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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions.			[G]§ 63.7550(h)
31H4	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
31H4	EU	R7ICI-12	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a)(2)(A) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
31H4	EU	R7ICI-12-A	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	For boilers that were regulated as existing facilities in 40 CFR Part 266, Subpart H that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 7.0% O <sub>2</sub> , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(b)(1) § 117.340(b)(3) § 117.340(d) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§	§ 117.345(a) § 117.345(f) § 117.345(f)(11) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8130 § 117.8130(4)		
31H4	EU	R7ICI-12-A	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a)(2)(A) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) ) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
31H4	EU	R7ICI-12-B	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For boilers that were regulated as existing facilities in 40 CFR Part 266, Subpart H that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 7.0% O <sub>2</sub> , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(b)(1) § 117.340(b)(3) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(3)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
31H4	EU	R7ICI-12-B	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a)(2)(A) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) ) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
31H4	EU	R7ICI-12-C	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For boilers that were regulated as existing facilities in 40 CFR Part 266, Subpart H that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 7.0% O <sub>2</sub> , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(b)(1) § 117.340(b)(3) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
31H4	EU	R7ICI-12-C	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a)(2)(A) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) ) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
31H4	EU	R7ICI-12-	NH <sub>3</sub>	30 TAC Chapter	§ 117.310(c)(2)	For boilers that were	§ 117.335(a)(2)	§ 117.345(a)	§ 117.335(b)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		D		117, Subchapter B	§ 117.310(c)(2)(A)	regulated as existing facilities in 40 CFR Part 266, Subpart H that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 7.0% O <sub>2</sub> , dry.	§ 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(b)(1) § 117.340(b)(3) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(2)	§ 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
31H4	EU	R7ICI-12-D	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a)(2)(A) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) §	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) ) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
31H4	EU	63EEE	Chromium	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(4)(ii) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain, except for an area source as defined under §63.2, when you burn hazardous waste with an as-fired heating value of 10,000 Btu/lb or greater, emissions in excess of 1.3 x 10-4 lbs chromium emissions attributable to the hazardous waste per million Btu heat input from the hazardous waste.	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(a) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) [G]§ 63.1207(f)(1)(x) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xvii)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(n) § 63.1209(n)(1) [G]§ 63.1209(n)(2)(vii) [G]§ 63.1209(n)(5) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)		§ 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) [G]§ 63.1207(f)(1)(x) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1208(b)(4) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) § 63.1209(c)(5) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) [G]§ 63.1209(n)(2)(vii) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) § 63.1209(g)(1)(iv)(A) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
31H4	EU	63EEE	Combined Metals	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(3)(ii) [G]§ 63.1206(b)(5)	For existing liquid fuel boilers, you must not	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(n) § 63.1209(n)(1) [G]§ 63.1209(n)(2)(vii) [G]§ 63.1209(n)(5) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)	discharge or cause to be emitted into the atmosphere combustion gases that contain, except for an area source as defined under §63.2, when you burn hazardous waste with an as-fired heating value of 10,000 Btu/lb or greater, emissions in excess of 8.2 x 10 <sup>-6</sup> lbs combined cadmium and lead emissions attributable to the hazardous waste per million Btu heat input from the hazardous waste on an (not-to-exceed) annual averaging period.	[G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) [G]§ 63.1207(f)(1)(x) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1208(b)(3) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(5)	[G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	[G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) [G]§ 63.1207(f)(1)(x) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) § 63.1209(c)(5) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) [G]§ 63.1209(n)(2)(vii) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) § 63.1209(g)(1)(iv)(A) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
31H4	EU	63EEE	Dioxins/Furans	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(1)(ii) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(l)(2)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain CO emissions in excess of the limits provided by §63.1217(a)(5) for sources not equipped with a dry air pollution control system;	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) [G]§ 63.1207(b)(2) [G]§ 63.1207(b)(3) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) § 63.1209(k)(2)(i) [G]§ 63.1209(k)(3) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xix) § 63.1207(f)(1)(xv)









**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1209(m)(3) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		
31H4	EU	63EEE	Principal Organic Hazardous Constituent	40 CFR Part 63, Subpart EEE	§ 63.1217(c)(1) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) [G]§ 63.1209(j) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(c)(3)(i) § 63.1217(c)(3)(ii)	For liquid fuel boilers, except as provided in §63.1217(c)(2), you must achieve a DRE of 99.99% for each POHC designated under paragraph §63.1217(c)(3). You must calculate DRE for each POHC using the equation in §63.1217(c)(2).	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) § 63.1207(f)(1)(ii)(D) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(7)(i) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) [G]§ 63.1206(c)(5) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) § 63.1207(f)(1)(ii)(D) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xix) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) [G]§ 63.1209(j) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
31H4	EU	63EEE	Total Chlorine	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(6)(ii) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain, except for an area source as defined under §63.2, when you burn hazardous waste with an as-fired heating value of 10,000 Btu/lb or greater, emissions in excess of 5.08 x 10 <sup>-2</sup> lbs combined emissions of hydrogen chloride and chlorine gas attributable to the hazardous waste per million Btu heat input from the	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(n)(4) § 63.1209(o) [G]§ 63.1209(o)(1)(ii)(A) [G]§ 63.1209(o)(2) [G]§ 63.1209(o)(3) [G]§ 63.1209(o)(4) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)	hazardous waste.	63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvii) § 63.1207(g)(1)(ii) § 63.1207(g)(2)(iii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) [G]§ 63.1208(b)(5)(i) § 63.1208(b)(5)(ii) [G]§ 63.1208(b)(5)(ii)(B) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) § 63.1209(c)(5) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(p)	§ 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxv) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(iii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 63.1209(q) § 63.1209(r)		[G]§ 63.1211(d) § 63.1212(a)
31H4	EU	63EEE	Total Hydrocarbons/CO	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(5)(i) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain CO in excess of 100 ppmv, over an hourly rolling average (monitored continuously with a CEMs), dry basis and corrected to 7 % O <sub>2</sub> . If complying with this CO standard rather than the hydrocarbon standard under §63.1217(a)(5)(ii), hydrocarbons do not exceed 10 ppmv , and must be reported as specified.	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(6) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) § 63.1207(g)(2)(i) § 63.1207(g)(2)(v) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) § 63.1208(b)(7)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxviii) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(i) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1208(b)(8) § 63.1209(a)(1)(i) § 63.1209(a)(2) [G]§ 63.1209(a)(3) [G]§ 63.1209(a)(6) § 63.1209(a)(7) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
31PROC-AIS	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
31S14	EP	R5720-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).			
31S14	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
31S14	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	[G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
31S27	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas	§ 115.122(a)(2) § 115.121(a)(2)	Any vent gas streams affected by §115.121(a)(2)	[G]§ 115.125 § 115.126(1)	§ 115.126 § 115.126(1)	None

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls	§ 115.122(a)(2)(B)	of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	§ 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126(1)(C) § 115.126(2)	
31S27	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(b) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(d)(1) [G]§ 63.115(f)	§ 63.114(d)(1) § 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(a)(3) [G]§ 63.152(a)	§ 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
31SAMPCA B	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
31T10	EU	R5111-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of this division.			
31T14	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
31T16	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
31T35	EU	R5112-T35	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
31T36	EU	R5112-T36	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
31T38	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.			
31T4	EU	R5111-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
31T7	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
31Z4	EU	R1111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period. Non-excessive upset events are subject to the provisions under §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
31Z4	EP	R5720-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(10) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B) [G]§ 115.726(a)(2)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B) § 115.725(n) [G]§ 115.726(a)(2)		§ 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) § 115.725(k)(1) § 115.725(m)(2)(A) § 115.725(m)(2)(B)		
31Z4	CD	60A-2	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
31Z4	CD	63A-2	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
331T5-1	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.133(a)(1)	A fixed roof shall be operated and maintained except that if the wastewater tank is used for specified purpose, then	None	None	§ 63.146(b)(2) § 63.146(b)(5) [G]§ 63.151(a)(6) [G]§ 63.151(b) § 63.151(e)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						owner or operator shall comply with requirements of § 63.133(a)(2).			[G]§ 63.151(e)(1) § 63.151(e)(2) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(4)(ii)
331T5-2	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.133(a)(1)	A fixed roof shall be operated and maintained except that if the wastewater tank is used for specified purpose, then owner or operator shall comply with requirements of § 63.133(a)(2).	None	None	§ 63.146(b)(2) § 63.146(b)(5) [G]§ 63.151(a)(6) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(4)(ii)
331T6	EU	R5111-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP_30D	EP	63G-30D	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	[G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
GRP_31D	EP	63G-31D	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	[G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
PRO_30CM PU	PRO	63F-1	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						that meet the criteria.			
PRO_30R1-1/6	EP	63G-30REC1	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(b) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(d)(1) [G]§ 63.115(f)	§ 63.114(d)(1) § 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(a)(3) [G]§ 63.152(a)	§ 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
PRO_30R1-1/6	EP	63G-30REC2	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(b) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(d)(1) [G]§ 63.115(f)	§ 63.114(d)(1) § 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(a)(3) [G]§ 63.152(a)	§ 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
PRO_31CM PU	PRO	63F-2	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						manufacturing process units that meet the criteria.			
PRO_31R1-1/2	EP	63G-31REC	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(b) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(d)(1) [G]§ 63.115(f)	§ 63.114(d)(1) § 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(a)(3) [G]§ 63.152(a)	§ 63.117(a)(4) § 63.117(a)(4)(iii) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

**Additional Monitoring Requirements**

**Compliance Assurance Monitoring Summary ..... 113**  
**Periodic Monitoring Summary ..... 117**

### CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: 30K100	
Control Device ID No.: 30K100	Control Device Type: Wet scrubber
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.122(a)(1)
<b>Monitoring Information</b>	
Indicator: A maximum scrubber liquid temperature was established using process simulation software.	
Minimum Frequency: The temperature shall be monitored and recorded at least hourly.	
Averaging Period: Daily	
Deviation Limit: The maximum scrubbing liquid temperature is 55 °F	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 2.5 degrees Celsius.</p> <p>Quality assured (or valid) data must be generated when the scrubber is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the scrubber operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.</p> <p>A temperature monitor is installed on the inlet line of the scrubbing liquid.</p>	

### CAM Summary

Unit/Group/Process Information	
ID No.: 30K100	
Control Device ID No.: 30K100	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: A minimum liquid flow rate was established using process simulation software.	
Minimum Frequency: The flow rate shall be monitored and recorded at least hourly.	
Averaging Period: Daily	
Deviation Limit: The minimum liquid flow to the absorber shall be 4 gpm	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design liquid flow rate.</p> <p>Quality assured (or valid) data must be generated when the scrubber is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the scrubber operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.</p> <p>A flow meter is installed on the inlet line of the scrubbing liquid.</p>	

### CAM Summary

Unit/Group/Process Information	
ID No.: 30S33	
Control Device ID No.: 30H5	Control Device Type: Steam generating unit (boiler)/process heater (design heat input is greater than or equal to 44 megawatts)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Combustion temperature greater than or equal to 1426 F when AOG vent is routed to 30H5. Combustion temperature greater than or equal to 1586 F when AOG vent and liquid HCN both are routed to 30H5.	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> <li>± 2% of reading; or</li> <li>± 2.5 degrees Celsius.</li> </ul>	

### CAM Summary

Unit/Group/Process Information	
ID No.: 31S27	
Control Device ID No.: 31H4	Control Device Type: Steam generating unit (boiler)/process heater (design heat input is greater than or equal to 44 megawatts)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Combustion temperature greater than or equal to 1433 F when AOG vent is routed to 31H4. Combustion temperature greater than or equal to 1586 F when AOG vent and liquid HCN both are routed to 31H4.	
<p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> <li>± 2% of reading; or</li> <li>± 2.5 degrees Celsius.</li> </ul>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 30H1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-5
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: Natural gas flow rate measurement	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: Natural gas flow rate greater than 740 lb/hr	
Periodic Monitoring Text: Measure and record natural gas fuel consumption with a fuel flow meter. The valve is positioned not to exceed the maximum natural gas flow limit which is established with the AP-42 Chapter 1.4 natural gas combustion CO emission factor for an emission rate not to exceed 400 ppmv. Flow meter installed, calibrated and maintained per manufacturer's recommendations.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 30H5	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: Firing an alternate fuel for greater than 24 consecutive hours without conducting a visible emission observation; visible emissions are observed and a Test Method 9 is not performed; or opacity greater than 15%.	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: 31AMSHOP-1	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-3
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: 20% averaged over a six-minute period	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: 31AMSHOP-2	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-4
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: 20% averaged over a six-minute period	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: 31H1-1	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-3
Pollutant: CO	Main Standard: § 117.310(c)(1)
<b>Monitoring Information</b>	
Indicator: Natural gas flow rate measurements	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: Natural gas flow rate greater than 1,725 lb/hr	
Periodic Monitoring Text: Measure and record natural gas fuel consumption with a fuel flow meter. The valve is positioned not to exceed the maximum natural gas flow limit which is established with the AP-42 Chapter 1.4 natural gas combustion CO emission factor for an emission rate not to exceed 400 ppmv. Flow meter installed, calibrated and maintained per manufacturer's recommendations.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 31H1-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-9
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: Natural gas flow rate measurement	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: Natural gas flow rate greater than 1,725 lb/hr	
Periodic Monitoring Text: Measure and record natural gas fuel consumption with a fuel flow meter. The valve is positioned not to exceed the maximum natural gas flow limit which is established with the AP-42 Chapter 1.4 natural gas combustion CO emission factor for an emission rate not to exceed 400 ppmv. Flow meter installed, calibrated and maintained per manufacturer's recommendations.	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: 31H4	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: Firing an alternate fuel for greater than 24 consecutive hours without conducting a visible emission observation; visible emissions are observed and a Test Method 9 is not performed; or opacity greater than 15%.	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

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### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
30D4	N/A	40 CFR Part 63, Subpart NNN	Group 1 process vent that is also subject to the provisions of 40 CFR Part 60 subpart NNN is required to comply only with the provisions of the HON.
30H1	N/A	40 CFR Part 60, Subpart Db	Not subject to NSPS Db because unit meets the definition of "process heater." By definition, process heaters are not "steam generating units" that are subject to this rule.
30H1	N/A	40 CFR Part 63, Subpart EEE	Source does not burn hazardous waste.
30H5	N/A	40 CFR Part 60, Subpart Db	Unit was built before June 19, 1984 and has not been modified or reconstructed since June 19, 1984
30H5	N/A	40 CFR Part 63, Subpart DDDDD	Waste heat boilers are excluded from the definition of a boiler as described in §63.7575
30PROC-AIS	N/A	40 CFR Part 63, Subpart G	Not a HON process vent because it is a gas stream exiting an analyzer.
30S33	N/A	40 CFR Part 63, Subpart YY	Not part of the SOHIO Hydrogen Cyanide Process Unit because it is upstream of the point where HCN is separated from the AN in the unit (Heads column).
30T10-1	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is between 75 cubic meters and 151 cubic meters and maximum true vapor pressure is less than 15 kPa (2.2 psia).
30T10-1	N/A	40 CFR Part 63, Subpart G	Tank does not store organic HAPs.
30T11	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
30T11	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
30T13	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T14	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb does not apply because this vessel meets the definition of "process tank," which is specifically excluded from the definition of "storage vessel."
30T14	N/A	40 CFR Part 63, Subpart G	Unit does not meet HON definition of "storage vessel" because it is a surge control vessel.
30T15	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb does not apply because this vessel meets the definition of "process tank," which is specifically excluded from the definition of "storage vessel."
30T15	N/A	40 CFR Part 63, Subpart G	Unit does not meet HON definition of "storage vessel" because it is a surge control vessel.
30T2	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store VOCs.
30T2	N/A	40 CFR Part 60, Subpart Kb	Tank does not store VOLs.
30T2	N/A	40 CFR Part 63, Subpart G	Tank does not store organic HAPs.
30T27	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T27	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
30T31	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			equal to 1,000 gallons.
30T31	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T31	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
30T49	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T49	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
30T53	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T53	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
30T58	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 m <sup>3</sup> .
30T58	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 m <sup>3</sup> .
30T61	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T61	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
30T62	N/A	40 CFR Part 63, Subpart G	Not a HON process vent because it does not originate as a continuous flow from a reactor or distillation column.
30T62	N/A	40 CFR Part 63, Subpart YY	Not part of the SOHIO Hydrogen Cyanide Process Unit because it is upstream of the point where HCH is separated from the AN in the unit (Heads column).
30T9	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
30T9	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
30T9	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage tank" in Subpart F because capacity is less than 38 cubic meters.
31H1-1	N/A	40 CFR Part 60, Subpart Db	Not subject to the NSPS Db because unit meets the definition of "process heater." By definition, process heaters are not "steam generating units" that are subject to this rule.
31H1-1	N/A	40 CFR Part 63, Subpart EEE	Source does not burn hazardous waste.
31H1-2	N/A	40 CFR Part 60, Subpart Db	Not subject to NSPS Db because unit meets the definition of "process heater." By definition, process heaters are not "steam generating units" that are subject to this rule.
31H1-2	N/A	40 CFR Part 63, Subpart EEE	Source does not burn hazardous waste.
31H4	N/A	40 CFR Part 60, Subpart Db	Unit was built before June 19, 1984 and has not been modified or reconstructed since June 19, 1984

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
31H4	N/A	40 CFR Part 63, Subpart DDDDD	Waste heat boilers are excluded from the definition of a boiler as described in §63.7575
31PROC-AIS	N/A	40 CFR Part 63, Subpart G	Not a HON process vent because it is a gas stream exiting an analyzer.
31S27	N/A	40 CFR Part 63, Subpart YY	Not part of the SOHIO Hydrogen Cyanide Process Unit because it is upstream of the point where HCN is separated from the AN in the unit (Heads column).
31T10	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T10	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T12	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
31T12	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T12	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T14	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb does not apply because this vessel meets the definition of "process tank" which is specifically excluded from the definition "storage vessel".
31T14	N/A	40 CFR Part 63, Subpart G	Tank does not store organic HAPs.
31T16	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb does not apply because this vessel

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			meets the definition of "process tank," which is specifically excluded from the definition of "storage vessel."
31T27	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
31T27	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T27	N/A	40 CFR Part 63, Subpart G	Tank does not store organic HAPs.
31T28	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
31T28	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T28	N/A	40 CFR Part 63, Subpart G	Tank does not store organic HAPs.
31T3	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
31T3	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T3	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T35	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T35	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
31T36	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T36	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T37	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
31T37	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T37	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T38	N/A	40 CFR Part 63, Subpart G	Not a HON process vent because it does not originate as a continuous flow from a reactor or distillation column
31T38	N/A	40 CFR Part 63, Subpart YY	Not part of the SOHIO Hydrogen Cyanide Process Unit because it is upstream of the point where HCN is separated from the AN in the unit (Heads Column).
31T4	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
31T4	N/A	40 CFR Part 63, Subpart G	Unit does not meet definition of "storage vessel" in Subpart F because capacity is less than 38 cubic meters.
31T7	N/A	40 CFR Part 60, Subpart G	Unit does not meet HON definition of "storage vessel" because it is a surge control vessel.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
31T7	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb does not apply because this vessel meets the definition of "process tank," which is specifically excluded from the definition of "storage vessel."
331T5-1	N/A	30 TAC Chapter 115, Storage of VOCs	Exempt from Chapter 115 Subchapter B Division 1 storage tank requirements because unit is subject to control requirements of 115.142.
331T5-1	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 cubic meters and maximum true vapor pressure is less than 3.5 kPa (0.51 psia).
331T5-2	N/A	30 TAC Chapter 115, Storage of VOCs	Exempt from Chapter 115 Subchapter B Division 1 storage tank requirements because unit is subject to control requirements of 115.142.
331T5-2	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 cubic meters and maximum true vapor pressure is less than 3.5 kPa (0.51 psia).
331T6	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
331T6	N/A	40 CFR Part 63, Subpart G	Tank is not part of the HON C MPU.
331T7	N/A	30 TAC Chapter 115, Storage of VOCs	Capacity of the storage vessel is less than or equal to 1,000 gallons.
331T7	N/A	40 CFR Part 60, Subpart Kb	Capacity of the storage vessel is less than 75 cubic meters.
331T7	N/A	40 CFR Part 63, Subpart G	Tank is not part of the HON C MPU.
GRP_30D	30D1, 30D3, 30D5, 30D6, 30D7, 30D8	40 CFR Part 63, Subpart NNN	Group 1 process vent that is also subject to the provisions of 40 CFR Part 60 subpart NNN is

**Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			required to comply only with the provisions of the HON.
GRP_31D	31D1, 31D3/D4, 31D5, 31D6	40 CFR Part 63, Subpart NNN	Group 1 process vent that is also subject to the provisions of 40 CFR Part 60 subpart NNN is required to comply only with the provisions of the HON
PRO_30R1-1/6	N/A	40 CFR Part 60, Subpart III	Group 1 process vent that is also subject to the provisions of 40 CFR Part 60, subpart III is required to comply only with the provisions of the HON.
PRO_31R1-1/2	N/A	40 CFR Part 60, Subpart III	Group 1 process vent that is also subject to the provisions of 40 CFR Part 60, Subpart III is required to comply only with the provisions of the HON.

**New Source Review Authorization References**

**New Source Review Authorization References ..... 135**

**New Source Review Authorization References by Emission Unit..... 136**

**New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Nonattainment (NA) Permits</b>	
NA Permit No.: N011	Issuance Date: 05/16/2025
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 18251	Issuance Date: 05/16/2025
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000

**New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
30-T-MSS	AN-2 TURNAROUND MSS ACTIVITIES	18251, N011
30D1	WASTEWATER COLUMN	18251, N011
30D3	AN-2 RECOVERY COLUMN	18251, N011
30D4	AN-2 STRIPPER COLUMN	18251, N011, 106.264/09/04/2000 [179440]
30D5	AN-2 HEADS COLUMN	18251, N011
30D6	AN-2 DRYING COLUMN	18251, N011
30D7	AN-2 PRODUCT COLUMN	18251, N011
30D8	AN-2/3 RERUN COLUMN	18251, N011
30H1	AN-2 AIR HEATER	18251, N011
30H5	AN-2 WASTE HEAT BOILER	18251, N011
30ISBLFUG	AN-2/3 ISBL PROCESS FUGITIVES	18251, N011, 106.261/11/01/2003 [156045, 156964, 170725, 174087, 175912, 179440], 106.262/11/01/2003 [153725, 156045, 156964, 165965, 170725, 174087, 176033, 179440]
30K100	SCRUBBER VENT	106.261/11/01/2003 [179440], 106.262/11/01/2003 [179440]
30MSS	ROUTINE MSS ACTIVITIES	18251, N011
30PROC-AIS	AN-2 PROCESS ANALYZERS	18251, N011
30S13	AN-2 FLARE STACK DRUM	18251, N011, 106.261/11/01/2003 [179440], 106.262/11/01/2003 [179440]
30S33	AN-2 AOG VENT TO WHB	18251, N011
30SAMPCAB	AN-2 SAMPLE CABINETS	18251, N011

**New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
30SUMPS	ACRYLONITRILE UNIT 2 SUMPS	18251, N011
30T10-1	ACIDIFIED CONDENSATE TANK	18251, N011
30T11	AN-2 HYDROQUINONE TANK	18251, N011, 106.264/09/04/2000
30T13	GLYCOL TANK	18251, N011
30T14	AN-2 PROCESS SEWER TANK	18251, N011
30T15	AN-2 SLOP WATER TANK 30T15 VENT	18251, N011
30T2	H2SO4 TANK	18251, N011
30T27	ACETIC ACID STORAGE TANK	18251, N011
30T31	30C1 LUBE OIL TANK	18251, N011
30T33	30C2 LUBE OIL TANK	18251, N011
30T49	INTERMITTENT BLOWDOWN TANK	18251, N011
30T53	STEAM BLOWDOWN FLASH TANK	18251, N011
30T58	ANTIFOAM TANK	18251, N011
30T61	DISPERSANT TANK	18251, N011
30T62	AN-2 CATALYST TRANSFER OPERATIONS	18251, N011, 106.261/11/01/2003 [153161]
30T9	ORGANIC ACID TANK	18251, N011
30Z7	ACRYLONITRILE UNIT 2 FLARE	18251, N011
30Z7-MSS	ACRYLONITRILE UNIT 2 FLARE MSS	18251, N011
31-T-MSS	AN3 TURNAROUND MSS ACTIVITIES	18251, N011
31AMSHOP-1	AN-3 INJECTION SYSTEM 1	18251, N011
31AMSHOP-2	AN-3 INJECTION SYSTEM 2	18251, N011

**New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
31D1	WASTEWATER COLUMN	18251, N011
31D3/D4	AN-3 RECOVERY/STRIPPER COLUMN	18251, N011, 106.264/09/04/2000 [156964]
31D5	AN-3 HEADS COLUMN	18251, N011
31D6	AN-3 PRODUCTS COLUMN	18251, N011
31H1-1	AN-3 AIR HEATER 1	18251, N011
31H1-2	AN-3 AIR HEATER 2	18251, N011
31H4	AN-3 WASTE HEAT BOILER	18251, N011
31PROC-AIS	AN-3 PROCESS ANALYZERS	18251, N011
31S14	AN-3 FLARE STACK DRUM	18251, N011
31S27	AN-3 AOG VENT TO WHB	18251, N011
31SAMPCAB	AN-3 SAMPLE CABINETS	18251, N011
31SUMPS	ACRYLONITRILE UNIT 3 SUMPS	18251, N011
31T10	AN-3 HYDROQUINONE TANK	18251, N011
31T12	31C1 LUBE OIL TANK	18251, N011
31T14	31C2 LUBE OIL TANK	18251, N011
31T16	CIRCULATING WATER TANK	18251, N011
31T27	31Z24 LUBE OIL TANK	18251, N011
31T28	31Z25 LUBE OIL TANK	18251, N011
31T3	ORGANIC ACID TANK	18251, N011
31T35	ANTIFOAM TANK	18251, N011
31T36	DISPERSANT TANK	18251, N011

**New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
31T37	31C3 LUBE OIL TANK	18251, N011
31T38	AN-3 CATALYST TRANSFER OPERATIONS	18251, N011, 106.261/11/01/2003 [153161]
31T4	HYDROQUINONE TANK	18251, N011
31T7	AN-3 SEWER TANK 31T7 VENT	18251, N011
31Z4	ACRYLONITRILE UNIT 3 FLARE	18251, N011
31Z4-MSS	ACRYLONITRILE UNIT 3 FLARE MSS	18251, N011
331SWTREAT	SOLID WASTE TREATMENT	18251, N011
331T3.1	DEPT. 331 SUMP	18251, N011
331T5-1	S WASTEWATER SETTLING TANK	18251, N011
331T5-2	N WASTEWATER SETTLING TANK	18251, N011
331T6	COAGULANT TANK	18251, N011
331T7	FLOCCULANT TANK	18251, N011
AMSHOP	AMS TRANSFER OPERATION	106.262/11/01/2003 [156045]
AMSHOP2	AMS HOPPER	106.261/11/01/2003 [162204]
ANHOP	AN 2/3 PORTABLE CATALYST TRANSFER OPERATION	106.261/11/01/2003 [153161, 156045]
PRO_30CMPU	AN-2 MFG PROCESS	18251, N011
PRO_30R1-1/6	AN-2 AIR_OX REACTORS	18251, N011
PRO_31CMPU	AN-3 MFG PROCESS	18251, N011
PRO_31R1-1/2	AN-3 AIR_OX REACTORS	18251, N011
REFSYS	NON-AMMONIA REFRIGERANT SYSTEM	106.373/09/04/2000

\*\*This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers,

Minor NSR permit numbers, and Major NSR permit numbers.

**Appendix A**

**Acronym List ..... 142**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
RO	Responsible Official
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

**Appendix B**

**Major NSR Summary Table ..... 144**

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
30H1	Acrylonitrile Unit 2 Air Heater	VOC	0.08	0.30		8, 35, 38	
		NO <sub>x</sub>	1.75	5.52			
		CO	1.17	4.64			
		PM	0.11	0.42			
		PM <sub>10</sub>	0.11	0.42			
		PM <sub>2.5</sub>	0.11	0.42			
		SO <sub>2</sub>	0.01	0.03			
30H5	Acrylonitrile Unit 2 Waste Heat Boiler	VOC (6)	39.25	28.84	4, 5, 6, 9, 12, 19, 20, 21, 25	4, 5, 6, 7, 8, 9, 10, 13, 19, 20, 21, 25, 35, 38	4, 5, 6, 19, 21
		NO <sub>x</sub>	120.00	109.50			
		CO	31.00	95.00			
		PM	138.00	8.80			
		PM <sub>10</sub>	138.00	8.80			
		PM <sub>2.5</sub>	138.00	8.80			
		SO <sub>2</sub>	5.00	20.00			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		ACN	5.02	7.00			
		AN	2.09	0.39			
		HCN	1.56	1.13			
		Acrylic Acid	0.38	0.64			
		Propylene	19.26	4.77			
		MeOH	1.75	5.10			
		Benzene	1.00	1.25			
		ACR	1.77	2.93			
		Acrylamide	0.31	0.53			
30Z7	Acrylonitrile Unit 2 Flare	VOC (6)	15.04	-	4, 6, 22, 23	4, 6, 7, 22, 23, 38	4, 6
		NOx	18.57	-			
		CO	10.78	-			
		SO <sub>2</sub>	0.10	-			
		AN	4.27	-			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		HCN	7.64	-			
		Propylene	2.72	-			
		Ethylene	0.10	-			
30Z7-MSS	Acrylonitrile Unit 2 Flare MSS	AN	11.90	-	4, 6, 22, 23, 36	4, 6, 7, 22, 23, 36, 38	4, 6
		CO	37.21	-			
		HCN	20.08	-			
		NO <sub>x</sub>	51.84	-			
		SO <sub>2</sub>	0.10	-			
		Propylene	39.76	-			
		Ethylene	1.21	-			
		VOC (6)	75.19	-			
30Z7 and 30Z7-MSS	Acrylonitrile Unit 2 Flare including MSS	VOC (6)	-	14.12	4, 6, 22, 23, 36	4, 6, 7, 22, 23, 36, 38	4, 6
		NO <sub>x</sub>	-	20.77			
		CO	-	13.37			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		SO <sub>2</sub>	-	0.50			
		AN	-	4.29			
		HCN	-	8.57			
		Propylene	-	1.21			
		Ethylene	-	0.01			
30PROC-AIS	AN2 Process Analyzers	VOC (6)	0.27	1.07		7, 38	
		CO	0.02	0.06			
		NH <sub>3</sub>	0.01	0.02			
		HCN	0.02	0.08			
		AN	0.13	0.58			
		ACN	0.01	0.01			
		ACR	0.01	0.01			
		Propylene	0.07	0.32			
30MSS	Routine MSS	VOC (6)	1.58	0.06	31	7, 27, 28, 29, 30, 31,	

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Activities	NH <sub>3</sub>	1.05	0.01		32, 33, 38	
		AN	0.70	0.02			
		HCN	0.05	0.01			
		Propylene	0.76	0.01			
30T2	Sulfuric Acid Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01		26, 38	
30T9	Organic Acid Tank	VOC	0.67	0.01		26, 38	
30T10-1	Acidified Condensate Tank	VOC	0.01	0.01		26, 38	
30T11	Hydroquinone Tank	VOC	0.01	0.01		26, 38	
30T13	Glycol Tank	VOC	0.13	0.01		26, 38	
30T14	Acrylonitrile Unit 2 Process Sewer Tank	VOC (6)	0.38	0.01		7, 26, 38	
		AN	0.38	0.01			
		HCN	0.10	0.01			
		ACN	0.01	0.01			
30T15	Acrylonitrile Unit 2	VOC (6)	0.83	0.03		7, 26, 38	

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Slop Water Tank 30T15 Vent	AN	0.82	0.03			
		HCN	0.21	0.03			
		ACN	0.01	0.01			
30T27	Acetic Acid Storage Tank	VOC	3.52	0.02		26, 38	
30T31	30C1 Lube Oil Tank	VOC (6)	0.01	0.01		26, 38	
		Lube Oil	0.01	0.01			
30T33	30C2 Lube Oil Tank	VOC (6)	0.22	0.95		26, 38	
		Lube Oil	0.01	0.01			
		Propylene	0.22	0.95			
30T49	Intermittent Blowdown Tank	VOC	0.01	0.01		26, 38	
30T53	Steam Blowdown Flash Tank	VOC	0.01	0.01		26, 38	
30T56	Storm Water Trench Backwash Tank	VOC	0.01	0.01		26, 38	

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
30T58	Antifoam Tank	VOC	0.10	0.01		26, 38	
30T61	Dispersant Tank	VOC	0.01	0.01		26, 38	
31H1-1	Acrylonitrile Unit 3 Air Heater 1	VOC	0.21	0.37		8, 35, 38	
		NO <sub>x</sub>	4.74	3.15			
		CO	3.19	5.63			
		PM	0.29	0.51			
		PM <sub>10</sub>	0.29	0.51			
		PM <sub>2.5</sub>	0.29	0.51			
		SO <sub>2</sub>	0.54	0.04			
31H1-2	Acrylonitrile Unit 3 Air Heater 2	VOC	0.21	0.37		8, 35, 38	
		NO <sub>x</sub>	4.74	3.15			
		CO	3.19	5.63			
		PM	0.29	0.51			
		PM <sub>10</sub>	0.29	0.51			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM <sub>2.5</sub>	0.29	0.51			
		SO <sub>2</sub>	0.54	0.04			
31H4	Acrylonitrile Unit 3 Waste Heat Boiler	VOC	42.79	30.99	4, 5, 6, 9, 12, 13, 19, 20, 21, 25	4, 5, 6, 7, 8, 9, 10, 12, 13, 19, 20, 21, 25, 35, 38, 39	4, 5, 6, 19, 21, 39
		NO <sub>x</sub>	140.00	41.21			
		CO	66.55	110.00			
		PM	7.72	11.52			
		PM <sub>10</sub>	7.72	11.52			
		PM <sub>2.5</sub>	7.72	11.52			
		SO <sub>2</sub>	5.00	15.86			
		NH <sub>3</sub>	9.49	11.86			
		ACN	5.02	7.00			
		AN	4.88	0.62			
		HCN	1.56	1.84			
Acrylic Acid	0.38	0.64					

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		Propylene	19.26	4.28			
		ACR	1.77	2.93			
		Acrylamide	0.31	0.53			
		Benzene	1.00	1.25			
		MeOH	1.75	5.10			
31Z4	Acrylonitrile Unit 3 Flare	VOC (6)	13.17	-	4, 6, 22, 23	4, 6, 7, 22, 23, 38	4, 6
		NO <sub>x</sub>	18.27	-			
		CO	8.68	-			
		SO <sub>2</sub>	0.10	-			
		AN	4.27	-			
		HCN	7.68	-			
		Propylene	0.61	-			
		Ethylene	0.01	-			
31Z4-MSS	Acrylonitrile Unit 3	VOC (6)	66.42	-	4, 6, 22, 23, 36	4, 6, 7, 22, 23, 36, 38	4, 6

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Flare MSS	NO <sub>x</sub>	71.29	-			
		CO	25.16	-			
		SO <sub>2</sub>	0.10	-			
		AN	18.91	-			
		HCN	29.32	-			
		Propylene	16.65	-			
		Ethylene	0.28	-			
31Z4 and 31Z4-MSS	Acrylonitrile Unit 3 Flare including MSS	VOC (6)	-	14.12	4, 6, 22, 23, 36	4, 6, 7, 22, 23, 36, 38	4, 6
		NO <sub>x</sub>	-	13.38			
		CO	-	13.56			
		SO <sub>2</sub>	-	0.50			
		AN	-	4.29			
		HCN	-	8.57			
		Propylene	-	1.21			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		Ethylene	-	0.01			
31PROC-AIS	Acrylonitrile Unit 3 Process Analyzers	VOC (6)	0.09	0.40		7, 38	
		NO <sub>x</sub>	0.43	1.86			
		CO	0.01	0.06			
		NH <sub>3</sub>	0.01	0.01			
		HCN	0.01	0.06			
		AN	0.07	0.30			
		ACN	0.01	0.01			
		ACR	0.01	0.01			
		Propylene	0.01	0.01			
31T3	Organic Acid Tank	VOC	0.67	0.01		26, 38	
31T4	Hydroquinone Tank	VOC	0.01	0.01		26, 38	
31T7	Acrylonitrile Unit 3 Sewer Tank 31T7 Vent	VOC (6)	0.38	0.01		7, 26, 38	
		AN	0.38	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		HCN	0.10	0.01			
		ACN	0.01	0.01			
31T10	Hydroquinone Tank	VOC	0.01	0.01		26, 38	
31T12	31C1 Lube Oil Tank	VOC (6)	0.01	0.01		26, 38	
		Lube Oil	0.01	0.01			
31T14	31C2 Lube Oil Tank	VOC (6)	0.22	0.95		26, 38	
		Lube Oil	0.01	0.01			
		Propylene	0.22	0.95			
31T16	Circulating Water Tank	VOC (6)	0.71	0.01		7, 26, 38	
		AN	0.47	0.01			
		HCN	0.37	0.01			
		ACN	0.24	0.01			
31T27	31Z24 Lube Oil Tank	VOC (6)	0.01	0.01		26, 38	
		Lube Oil	0.01	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
31T28	31Z25 Lube Oil Tank	VOC (6)	0.01	0.01		26, 38	
		Lube Oil	0.01	0.01			
31T35	Antifoam Tank	VOC	0.10	0.01		26, 38	
31T36	Dispersant Tank	VOC	0.01	0.01		26, 38	
31T37	31C3 Lube Oil Tank	VOC (6)	0.01	0.01		26, 38	
		Lube Oil	0.01	0.01			
331T6	Coagulant Tank	VOC	2.46	0.01		26, 38	
331T7	Flocculent Tank	VOC	0.01	0.01		26, 38	
30SUMPS	Acrylonitrile Unit 2 Sumps (30T63, 30T64, 30T65, 30T66, 30D1 Sump, and 30D4 Sump)	VOC (6)	0.01	0.01		7, 38	
		AN	0.01	0.01			
		HCN	0.01	0.01			
		ACN	0.01	0.01			
31SUMPS	Acrylonitrile Unit 3 Sumps (31T39, 31T40, 31T41, 31D1)	VOC (6)	0.01	0.01		7, 38	
		AN	0.01	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Sump, and 31D4 Sump)	HCN	0.01	0.01			
		ACN	0.01	0.01			
331T3.1	Dept. 331 Sump (5)	VOC (6)	0.01	0.01		7, 38	
		AN	0.01	0.01			
		HCN	0.01	0.01			
		ACN	0.01	0.01			
30T62	Acrylonitrile Unit 2 Catalyst Transfer Operations	VOC (6)	2.40	0.01		7, 38	
		CO	0.14	0.01			
		PM	0.10	0.01			
		PM <sub>10</sub>	0.10	0.01			
		PM <sub>2.5</sub>	0.10	0.01			
		NH <sub>3</sub>	0.12	0.01			
		AN	0.63	0.01			
		HCN	0.13	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		ACN	0.01	0.01			
		ACR	0.01	0.01			
		MeOH	0.27	0.01			
		Propylene	1.30	0.01			
31T38	Acrylonitrile Unit 3 Catalyst Transfer Operations	VOC (6)	4.53	0.01		7, 38, 39	39
		CO	0.28	0.01			
		PM	0.01	0.01			
		PM <sub>10</sub>	0.01	0.01			
		PM <sub>2.5</sub>	0.01	0.01			
		NH <sub>3</sub>	0.27	0.01			
		AN	1.66	0.01			
		HCN	0.35	0.01			
		ACN	0.01	0.01			
		ACR	0.01	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		MeOH	0.02	0.01			
		Propylene	2.70	0.01			
331SWTREAT	Solid Waste Treatment	VOC (6)	0.04	0.01		7, 38	
		PM	0.01	0.01			
		PM <sub>10</sub>	0.01	0.01			
		PM <sub>2.5</sub>	0.01	0.01			
		NH <sub>3</sub>	0.04	0.01			
		AN	0.01	0.01			
		HCN	0.01	0.01			
		ACN	0.02	0.01			
30SAMPCAB	Acrylonitrile Unit 2 Sample Cabinets	VOC (6)	0.25	0.08		7, 38	
		CO	0.01	0.01			
		NH <sub>3</sub>	0.01	0.01			
		HCN	0.01	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		AN	0.15	0.05			
		ACN	0.08	0.02			
		ACR	0.01	0.01			
		Acetaldehyde	0.01	0.01			
		MeOH	0.01	0.01			
		Methacrylonitrile	0.01	0.01			
		Oxazole	0.01	0.01			
		Benzene	0.01	0.01			
		Propylene	0.01	0.01			
31SAMPCAB	Acrylonitrile Unit 3 Sample Cabinets	VOC (6)	0.13	0.06		7, 38	
		CO	0.01	0.01			
		NH <sub>3</sub>	0.01	0.01			
		HCN	0.01	0.01			
		AN	0.12	0.05			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		ACN	0.01	0.01			
		ACR	0.01	0.01			
		Acetaldehyde	0.01	0.01			
		MeOH	0.01	0.01			
		Methacrylonitrile	0.01	0.01			
		Oxazole	0.01	0.01			
		Benzene	0.01	0.01			
		Propylene	0.01	0.01			
31AMSHOP-1	AN-3 Injection System 1	PM	0.07	<0.01			
		PM <sub>10</sub>	0.03	<0.01			
		PM <sub>2.5</sub>	<0.01	<0.01			
31AMSHOP-2	AN-3 Injection System 2	PM	0.07	<0.01			
		PM <sub>10</sub>	0.03	<0.01			
		PM <sub>2.5</sub>	<0.01	<0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
30ISBLFUG	AN-2, AN-3, and 30COFUG ISBL Process Fugitives (5)	VOC (6)	4.74	20.81	4, 6, 11, 14, 16, 18, 20, 23, 30	4, 5, 6, 7, 13, 14, 16, 17, 18, 20, 23, 27, 30, 38, 39	4, 5, 6, 17, 39
		CO	0.06	0.27			
		SO <sub>2</sub>	0.01	0.01			
		H <sub>2</sub> SO <sub>4</sub>	0.01	0.05			
		NH <sub>3</sub>	0.73	3.23			
		AN	2.36	10.32			
		HCN	0.53	2.38			
		ACN	0.03	0.12			
		ACR	0.01	0.03			
		Acrolein derivatives	0.01	0.02			
		MeOH	0.68	2.98			
		Propylene	0.57	2.51			
30-T-MSS	AN-2 Turnaround MSS Activities	VOC (6)	3.85	0.05	31	7, 27, 28, 29, 30, 31, 32, 33, 38	
		NH <sub>3</sub>	0.69	0.01			

**Major NSR Summary Table**

Permit Number 18251 and N011					Issuance Date: May 16, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		AN	1.40	0.01			
		HCN	0.44	0.01			
		Propylene	0.97	0.01			
31-T-MSS	AN3 Turnaround MSS Activities	VOC (6)	4.90	0.05	31	7, 27, 28, 29, 30, 31, 32, 33, 38	
		NH <sub>3</sub>	2.09	0.01			
		AN	1.54	0.01			
		HCN	0.80	0.01			
		Propylene	1.50	0.05			

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC
  - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub>
  - total oxides of nitrogen
- SO<sub>2</sub>
  - sulfur dioxide
- PM
  - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub>
  - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub>
  - particulate matter equal to or less than 2.5 microns in diameter
- CO
  - carbon monoxide
- ACN
  - acetonitrile
- AN
  - acrylonitrile
- HCN
  - hydrogen cyanide
- MeOH
  - methanol



## Texas Commission on Environmental Quality Air Quality Permit

*A Permit Is Hereby Issued To*  
**Ascend Performance Materials Texas Inc.**  
*Authorizing the Continued Operation of*  
**Acrylonitrile Units 2 and 3**  
*Located at Alvin, Brazoria County, Texas*  
*Latitude 29.249166 Longitude -95.209722*

Permit: 18251, N011

Issuance Date: May 16, 2025

Expiration Date: May 16, 2035

  
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For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]<sup>1</sup>
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]<sup>1</sup>
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.<sup>1</sup>

<sup>1</sup> Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

## Common Acronyms in Air Permits

°C = Temperature in degrees Celsius	GLCmax = maximum (predicted) ground-level concentration
°F = Temperature in degrees Fahrenheit	gpm = gallon per minute
°K = Temperature in degrees Kelvin	gr/1000scf = grain per 1000 standard cubic feet
µg = microgram	gr/dscf = grain per dry standard cubic feet
µg/m <sup>3</sup> = microgram per cubic meter	H <sub>2</sub> CO = formaldehyde
acfm = actual cubic feet per minute	H <sub>2</sub> S = hydrogen sulfide
AMOC = alternate means of control	H <sub>2</sub> SO <sub>4</sub> = sulfuric acid
AOS = alternative operating scenario	HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
AP-42 = Air Pollutant Emission Factors, 5th edition	HC = hydrocarbons
APD = Air Permits Division	HCl = hydrochloric acid, hydrogen chloride
API = American Petroleum Institute	Hg = mercury
APWL = air pollutant watch list	HGB = Houston/Galveston/Brazoria
BPA = Beaumont/ Port Arthur	hp = horsepower
BACT = best available control technology	hr = hour
BAE = baseline actual emissions	IFR = internal floating roof tank
bbl = barrel	in H <sub>2</sub> O = inches of water
bbl/day = barrel per day	in Hg = inches of mercury
bhp = brake horsepower	IR = infrared
BMP = best management practices	ISC3 = Industrial Source Complex, a dispersion model
Btu = British thermal unit	ISCST3 = Industrial Source Complex Short-Term, a dispersion model
Btu/scf = British thermal unit per standard cubic foot or feet	K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
CAA = Clean Air Act	LACT = lease automatic custody transfer
CAM = compliance-assurance monitoring	LAER = lowest achievable emission rate
CEMS = continuous emissions monitoring systems	lb = pound
cfm = cubic feet (per) minute	lb/day = pound per day
CFR = Code of Federal Regulations	lb/hr = pound per hour
CN = customer ID number	lb/MMBtu = pound per million British thermal units
CNG = compressed natural gas	LDAR = Leak Detection and Repair (Requirements)
CO = carbon monoxide	LNG = liquefied natural gas
COMS = continuous opacity monitoring system	LPG = liquefied petroleum gas
CPMS = continuous parametric monitoring system	LT/D = long ton per day
DFW = Dallas/ Fort Worth (Metroplex)	m = meter
DE = destruction efficiency	m <sup>3</sup> = cubic meter
DRE = destruction and removal efficiency	m/sec = meters per second
dscf = dry standard cubic foot or feet	MACT = maximum achievable control technology
dscfm = dry standard cubic foot or feet per minute	MAERT = Maximum Allowable Emission Rate Table
ED = (TCEQ) Executive Director	MERA = Modeling and Effects Review Applicability
EF = emissions factor	mg = milligram
EFR = external floating roof tank	mg/g = milligram per gram
EGU = electric generating unit	mL = milliliter
EI = Emissions Inventory	MMBtu = million British thermal units
ELP = El Paso	MMBtu/hr = million British thermal units per hour
EPA = (United States) Environmental Protection Agency	MSDS = material safety data sheet
EPN = emission point number	MSS = maintenance, startup, and shutdown
ESL = effects screening level	MW = megawatt
ESP = electrostatic precipitator	NAAQS = National Ambient Air Quality Standards
FCAA = Federal Clean Air Act	NESHAP = National Emission Standards for Hazardous Air Pollutants
FCCU = fluid catalytic cracking unit	NGL = natural gas liquids
FID = flame ionization detector	NNSR = nonattainment new source review
FIN = facility identification number	NO <sub>x</sub> = total oxides of nitrogen
ft = foot or feet	NSPS = New Source Performance Standards
ft/sec = foot or feet per second	
g = gram	
gal/wk = gallon per week	
gal/yr = gallon per year	
GLC = ground level concentration	

PAL = plant-wide applicability limit  
PBR = Permit(s) by Rule  
PCP = pollution control project  
PEMS = predictive emission monitoring system  
PID = photo ionization detector  
PM = periodic monitoring  
PM = total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
PM<sub>2.5</sub> = particulate matter equal to or less than 2.5 microns in diameter  
PM<sub>10</sub> = total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
POC = products of combustion  
ppb = parts per billion  
ppm = parts per million  
ppmv = parts per million (by) volume  
psia = pounds (per) square inch, absolute  
psig = pounds (per) square inch, gage  
PTE = potential to emit  
RA = relative accuracy  
RATA = relative accuracy test audit  
RM = reference method  
RVP = Reid vapor pressure  
scf = standard cubic foot or feet  
scfm = standard cubic foot or feet (per) minute  
SCR = selective catalytic reduction  
SIL = significant impact levels  
SNCR = selective non-catalytic reduction  
SO<sub>2</sub> = sulfur dioxide  
SOCMI = synthetic organic chemical manufacturing industry  
SRU = sulfur recovery unit  
TAC = Texas Administrative Code  
TCAA = Texas Clean Air Act  
TCEQ = Texas Commission on Environmental Quality  
TD = Toxicology Division  
TLV = threshold limit value  
TMDL = total maximum daily load  
tpd = tons per day  
tpy = tons per year  
TVP = true vapor pressure  
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
VRU = vapor recovery unit or system

## Special Conditions

Permit Numbers 18251 and N011

1. This permit authorizes emissions from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT) and the facilities covered by this permit are authorized to emit subject to the emission rate limits on the MAERT and other operating requirements specified in the Special Conditions.

Planned startup and shutdown emissions due to the activities identified in Special Condition 27 are authorized from facilities and emission points identified in this permit provided the facility and emissions are compliant with the respective MAERT and special conditions of this permit.

2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the Maximum Allowable Emission Rates Table (MAERT). Any releases directly to the atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with exception for safety relief valves that discharge to the atmosphere as a result of fire, malfunction, or failure of utilities provided that: a) each valve is equipped with a rupture disc upstream, b) a pressure-sensing device is installed between the relief valve and rupture disc to monitor disc integrity, and c) all leaking discs are replaced at the earliest opportunity but no later than the next process shutdown.
3. This permit authorizes emissions from the following temporary facilities used to support planned Maintenance, Startup, and Shutdown (MSS) activities at permanent site facilities: frac tanks, containers, vacuum trucks, portable control devices identified in Special Condition 36, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities, and (c) does not operate as a replacement for an existing authorized facility.

### Federal Program Applicability

4. This facility shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated for the following:
  - A. General Provisions, 40 CFR Part 60 Subpart A.
  - B. Standards of Performance for Nitric Acid Plants, 40 CFR 60 Subpart G.
  - C. Standards of Performance for Sulfuric Acid Plants, 40 CFR 60 Subpart H
  - D. Equipment Leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI), 40 CFR Part 60 Subpart VV.
  - E. VOC Emissions from the SOCMI Air Oxidation Unit Processes, 40 CFR Part 60, Subpart III.
  - F. SOCMI Distillation Unit Operations, 40 CFR Part 60, Subpart NNN.
5. This facility shall comply with all applicable requirements of EPA regulations on National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated for the following:
  - A. General Provisions, 40 CFR 61 Subpart A and
  - B. Asbestos, 40 CFR Part 61 Subparts M.

- C. Benzene Waste Operations, 40 CFR 61, Subpart FF.
6. These facilities shall comply with the applicable requirements of Title 30 Texas Administrative Code §§ 113.100, 113.110, 113.120, and 113.130 (30 TAC §§ 113.100, 113.110, 113.120, and 113.130), including the referenced requirements contained in 40 CFR Part 63,
- A. Subpart A, General Provisions
  - B. Subpart F, National Emission Standards for Organic Hazardous Air Pollutants from The Synthetic Organic Chemical Manufacturing Industry
  - C. Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From The Synthetic Organic Chemical Manufacturing Industry For Process Vents, Storage Vessels, Transfer Operations, And Wastewater
  - D. Subpart H, National Emission Standards for Organic Hazardous Air Pollutants For Equipment Leaks
  - E. Subpart YY, National Emission Standards for Hazardous Air Pollutants For Source Categories: Generic Maximum Achievable Control Technology Standards
  - F. Subpart EEE, National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors

#### **Emission Controls and Operational Limitations**

7. Acrylonitrile (AN) and hydrogen cyanide (HCN) production is limited to the amounts specified on the Table 2 (Material Balance Table) of the October 2006 confidential permit application file. Records of AN and HCN production shall be kept at the plant site to demonstrate compliance with this special condition.
8. All reactor vent start-up emissions shall be routed to the AN Unit 2 and AN Unit 3 Waste Heat Boilers (WHB) (Emission Point Nos. [EPNs] 30H5 and 31H4). The Air Heaters (EPNs 30H1, 31H1-1 and 31H1-2) are limited to the operating hours per calendar year provided in the Appendix D of the October 2006 confidential permit application file. Records shall be kept at the plant site to demonstrate compliance with this special condition.
9. The in-stack concentration of carbon monoxide (CO) from each WHB stack (EPNs 30H5 and 31H4) shall not exceed 100 parts per million by volume (ppmv) dry corrected to 7 percent oxygen as required by 40 CFR § 266.104(b). The in-stack concentration of nitrogen oxides (NO<sub>x</sub>) from each WHB Stack (EPNs 30H5 and 31H4) shall not exceed 170 ppmv dry, as measured, averaged over 24-hours. The in-stack concentration of ammonia (NH<sub>3</sub>) in AN3 Waste Heat Boiler (EPN 31H4) shall not exceed 10 ppmv dry corrected to 3% O<sub>2</sub> averaged over 24 hours. Weekly records shall be kept at the plant site demonstrating compliance with this special condition and updated once a week.
10. The hourly NO<sub>x</sub> and CO emission limits on the WHB in Special Condition No. 9 shall not apply during periods when the following requirements are met. The hourly NH<sub>3</sub> emission limits for the WHB in Special Condition No. 9 shall not apply during periods when subparagraph A of this special condition is met.
- A. Reactor and WHB start-ups (not to exceed three hours).

- B. Steam demand on the boilers changes by more than 10 percent of full load (not to exceed two hours).

The CO emission limits apply whenever hazardous waste is burned in a boiler.

- 11. All process vents shall be routed to a control device. The flares and capture systems for the flares shall meet the requirements of Special Condition 22.B and 23. Emergency relief valves designed to protect against fire and explosion are exempt from emission control requirements of this special condition. At the permit holder's choice, relief valves not otherwise controlled shall comply with one of the following:
  - A. Be equipped with a rupture disc and pressure gauge upstream of the relief valve. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. Rupture disks shall be installed under the reactor relief valves.
  - B. Be subject to monthly VOC leak testing in Special Condition No. 14.
  - C. Relief valves in ammonia (NH<sub>3</sub>) or HCN service shall be subject to the audio, olfactory, and visual monitoring program specified in Special Condition No. 18. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.
- 12. Each WHB shall achieve a 99.9 percent destruction and removal efficiency (DRE) when firing the absorber off-gas and each WHB shall achieve 99.99 percent DRE when firing liquid HCN. A 99.99 percent DRE can be applied to all VOC combusted when firing at the temperature demonstrated to achieve 99.99 percent DRE for liquid HCN.
- 13. The NO<sub>x</sub> emitted from the incineration of AN wastes shall be computed monthly using the data derived in Special Condition Nos. 19 or 21, as appropriate. Monthly NO<sub>x</sub> emissions shall be recorded and such records shall be made available to authorized Texas Commission on Environmental Quality (TCEQ) personnel upon request.

The NO<sub>x</sub> emissions shall be measured on a dry volumetric basis. Measured concentrations shall be converted to pounds per hour (lb/hr) and pounds per million British thermal units (lb/MMBtu) using EPA Method 40 CFR Part 75, Appendix F, Section 3 for a NO<sub>x</sub> continuous monitoring system that uses O<sub>2</sub> as a diluent. The EPA factors shall be adjusted to account for the inert in the system. Total boiler feed water to the boiler shall be used to calculate the heat released from the boiler. Records of monthly NO<sub>x</sub> production from the AN waste incinerators shall be kept at the plant site demonstrating compliance with this special condition.

A Selective Catalytic Reduction (SCR) unit shall be installed on the AN3 Waste Heat Boiler (EPN 31H4) prior to the commencement of the project associated with the permit application PI-1 dated May 11, 2021, TCEQ NSR Project Nos. 328715 and 328716. Requirements for the SCR shall not apply until the SCR unit is installed.

The NH<sub>3</sub> concentration in the exhaust stack shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for NH<sub>3</sub> slip is only required on days when the SCR unit is in operation.

- A. Install, calibrate, maintain, and operate, as specified under Special Condition No. 21, a CEMS to measure and record the concentration of NH<sub>3</sub>. The NH<sub>3</sub> concentration shall be corrected and reported in accordance with Special Condition No. 21.

- B. Use a sorbent or stain tube device specific for NH<sub>3</sub> measurement in the 5 to 10 parts per million (ppm) range. The frequency of sorbent/stain tube testing shall be performed daily for the first 60 days of operation, after which the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of NH<sub>3</sub> from being introduced in the SCR units and when operation of the SCR units have been proven successful with regard to controlling NH<sub>3</sub> slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with this Special Condition No. 9.

If sorbent or stain tube testing indicates an NH<sub>3</sub> slip concentration which exceed 5 ppm at any time, the permit holder shall begin NH<sub>3</sub> testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or the EPA Conditional Test Method (CTM) 27 on a quarterly basis, in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates NH<sub>3</sub> slip is 4 ppm or less, the Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent or stain tube testing again indicate 5 ppm NH<sub>3</sub> slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 9.

- C. Install, calibrate, maintain, and operate, as specified under Special Condition No. 21, a second NO<sub>x</sub> CEMS upstream of the control device (in addition to the NO<sub>x</sub> CEMS required under Special Condition No. 9). Perform the measurements and calculations associated with the mass balance method specified in 30 TAC § 117.8130(1), using NO<sub>x</sub> CEMS data to determine the NO<sub>x</sub> concentration differential across the control device. These results shall be recorded and used to determine compliance with Special Condition No. 9.
- D. Install and operate a dual stream system of NO<sub>x</sub> CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO<sub>x</sub> CEMS and the other exhaust stream would be routed through a NH<sub>3</sub> converter to convert NH<sub>3</sub> to NO<sub>x</sub> and then to a second NO<sub>x</sub> CEMS. The NH<sub>3</sub> slip concentration shall be calculated according to the method specified in 30 TAC § 117.8130(2). These results shall be recorded and used to determine compliance with Special Condition No. 9.
- E. Any other method used for measuring NH<sub>3</sub> slip shall require prior approval from the TCEQ Regional Director.

### **Process Fugitive Monitoring Programs**

#### **14. Piping, Valves, Connectors, Pumps, and Compressors in VOC Service - 28VHP**

- A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 psia at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined by 30 TAC Chapter 115, shall be identified in a list to be made available upon request.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

An approved gas analyzer shall conform to requirements listed in 40 CFR § 60.485(a)-(b).

Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. Except as may be provided for in the special conditions of this permit, all pump and compressor seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump and compressor seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired.
- I. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The TCEQ Executive Director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

- J. The results of the required fugitive monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, and corrective actions taken for all components. Records of connector inspections are not required unless a leak is detected.
- K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352-115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standards (NSPS), or an applicable NESHAPS and does not constitute approval of alternative standards for these regulations.

15. RESERVED

16. Piping, Valves, Connectors, Pumps, Agitators, and Compressors in AN and Propylene Service-Intensive Directed Maintenance - 28LAER

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.  
  
The exempted components may be identified by one or more of the following methods:
  - (1) piping and instrumentation diagram (PID);
  - (2) a written or electronic database or electronic file;
  - (3) color coding;
  - (4) a form of weatherproof identification; or
  - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an

unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.

- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

In lieu of the monitoring frequency specified above, connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of connectors leaking used in paragraph B shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.

Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe to monitor connectors.

Cp = the percentage of leaking connectors for the monitoring period.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
- (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the

results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Non accessible valves shall be monitored by leak-checking for fugitive emissions at least annually using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs are being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. A leaking component shall be repaired as soon as

practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- I. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections in Special Condition No. 16E (visual, audible, and/or olfactory inspections) shall be noted in the operator's log or equivalent.
- J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.
- K. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- L. The percent of valves leaking used in paragraph K shall be determined using the following formula:

$$(V_I + V_s) \times 100/V_t = V_p$$

Where:

$V_I$  = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

$V_s$  = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

$V_t$  = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe to monitor valves.

$V_p$  = the percentage of leaking valves for the monitoring period.

- M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.
17. Notification that the emissions from a delay of repair exceed the emissions of a unit shutdown per Special Condition 16H is required within 30 days of making the determination. This condition supersedes the last sentence of Special Condition 16H.
18. Piping, Valves, Flanges, Pumps and Compressors in  $\text{NH}_3$  and HCN Service.
- A. Audio, olfactory, and visual checks for HCN and  $\text{NH}_3$  leaks within the operating area shall be made once per shift from the time of AN-2/3 Unit operations have started until the unit has been degased.
- B. Immediately, but no later than one-hour upon detection of a leak, plant personnel shall take the following actions:
- (1) Isolate the leak.
  - (2) Commence repair or replacement of the leaking component.
  - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.
- Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request.
- C. Leaks that cannot be isolated will be repaired in a manner that will minimize emissions as outlined in the "HCN and  $\text{NH}_3$  Leak Repair or Containment Procedures" as shown below:
- HCN and  $\text{NH}_3$  Leak Repair or Containment Procedures
- (1) The unit personnel shall notify the maintenance department of the need to repair or contain the leak and to coordinate the activity.
  - (2) If the decision to contain the leak is made the maintenance department shall coordinate with an outside contractor the logistics to contain the leak and minimize emissions no later than 1 week after the leak is detected.
  - (3) After the leak is contained, the repair shall be coordinated. The production supervisor will coordinate the repair at the next unit shutdown.
  - (4) Title 30 Texas Administrative Code § 115.10 (38) shutdown or turnaround, for the purposes of this chapter, a work practice or operational procedure that stops production from a process unit or part of a unit during which time it is technically feasible to clear process material from a process unit or part of a unit consistent with safety constraints, and repairs can be accomplished.

- (a) The term shutdown or turnaround does not include a work practice that would stop production from a process unit or part of a unit.
  - i. for less than 24 hours; or
  - ii. for a shorter period of time than would be required to clear the process unit or part of the unit and start up the unit.
- (b) Operation of a process unit or part of a unit in recycle mode (i.e., process material is circulated, but production does not occur) is not considered shutdown.

### Determination of Compliance

19. The holder of this permit shall perform stack sampling and other testing as required by the Executive Director of the TCEQ to determine the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Waste Heat Boiler Stacks (EPNs 30H5 and 31H4). The holders of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his/her expense. (The stack tests demonstrating compliance with the testing requirements and satisfying the stack sampling conditions of this permit were conducted in July 2004 and April 2005.)

- A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

Requests to use previous testing in lieu of or to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Air contaminants emitted from the Waste Heat Boiler Stacks (EPNs 30H5 and 31H4) to be tested for include (but are not limited to) NO<sub>x</sub>, CO, VOC, and NH<sub>3</sub>.
- C. Sampling shall occur at such other times as required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40

CFR Part 61 requires EPA approval, and requests shall be submitted to the TCEQ Regional Director. Stack testing shall cover the entire operating range of the incinerators with regard to fuel flow and excess oxygen. Testing shall be performed without liquid waste feed to the WHB. (This condition has been met with the recent stack tests.)

- D. A copy of the final sampling report shall be forwarded to the TCEQ Regional Office within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual.
20. The following requirements apply to capture systems for the plant boiler system.
- A. Either conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21 once a year. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
  - B. The control device shall not have a bypass. A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly.
  - C. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.

### **Continuous Determination of Compliance**

21. The holder of this permit shall install, calibrate, maintain and operate a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of NO<sub>x</sub> and CO from AN2 Waste Heat Boiler (EPN 30H5). The holder of this permit shall install, calibrate, maintain and operate a CEMS to measure and record the in-stack concentration of NO<sub>x</sub>, CO, and NH<sub>3</sub> from AN3 Waste Heat Boiler (EPN 31H4). Methods specified in Special Condition No. 13 may be used as alternatives to installation of an NH<sub>3</sub> CEMS.
- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air for requirements to be met.
  - B. Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other sources:
    - (1) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.

- (2) The system shall be zeroed and spanned daily, and corrective action taken when the 24 hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of  $\pm 15$  percent accuracy indicate that the CEMS is out of control.

- C. The monitoring data shall be reduced to daily average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in pounds per hour at least once every week as follows:
- The measured daily average concentration from the CEMS shall be multiplied by the design flow rate identified in the permit application, PI-1 dated October 26, 2006, or the flow rate measured during the latest stack test performed in accordance with Special Condition No.19, or exhaust gas flow rate to determine the hourly emission rate.
- D. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- F. Quality-assured (or valid) data must be generated when the AN-2 and AN-3 Waste Heat Boilers are operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration shall be exempted provided it does not exceed 5 percent of the time (in minutes) that the AN-2 and AN-3 Units operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.
22. The AN-2 Unit and AN-3 Unit Flares (EPNs 30Z7 and 31Z4) shall be designed and operated in accordance with the following requirements when waste gases are vented to the flares as authorized by this permit:
- A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum net heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.
- The net heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.
- D. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the flow and composition of the waste gas routed to the flare to demonstrate that the flare meets the 40 CFR § 60.18 specifications of the minimum net heating value. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 CFR 61744).

The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be  $\pm 5.0\%$ , temperature monitor shall be  $\pm 2.0\%$  at absolute temperature, and pressure monitor shall be  $\pm 5.0$  mm Hg.

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes.

The permit holder has 180 days from the issued date of this permit amendment to comply with the sampling and testing requirements as listed in condition 22B through 22D.

- E. The flare shall comply with the applicable provisions for Highly-Reactive Volatile Organic Compounds (HRVOC) found in Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), Subchapter H, Division 1: Vent Gas Control as required by 30 TAC Chapter 115, Subchapter H, effective December 23, 2004.
23. The following requirements apply to waste gas capture systems for the flares:
- A. The control device shall not have a bypass to the atmosphere.

- B. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or  
  
Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
  - C. The date and results of each inspection performed shall be recorded. If the results of the above inspections are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.
24. The Air Heaters (EPNs 30H1, 31H1-1, and 31H1-2) shall be operated in accordance with the following requirements:
- A. All heaters shall be fired with natural gas containing no more than 5 grains per 100 dry standard cubic feet (dscf) or fuel gas containing no more than 10 grains of total sulfur per 100 dscf.
  - B. Visible emissions are not allowed from the heaters.
25. During periods when the AOG vent is being vented to the waste heat boilers, 30H5 or 31H4, the combustion temperature shall be greater than or equal to the temperature during the last successful stack test for that boiler. Combustion temperatures in a boiler that is receiving liquid HCN shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing for that boiler during periods when liquid HCN waste is being routed to that boiler.
- A. Combustion temperature shall be measured every 15 minutes and averaged and recorded every hour.
  - B. The temperature monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:
    - ± 2% of reading; or
    - ± 2.5 degrees Celsius.
  - C. Quality assured (or valid) data must be generated when the WHB is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the WHB operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

#### **Storage and Loading of VOC**

26. Storage tanks are subject to the following requirements.

- A. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
- B. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12-month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods outlined in AP 42, Fifth Edition, Volume I Chapter 7: Liquid Storage Tanks dated June 2020 and APDG 6250 Estimating Short Term Emission Rates from Fixed Roof Tanks that were used to determine the MAERT limits in the permit renewal application, PI-1 dated May 9, 2024. Sample calculations from the application shall be attached to a copy of this permit at the plant site.

The temperature monitor shall be calibrated on an annual basis to meet an accuracy specification of  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 2.5^{\circ}\text{C}$ . Up to 5 percent invalid monitoring data is acceptable on a rolling 12-month basis provided it is only generated when the monitor is broken down, out-of-control (producing inaccurate data), being repaired, having maintenance performed, or being calibrated. The data availability shall be calculated as the total tank operating hours for which quality assured data was recorded divided by the total tank hours in service. Invalid data generated due to other reasons is not allowed. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

### **Planned Maintenance, Startup and Shutdown Activities**

- 27. This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Attachment C) attached to this permit.

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;

- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

28. Process units and facilities, with the exception of those identified in Special Conditions 31 and 33, and Attachment A shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature or 95°F, whichever is higher, may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
  - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
  - C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
  - D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

- (1) For MSS activities identified in Attachment B, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
- (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 29. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:

- (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
- (2) There is not an available connection to a plant control system (flare).
- (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Special Condition 28E must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.

29. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

- (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument\*RF

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.

- (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and not exceed the specified VOC concentration limit prior to uncontrolled venting.
- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
- (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.
  - (2) The tube is used in accordance with the manufacturer's guidelines.
  - (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:  
measured contaminant concentration (ppmv) < release concentration.  
Where the release concentration is:  
10,000\*mole fraction of the total air contaminants present that can be detected by the tube.  
The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.  
Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.
- C. Lower explosive limit measured with a lower explosive limit detector.
- (1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
  - (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
  - (3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.
30. This condition applies only to piping and components subject to leak detection and repair monitoring requirements identified Special Conditions 14, 16, and 18. Each open-ended valve or line shall be equipped with an appropriately-sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or

valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

- A. a cap, blind flange, plug, or second valve must be installed on the line or valve; or
  - B. the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
31. This permit authorizes emissions from EPN 30Turnaround-MSS, 31Turnaround-MSS and 30MSS for fixed roof storage tanks during planned maintenance. The following requirements apply to tank maintenance activities:
- A. If the ventilation of the vapor space is controlled, the emission control system shall meet the following requirements:
    - (1) Any gas or vapor removed from the vapor space must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space when degassing to the control device or controlled recovery system.
    - (2) The vapor space shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
    - (3) A volume of purge gas equivalent to twice the volume of the vapor space must have passed through the control device or into a controlled recovery system, before the vent stream is sampled to verify the acceptable VOC concentration at which the ventilation of the vapor space may be vented uncontrolled and directly to atmosphere as specified in (1). The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 29.
    - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
    - (5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
  - B. The tank shall not be opened or ventilated without control, except as allowed below, until one of the criteria in part C of this condition is satisfied.  
Minimize air circulation in the tank vapor space.

- (1) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
  - (2) Access points shall be closed when not in use.
- C. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
- (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
  - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
    - (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A Appendix 1.
    - (b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
    - (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 29.
  - (3) No standing liquid verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank.
- D. The occurrence of each tank maintenance event and the associated emissions shall be recorded and the rolling 12-month tank maintenance emissions shall be updated on a monthly basis. These records shall include at least the following information:
- (1) for the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
    - (a) start and completion of controlled degassing, and total volumetric flow.
    - (b) all standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi.
    - (c) if there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow.
  - (2) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events a and c with the data and methods used to determine it.

32. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
- A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
  - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
    - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
    - (2) Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
    - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
      - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
      - (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 29A or B.
  - C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
  - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12-month vacuum truck emissions shall also be determined on a monthly basis.
  - E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in Special Condition 32A through 32D do not apply.
33. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
- A. The exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum effective May 1, 2013. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.

- B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom.
  - C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
  - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12-month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
  - E. If the tank/vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.
34. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.
35. All permanent facilities must comply with all operating requirements, limits, and representations in this permit during planned startup and shutdown unless alternate requirements and limits are identified in the MSS section of this permit. Alternate requirements for emissions from routine emission points are identified below.
- A. Combustion units, with the exception of flares, at this site are exempt from NO<sub>x</sub> and CO operating requirements identified in special conditions in other NSR permits during planned startup and shutdown if the following criteria are satisfied.
    - (1) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.
    - (2) The startup period does not exceed 72 hours (for refractory curing) in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.
    - (3) Control devices are started and operating properly when venting a waste gas stream.
  - B. A record shall be maintained indicating that the start and end times of each of the activities identified above occur and documentation that the requirements for each have been satisfied.
36. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through a control device meeting the requirements of this permit condition.

Control devices required by this permit for emissions from planned MSS activities:

A. Carbon Adsorption System (CAS).

- (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
- (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
  - (a) It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
  - (b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
  - (c) The method of VOC sampling shall be done using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions: The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:  
$$\text{VOC Concentration} = \text{Concentration as read from the instrument} \times \text{RF}$$

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.
- (3) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
- (4) Records of CAS monitoring shall include the following:
  - (a) Sample time and date.
  - (b) Monitoring results (ppmv).

- (c) Canister replacement log.
  - (5) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.
- B. Thermal Oxidizer
- (1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.
  - (2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.  
  
The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications.  
  
The device shall have an accuracy of the greater of  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 2.5^\circ\text{C}$ .
- C. A liquid scrubbing system may be used upstream of carbon adsorption. A single carbon can or a caustic liquid scrubbing system may be used as the sole control device if the requirements below are satisfied.
- (1) The exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the scrubber.
  - (2) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 29.A.
  - (3) An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible when the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded.
- D. The plant flare system:
- (1) The net heating value and velocity requirements in 40 CFR 60.18 shall be satisfied during operations authorized by this permit.
  - (2) The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
  - (3) Each flare shall meet one of the following criteria to ensure adequate BTU/scf at the flare tip during shutdowns/startups:
    - (a) Procedures shall be in place to ensure that at least 25 percent by volume enrichment gas is maintained in the waste stream to the flare any time waste gas is present; or

- (b) The waste gas stream shall be monitored and analyzed at all times that waste gas is present to ensure the net heating value is greater than 300 BTU/scf.
37. Planned maintenance activities must be conducted in a manner consistent with good engineering practice for minimizing emissions, including the use of air pollution control equipment, practices and processes. All reasonable and practical efforts to comply with Special Conditions 27 through 36 must be used when conducting the planned maintenance activity, until the Commission determines that the efforts are unreasonable or impractical, or that the activity is an unplanned maintenance activity.

### **Recordkeeping Requirements**

38. The permit holder shall maintain the following records electronically or in hard copy format for at least five years. These reports shall be made available to the TCEQ Executive Director, designated representatives, or any local air pollution control program having jurisdiction upon request. These records shall be used to demonstrate compliance with the Special Conditions and the limits specified in the MAERT:
- A. AN and HCN production as per Special Condition No. 7.
  - B. Operating hours of the air heaters as per Special Condition No. 8.
  - C. Stack concentration of the WHB as per Special Condition No. 9.
  - D. NO<sub>x</sub> emissions from the AN waste heat boilers as per Special Condition No. 13.
  - E. Fugitive monitoring as per Special Condition Nos. 14, 16, and 18.
  - F. The flow and composition of waste gas and presence of a pilot flame as per Special Condition No. 22.
  - G. The temperature of the waste heat boilers as per Special Condition No. 25.
  - H. Storage tank throughput and emissions as per Special Condition No. 26.
  - I. MSS activities performed as per Special Condition No. 27.
  - J. Volume and type of liquid in a tank during MSS as per Special Condition No. 31.
  - K. Vacuum truck operation as per Special Condition No. 32.
  - L. Frac tank emissions as per Special Condition No. 33.
  - M. Control device monitoring per Special Condition No. 36.

**Projected Actual Emissions**

39. The project associated with the permit application PI-1 dated May 11, 2021, TCEQ NSR Project Nos. 328715 and 328716, was determined to not be subject to major new source review through the use of projected actual emission rates for one or more facilities associated with the project. Actual emissions from the sources using a projected actual as listed in the table of this special condition shall be monitored as represented in the application and records maintained, and reports provided in accordance with 30 TAC §116.127. Records shall be maintained for five calendar years from the resumption of regular operations. Records shall include the date of resumption of regular operations after the project change.

Pollutant/ NOx							
Application project emissions increase: 1.15 tpy							
Net project increase:							
FIN*	EPN	Permit/ Registration/ PBR No.	Baseline Actual Emissions (tpy)	Post Project Allowable (tpy)	Projected Actual Emissions (tpy)	Correction (tpy)	Monitoring Special Condition Nos.
31H4	31H4	18251	51.95	41.21	N/A	N/A	21
70H401	70Z401	38336	81.73	170.00	153.41	59.79	16
Total Baseline Actual (tpy)			133.68				

\*The project seeks to replace catalyst and collect Acetonitrile as a product. Correction value excluding Acetonitrile

Pollutant/ VOC							
Application project emissions increase: 13.24 tpy							
Net project increase: 24.17 tpy							
FIN*	EPN	Permit/ Registration/ PBR No.	Baseline Actual Emissions (tpy)	Post Project Allowable (tpy)	Projected Actual Emissions (tpy)	Correction (tpy)	Monitoring Special Condition Nos.
31H4	31H4	18251	11.70	30.99	19.64	8.10	12 & 21
31T38	31T38	18251	0.01	0.01	N/A	N/A	7
30COFUG	30ISBLFUG	18251	0	0.03	N/A	N/A	14 & 16
70H401	70Z401	38336	18.74	25.00	N/A	N/A	10 & 16
70T512	70K512	38336	0.06	0.06	N/A	N/A	29
TRKLOAD	70K512	38336	0	0.001	N/A	N/A	29
TRKLOAD	TRKLOAD	38336	0	0.03	N/A	N/A	27

70k600	70K600	38336	0	4.54	N/A	N/A	28
70T214	70K214	38336	0.08	0.10	N/A	N/A	30
70COFUG	70ANFUG	38336	0	1.45	N/A	N/A	21
70 Turnaround MSS	70 Turnaround MSS	38336	0	0.01	N/A	N/A	33
70MSS	70MSS	38336	0	0.001	N/A	N/A	33
70T314	70K314	38336	0.12	0.14	N/A	N/A	31
70382E6	70382E6	48895	0	0.83	N/A	N/A	4
70SAMPCAB	70SAMPCAB	38336	0.17	0.07	N/A	N/A	7
SAMPCAB	SAMPCAB	38336	0	0.04	N/A	N/A	7
Total Baseline Actual (tpy)			30.88				

\*The project seeks to replace catalyst and collect Acetonitrile as a product. Correction value excluding Acetonitrile

A report is due to the Executive Director in any calendar year in which the actual emissions for the project exceed the total baseline actual emissions in the table above by 5 tpy netting significant emission rate, and a projected actual emission for any facility is exceeded in accordance with 116.127(d).

If netting is triggered during the project and a projected actual emission is exceeded, and actual emissions do not exceed the netting significant emission rate for the calendar year, the permit holder will maintain an emissions record for the calendar year and no report is required.

40. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). This list is not intended to be all inclusive and can be altered without modifications to this permit.

Authorization	Source or Activity
PBR No. 153161	Alternative Catalyst and Portable Hopper/Conveyance System
PBR No. 153725	Flange Emissions
PBR No. 156045	Alternative Catalyst, Hopper Production Increase, Catalyst Transfer, Fugitive Components, Waste Heater Boiler NOx Increases
PBR No. 156964	In-Kind AN3 Recovery Stripper Column Replacement
PBR No. 162204	Inhibitor Hopper Emissions
PBR No. 165965	Acetic Acid Storage Tank Fugitive Components

PBR No. 170725	Tank 30T15 Level Indicator Fugitive Components
PBR No. 174087	Bleed Point Fugitive Components
PBR No. 175912	Sulfur Dioxide Line Backflow Prevention Fugitive Components
PBR No. 176033	Product Column 30D7 Bypass Line Fugitive Components
30 TAC § 106.264 (effective 9/4/2000)	In-Kind HQ 30T11 Tank Replacement
30 TAC § 106.373 (effective 9/4/2000)	Non-Ammonia Refrigeration

Date: May 16, 2025

**Attachment A**

**Inherently Low Emitting Activities**

Activity	Emissions				
	VOC	NO <sub>x</sub>	CO	PM	H <sub>2</sub> S/SO <sub>2</sub>
Management of sludge from pits, ponds, sumps, and water conveyances	x				
Instrumentation/analyzer maintenance	x				
Meter proving	x				
Replacement of analyzer filters and screens	x				
Maintenance on water treatment systems (cooling, boiler, potable)	x				
Soap and other aqueous based cleaners	x				
Cleaning sight glasses	x				

Date: May 16, 2025

**Attachment B**

**Routine Maintenance Activities**

Pump repair/replacement

Fugitive component (valve, pipe, flange) repair/replacement

Compressor repair/replacement

Heat exchanger repair/replacement

Vessel repair/replacement

Date: May 16, 2025

**Attachment C**

**MSS Activity Summary**

Facilities	Description	Emissions Activity	EPN
all process units	process unit shutdown/ depressurize/ drain	vent to flare	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS, and 31Z4-MSS
all process units	process unit purge/degas/drain	vent to atmosphere	30Turnaround-MSS, 31Turnaround-MSS, and 30MSS
all process units	process unit startup	vent to flare	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS and 30Z4-MSS
all process units and tanks	preparation for facility/component repair/replacement	vent to flare	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS and 30Z4-MSS
all process units and tanks	preparation for facility/component repair/replacement	vent to atmosphere	30Turnaround-MSS, 31Turnaround-MSS, 30MSS
all process units and tanks	recovery from facility/component repair/replacement	vent to flare	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS, and 31Z4-MSS
all process units and tanks	recovery from facility/component repair/replacement	vent to atmosphere	30Turnaround-MSS, 31Turnaround-MSS, 30MSS
all process units and tanks	preparation for unit turnaround or facility/component repair/replacement	remove liquid	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS, 31Z4-MSS, 30MSS
all tanks	tank cleaning	cleaning activity and solvents	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS, and 31Z4-MSS
see Attachment A	Miscellaneous low emitting activities	See Attachment A	30Turnaround-MSS, 31Turnaround-MSS, 30Z7-MSS, and 31Z4-MSS

Date: May 16, 2025

Emission Sources - Maximum Allowable Emission Rates

Permit Number 18251 and N011

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
30H1	Acrylonitrile Unit 2 Air Heater	VOC	0.08	0.30
		NO <sub>x</sub>	1.75	5.52
		CO	1.17	4.64
		PM	0.11	0.42
		PM <sub>10</sub>	0.11	0.42
		PM <sub>2.5</sub>	0.11	0.42
		SO <sub>2</sub>	0.01	0.03
30H5	Acrylonitrile Unit 2 Waste Heat Boiler	VOC (6)	39.25	28.84
		NO <sub>x</sub>	120.00	109.50
		CO	31.00	95.00
		PM	138.00	8.80
		PM <sub>10</sub>	138.00	8.80
		PM <sub>2.5</sub>	138.00	8.80
		SO <sub>2</sub>	5.00	20.00
		ACN	5.02	7.00
		AN	2.09	0.39
		HCN	1.56	1.13
		Acrylic Acid	0.38	0.64
		Propylene	19.26	4.77
		MeOH	1.75	5.10
		Benzene	1.00	1.25
ACR	1.77	2.93		
Acrylamide	0.31	0.53		
30Z7	Acrylonitrile Unit 2 Flare	VOC (6)	15.04	-
		NO <sub>x</sub>	18.57	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		CO	10.78	-
		SO <sub>2</sub>	0.10	-
		AN	4.27	-
		HCN	7.64	-
		Propylene	2.72	-
		Ethylene	0.10	-
30Z7-MSS	Acrylonitrile Unit 2 Flare MSS	AN	11.90	-
		CO	37.21	-
		HCN	20.08	-
		NO <sub>x</sub>	51.84	-
		SO <sub>2</sub>	0.10	-
		Propylene	39.76	-
		Ethylene	1.21	-
		VOC (6)	75.19	-
30Z7 and 30Z7-MSS	Acrylonitrile Unit 2 Flare including MSS	VOC (6)	-	14.12
		NO <sub>x</sub>	-	20.77
		CO	-	13.37
		SO <sub>2</sub>	-	0.50
		AN	-	4.29
		HCN	-	8.57
		Propylene	-	1.21
		Ethylene	-	0.01
30PROC-AIS	AN2 Process Analyzers	VOC (6)	0.27	1.07
		CO	0.02	0.06
		NH <sub>3</sub>	0.01	0.02
		HCN	0.02	0.08
		AN	0.13	0.58

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		ACN	0.01	0.01
		ACR	0.01	0.01
		Propylene	0.07	0.32
30MSS	Routine MSS Activities	VOC (6)	1.58	0.06
		NH <sub>3</sub>	1.05	0.01
		AN	0.70	0.02
		HCN	0.05	0.01
		Propylene	0.76	0.01
30T2	Sulfuric Acid Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
30T9	Organic Acid Tank	VOC	0.67	0.01
30T10-1	Acidified Condensate Tank	VOC	0.01	0.01
30T11	Hydroquinone Tank	VOC	0.01	0.01
30T13	Glycol Tank	VOC	0.13	0.01
30T14	Acrylonitrile Unit 2 Process Sewer Tank	VOC (6)	0.38	0.01
		AN	0.38	0.01
		HCN	0.10	0.01
		ACN	0.01	0.01
30T15	Acrylonitrile Unit 2 Slop Water Tank 30T15 Vent	VOC (6)	0.83	0.03
		AN	0.82	0.03
		HCN	0.21	0.03
		ACN	0.01	0.01
30T27	Acetic Acid Storage Tank	VOC	3.52	0.02
30T31	30C1 Lube Oil Tank	VOC (6)	0.01	0.01
		Lube Oil	0.01	0.01
30T33	30C2 Lube Oil Tank	VOC (6)	0.22	0.95
		Lube Oil	0.01	0.01
		Propylene	0.22	0.95

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
30T49	Intermittent Blowdown Tank	VOC	0.01	0.01
30T53	Steam Blowdown Flash Tank	VOC	0.01	0.01
30T56	Storm Water Trench Backwash Tank	VOC	0.01	0.01
30T58	Antifoam Tank	VOC	0.10	0.01
30T61	Dispersant Tank	VOC	0.01	0.01
31H1-1	Acrylonitrile Unit 3 Air Heater 1	VOC	0.21	0.37
		NO <sub>x</sub>	4.74	3.15
		CO	3.19	5.63
		PM	0.29	0.51
		PM <sub>10</sub>	0.29	0.51
		PM <sub>2.5</sub>	0.29	0.51
		SO <sub>2</sub>	0.54	0.04
31H1-2	Acrylonitrile Unit 3 Air Heater 2	VOC	0.21	0.37
		NO <sub>x</sub>	4.74	3.15
		CO	3.19	5.63
		PM	0.29	0.51
		PM <sub>10</sub>	0.29	0.51
		PM <sub>2.5</sub>	0.29	0.51
		SO <sub>2</sub>	0.54	0.04
31H4	Acrylonitrile Unit 3 Waste Heat Boiler	VOC	42.79	30.99
		NO <sub>x</sub>	140.00	41.21
		CO	66.55	110.00
		PM	7.72	11.52
		PM <sub>10</sub>	7.72	11.52
		PM <sub>2.5</sub>	7.72	11.52
		SO <sub>2</sub>	5.00	15.86
		NH <sub>3</sub>	9.49	11.86

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		ACN	5.02	7.00
		AN	4.88	0.62
		HCN	1.56	1.84
		Acrylic Acid	0.38	0.64
		Propylene	19.26	4.28
		ACR	1.77	2.93
		Acrylamide	0.31	0.53
		Benzene	1.00	1.25
		MeOH	1.75	5.10
31Z4	Acrylonitrile Unit 3 Flare	VOC (6)	13.17	-
		NO <sub>x</sub>	18.27	-
		CO	8.68	-
		SO <sub>2</sub>	0.10	-
		AN	4.27	-
		HCN	7.68	-
		Propylene	0.61	-
		Ethylene	0.01	-
31Z4-MSS	Acrylonitrile Unit 3 Flare MSS	VOC (6)	66.42	-
		NO <sub>x</sub>	71.29	-
		CO	25.16	-
		SO <sub>2</sub>	0.10	-
		AN	18.91	-
		HCN	29.32	-
		Propylene	16.65	-
		Ethylene	0.28	-
31Z4 and 31Z4-MSS	Acrylonitrile Unit 3 Flare including MSS	VOC (6)	-	14.12
		NO <sub>x</sub>	-	13.38

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		CO	-	13.56
		SO <sub>2</sub>	-	0.50
		AN	-	4.29
		HCN	-	8.57
		Propylene	-	1.21
		Ethylene	-	0.01
31PROC-AIS	Acrylonitrile Unit 3 Process Analyzers	VOC (6)	0.09	0.40
		NO <sub>x</sub>	0.43	1.86
		CO	0.01	0.06
		NH <sub>3</sub>	0.01	0.01
		HCN	0.01	0.06
		AN	0.07	0.30
		ACN	0.01	0.01
		ACR	0.01	0.01
		Propylene	0.01	0.01
31T3	Organic Acid Tank	VOC	0.67	0.01
31T4	Hydroquinone Tank	VOC	0.01	0.01
31T7	Acrylonitrile Unit 3 Sewer Tank 31T7 Vent	VOC (6)	0.38	0.01
		AN	0.38	0.01
		HCN	0.10	0.01
		ACN	0.01	0.01
31T10	Hydroquinone Tank	VOC	0.01	0.01
31T12	31C1 Lube Oil Tank	VOC (6)	0.01	0.01
		Lube Oil	0.01	0.01
31T14	31C2 Lube Oil Tank	VOC (6)	0.22	0.95
		Lube Oil	0.01	0.01
		Propylene	0.22	0.95

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
31T16	Circulating Water Tank	VOC (6)	0.71	0.01
		AN	0.47	0.01
		HCN	0.37	0.01
		ACN	0.24	0.01
31T27	31Z24 Lube Oil Tank	VOC (6)	0.01	0.01
		Lube Oil	0.01	0.01
31T28	31Z25 Lube Oil Tank	VOC (6)	0.01	0.01
		Lube Oil	0.01	0.01
31T35	Antifoam Tank	VOC	0.10	0.01
31T36	Dispersant Tank	VOC	0.01	0.01
31T37	31C3 Lube Oil Tank	VOC (6)	0.01	0.01
		Lube Oil	0.01	0.01
331T6	Coagulant Tank	VOC	2.46	0.01
331T7	Flocculent Tank	VOC	0.01	0.01
30SUMPS	Acrylonitrile Unit 2 Sumps (30T63, 30T64, 30T65, 30T66, 30D1 Sump, and 30D4 Sump)	VOC (6)	0.01	0.01
		AN	0.01	0.01
		HCN	0.01	0.01
		ACN	0.01	0.01
31SUMPS	Acrylonitrile Unit 3 Sumps (31T39, 31T40, 31T41, 31D1 Sump, and 31D4 Sump)	VOC (6)	0.01	0.01
		AN	0.01	0.01
		HCN	0.01	0.01
		ACN	0.01	0.01
331T3.1	Dept. 331 Sump (5)	VOC (6)	0.01	0.01
		AN	0.01	0.01
		HCN	0.01	0.01
		ACN	0.01	0.01
30T62		VOC (6)	2.40	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Acrylonitrile Unit 2 Catalyst Transfer Operations	CO	0.14	0.01
		PM	0.10	0.01
		PM <sub>10</sub>	0.10	0.01
		PM <sub>2.5</sub>	0.10	0.01
		NH <sub>3</sub>	0.12	0.01
		AN	0.63	0.01
		HCN	0.13	0.01
		ACN	0.01	0.01
		ACR	0.01	0.01
		MeOH	0.27	0.01
		Propylene	1.30	0.01
31T38	Acrylonitrile Unit 3 Catalyst Transfer Operations	VOC (6)	4.53	0.01
		CO	0.28	0.01
		PM	0.01	0.01
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	0.01	0.01
		NH <sub>3</sub>	0.27	0.01
		AN	1.66	0.01
		HCN	0.35	0.01
		ACN	0.01	0.01
		ACR	0.01	0.01
		MeOH	0.02	0.01
		Propylene	2.70	0.01
331SWTREAT	Solid Waste Treatment	VOC (6)	0.04	0.01
		PM	0.01	0.01
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		NH <sub>3</sub>	0.04	0.01
		AN	0.01	0.01
		HCN	0.01	0.01
		ACN	0.02	0.01
30SAMPCAB	Acrylonitrile Unit 2 Sample Cabinets	VOC (6)	0.25	0.08
		CO	0.01	0.01
		NH <sub>3</sub>	0.01	0.01
		HCN	0.01	0.01
		AN	0.15	0.05
		ACN	0.08	0.02
		ACR	0.01	0.01
		Acetaldehyde	0.01	0.01
		MeOH	0.01	0.01
		Methacrylonitrile	0.01	0.01
		Oxazole	0.01	0.01
		Benzene	0.01	0.01
		Propylene	0.01	0.01
31SAMPCAB	Acrylonitrile Unit 3 Sample Cabinets	VOC (6)	0.13	0.06
		CO	0.01	0.01
		NH <sub>3</sub>	0.01	0.01
		HCN	0.01	0.01
		AN	0.12	0.05
		ACN	0.01	0.01
		ACR	0.01	0.01
		Acetaldehyde	0.01	0.01
		MeOH	0.01	0.01
		Methacrylonitrile	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		Oxazole	0.01	0.01
		Benzene	0.01	0.01
		Propylene	0.01	0.01
31AMSHOP-1	AN-3 Injection System 1	PM	0.07	<0.01
		PM <sub>10</sub>	0.03	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
31AMSHOP-2	AN-3 Injection System 2	PM	0.07	<0.01
		PM <sub>10</sub>	0.03	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
30ISBLFUG	AN-2, AN-3, and 30COFUG ISBL Process Fugitives (5)	VOC (6)	4.74	20.81
		CO	0.06	0.27
		SO <sub>2</sub>	0.01	0.01
		H <sub>2</sub> SO <sub>4</sub>	0.01	0.05
		NH <sub>3</sub>	0.73	3.23
		AN	2.36	10.32
		HCN	0.53	2.38
		ACN	0.03	0.12
		ACR	0.01	0.03
		Acrolein derivatives	0.01	0.02
		MeOH	0.68	2.98
		Propylene	0.57	2.51
30-T-MSS	AN-2 Turnaround MSS Activities	VOC (6)	3.85	0.05
		NH <sub>3</sub>	0.69	0.01
		AN	1.40	0.01
		HCN	0.44	0.01
		Propylene	0.97	0.01
31-T-MSS		VOC (6)	4.90	0.05

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	AN3 Turnaround MSS Activities	NH <sub>3</sub>	2.09	0.01
		AN	1.54	0.01
		HCN	0.80	0.01
		Propylene	1.50	0.05

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- ACN - acetonitrile
- AN - acrylonitrile
- HCN - hydrogen cyanide
- MeOH - methanol
- ACR - acrolein
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Speciated VOC emissions are also included in the total VOC maximum allowable.

Date: May 16, 2025