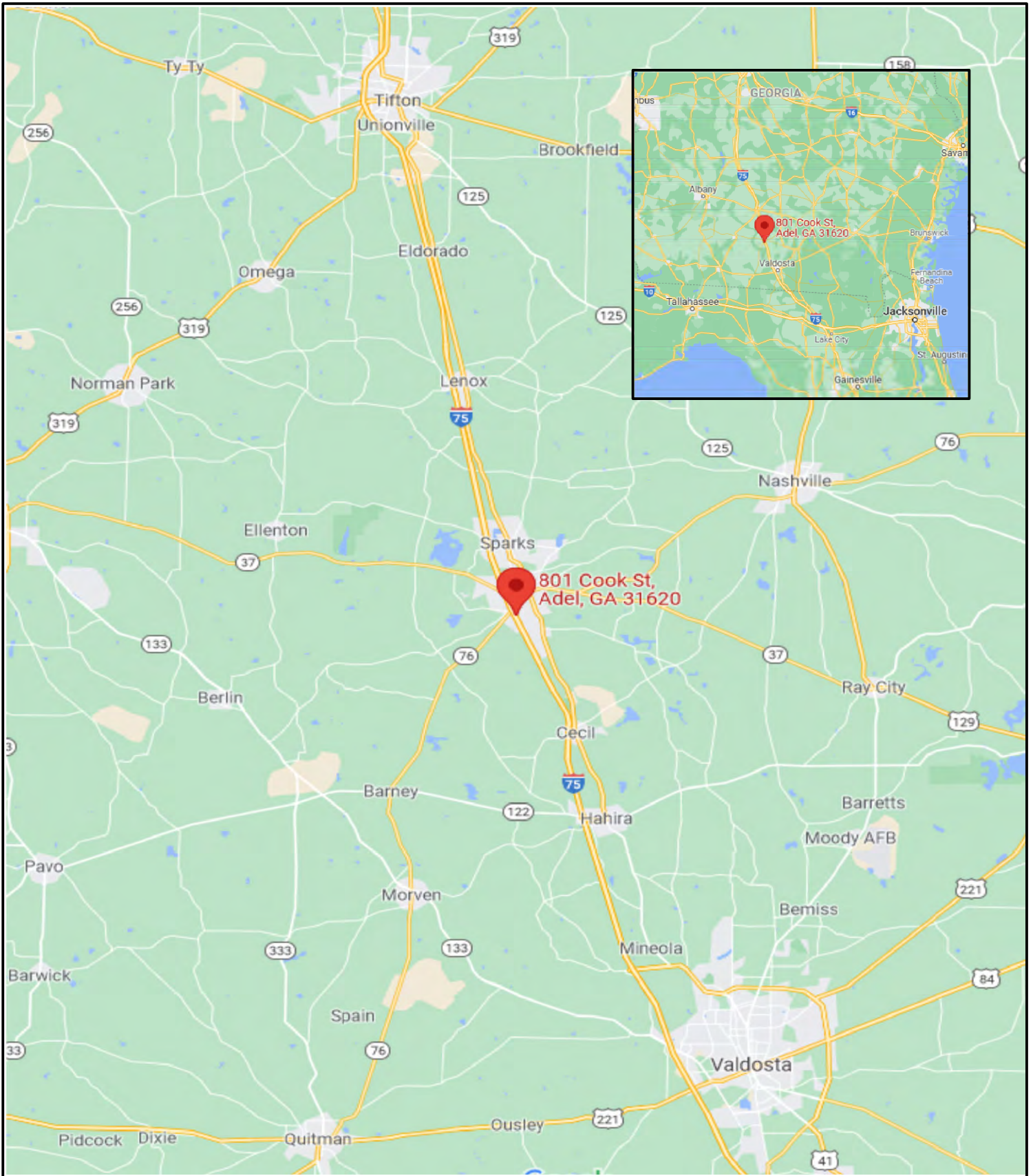
4.3.5 GRAQC 391-3-1-.02(2)(n)

GRAQC 391-3-1-.02(2)(n) governs fugitive dust and requires all persons responsible for any operation, process, handling, transportation or storage facility which may result in fugitive dust to take all reasonable precautions to prevent such dust from becoming airborne. GRAQC 391-3-1-.02(2)(n)(2) also limits the percent opacity from any fugitive dust source to less than 20 percent.

5.0 PERMITTING REQUIREMENTS

The proposed operations will be located in Cook County, an area currently classified as “attainment” or “unclassifiable” for all criteria pollutants. The proposed operations will be a “minor” source with respect to the NSR program, a “major” source with respect to the Title V operating permit program, and “area” source with respect to the NESHAP programs. The applicant herein seeks agency authorization to construct and operate the site in accordance with GRAQC 391391-3-1-.03(1) and (2). Completed (SIP) construction permit forms are provided in Appendix F. For the sake of clarity the applicant requests that two (2) separate construction permits be issued, one for each phase. A Title V operating permit application will be due no later than one (1) year after startup.

APPENDIX A
SITE LOCATION MAP



**SPECTRUM ENERGY
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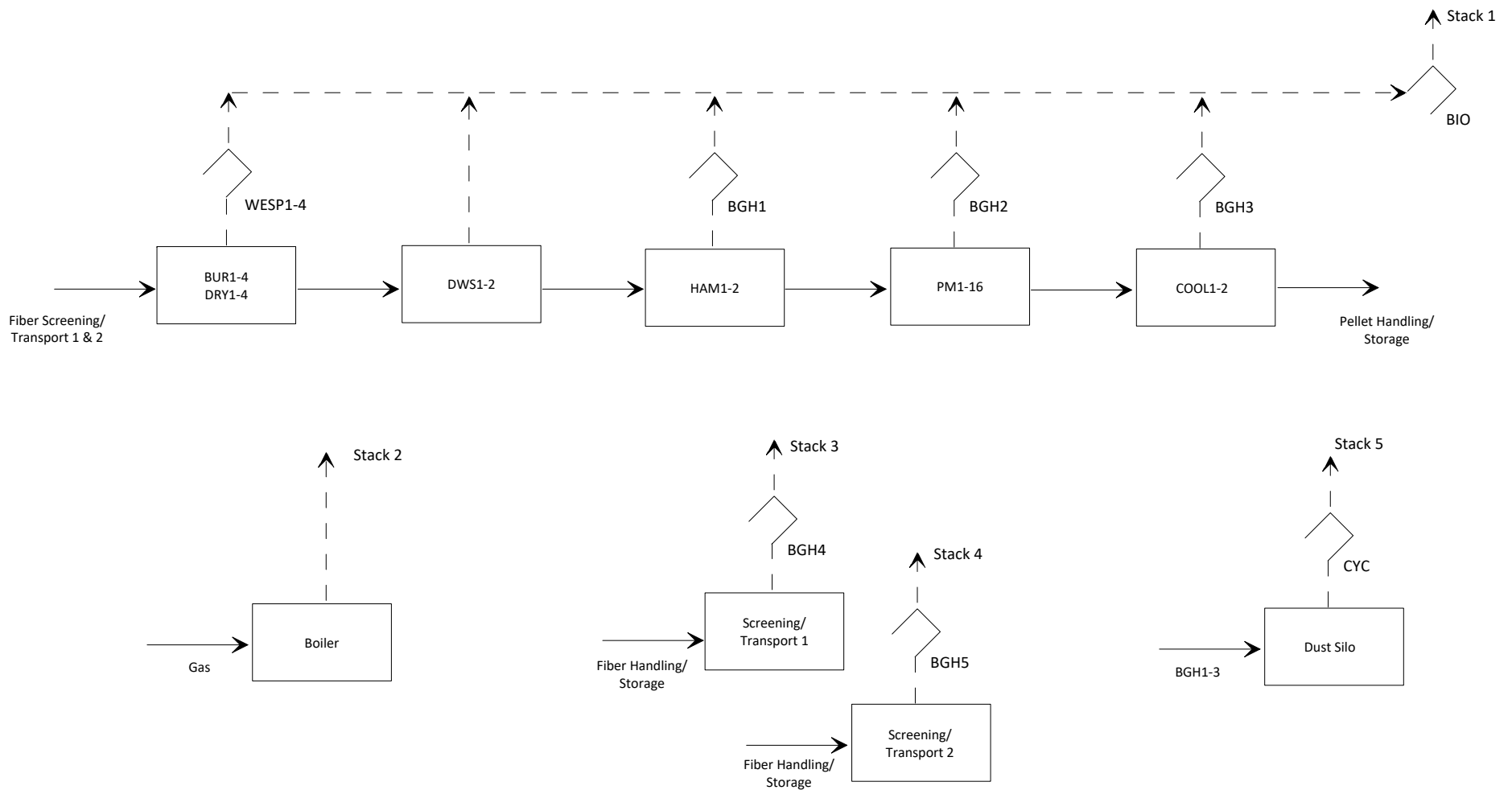
Site Location Map

801 COOK STREET
ADEL, GEORGIA 31620
COOK COUNTY

APPENDIX B
FACILITY DIAGRAMS

APPENDIX C
PROCESS FLOW DIAGRAMS

PHASE 1

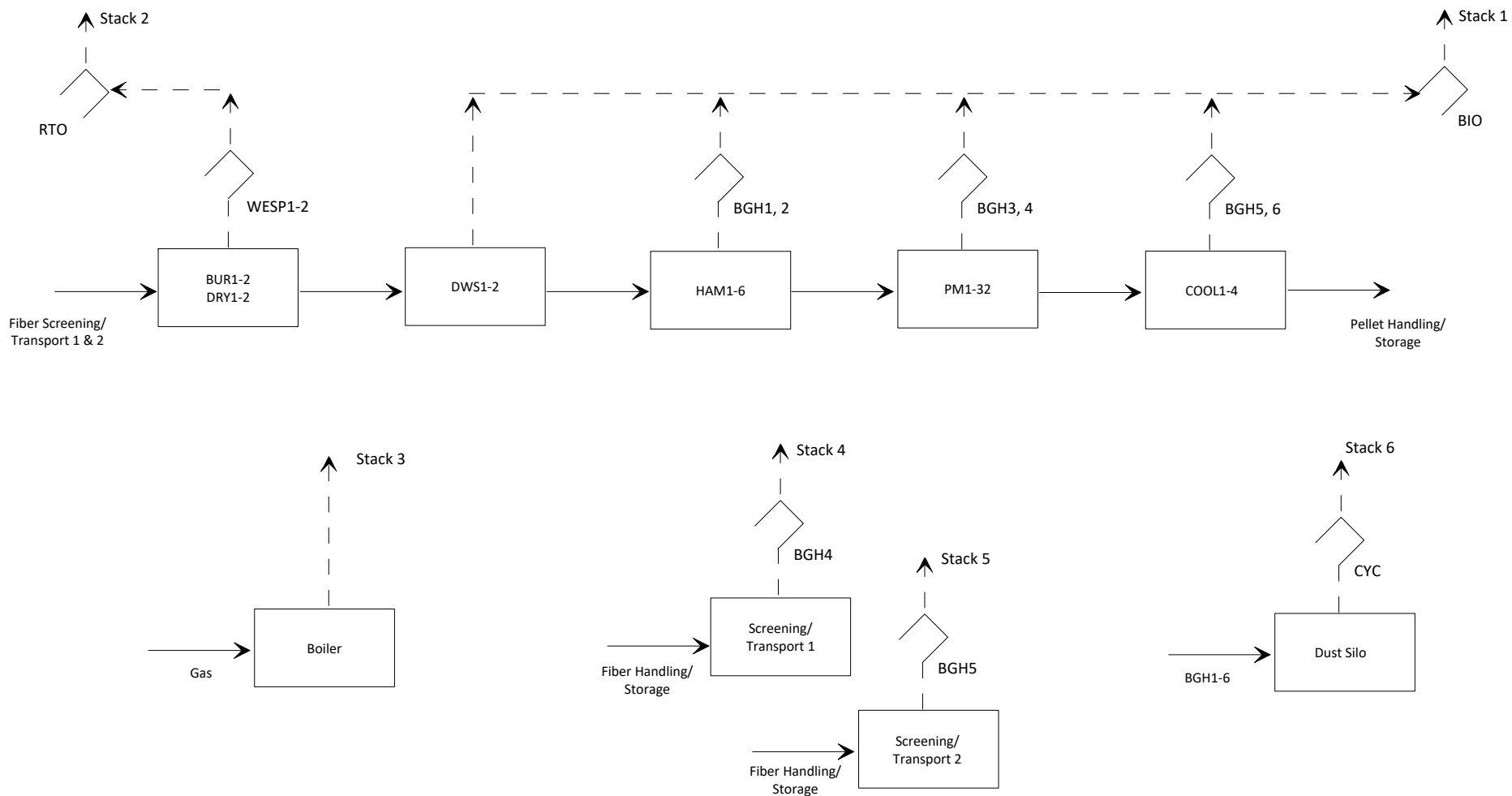


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**Figure 2
Process Flow Diagram - PHASE 1**

801 COOK STREET
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PHASE 2



**SPECTRUM ENERGY
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**Figure 2
Process Flow Diagram - PHASE 2**

801 COOK STREET
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COOK COUNTY

APPENDIX D
EMISSIONS ESTIMATES

PHASE 1

Spectrum Energy Georgia LLC
Appendix D - Calculations v5.xlsx
Phase 1 Calculations

Table 1. Fiber Handling and Storage

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P1	--	--	FUG	DUMP1-2 SHRED ROADS PILES	1,200,000 ST 250 VMT 2.5 acres	PM10/2.5	0.012	--	--	lb/ST	--	7.20	[1]
							5			lb/VMT	--	0.63	[3]
							4.39			lb/acre-day	--	2.01	[4]
							VOC (as C3)			4.40	--	2.01	

[1] https://www.epa.gov/sites/default/files/2016-09/documents/smppteef_memo.pdf. Assumes all PM10 equals PM2.5.
 [2] Assumed to be equal to CHIP emission factor.
 [3] <https://www3.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf>
 [4] NCASI Technical Bulletin 700.

Table 2. Drying

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes			
P2.1	WESP1-4	BIO	S1	BUR1-4 DRY1-4	600,000 ODT	NOX	0.194	--	--	lb/MMBtu	--	127	[1]			
						CO	0.194				--	127				
						SO2	0.025				--	16.4				
						PM10/2.5	160,000 cfm				--	0.0085	gr/cf	11.7	51.1	[2]
						VOC (as C3)	6				--	0.5	--	144		
						ACET	0.11				92%	8.80E-03	--	2.64		
						HCHO	0.14					1.12E-02	--	3.36	[3]	
						MEOH	0.11					8.80E-03	--	2.64		
						O_HAP	0.19					1.52E-02	lb/ODT	--	4.56	
						ACRO	6.41E-03					5.13E-04	--	0.15		
						PHEN	8.47E-03					6.78E-04	--	0.20		
						PROP	2.06E-03					1.65E-04	--	0.05	[4]	
HCl	0.012	70%	3.73E-03	--	1.12											

[1] Vendor estimate for NOX and CO. AP-42, Table 1.6-2 for SO2. Emissions based on 150 MMBtu/hr maximum overall BUR1-4 heat input rate.
 [2] Estimated grain loading. Includes filterable and condensable.
 [3] Georgia EPD recommended VOC and HAP emission factors.
 [4] Jasper Pellets DHEC test report summary dated August 10, 2021.

Table 3. Dry Wood Silos

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes	
P3.1	BGH1	BIO	S1	DWS1-2	600,000 ST	PM10/2.5	45,000 cfm	--	0.0085	gr/cf	3.28	14.4	[2]	
						VOC (as C3)	0.315				0.025	--	7.56	
						ACET	5.90E-04				4.72E-05	--	0.01	
						HCHO	8.85E-05				7.08E-06	--	0.00	
						MEOH	2.65E-03				2.12E-04	lb/ST	--	0.06
						ACRO	2.65E-03				2.12E-04	--	0.06	
						PHEN	2.65E-03				2.12E-04	--	0.06	
						PROP	2.65E-03				2.12E-04	--	0.06	

[1] Estimated grain loading. Includes filterable and condensable.
 [2] HWP dry chip silo testing 7/20/2021: VOC = 10.68 lb/hr at 33.9 ton/hr = 0.315 lb/ton; ACET = 0.02 lb/hr at 33.9 ton/hr = 5.90E-4 lb/ton
 HCHO = 0.003 lb/hr at 33.9 ton/hr = 8.85E-5 lb/ton; MeOH = 0.09 lb/hr at 33.9 ton/hr = 2.65E-3 lb/ton
 [3] Assumed equal to MeOH factor.

Table 4. Hammermills

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes	
P4.1	BGH1	BIO	S1	HAM1-2	600,000 ST	PM10/2.5	20,000 cfm	--	0.0085	gr/cf	1.46	6.38	[2]	
						VOC (as C3)	2.5				0.20	--		60.0
						ACET	0.004				3.20E-04	--	0.10	
						HCHO	0.008				6.40E-04	--	0.19	
						MEOH	0.004				3.20E-04	lb/ST	--	0.10
						ACRO	1.80E-03				1.44E-04	--	0.04	
						PHEN	3.30E-03				2.64E-04	--	0.08	
						PROP	3.60E-04				2.88E-05	--	0.01	

[1] Estimated grain loading. Includes filterable and condensable.
 [2] Georgia EPD recommended VOC and HAP emission factors.
 [3] Jasper Pellets DHEC test report summary dated August 10, 2021.

Spectrum Energy Georgia LLC
Appendix D - Calculations v5.xlsx
Phase 1 Calculations

Table 5. Pellet Mills/Coolers

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P5.1	BGH2-3	BIO	S1	PM1-16 COOL1-2	600,000 ST	PM10/2.5	120,000 cfm	--	0.0085	gr/cf	8.74	38.3	[2]
						VOC (as C3)	0.5		0.04		--	12.0	
						ACET	0.001		8.00E-05		--	0.02	
						HCHO	0.002		1.60E-04		--	0.05	
						MEOH	0.001	92%	8.00E-05	lb/ST	--	0.02	
						ACRO	7.77E-03		6.22E-04		--	0.19	
						PHEN	2.97E-03		2.38E-04		--	0.07	[3]
						PROP	6.20E-04		4.96E-05		--	0.01	

[1] Estimated grain loading. Includes filterable and condensable.

[2] Georgia EPD recommended VOC and HAP emission factors.

[3] Jasper Pellets DHEC test report summary dated August 10, 2021.

Table 6. Pellet Handling/Storage

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes	
P6.1	--	--	--	SILO1-8	600,000 ST	PM10/2.5	5,000 cfm	--	0.0085	gr/cf	0.36	1.60	[1]	
						VOC (as C3)	0.003				--	0.87		
						ACET	4.85E-05		--	--	lb/ST	--	0.01	[2]
						HCHO	4.85E-05		--	--	lb/ST	--	0.01	
						MEOH	2.43E-04		--	--	lb/ST	--	0.07	

[1] Estimated grain loading. Includes filterable and condensable.

[2] ACP finished pellet silo testing 1/21/2021: VOC = 0.120 lb/hr at 41.2 ton/hr = 0.003 lb/ton; ACET = 0.002 lb/hr at 41.2 ton/hr = 4.85E-5 lb/ton
HCHO = 0.002 lb/hr at 41.2 ton/hr = 4.85E-5 lb/ton; MeOH = 0.010 lb/hr at 41.2 ton/hr = 2.43E-4 lb/ton

Table 7. NG Boiler

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes	
P7	--	--	S2	BLR	25 MMBtu/hr	NOX	0.1					--	11.0	
						CO	0.084				--	9.20		
						SO2	0.0006		--	--	lb/MMBtu	--	0.07	[1]
						PM10/2.5	0.0076		--	--	lb/MMBtu	0.19	0.83	
						VOC (as C3)	0.0055		--	--	lb/MMBtu	--	0.60	

[1] AP-42, Tables 1.6-1 and 1.6-2 for all pollutants.

Table 8. Miscellaneous Dust Collection

Process	PM Control	VOC/HAP Control	Stack	Source	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P8	BGH4	--	S3	Sizing/Screening/Transport 1	40,000 cfm				2.91	12.8	
				Sizing/Screening/Transport 2	40,000 cfm	--	0.0085	gr/cf	2.91	12.8	[1]
				Fuel Dust Cyclone	15,000 cfm				1.09	4.79	

[1] Estimated grain loading. Includes filterable and condensable.

Table 9. Emission Totals

Pollutant	Type	Value	Limit	Units
NOX	Point	138	250	tpy
CO	Point	137	250	
SO2	Point	16.5	250	
PM10/2.5	FUG	17.0	--	
PM10/2.5	Point	143	250	
VOC	FUG	2.01	--	
VOC	Point/C3	225	--	
VOC	Point/WPP1	234	250	
T_HAP	Point	16.0	25	
ACET	Point	2.79	10	
HCHO	Point	3.62	10	
MEOH	Point	2.90	10	
O_HAP	Point	4.56	--	
ACRO	Point	0.45	10	
PHEN	Point	0.42	10	
PROP	Point	0.14	10	
HCl	Point	1.12	10	

PHASE 2

Spectrum Energy Georgia LLC
Appendix D - Calculations v5.xlsx
Phase 2 Calculations

Table 1. Fiber Handling and Storage

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P1	--	--	N/A	LOG	2,640,000 ST	PM10/2.5	0.012	--	--	lb/ST	--	15.8	[1]
				DBRK1-2							--	15.8	
				CHIP1-2							--	15.8	
				DUMP1-3							--	15.8	
				SHRED1-3	500 VMT	5	--	15.8	[2]				
				ROAD			4.39	--	1.25	[3]			
				PILE			5 acres	4.40	--	4.02	[4]		
					VOC (as C3)	4.40			lb/acre-day	--	4.02		

[1] https://www.epa.gov/sites/default/files/2016-09/documents/smpmteef_memo.pdf. Assumes all PM10 equals PM2.5.

[2] Conservatively assumed to be equal to CHIP emission factor.

[3] <https://www3.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf>

[4] NCASI Technical Bulletin 700.

Table 2. Drying

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes					
P2.2	WESP1-2	RTO	S1	BUR1-2 DRY1-2	1,320,000 ODT	NOX	0.194	--	--	lb/MMBtu	--	238	[1]					
						CO	0.194				--	238						
						SO2	0.025				--	30.7						
											PM10/2.5	340,000 cfm	--	0.0085	gr/cf	24.8	108	[2]
											VOC (as C3)	6		0.1		--	79.2	
											ACET	0.11	98%	2.20E-03		--	1.45	[3]
											HCHO	0.14		2.80E-03		--	1.85	
											MEOH	0.11		2.20E-03		--	1.45	
											O_HAP	0.19		3.80E-03	lb/ODT	--	2.51	
											ACRO	6.41E-03		1.28E-04		--	0.08	
											PHEN	8.47E-03		1.69E-04		--	0.11	
					PROP	2.06E-03	4.12E-05		--	0.03								
					HCl	0.012	70%	3.73E-03		--	2.46	[4]						

[1] Vendor estimate for NOX and CO. AP-42, Table 1.6-2 for SO2. Emissions based on 280 MMBtu/hr maximum overall BUR1-2/RTO heat input.

[2] Estimated grain loading. Includes filterable and condensable PM.

[3] Georgia EPD recommended VOC and HAP emission factors.

[4] Jasper Pellets DHEC test report summary dated August 10, 2021.

Table 3. Dry Wood Silos

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P3	BGH1-2	BIO	S2	DWS1-2	1,320,000 ST	PM10/2.5	30,000 cfm	--	0.0085	gr/cf	2.19	9.57	[1]
						VOC (as C3)	0.315		0.022		--	14.6	
						ACET	5.90E-04	93%	4.13E-05		--	0.03	
						HCHO	8.85E-05		6.19E-06		--	0.00	
						MEOH	2.65E-03		1.86E-04	lb/ST	--	0.12	
						ACRO	2.65E-03		1.86E-04		--	0.12	
						PHEN	2.65E-03		1.86E-04		--	0.12	
PROP	2.65E-03	1.86E-04		--	0.12								

[1] Estimated grain loading. Includes filterable and condensable PM.

[2] HWP dry chip silo testing 7/20/2021: VOC = 10.68 lb/hr at 33.9 ton/hr = 0.315 lb/ton; ACET = 0.02 lb/hr at 33.9 ton/hr = 5.90E-4 lb/ton

HCHO = 0.003 lb/hr at 33.9 ton/hr = 8.85E-5 lb/ton; MeOH = 0.09 lb/hr at 33.9 ton/hr = 2.65E-3 lb/ton

[3] Assumed equal to MeOH factor.

Table 4. Hammermills

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P4.2	BGH1-2	BIO	S2	HAM1-6	1,320,000 ST	PM10/2.5	60,000 cfm	--	0.0085	gr/cf	4.37	19.1	[1]
						VOC (as C3)	2.5		0.175		--	116	
						ACET	0.004	93%	2.80E-04		--	0.18	
						HCHO	0.008		5.60E-04		--	0.37	
						MEOH	0.004		2.80E-04	lb/ST	--	0.18	
						ACRO	1.80E-03		1.26E-04		--	0.08	
						PHEN	3.30E-03		2.31E-04		--	0.15	
PROP	3.60E-04	2.52E-05		--	0.02								

[1] Estimated grain loading. Includes filterable and condensable PM.

[2] Georgia EPD recommended VOC and HAP emission factors.

[3] Jasper Pellets DHEC test report summary dated August 10, 2021.

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Appendix D - Calculations v5.xlsx
Phase 2 Calculations

Table 5. Pellet Mills + Coolers

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P5.2	BGH3-6	BIO	S2	PM1-32 COOL1-4	1,320,000 ST	PM10/2.5	240,000 cfm	--	0.0085	gr/cf	17.5	76.6	[1]
						VOC (as C3)	0.5	--	0.035	--	23.1		
						ACET	0.001	--	7.00E-05	--	0.05	[2]	
						HCHO	0.002	--	1.40E-04	--	0.09		
						MEOH	0.001	93%	7.00E-05	lb/ST	--	0.05	
						ACRO	7.77E-03	--	5.44E-04	--	0.36		
						PHEN	2.97E-03	--	2.08E-04	--	0.14	[3]	
						PROP	6.20E-04	--	4.34E-05	--	0.03		

[1] Estimated grain loading. Includes filterable and condensable PM.

[2] Georgia EPD recommended VOC and HAP emission factors.

[3] Jasper Pellets DHEC test report summary dated August 10, 2021.

Table 6. Pellet Handling/Storage

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P6.2	--	--	--	SILO1-16	1,320,000 ST	PM10/2.5	10,000 cfm	--	0.0085	gr/cf	0.73	3.19	[1]
						VOC (as C3)	0.003	--	--	1.92			
						ACET	4.85E-05	--	--	0.03	[2]		
						HCHO	4.85E-05	--	--	0.03			
						MEOH	2.43E-04	--	--	0.16			

[1] Estimated grain loading. Includes filterable and condensable PM.

[2] ACP finished pellet silo testing 1/21/2021: VOC = 0.120 lb/hr at 41.2 ton/hr = 0.003 lb/ton; ACET = 0.002 lb/hr at 41.2 ton/hr = 4.85E-5 lb/ton
HCHO = 0.002 lb/hr at 41.2 ton/hr = 4.85E-5 lb/ton; MeOH = 0.010 lb/hr at 41.2 ton/hr = 2.43E-4 lb/ton

Table 7. NG Boiler

Process	PM Control	VOC/HAP Control	Stack	Source	Design Basis	Pollutant	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P7	--	--	S3	BLR	25 MMBtu/hr	NOX	0.1	--	--	lb/MMBtu	--	11.0	
						CO	0.084	--	--	9.20			
						SO2	0.0006	--	--	0.07	[1]		
						PM10/2.5	0.0076	--	--	0.19			
						VOC (as C3)	0.0055	--	--	0.60			

[1] AP-42, Tables 1.6-1 and 1.6-2 for all pollutants.

Table 8. Miscellaneous Dust Collection

Process	PM Control	VOC/HAP Control	Stack	Source	Factor	Control	Control Factor	Units	Emissions (lb/hr)	Emissions (tpy)	Notes
P8	BGH7	--	S4	Shredding/Screening/Transport 1	40,000 cfm	--	0.0085	gr/cf	2.91	12.8	
				Shredding/Screening/Transport 2	40,000 cfm	--	0.0085	gr/cf	2.91	12.8	[1]
				Fuel Dust Cyclone	15,000 cfm	--	0.0085	gr/cf	1.09	4.79	

[1] Estimated grain loading. Includes filterable and condensable.

Table 7. Emission Totals

Pollutant	Type	Value	Limit	Units
NOX	Point	249	250	tpy
CO	Point	247	250	
SO2	Point	30.7	250	
PM10/2.5	FUG	84.5	--	
PM10/2.5	Point	248	250	
VOC	FUG	4.02	--	
VOC	Point/C3	235	--	
VOC	Point/WPP1	241	250	
T_HAP	Point	12.4	25	
ACET	Point	1.74	10	
HCHO	Point	2.35	10	
MEOH	Point	1.97	10	
O_HAP	Point	2.51	--	
ACRO	Point	0.65	10	
PHEN	Point	0.52	10	
PROP	Point	0.20	10	
HCl	Point	2.46	10	

APPENDIX E
REGULATORY REVIEW

Table E1 - 40 CFR Part 60 New Source Performance Standards (NSPS)

Subpart	Description	Applicability
Subpart A	General Provisions	Applicable
Subpart B	Adoption and Submittal of State Plans for Designated Facilities	Not applicable
Subpart C1	Emission Guidelines and Compliance Times	Not applicable
Subpart Ca	Reserved	N/A
Subpart Cb	Emission Guidelines and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995	Not applicable
Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	Not applicable
Subpart Cd	Emission Guidelines and Compliance Times for Sulfuric Acid Production Units	Not applicable
Subpart Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	Not applicable
Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced After August 17, 1971	Not applicable
Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978	Not applicable
Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Not applicable
Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Applicable
Subpart E	Standards of Performance for Incinerators	Not applicable
Subpart Ea	Standards of Performance for Municipal Waste Combustors for Which Construction Commenced After December 20, 1989	Not applicable
Subpart Eb	Standards of Performance for Municipal Waste Combustors for Which Construction Commenced After September 20, 1994	Not applicable
Subpart Ec	Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction Commenced After June 20, 1996	Not applicable
Subpart F	Standards of Performance for Portland Cement Plants	Not applicable
Subpart G	Standards of Performance for Nitric Acid Plants	Not applicable
Subpart H	Standards of Performance for Sulfuric Acid Plants	Not applicable
Subpart I	Standards of Performance for Hot Mix Asphalt Facilities	Not applicable
Subpart J	Standards of Performance for Petroleum Refineries	Not applicable
Subpart Ja	Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	Not applicable
Subpart K	Standards of Performance for Storage Vessels (...) for Which Construction (...) Commenced After June 11, 1973, and Prior to May 19, 1978	Not applicable
Subpart Ka	Standards of Performance for Storage Vessels (...) for Which Construction (...) Commenced After May 18, 1978, and Prior to July 23, 1984	Not applicable
Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (...) for Which Construction (...) Commenced after July 23, 1984	Not applicable
Subpart L	Standards of Performance for Secondary Lead Smelters	Not applicable
Subpart M	Standards of Performance for Secondary Brass and Bronze Production Plants	Not applicable
Subpart N	Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for Which Construction Commenced After June 11, 1973	Not applicable
Subpart Na	Standards of Performance for Basic Oxygen Steelmaking Facilities for Which Construction Commenced After January 20, 1983	Not applicable
Subpart O	Standards of Performance for Sewage Treatment Plants	Not applicable
Subpart P	Standards of Performance for Primary Copper Smelters	Not applicable
Subpart Q	Standards of Performance for Primary Zinc Smelters	Not applicable
Subpart R	Standards of Performance for Primary Lead Smelters	Not applicable
Subpart S	Standards of Performance for Primary Aluminum Reduction Plants	Not applicable
Subpart T	Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants	Not applicable
Subpart U	Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants	Not applicable
Subpart V	Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants	Not applicable
Subpart W	Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants	Not applicable
Subpart X	Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	Not applicable
Subpart Y	Standards of Performance for Coal Preparation Plants	Not applicable
Subpart Z	Standards of Performance for Ferroalloy Production Facilities	Not applicable
Subpart AA	Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983	Not applicable
Subpart AA	Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	Not applicable
Subpart BB	Standards of Performance for Kraft Pulp Mills	Not applicable
Subpart CC	Standards of Performance for Glass Manufacturing Plants	Not applicable
Subpart DD	Standards of Performance for Grain Elevators	Not applicable
Subpart EE	Standards of Performance for Surface Coating of Metal Furniture	Not applicable
Subpart FF	Reserved	N/A
Subpart GG	Standards of Performance for Stationary Gas Turbines	Not applicable
Subpart HH	Standards of Performance for Lime Manufacturing Plants	Not applicable
Subpart KK	Standards of Performance for Lead-Acid Battery Manufacturing Plants	Not applicable
Subpart LL	Standards of Performance for Metallic Mineral Processing plants	Not applicable
Subpart MM	Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	Not applicable
Subpart NN	Standards of Performance for Phosphate Rock Plants	Not applicable
Subpart PP	Standards of Performance for Ammonium Sulfate Manufacture	Not applicable
Subpart QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	Not applicable
Subpart RR	Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations	Not applicable
Subpart SS	Standards of Performance for Industrial Surface Coating: Large Appliances	Not applicable
Subpart TT	Standards of Performance for Metal Coil Surface Coating	Not applicable
Subpart UU	Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture	Not applicable
Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	Not applicable
Subpart VV	Standards of Performance for Equipment Leaks of VOC in the SOCMII for Which Construction (...) Commenced After November 7, 2006	Not applicable
Subpart WW	Standards of Performance for the Beverage Can Surface Coating Industry	Not applicable
Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Not applicable
Subpart AAA	Standards of Performance for New Residential Wood Heaters	Not applicable
Subpart BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	Not applicable

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Appendix E - Reg Review.xlsx
Part 60 NSPS

Table E1 - 40 CFR Part 60 New Source Performance Standards (NSPS), cont.

Subpart	Description	Applicability
Subpart CCC	Reserved	N/A
Subpart DDD	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry	Not applicable
Subpart EEE	Reserved	N/A
Subpart FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	Not applicable
Subpart GGG	Standards of Performance for Equipment Leaks in Petroleum Refineries	Not applicable
Subpart GGG	Standards of Performance for Equipment Leaks in Petroleum Refineries for which Construction (...) Commenced After November 7, 2006	Not applicable
Subpart HHH	Standards of Performance for Synthetic Fiber Production Facilities	Not applicable
Subpart III	Standards of Performance for Volatile Organic Compound (VOC) Emissions From the SO2 Air Oxidation Unit Processes	Not applicable
Subpart JJJ	Standards of Performance for Petroleum Dry Cleaners	Not applicable
Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	Not applicable
Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions	Not applicable
Subpart MMM	Reserved	N/A
Subpart NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions From SO2 Distillation Operations	Not applicable
Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	N/A
Subpart PPP	Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants	Not applicable
Subpart QQQ	Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems	N/A
Subpart RRR	Standards of Performance for Volatile Organic Compound Emissions From SO2 Reactor Processes	Not applicable
Subpart SSS	Standards of Performance for Magnetic Tape Coating Facilities	Not applicable
Subpart TTT	Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	Not applicable
Subpart UUU	Standards of Performance for Calciners and Dryers in Mineral Industries	Not applicable
Subpart VVV	Standards of Performance for Polymeric Coating of Supporting Substrates Facilities	Not applicable
Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	Not applicable
Subpart AAAA	Standards of Performance for Small Municipal Waste Combustion Units for Which Commenced After August 30, 1999	Not applicable
Subpart BBBB	Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed On or Before August 30, 1999	Not applicable
Subpart CCCC	Standards of Performance for CISWI Units Which Construction Commenced After November 30, 1999	Not applicable
Subpart DDDD	Emission Guidelines and Compliance Times for CISWI Units that Commenced Construction On or Before November 30, 1999	Not applicable
Subpart EEEE	Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004	Not applicable
Subpart FFFF	Emission Guidelines for Other Solid Waste Incineration Units that Commenced Construction On or Before December 9, 2004	Not applicable
Reserved	Reserved	N/A
Subpart HHHH	Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units	Not applicable
Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Not applicable
Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Not applicable
Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	Not applicable
Subpart LLLL	Standards of Performance for New Sewage Sludge Incineration Units	Not applicable
Subpart MMMM	Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	Not applicable
Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution	Not applicable
Subpart PPPP	Reserved	N/A
Subpart QQQQ	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces	Not applicable
Subpart UUUU	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces	Not applicable
Subpart TTTT	Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units	Not applicable

Table E2 - 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Subpart	Description	Applicability
Subpart A	General Provisions	See below
Subpart B	National Emission Standards for Radon Emissions from Underground Uranium Mines	Not applicable
Subpart C	National Emission Standards for Beryllium	Not applicable
Subpart D	National Emission Standard for Beryllium Rocket Motor Firing	Not applicable
Subpart E	National Emission Standards for Mercury	Not applicable
Subpart F	National Emission Standards for Vinyl Chloride	Not applicable
Subpart G	Reserved	N/A
Subpart H	National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities	Not applicable
Subpart I	National Emission Standards for Radionuclide Emissions from Federal Other Than Nuclear Regulatory Commission Licensees	Not applicable
Subpart J	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene	Not applicable
Subpart K	National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants	Not applicable
Subpart L	National Emission Standards for Benzene Emissions from Coke By-Product Recovery Plants	Not applicable
Subpart M	National Emission Standards for Asbestos	Not applicable
Subpart N	National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants	Not applicable
Subpart O	National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters	Not applicable
Subpart P	National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities	Not applicable
Subpart Q	National Emission Standard for Radon Emissions from Department of Energy Facilities	Not applicable
Subpart R	National Emission Standard for Radon Emissions from Phosphogypsum Stacks	Not applicable
Subpart S	Reserved	N/A
Subpart T	National Emission Standards for Radon Emissions from the Disposal of Uranium Mill Tailings	Not applicable
Subpart U	Reserved	N/A
Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	Not applicable
Subpart W	National Emission Standards for Radon Emissions from Operating Mill Tailings	Not applicable
Subpart X	Reserved	N/A
Subpart Y	National Emission Standards for Benzene Emissions from Benzene Storage Vessels	Not applicable
Subparts Z	Reserved	N/A
Subparts AA	Reserved	N/A
Subpart BB	National Emission Standard for Benzene Emissions from Benzene Transfer Operations	Not applicable
Subparts CC	Reserved	N/A
Subparts DD	Reserved	N/A
Subparts EE	Reserved	N/A
Subpart FF	National Emission Standard for Benzene Waste Operations	Not applicable

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Appendix E - Reg Review.xlsx
Part 63 Major NESHAP

Table E3 - 40 CFR Part 63 Maximum Achievable Control Technology (MACT) Standards

Subpart	Description	Applicability
Subpart A	General Provisions	Not applicable
Subpart B	Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)	Not applicable
Subpart C	List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List	Not applicable
Subpart D	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	Not applicable
Subpart E	Approval of State Programs and Delegation of Federal Authorities	Not applicable
Subpart F	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	Not applicable
Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From SOCM I Process Vents, Storage Vessels, and Wastewater	Not applicable
Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	Not applicable
Subpart I	National Emission Standards for Organic Hazardous Air Pollutants for Processes Subject to the Negotiated Regulation for Equipment Leaks	Not applicable
Subpart J	National Emission Standards for Hazardous Air Pollutants for PVC and Copolymers Production	Not applicable
Subpart K	Reserved	N/A
Subpart L	National Emission Standards for Coke Oven Batteries	N/A
Subpart M	National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities	Not applicable
Subpart N	National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	Not applicable
Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities	Not applicable
Subpart P	Reserved	N/A
Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	Not applicable
Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	Not applicable
Subpart S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	Not applicable
Subpart T	National Emission Standards for Halogenated Solvent Cleaning	Not applicable
Subpart U	National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins	Not applicable
Subpart V	Reserved	N/A
Subpart W	National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production	Not applicable
Subpart X	National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting	Not applicable
Subpart Y	National Emission Standards for Marine Vessel Loading Operations	Not applicable
Subpart Z	Reserved	N/A
Subpart AA	National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants	Not applicable
Subpart BB	National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants	Not applicable
Subpart CC	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	Not applicable
Subpart DD	National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations	Not applicable
Subpart EE	National Emission Standards for Magnetic Tape Manufacturing Operations	Not applicable
Subpart FF	Reserved	N/A
Subpart GG	National Emission Standards for Aerospace Manufacturing and Rework Facilities	Not applicable
Subpart HH	National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (Area Source Applicability)	Not applicable
Subpart II	National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)	Not applicable
Subpart JJ	National Emission Standards for Wood Furniture Manufacturing Operations	Not applicable
Subpart KK	National Emission Standard for the Printing and Publishing Industry	Not applicable
Subpart LL	National Emission Standard for Hazardous Air Pollutants for Primary Aluminum Reduction Plants	Not applicable
Subpart MM	National Emission Standard for Hazardous Air Pollutants for Chemical Recovery Boilers at Kraft, Soda, Sulfite, and Semicheical Pulp Mills	Not applicable
Subpart OO	National Emission Standards for Tanks - Level 1	Not applicable
Subpart PP	National Emission Standards for Containers	Not applicable
Subpart QQ	National Emission Standards for Surface Impoundments	Not applicable
Subpart RR	National Emission Standards for Individual Drain Systems	Not applicable
Subpart SS	National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process	Not applicable
Subpart TT	National Emission Standards for Equipment Leaks - Control Level 1	Not applicable
Subpart UU	National Emission Standards for Equipment Leaks - Control Level 2 Standards	Not applicable
Subpart VV	National Emission Standards for Oil-Water Separators and Organic-Water Separators	Not applicable
Subpart WW	National Emission Standards for Storage Vessels (Tanks) - Control Level 2	Not applicable
Subpart XX	National Emission Standards For Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	Not applicable
Subpart YY	National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards	Not applicable
Subpart ZZ	Reserved	N/A
Subpart AAA	Reserved	N/A
Subpart BBB	Reserved	N/A
Subpart CCC	National Emission Standards for Hazardous Air Pollutants for Steel Pickling--HCl Process Facilities and Hydrochloric Acid Regeneration Plants	Not applicable
Subpart DDD	National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production	Not applicable
Subpart EEE	National Emission Standard for Hazardous Air Pollutants from Hazardous Waste Combustors	Not applicable
Subpart FFF	Reserved	N/A
Subpart GGG	National Emission Standards Pharmaceuticals Production	Not applicable
Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	Not applicable
Subpart III	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production	Not applicable
Subpart JJJ	National Emission Standard for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins	Not applicable
Subpart KKK	Reserved	N/A
Subpart LLL	National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry	Not applicable
Subpart MMM	National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production	Not applicable
Subpart NNN	National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing	Not applicable
Subpart OOO	National Emission Standards for Hazardous Air Pollutants Emissions: Manufacture of Amino/Phenolic Resins	Not applicable

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Part 63 Major NESHAP

Table E3 - 40 CFR Part 63 Maximum Achievable Control Technology (MACT) Standards, cont.

Subpart	Description	Applicability
Subpart PPP	National Emission Standards for Hazardous Air Pollutants Emissions for Polyether Polyols Production	Not applicable
Subpart QQQ	National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting	Not applicable
Subpart RRR	National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production	Not applicable
Subpart SSS	Reserved	N/A
Subpart TTT	National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting	Not applicable
Subpart UUU	National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: CCU, CRU, and SRU.	Not applicable
Subpart VVV	National Emission Standard for Hazardous Air Pollutants: Publicly Owned Treatment Works	Not applicable
Subpart WWW	Reserved	N/A
Subpart XXX	National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese	Not applicable
Subpart AAAA	National Emission Standard for Hazardous Air Pollutants: Municipal Solid Waste Landfills	Not applicable
Subpart CCCC	National Emission Standard for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	Not applicable
Subpart DDDD	National Emission Standard for Hazardous Air Pollutants: Plywood and Composite Wood Products	Not applicable
Subpart EEEE	National Emission Standard for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	Not applicable
Subpart FFFF	National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	Not applicable
Subpart GGGG	National Emission Standard for Hazardous Air Pollutants: Solvent Extractions for Vegetable Oil Production	Not applicable
Subpart HHHH	National Emission Standard for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production	Not applicable
Subpart IIII	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	Not applicable
Subpart JJJJ	National Emission Standard for Hazardous Air Pollutants: Paper and Other Web Coating	Not applicable
Subpart KKKK	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Cans	Not applicable
Subpart MMMM	National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	Not applicable
Subpart NNNN	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Large Appliances	Not applicable
Subpart OOOO	National Emission Standard for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles	Not applicable
Subpart PPPP	National Emission Standard for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products	Not applicable
Subpart QQQQ	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Wood Building Products	Not applicable
Subpart RRRR	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Furniture	Not applicable
Subpart SSSS	National Emission Standard for Hazardous Air Pollutants: Surface Coating of Metal Coil	Not applicable
Subpart TTTT	National Emission Standard for Hazardous Air Pollutants for Leather Finishing Operations	Not applicable
Subpart UUUU	National Emission Standard for Hazardous Air Pollutants for Cellulose Products Manufacturing	Not applicable
Subpart VVVV	National Emission Standard for Hazardous Air Pollutants for Boat Manufacturing	Not applicable
Subpart WWWW	National Emission Standard for Hazardous Air Pollutants: Reinforced Plastic Composites Production	Not applicable
Subpart XXXX	National Emission Standard for Hazardous Air Pollutants: Rubber Tire Manufacturing	Not applicable
Subpart YYYY	National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines	Not applicable
Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary RICE (Major Source Provisions)	Not applicable
Subpart AAAAA	National Emission Standard for Hazardous Air Pollutants for Lime Manufacturing Plants	Not applicable
Subpart BBBB	National Emission Standard for Hazardous Air Pollutants for Semiconductor Manufacturing	Not applicable
Subpart CCCC	National Emission Standard for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks	Not applicable
Subpart DDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	Not applicable
Subpart EEEE	National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries	Not applicable
Subpart FFFF	National Emission Standard for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities	Not applicable
Subpart GGGG	National Emission Standard for Hazardous Air Pollutants: Site Remediation	Not applicable
Subpart HHHH	National Emission Standard for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing	Not applicable
Subpart IIII	National Emission Standard for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants	Not applicable
Subpart JJJJ	National Emission Standard for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing	Not applicable
Subpart KKKK	National Emission Standard for Hazardous Air Pollutants for Clay Ceramics Manufacturing	Not applicable
Subpart LLLL	National Emission Standard for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing	Not applicable
Subpart MMMM	National Emission Standard for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations	Not applicable
Subpart NNNN	National Emission Standard for Hazardous Air Pollutants: Hydrochloric Acid Production	Not applicable
Subparts OOOO	Reserved	N/A
Subpart PPPP	National Emission Standard for Hazardous Air Pollutants for Engine Test Cells/Stands	Not applicable
Subpart QQQQ	National Emission Standard for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities	Not applicable
Subpart RRRR	National Emission Standard for Hazardous Air Pollutants: Taconite Iron Ore Processing	Not applicable
Subpart SSSS	National Emission Standard for Hazardous Air Pollutants for Refractory Products Manufacturing	Not applicable
Subpart TTTT	National Emission Standard for Hazardous Air Pollutants for Primary Magnesium Refining	Not applicable
Subpart UUUU	Reserved	N/A
Subpart VVVV	Reserved	N/A
Subpart WWWW	National Emission Standard for Hospital Ethylene Oxide Sterilizers	Not applicable
Subparts XXXX	Reserved	N/A

Spectrum Energy Georgia LLC
Appendix E - Reg Review.xlsx
Part 63 Area NESHAP

Table E4 - 40 CFR Part 63 Generally Achievable Control Technology (GACT) Standards

Subpart	Description	Applicability
Subpart A	General Provisions	Not applicable
Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary RICE (Area Source Provisions)	Not applicable
Subpart YYYYY	National Emission Standard for Hazardous Air Pollutants for Area/Sources: Electric Arc Furnace Steelmaking Facilities	Not applicable
Subpart ZZZZZ	National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources	Not applicable
Subparts AAAAAA	Reserved	N/A
Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals	Not applicable
Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Not applicable
Subpart DDDDDD	National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production Area Sources	Not applicable
Subpart EEEEE	National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources	Not applicable
Subpart FFFFFF	National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources	Not applicable
Subpart GGGGGG	National Emission Standards for Hazardous Air Pollutants for Primary Nonferrous Metals Area Sources (Zinc, Cadmium, and Beryllium)	Not applicable
Subpart HHHHHH	National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations	Not applicable
Subparts IIIIII	Reserved	N/A
Subparts JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	Applicable
Subparts KKKKKK	Reserved	N/A
Subpart LLLLLL	National Emission Standards for Hazardous Air Pollutants for Acrylic and Modacrylic Fibers Production Area Sources	Not applicable
Subpart MMMMMM	National Emission Standards for Hazardous Air Pollutants for Carbon Black Production Area Sources	Not applicable
Subpart NNNNNN	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds	Not applicable
Subpart OOOOOO	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources	Not applicable
Subpart PPPPPP	National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources	Not applicable
Subpart QQQQQQ	National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources	Not applicable
Subpart RRRRRR	National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources	Not applicable
Subpart SSSSSS	National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources	Not applicable
Subpart TTTTTT	National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources	Not applicable
Subparts UUUUUU	Reserved	N/A
Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	Not applicable
Subpart WWWWWW	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations	Not applicable
Subpart XXXXXX	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Sources	Not applicable
Subpart YYYYYY	National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities	Not applicable
Subpart ZZZZZZ	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Aluminum, Copper and Other Foundries	Not applicable
Subpart AAAAAA	National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing	Not applicable
Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry	Not applicable
Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing	Not applicable
Subpart DDDDDD	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Prepared Feeds Manufacturing	Not applicable
Subpart EEEEE	National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category	Not applicable
Subpart HHHHHH	National Emission Standards for Hazardous Air Pollutant Emissions for Polyvinyl Chloride and Copolymers Production	Not applicable

Tabel E5 - GRAQC 391-3-1-.02(2) Emission Limitations and Standards.

Standard/Section	Applicability
<i>(b) Visible Emissions.</i>	<i>Applicable</i>
<i>(c) Incinerators.</i>	<i>Not applicable</i>
<i>(d) Fuel Burning Equipment.</i>	<i>Applicability</i>
<i>(e) Particulate Emission from Manufacturing Processes.</i>	<i>Applicable</i>
<i>(f) Normal Superphosphate Manufacturing Facilities.</i>	<i>Not applicable</i>
<i>(g) Sulfur Dioxide.</i>	<i>Applicability</i>
<i>(h) Portland Cement Plants.</i>	<i>Not applicable</i>
<i>(i) Nitric Acid Plants.</i>	<i>Not applicable</i>
<i>(j) Sulfuric Acid Plants.</i>	<i>Not applicable</i>
<i>(k) Particulate Emission from Asphaltic Concrete Hot Mix Plants.</i>	<i>Not applicable</i>
<i>(l) [reserved]</i>	<i>Not applicable</i>
<i>(m) Repealed.</i>	<i>Not applicable</i>
<i>(n) Fugitive Dust.</i>	<i>Applicable</i>
<i>(o) [reserved]</i>	<i>Not applicable</i>
<i>(p) Particulate Emissions from Kaolin and Fuller's Earth Processes.</i>	<i>Not applicable</i>
<i>(q) Particulate Emissions from Cotton Gins.</i>	<i>Not applicable</i>
<i>(r) Particulate Emissions from Granular and Mixed Fertilizer Manufacturing Units.</i>	<i>Not applicable</i>
<i>(s) Nitrogen Oxides. (Repealed)</i>	<i>Not applicable</i>
<i>(t) VOC Emissions from Automobile and Light-Duty Truck Manufacturing.</i>	<i>Not applicable</i>
<i>(u) VOC Emissions from Can Coating.</i>	<i>Not applicable</i>
<i>(v) VOC Emissions from Coil Coating.</i>	<i>Not applicable</i>
<i>(w) VOC Emissions from Paper Coating.</i>	<i>Not applicable</i>
<i>(x) VOC Emissions from Fabric and Vinyl Coating.</i>	<i>Not applicable</i>
<i>(y) VOC Emissions from Metal Furniture Coating.</i>	<i>Not applicable</i>
<i>(z) VOC Emissions from Large Appliance Surface Coating.</i>	<i>Not applicable</i>
<i>(aa) VOC Emissions from Wire Coating.</i>	<i>Not applicable</i>
<i>(bb) Petroleum Liquid Storage.</i>	<i>Not applicable</i>
<i>(cc) Bulk Gasoline Terminals.</i>	<i>Not applicable</i>
<i>(dd) Cutback Asphalt.</i>	<i>Not applicable</i>
<i>(ee) Petroleum Refinery.</i>	<i>Not applicable</i>
<i>(ff) Solvent Metal Cleaning.</i>	<i>Not applicable</i>
<i>(gg) Kraft Pulp Mills.</i>	<i>Not applicable</i>
<i>(hh) Petroleum Refinery Equipment Leaks.</i>	<i>Not applicable</i>
<i>(ii) VOC Emissions from Surface Coating of Miscellaneous Metal Parts and Products.</i>	<i>Not applicable</i>
<i>(jj) VOC Emissions from Surface Coating of Flat Wood Paneling.</i>	<i>Not applicable</i>
<i>(kk) VOC Emissions from Synthesized Pharmaceutical Manufacturing.</i>	<i>Not applicable</i>
<i>(ll) VOC Emissions from the Manufacture of Pneumatic Rubber Tires.</i>	<i>Not applicable</i>
<i>(mm) VOC Emissions from Graphic Arts Systems.</i>	<i>Not applicable</i>
<i>(nn) VOC Emissions from External Floating Roof Tanks.</i>	<i>Not applicable</i>
<i>(oo) Fiberglass Insulation Manufacturing Plants.</i>	<i>Not applicable</i>
<i>(pp) Bulk Gasoline Plants.</i>	<i>Not applicable</i>
<i>(qq) VOC Emissions from Large Petroleum Dry Cleaners.</i>	<i>Not applicable</i>
<i>(rr) Gasoline Dispensing Facility - Stage I.</i>	<i>Not applicable</i>
<i>(ss) Gasoline Transport Vehicles and Vapor Collection Systems.</i>	<i>Not applicable</i>
<i>(tt) VOC Emissions from Major Sources.</i>	<i>Not applicable</i>
<i>(uu) Visibility Protection.</i>	<i>Not applicable</i>
<i>(vv) Volatile Organic Liquid Handling and Storage.</i>	<i>Not applicable</i>
<i>(ww) Reserved.</i>	<i>Not applicable</i>
<i>(xx) Reserved.</i>	<i>Not applicable</i>
<i>(yy) Emissions of Nitrogen Oxides from Major Sources.</i>	<i>Not applicable</i>
<i>(zz) Gasoline Dispensing Facilities--Stage II.</i>	<i>Not applicable</i>
<i>(aaa) [reserved]</i>	<i>Not applicable</i>
<i>(bbb) [reserved]</i>	<i>Not applicable</i>
<i>(ccc) VOC Emissions from Bulk Mixing Tanks.</i>	<i>Not applicable</i>
<i>(ddd) VOC Emissions from Offset Lithography and Letterpress.</i>	<i>Not applicable</i>
<i>(eee) VOC Emissions from Expanded Polystyrene Products Manufacturing.</i>	<i>Not applicable</i>
<i>(fff) Particulate Matter Emissions from Yarn Spinning Operations.</i>	<i>Not applicable</i>
<i>(ggg) Existing Municipal Solid Waste Landfills.</i>	<i>Not applicable</i>
<i>(hhh) Wood Furniture Finishing and Cleaning Operations.</i>	<i>Not applicable</i>
<i>(iii) Hospital/Medical/Infectious Waste Incinerators Constructed on or Before June 20, 1996.</i>	<i>Not applicable</i>
<i>(jjj) NOX Emissions from Electric Utility Steam Generating Units.</i>	<i>Not applicable</i>
<i>(kkk) VOC Emissions from Aerospace Manufacturing and Rework Facilities.</i>	<i>Not applicable</i>
<i>(lll) NOX Emissions From Fuel-Burning Equipment.</i>	<i>Not applicable</i>
<i>(mmm) NOX Emissions from Stationary Gas Turbines and Stationary Engines</i>	<i>Not applicable</i>
<i>(nnn) NOX Emissions from Large Stationary Gas Turbines.</i>	<i>Not applicable</i>
<i>(ooo) Reserved.</i>	<i>Not applicable</i>

Tabel E5 - GRAQC 391-3-1-.02(2) Emission Limitations and Standards, cont.

<i>Standard/Section</i>	<i>Applicability</i>
<i>(ppp) CISW Incineration Units Constructed On or Before June 4, 2010.</i>	<i>Not applicable</i>
<i>(qqq) VOC Emissions from Extruded Polystyrene Products Utilizing a Blowing Agent.</i>	<i>Not applicable</i>
<i>(rrr) NOx Emissions from Small Fuel-Burning Equipment.</i>	<i>Not applicable</i>
<i>(sss) Multipollutant Control for Electric Utility Steam Generating Units.</i>	<i>Not applicable</i>
<i>(ttt) [reserved]</i>	<i>Not applicable</i>
<i>(uuu) SO2 Emissions from Electric Utility Steam Generating Units.</i>	<i>Not applicable</i>
<i>(vvv) VOC Emissions from Surface Coating of Miscellaneous Plastic Parts and Products.</i>	<i>Not applicable</i>
<i>(www) Sewage Sludge Incineration Units Constructed On or Before October 14, 2010.</i>	<i>Not applicable</i>
<i>(xxx) Reserved.</i>	<i>Not applicable</i>
<i>(yyy) VOC Emissions from the Use of Miscellaneous Industrial Adhesives.</i>	<i>Not applicable</i>
<i>(zzz) VOC Emissions from the Fiberglass Boat Manufacturing.</i>	<i>Not applicable</i>
<i>(aaaa) Industrial Cleaning Solvents.</i>	<i>Not applicable</i>

APPENDIX F
FORMS



SIP AIR PERMIT APPLICATION

EPD Use Only

Date Received:

Application No.

FORM 1.00: GENERAL INFORMATION

1. Facility Information

Facility Name: SPECTRUM ENERGY GEORGIA LLC

AIRS No. (if known): TO BE ISSUED

Facility Location: Street: 801 COOK STREET

City: ADEL Georgia Zip: 31620 County: COOK

Is this facility a "small business" as defined in the instructions? Yes: No:

2. Facility Coordinates

Latitude: 31.123395 NORTH Longitude: -83.431858 WEST

UTM Coordinates: 268100.77 EAST 3445805.53 NORTH ZONE 17

3. Facility Owner

Name of Owner: SPECTRUM ENERGY GEORGIA LLC

Owner Address Street: 801 COOK STREET

City: ADEL State: GA Zip: 31620

4. Permitting Contact and Mailing Address

Name: MICHAEL AINSWORTH Title: PRINCIPAL, SPECTRUM ENERGY GEORGIA LLC

Telephone No.: EMAIL ONLY Ext. _____ Fax No.: EMAIL ONLY

Email Address: spectrumenergy.ga@gmail.com

Mailing Address: Same as: _____ Facility Location: Owner Address: Other:

If Other: Street Address: _____

City: _____ State: _____ Zip: _____

5. Responsible Official

Name: MICHAEL AINSWORTH Title: PRINCIPAL, SPECTRUM ENERGY GEORGIA LLC

Address of Official Street: 801 COOK STREET

City: ADEL State: GA Zip: 31620

THIS APPLICATION IS SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE GEORGIA RULES FOR AIR QUALITY CONTROL AND, TO THE BEST OF MY KNOWLEDGE, IS COMPLETE AND CORRECT.

Signature: _____

Date: _____

6. Reason for Application: (Check all that apply)

- New Facility (to be constructed)
 Revision of Data Submitted in an Earlier Application
 Existing Facility (initial or modification application)
 Application No.: _____
 Permit to Construct
 Date of Original Submittal: _____
 Permit to Operate
 Permit to Modify Existing Equipment:
 Affected Permit No.: _____

7. Permitting Exemption Activities (for permitted facilities only):

Have any exempt modifications based on emission level per Georgia Rule 391-3-1-.03(6)(i)(3) been performed at the facility that have not been previously incorporated in a permit?

- No
 Yes, please fill out the SIP Exemption Attachment

8. Has assistance been provided to you for any part of this application?

- No
 Yes, SBAP
 Yes, a consultant has been employed or will be employed.

If yes, please provide the following information:

Name of Consulting Company: _____
 Name of Contact: TODD CLOUD
 Telephone No.: EMAIL ONLY Fax No.: EMAIL ONLY
 Email Address: spectrumenergy.ga@gmail.com
 Mailing Address: Street: 801 COOK STREET
 City: ADEL State: GA Zip: 31620

9. Submitted Application Forms

Forms	Form
YES	2.00 Emission Unit List
YES	2.01 Boilers and Fuel Burning Equipment
NO	2.02 Storage Tank Physical Data
NO	2.03 Printing Operations
NO	2.04 Surface Coating Operations
NO	2.05 Waste Incinerators (solid/liquid waste destruction)
YES	2.06 Manufacturing and Operational Data
YES	3.00 Air Pollution Control Devices (APCD)
NO	3.01 Scrubbers
YES	3.02 Baghouses & Other Collectors
YES	3.03 Electrostatic Precipitators
YES	4.00 Emissions Data
YES	5.00 Monitoring Information
YES	6.00 Fugitive Emission Sources
YES	7.00 Air Modeling Information

10. Construction or Modification Date

Estimated Start Date: ASAP

11. If confidential information is being submitted in this application, were the guidelines followed in the "Procedures for Requesting that Submitted Information be treated as Confidential"?

- No
 Yes
 Not Applicable

12. New Facility Emissions Summary – PHASE 1

Criteria Pollutant	New Facility	
	Potential (tpy)	Actual (tpy)
<i>Nitrogen oxides (NOX)</i>	138	
<i>Carbon monoxide (CO)</i>	137	
<i>Sulfur dioxide (SO₂)</i>	16.5	
<i>PM <10 microns (PM10)</i>	143	
<i>PM <2.5 microns (PM2.5)</i>	143	
<i>Volatile Organic Compounds (VOC)</i>	234	
<i>Greenhouse Gases (GHG) (in CO₂e)</i>	--	
<i>Total Hazardous Air Pollutants (HAP)</i>	16.0	
Individual HAP		
ACETALDEHYDE	2.79	
FORMALDEHYDE	3.62	
METHANOL	2.90	
OHAP	4.56	
ACROLEIN	0.45	
PHENOL	0.42	
PROPIONALDEHYDE	0.14	

12. New Facility Emissions Summary – PHASE 2

Criteria Pollutant	New Facility	
	Potential (tpy)	Actual (tpy)
<i>Nitrogen oxides (NOX)</i>	249	
<i>Carbon monoxide (CO)</i>	247	
<i>Sulfur dioxide (SO₂)</i>	30.7	
<i>PM <10 microns (PM10)</i>	248	
<i>PM <2.5 microns (PM2.5)</i>	248	
<i>Volatile Organic Compounds (VOC)</i>	241	
<i>Greenhouse Gases (GHG) (in CO₂e)</i>	--	
<i>Total Hazardous Air Pollutants (HAP)</i>	12.4	
Individual HAP		
ACETALDEHYDE	1.74	
FORMALDEHYDE	2.35	
METHANOL	1.97	
OHAP	2.51	
ACROLEIN	0.65	
PHENOL	0.52	
PROPIONALDEHYDE	0.20	

13. Existing Facility Emissions Summary

Not applicable

14. 4-Digit Facility Identification Code:

SIC Code: 2499

SIC Description: WOOD PRODUCTS, NOT ELSEWHERE CLASSIFIED

NAICS Code: 321999

NAICS Description: ALL OTHER MISCELLANEOUS WOOD PRODUCT MANUFACTURING

15. Description of general production process and operation for which a permit is being requested. If necessary, attach additional sheets to give an adequate description. Include layout drawings, as necessary, to describe each process. References should be made to source codes used in the application.

SEE APPLICATION NARRATIVE AND ATTACHMENTS

16. Additional information provided in attachments as listed below:

Appendix A - SITE LOCATION MAP

Appendix B - FACILITY DIAGRAMS

Appendix C - PROCESS FLOW DIAGRAMS

Appendix D - EMISSION ESTIMATES

Appendix E - REGULATORY REVIEW

Appendix F - FORMS

17. Additional Information: Unless previously submitted, include the following two items:

Plot plan/map of facility location or date of previous submittal: _____

Flow Diagram or date of previous submittal: _____

18. Other Environmental Permitting Needs:

Will this facility/modification trigger the need for environmental permits/approvals (other than air) such as Hazardous Waste Generation, Solid Waste Handling, Water withdrawal, water discharge, SWPPP, mining, landfill, etc.?

No

Yes, please list below:

NPDES General Permit No. GAR050000

Stormwater Discharges Associated with Industrial Activity (2017 IGP) [March 2017]

19. List requested permit limits including synthetic minor (SM) limits.

<i>NOX</i>	<i>249 tpy</i>
<i>CO</i>	<i>249 tpy</i>
<i>PM10/PM2.5</i>	<i>249 tpy</i>
<i>VOC</i>	<i>249 tpy</i>
<i>Individual HAP</i>	<i>9.9 tpy</i>
<i>Aggregate HAP</i>	<i>24.9 tpy</i>

20. Effective March 1, 2019, permit application fees will be assessed. The fee amount varies based on type of permit application. Application acknowledgement emails will be sent to the current registered fee contact in the GECO system. If fee contacts have changed, please list that below:

Fee Contact name: **MICHAEL AINSOWRTH**
Fee Contact title: **PRINCIPAL, SPECTRUM ENERGY GEORGIA LLC**
Fee Contact email address: **spectrumenergy.ga@gmail.com**
Fee Contact phone number: **EMAIL ONLY**

Fee invoices will be created through the GECO system shortly after the application is received. It is the applicant's responsibility to access the facility GECO account, generate the fee invoice, and submit payment within 10 days after notification.

PHASE 1

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST– PHASE 1

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
DUMP1	Truck dump 1	TBD	Truck dump
DUMP2	Truck dump 2		Truck dump
SHRED	Shredder		Shredder
ROAD	Plant road traffic		Plant road traffic
PILE	Storage piles		Storage piles
BUR1	Dryer 1 burner		Dryer burner
BUR2	Dryer 2 burner		Dryer burner
BUR3	Dryer 3 burner		Dryer burner
BUR4	Dryer 4 burner		Dryer burner
DRY1	Dryer 1		Dryer
DRY2	Dryer 2		Dryer
DRY3	Dryer 3		Dryer
DRY4	Dryer 4		Dryer
DWS1	Dry wood silo 1		Dried wood silo
DWS2	Dry wood silo 2		Dried wood silo
DHM1	Dry hammermill 1		Dry hammermill
DHM2	Dry hammermill 2		Dry hammermill
PM1	Pellet Mill 1		Pellet Mill
PM2	Pellet Mill 2	Pellet Mill	

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 1

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
PM3	Pellet Mill 3	TBD	Pellet Mill
PM4	Pellet Mill 4		Pellet Mill
PM5	Pellet Mill 5		Pellet Mill
PM6	Pellet Mill 6		Pellet Mill
PM7	Pellet Mill 7		Pellet Mill
PM8	Pellet Mill 8		Pellet Mill
PM9	Pellet Mill 9		Pellet Mill
PM10	Pellet Mill 10		Pellet Mill
PM11	Pellet Mill 11		Pellet Mill
PM12	Pellet Mill 12		Pellet Mill
PM13	Pellet Mill 13		Pellet Mill
PM14	Pellet Mill 14		Pellet Mill
PM15	Pellet Mill 15		Pellet Mill
PM16	Pellet Mill 16		Pellet Mill
COOL1	Pellet Cooler 1		Pellet Cooler
COOL2	Pellet Cooler 2		Pellet Cooler
SILO1	Finished Pellet Silo 1		Finished Pellet Silo
SILO2	Finished Pellet Silo 2		Finished Pellet Silo
SILO3	Finished Pellet Silo 3		Finished Pellet Silo

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 1

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
SILO4	Finished Pellet Silo 4	TBD	Finished Pellet Silo
SILO5	Finished Pellet Silo 5		Finished Pellet Silo
SILO6	Finished Pellet Silo 6		Finished Pellet Silo
SILO7	Finished Pellet Silo 7		Finished Pellet Silo
SILO8	Finished Pellet Silo 8		Finished Pellet Silo
BLR	Boiler		Boiler
SST1	Sizing/Screening/Transport 1		Sizing/Screening/Transport
SST2	Sizing/Screening/Transport 2		Sizing/Screening/Transport

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.01 – FUEL COMBUSTION – PHASE 1

Emission Unit ID	Type of Burner	Type of Draft	Design Capacity of Unit (MMBtu/hr)	Percent Excess Air	Dates		Date & Description of Last Modification
					Construction	Installation	
BUR1	Wood	Induced	30	3%	N/A	ASAP	N/A
BUR2	Wood		30				
BUR3	Wood		45				
BUR4	Wood		45				
BLR	Gas	Forced	25		2022		None

FUEL DATA – PHASE 1

Emission Unit ID	Fuel Type	Potential Annual Consumption				Hourly Consumption		Heat Content		Percent Sulfur		Percent Ash	
		Total Quantity		Percent Use by Season		Max.	Avg.	Min.	Avg.	Max.	Avg.	Max.	Avg.
		Amount	Units	May 1 - Sept 30	Oct 1 - Apr 30								
BUR1	Wood	146,000 tons per year		42	58	16.8 tons per hour		4,500 Btu/lb green		Negligible		Negligible	
BUR2													
BUR3													
BUR4													
BLR	Gas	219 MMscf/yr				25 Mscf/hr		1,000 Btu/scf					

FUEL SUPPLIER – PHASE 1

Fuel Type	Name of Supplier	Phone Number	Supplier Location			
			Address	City	State	Zip
Wood	Various					
Gas	Local utility					

Facility Name: SPECTRUM ENERGY GEORGIA LLC Date of Application: October 2021

FORM 2.06 – MANUFACTURING AND OPERATIONAL DATA – PHASE 1

Normal Operating Schedule: 24 hours/day 7 days/week 52 weeks/yr

Additional Data Attached? No Yes, please include the attachment in list on Form 1.00, Item 16.

Seasonal/Peak Operating Periods: Not applicable

PRODUCTION INPUT FACTORS

Emission Unit ID	Emission Unit Name	Const. Date	Input Raw Material(s)	Annual Input	Hourly Process Input Rate		
					Design	Normal	Max
DUMP1-2	DUMP1-2	ASAP	Chips, shavings, sander dust, sawdust	1,200,000 tons	160	tph	
SHRED	SHRED						
PILE	PILES						
DRY1-4	DRY1-4						
DWS1-2	DWS1-2						
HAM1-2	HAM1-2						
PM1-16	PM1-16						
COOL1-2	COOL1-2						
SILO1-8	SILO1-8						

PRODUCTS OF MANUFACTURING

Emission Unit ID	Description of Product	Production Schedule		Hourly Production Rate			
		Tons/yr	Hr/yr	Design	Normal	Maximum	Units
Plant	Wood pellets	600,000		80			tph

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

Form 3.00 – AIR POLLUTION CONTROL DEVICES - PART A: GENERAL EQUIPMENT INFORMATION – PHASE 1

APCD Unit ID	Emission Unit ID	APCD Type	Date Installed	Make & Model Number	Unit Modified from Mfg Specifications?	Gas Temp. °F		Inlet Gas Flow Rate (acfm)
						Inlet	Outlet	
WESP1-4	BUR1-4, DRY1-4	WESP	ASAP	TBD	TBD	TBD		
BGH1	DWS1-2, HAM1-2	Baghouse						
BGH2	PM1-8, COOL1	Baghouse						
BGH3	PM9-16, COOL2	Baghouse						
BGH4	Screening/Transport 1	Baghouse						
BGH5	Screening/Transport 2	Baghouse						
CYC	Fuel Dust	Cyclone						
BIO	VARIOUS	Biofilter						

Form 3.00 – AIR POLLUTION CONTROL DEVICES – PART B: EMISSION INFORMATION – PHASE 1

APCD Unit ID	Pollutants Controlled	Percent Control Efficiency		Inlet Stream To APCD		Exit Stream From APCD		Pressure Drop Across Unit (Inches of water)
		Design	Actual	lb/hr	Method of Determination	lb/hr	Method of Determination	
WESP1-4	PM10/PM2.5	99%+		See emission calculations		See emission calculations		TBD
BGH1								
BGH2								
BGH3								
BGH4								
BGH5								
CYC	VOC, HAP	93%						
BIO								

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 3.02 – BAGHOUSES & OTHER FILTER COLLECTORS – PHASE 1

APCD ID	Filter Surface Area (ft ²)	No. of Bags	Inlet Gas Dew Point Temp. (°F)	Inlet Gas Temp. (°F)	Bag or Filter Material	Pressure Drop (inches of water)	Cleaning Method	Gas Cooling Method	Leak Detection System Type
BGH1	TBD								
BGH2									
BGH3									
BGH4									
BGH5									

FORM 3.03 – ELECTROSTATIC PRECIPITATORS – PHASE 1

APCD ID	Type of ESP	Field No.	Voltage (Volts)		Current (Amps)		Total Power (kW)	Water Flow Rate	Inlet Gas Velocity	Spark Rate sparks/min
			Primary	Secondary	Primary	Secondary				
WESP1	Wet	TBD								
WESP2										
WESP3										
WESP4										

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION – PHASE 1

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	Method of Determination
BUR1-4, DRY1-4	WESP1-4 + BIO	S1	NOX		--		127	Vendor
			CO		--		127	Vendor
			SO2		--		16.4	AP-42
			PM10/2.5		11.7		51.1	Grain loading
			VOC (as C3)		--		144	EPD factors
			ACET		--		2.64	
			HCHO		--		3.36	
			MeOH		--		2.64	
			O_HAP		--		4.56	
			ACRO		--		0.15	DHEC factors
			PHEN		--		0.20	
			PROP		--		0.05	
			HCl		--		1.12	
DWS1-2	BGH1 + BIO	S1	PM10/2.5		3.28	14.4	Grain loading	
			VOC (as C3)		--	7.56	HWP factors	
			ACET		--	0.01		
			HCHO		--	0.00	Estimated	
			MeOH		--	0.06		
			ACRO		--	0.06		
			PHEN		--	0.06		
PROP		--	0.06					

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION, CONT. – PHASE 1

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	Method of Determination
HAM1-2	BGH1 + BIO	S1	PM10/2.5		1.46		6.38	Grain loading
			VOC (as C3)		--		60.0	EPD factors
			ACET		--		0.10	
			HCHO		--		0.19	
			MeOH		--		0.10	
			ACRO		--		0.04	DHEC factors
			PHEN		--		0.08	
			PROP		--		0.01	
PM1-16 COOL1-2	BGH2-3 + BIO	S1	PM10/2.5		8.74		38.3	Grain loading
			VOC (as C3)		--		12.0	EPD factors
			ACET		--		0.02	
			HCHO		--		0.05	
			MeOH		--		0.02	
			ACRO		--		0.19	
			PHEN		--		0.07	
			PROP		--		0.01	
SILO1-8	N/A	N/A	PM10/2.5		0.36		1.60	Grain loading
			VOC (as C3)		--		0.87	ACP factors
			ACET		--		0.01	
			HCHO		--		0.01	
			MeOH		--		0.07	

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION, CONT. – PHASE 1

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				Method of Determination
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	
BLR	N/A	S2	NOX		--		11.0	AP-42
			CO		--		9.20	
			SO2		--		0.07	
			PM10/2.5		0.19		0.83	
			VOC (as C3)		--		0.60	
MISC	BGH4	S3	PM10/2.5		2.91		12.8	Grain loading
	BGH5	S4			2.91		12.8	
	CYC	S5			1.09		4.79	

FORM 5.00 MONITORING INFORMATION – PHASE 1

Emission Unit ID/ APCD ID	Emission Unit/ APCD Name	Monitored Parameter		Monitoring Frequency
		Parameter	Units	
WESP1	WESP1	Power	kW	Continuous
WESP2	WESP2	Power	kW	Continuous
WESP3	WESP3	Power	kW	Continuous
WESP4	WESP4	Power	kW	Continuous
BGH1	BGH1	Pressure drop	In WC	Daily
BGH2	BGH2	Pressure drop	In WC	Daily
BGH3	BGH3	Pressure drop	In WC	Daily
BGH4	BGH4	Pressure drop	In WC	Daily
BGH5	BGH5	Pressure drop	In WC	Daily
CYC	CYC	Pressure drop	In WC	Daily
BIO	BIO	VOC	ppm	Continuous

Comments:

PHASE 2

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST – PHASE 2

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
LOG	Log handling and storage	TBD	Log handling and storage
DBRK1	Debarker 1		Debarking
DBRK2	Debarker 2		Debarking
CHIP1	Chipper 1		Chipper
CHIP2	Chipper 2		Chipper
DUMP1	Truck dump 1		Truck dump
DUMP2	Truck dump 2		Truck dump
DUMP3	Truck dump 3		Truck dump
SHRED1	Shredder 1		Shredder
SHRED2	Shredder 2		Shredder
SHRED3	Shredder 3		Shredder
ROAD	Plant traffic		Plant traffic
PILE	Storage piles		Storage piles
BUR5	Dryer 1 burner		Dryer burner
BUR6	Dryer 2 burner		Dryer burner
DRY5	Dryer 1		Dryer
DRY6	Dryer 2		Dryer
DWS1	Dry wood silo 1		Dried wood silo
DWS2	Dry wood silo 2		Dried wood silo

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 2

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
DHM1	Dry hammermill 1	TBD	Dry hammermill
DHM2	Dry hammermill 2		Dry hammermill
DHM3	Dry hammermill 3		Dry hammermill
DHM4	Dry hammermill 4		Dry hammermill
DHM5	Dry hammermill 5		Dry hammermill
DHM6	Dry hammermill 6		Dry hammermill
PM1	Pellet Mill 1		Pellet Mill
PM2	Pellet Mill 2		Pellet Mill
PM3	Pellet Mill 3		Pellet Mill
PM4	Pellet Mill 4		Pellet Mill
PM5	Pellet Mill 5		Pellet Mill
PM6	Pellet Mill 6		Pellet Mill
PM7	Pellet Mill 7		Pellet Mill
PM8	Pellet Mill 8	Pellet Mill	
PM9	Pellet Mill 9	Pellet Mill	
PM10	Pellet Mill 10	Pellet Mill	
PM11	Pellet Mill 11	Pellet Mill	
PM12	Pellet Mill 12	Pellet Mill	
PM13	Pellet Mill 13	Pellet Mill	

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 2

Emission Unit ID	Name	Manufacturer and Model Number	Description
PM14	Pellet Mill 14	TBD	Pellet Mill
PM15	Pellet Mill 15		Pellet Mill
PM16	Pellet Mill 16		Pellet Mill
PM17	Pellet Mill 17		Pellet Mill
PM18	Pellet Mill 18		Pellet Mill
PM19	Pellet Mill 19		Pellet Mill
PM20	Pellet Mill 20		Pellet Mill
PM21	Pellet Mill 21		Pellet Mill
PM22	Pellet Mill 22		Pellet Mill
PM23	Pellet Mill 23		Pellet Mill
PM24	Pellet Mill 24		Pellet Mill
PM25	Pellet Mill 25		Pellet Mill
PM26	Pellet Mill 26		Pellet Mill
PM27	Pellet Mill 27		Pellet Mill
PM28	Pellet Mill 28		Pellet Mill
PM29	Pellet Mill 29		Pellet Mill
PM30	Pellet Mill 30		Pellet Mill
PM31	Pellet Mill 31		Pellet Mill
PM32	Pellet Mill 32		Pellet Mill

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 2

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
COOL1	Pellet Cooler 1	TBD	Pellet Cooler
COOL2	Pellet Cooler 2		Pellet Cooler
COOL3	Pellet Cooler 3		Pellet Cooler
COOL4	Pellet Cooler 4		Pellet Cooler
SILO1	Finished Pellet Silo 1		Finished Pellet Silo
SILO2	Finished Pellet Silo 2		Finished Pellet Silo
SILO3	Finished Pellet Silo 3		Finished Pellet Silo
SILO4	Finished Pellet Silo 4		Finished Pellet Silo
SILO5	Finished Pellet Silo 5		Finished Pellet Silo
SILO6	Finished Pellet Silo 6		Finished Pellet Silo
SILO7	Finished Pellet Silo 7		Finished Pellet Silo
SILO8	Finished Pellet Silo 8		Finished Pellet Silo
SILO9	Finished Pellet Silo 9		Finished Pellet Silo
SILO10	Finished Pellet Silo 10		Finished Pellet Silo
SILO11	Finished Pellet Silo 11		Finished Pellet Silo
SILO12	Finished Pellet Silo 12	Finished Pellet Silo	
SILO13	Finished Pellet Silo 13	Finished Pellet Silo	
SILO14	Finished Pellet Silo 14	Finished Pellet Silo	
SILO15	Finished Pellet Silo 15	Finished Pellet Silo	

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.00 – EMISSION UNIT LIST, CONT. – PHASE 2

<i>Emission Unit ID</i>	<i>Name</i>	<i>Manufacturer and Model Number</i>	<i>Description</i>
<i>SILO16</i>	<i>Finished Pellet Silo 16</i>	<i>TBD</i>	<i>Finished Pellet Silo</i>
<i>BLR</i>	<i>Boiler</i>		<i>Boiler</i>
<i>SST1</i>	<i>Sizing/Screening/Transport 1</i>		<i>Sizing/Screening/Transport</i>
<i>SST2</i>	<i>Sizing/Screening/Transport 2</i>		<i>Sizing/Screening/Transport</i>

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 2.01 – FUEL COMBUSTION – PHASE 2

Emission Unit ID	Type of Burner	Type of Draft	Design Capacity of Unit (MMBtu/hr)	Percent Excess Air	Dates		Date & Description of Last Modification
					Construction	Installation	
BUR1	Wood	Induced	140	3%	N/A	ASAP	N/A
BUR2	Wood		140				
BLR	Gas	Forced	25		2022		None

FUEL DATA – PHASE 2

Emission Unit ID	Fuel Type	Potential Annual Consumption				Hourly Consumption		Heat Content		Percent Sulfur		Percent Ash	
		Total Quantity		Percent Use by Season		Max.	Avg.	Min.	Avg.	Max.	Avg.	Max.	Avg.
		Amount	Units	May 1 - Sept 30	Oct 1 - Apr 30								
BUR1	Wood	272,000 tons per year		42	58	31.4 tons per hour		4,500 Btu/lb green		Negligible		Negligible	
BUR2													
BLR	Gas	219 MMscf/yr				25 Mscf/hr		1,000 Btu/scf					

FUEL SUPPLIER – PHASE 2

Fuel Type	Name of Supplier	Phone Number	Supplier Location			
			Address	City	State	Zip
Wood	Various					
Gas	Local utility					

Facility Name: SPECTRUM ENERGY GEORGIA LLC Date of Application: October 2021

FORM 2.06 – MANUFACTURING AND OPERATIONAL DATA – PHASE 2

Normal Operating Schedule: 24 hours/day 7 days/week 52 weeks/yr

Additional Data Attached? No Yes, please include the attachment in list on Form 1.00, Item 16.

Seasonal/Peak Operating Periods: Not applicable

PRODUCTION INPUT FACTORS

Emission Unit ID	Emission Unit Name	Const. Date	Input Raw Material(s)	Annual Input	Hourly Process Input Rate		
					Design	Normal	Max
LOG	LOG	ASAP	Logs, chips, shavings, sander dust, sawdust	2,640,000 tons	320	tph	
DBRK1-2	DBRK1-2						
CHIP1-2	CHIP1-2						
DUMP1-3	DUMP1-3						
SHRED1-3	SHRED1-3						
PILE	PILE						
DRY1-2	DRY1-2						
DWS1-2	DWS1-2						
HAM1-6	HAM1-6						
PM1-32	PM1-32						
COOL1-4	COOL1-4						
SILO1-16	SILO1-16						

PRODUCTS OF MANUFACTURING

Emission Unit ID	Description of Product	Production Schedule		Hourly Production Rate			
		Tons/yr	Hr/yr	Design	Normal	Maximum	Units
Plant	Wood pellets	1,320,000		160			tph

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

Form 3.00 – AIR POLLUTION CONTROL DEVICES - PART A: GENERAL EQUIPMENT INFORMATION – PHASE 2

APCD Unit ID	Emission Unit ID	APCD Type	Date Installed	Make & Model Number	Unit Modified from Mfg Specifications?	Gas Temp. °F		Inlet Gas Flow Rate (acfm)
						Inlet	Outlet	
WESP1-2	BUR1-2, DRY1-2	WESP	ASAP	TBD	TBD	TBD		
BGH1	DWS1, HAM1	Baghouse						
BGH2	DWS2, HAM2	Baghouse						
BGH3	PM1-8, COOL1	Baghouse						
BGH4	PM9-16, COOL2	Baghouse						
BGH5	PM17-24, COOL3	Baghouse						
BGH6	PM25-32, COOL4	Baghouse						
BGH7	Screening/Transport 1	Baghouse						
BGH8	Screening/Transport 2	Baghouse						
CYC	Fuel Dust	Cyclone						
BIO	VARIOUS	Biofilter						
RTO	BUR5-6, DRY5-6	RTO						

Form 3.00 – AIR POLLUTION CONTROL DEVICES – PART B: EMISSION INFORMATION – PHASE 2

APCD Unit ID	Pollutants Controlled	Percent Control Efficiency		Inlet Stream To APCD		Exit Stream From APCD		Pressure Drop Across Unit (Inches of water)
		Design	Actual	lb/hr	Method of Determination	lb/hr	Method of Determination	
WESP1-2	PM10/PM2.5	99%+		See emission calculations		See emission calculations		TBD
BGH1								
BGH2								
BGH3								
BGH4								
BGH5								
BGH6								
BGH7								
BGH8								
CYC	VOC, HAP	93%						
BIO								
RTO								

Facility Name: SPECTRUM ENERGY GEORGIA LLC

Date of Application: October 2021

FORM 3.02 – BAGHOUSES & OTHER FILTER COLLECTORS – PHASE 2

APCD ID	Filter Surface Area (ft ²)	No. of Bags	Inlet Gas Dew Point Temp. (°F)	Inlet Gas Temp. (°F)	Bag or Filter Material	Pressure Drop (inches of water)	Cleaning Method	Gas Cooling Method	Leak Detection System Type
BGH1	TBD								
BGH2									
BGH3									
BGH4									
BGH5									
BGH6									
BGH7									
BGH8									

FORM 3.03 – ELECTROSTATIC PRECIPITATORS – PHASE 2

APCD ID	Type of ESP	Field No.	Voltage (Volts)		Current (Amps)		Total Power (kW)	Water Flow Rate	Inlet Gas Velocity	Spark Rate sparks/min
			Primary	Secondary	Primary	Secondary				
WESP1	Wet	TBD								
WESP2										

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION – PHASE 2

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	Method of Determination
BUR1-2 DRY1-2	WESP1-2 + RTO	S1	NOX		--		238	Vendor
			CO		--		238	Vendor
			SO2		--		30.7	AP-42
			PM10/2.5		11.7		108	Grain loading
			VOC (as C3)		--		79.2	EPD factors
			ACET		--		1.45	
			HCHO		--		1.85	
			MeOH		--		1.45	
			O_HAP		--		2.51	
			ACRO		--		0.08	DHEC factors
			PHEN		--		0.11	
			PROP		--		0.03	
			HCl		--		2.46	
DWS1-2	BGH1-2 + BIO	S2	PM10/2.5		2.19	9.57	Grain loading	
			VOC (as C3)		--	14.6	HWP factors	
			ACET		--	0.03		
			HCHO		--	0.00	Estimated	
			MeOH		--	0.12		
			ACRO		--	0.12		
			PHEN		--	0.12		
PROP		--	0.12					

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION, CONT. – PHASE 2

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	Method of Determination
HAM1-6	BGH1-2 + BIO	S2	PM10/2.5		4.37		19.1	Grain loading
			VOC (as C3)		--		116	EPD factors
			ACET		--		0.18	
			HCHO		--		0.37	
			MeOH		--		0.18	
			ACRO		--		0.08	DHEC factors
			PHEN		--		0.15	
			PROP		--		0.02	
PM1-32 COOL1-4	BGH3-6 + BIO	S2	PM10/2.5		17.5		76.6	Grain loading
			VOC (as C3)		--		23.1	EPD factors
			ACET		--		0.05	
			HCHO		--		0.09	
			MeOH		--		0.05	
			ACRO		--		0.36	DHEC factors
			PHEN		--		0.14	
			PROP		--		0.03	
SILO1-16	N/A	N/A	PM10/2.5		0.73		3.19	Grain loading
			VOC (as C3)		--		1.92	ACP factors
			ACET		--		0.03	
			HCHO		--		0.03	
			MeOH		--		0.16	

Facility Name:

SPECTRUM ENERGY GEORGIA LLC

Date of Application:

October 2021

FORM 4.00 – EMISSION INFORMATION, CONT. – PHASE 2

Emission Unit ID	Air Pollution Control Device ID	Stack ID	Pollutant Emitted	Emission Rates				Method of Determination
				Hourly Actual Emissions (lb/hr)	Hourly Potential Emissions (lb/hr)	Actual Annual Emission (tpy)	Potential Annual Emission (tpy)	
BLR	N/A	S3	NOX		--		11.0	AP-42
			CO		--		9.20	
			SO2		--		0.07	
			PM10/2.5		0.19		0.83	
			VOC (as C3)		--		0.60	
MISC	BGH7	S4	PM10/2.5		2.91		12.8	Grain loading
	BGH8	S5			2.91		12.8	
	CYC	S6			1.09		4.79	

FORM 5.00 MONITORING INFORMATION – PHASE 2

Emission Unit ID/ APCD ID	Emission Unit/ APCD Name	Monitored Parameter		Monitoring Frequency
		Parameter	Units	
WESP1	WESP1	Power	kW	Continuous
WESP2	WESP2	Power	kW	Continuous
BGH1	BGH1	Pressure drop	In WC	Daily
BGH2	BGH2	Pressure drop	In WC	Daily
BGH3	BGH3	Pressure drop	In WC	Daily
BGH4	BGH4	Pressure drop	In WC	Daily
BGH5	BGH5	Pressure drop	In WC	Daily
BGH6	BGH6	Pressure drop	In WC	Daily
BGH7	BGH7	Pressure drop	In WC	Daily
BGH8	BGH8	Pressure drop	In WC	Daily
CYC	CYC	Pressure drop	In WC	Daily
BIO	BIO	VOC	ppm	Continuous
RTO	RTO	Temperature	F	Continuous

Comments:

