

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 8904, PSDTX447M1, and N012

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) (FIN)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
<u>Brewing Operations</u>				
Grain Handling (Buildings 2 [Old Side] and 62 [New Side])				
GU-O1	Grain Unloading I (GH-GU1) Bagfilter Vent	PM	0.40	0.95
		PM <sub>10</sub>	0.06	0.14
BHA-6	Malt Conveying I (GH-MALT1) Bagfilter Vent	PM	0.18	0.62
		PM <sub>10</sub>	0.03	0.09
BHA-7	Rice Conveying I (GH-RICE1) Bagfilter Vent	PM	0.14	0.33
		PM <sub>10</sub>	0.02	0.05
BHA-8	Mill Dust Collection I (GH-MDC1) Bagfilter Vent	PM	0.57	2.33
		PM <sub>10</sub>	0.40	1.63
GU-N1	Grain Unloading II (GH-GU2) Bagfilter Vent	PM	0.45	1.97
		PM <sub>10</sub>	0.07	0.30
GU-N2	Grain Bin Dust Collection II (GH-GBD2) Bagfilter Vent	PM	0.45	1.97
		PM <sub>10</sub>	0.07	0.30
GH-N1	Malt Conveying IIA (GH-MALT2A) Bagfilter Vent	PM	0.20	0.89
		PM <sub>10</sub>	0.03	0.13
GH-N2	Rice Conveying IIA (GH-RICE2A) Bagfilter Vent	PM	0.09	0.39
		PM <sub>10</sub>	0.01	0.06
BHB-20	Malt Conveying IIB (GH-MALT2B) Bagfilter Vent	PM	0.20	0.89
		PM <sub>10</sub>	0.03	0.13

## Emission Sources - Maximum Allowable Emission Rates

BHB-21	Rice Conveying IIB (GH-RICE2B) Bagfilter Vent	PM	0.09	0.39
		PM <sub>10</sub>	0.01	0.06
BHB-22	Mill Dust Collection II (GH-MDC2) Bagfilter Vent	PM	0.35	1.54
		PM <sub>10</sub>	0.25	1.08
BHB-24	Mill Dust Collection III (GH-MDC3) Bagfilter Vent	PM	0.35	1.54
		PM <sub>10</sub>	0.25	1.08
GH-O1	Vacuum Cleaning I (GH-VC1) Bagfilter Vent	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
BHA-9	Vacuum Cleaning II (GH-VC2) Bagfilter Vent	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
GH-N5	Vacuum Cleaning III (GH-VC3) Bagfilter	PM (5)	<0.01	0.01
		PM <sub>10</sub> (5)	<0.01	0.01
BHB-23	Vacuum Cleaning IV (GH-VC4) Bagfilter Vent	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
GH-N6	Vacuum Cleaning V (GH-VC5) Bagfilter Vent	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
	Total Vacuum Cleaning Operations	PM (5)	--	0.01
		PM <sub>10</sub> (5)	--	0.01
Brewhouse (Buildings 3 [Old Side], 3X, and 63)				
BHA-1	Mash Cooker No. 1 (BHA-MC1) Vent	VOC	0.12	0.53
BHA-2	Mash Cooker No. 2 (BHA-MC2) Vent	VOC	0.12	0.53
BHX-1	Mash Cooker No. 3 (BHX-MC3) Vent	VOC	0.12	0.53
BHB-1	Mash Cooker No. 4 (BHB-MC4) Vent	VOC	0.12	0.53
BHB-2	Mash Cooker No. 5	VOC	0.12	0.53

## Emission Sources - Maximum Allowable Emission Rates

	(BHB-MC5) Vent			
BHB-3	Mash Cooker No. 6 (BHB-MC6) Vent	VOC	0.12	0.53
BHB-4	Mash Cooker No. 7 (BHB-MC7) Vent	VOC	0.12	0.53
BHB-5	Mash Cooker No. 8 (BHB-MC8) Vent	VOC	0.12	0.53
	Total Mash Cooker Operations	VOC	--	1.86
BHA-3	Brew Kettle No. 1 (BHA-BK1) Vent	VOC	1.12	4.91
BHX-4	Brew Kettle No. 2 (BHX-BK2) Vent	VOC	1.12	4.91
BHB-8	Brew Kettle No. 3 (BHB-BK3) Vent	VOC	1.12	4.91
BHB-9	Brew Kettle No. 4 (BHB-BK4) Vent	VOC	1.12	4.91
BHB-10	Brew Kettle No. 5 (BHB-BK5) Vent	VOC	1.12	4.91
	Total Brew Kettle Operations	VOC	--	11.03
BHA-4	Holding Kettle (BHA-HK) Vent	VOC	0.40	0.79
BHA-5	Hops Strainer No. 1 (BHA-HS) Vent	VOC	0.13	0.51
BHB-14	Hops Strainer No. 2 (BHB-HS) Vent	VOC	0.13	0.51
	Total Hops Strainer Operations	VOC	--	0.51
BHX-2	Lauter Tub No. 1 (BHX-LT1) Vent	VOC	0.54	2.37
BHX-3	Lauter Tub No. 2 (BHX-LT2) Vent	VOC	0.54	2.37
BHB-6	Lauter Tub No. 3 (BHB-LT3) Vent	VOC	0.54	2.37
BHB-7	Lauter Tub No. 4 (BHB-LT4) Vent	VOC	0.54	2.37
	Total Lauter Tub Operations	VOC	--	4.26
BHB-11	Hot Wort Receiver	VOC	0.06	0.26

## Emission Sources - Maximum Allowable Emission Rates

	No. 1 (BHB-HWR1) Vent			
BHX-5	Hot Wort Receiver No. 2 (BHX-HWR2) Vent	VOC	0.06	0.26
BHB-12	Hot Wort Receiver No. 3 (BHB-HWR3) Vent	VOC	0.06	0.26
BHB-13	Hot Wort Receiver No. 4 (BHB-HWR4) Vent	VOC	0.06	0.26
	Total Hot Wort Receiver Operations	VOC	--	0.51
BHX-6	Press Feed Tank No. 1 (BHX-PFT1) Vent	VOC	0.01	0.03
BHX-7	Press Feed Tank No. 2 (BHX-PFT2) Vent	VOC	0.01	0.03
	Total Press Feed Tank Operations	VOC	--	0.03
BHX-8	Truck Loadout Tank (BHX-TLT) Vent	VOC	0.02	0.03
BHB-HVAC	Hot Trub Collection Tanks No. 1 (BHB- HTC1) and 3 (BHB- HTC3) Vent	VOC	0.58	1.71
BHX-9	Hot Trub Collection Tank No. 2 (BHX- HTC2) Vent	VOC	0.29	1.27
	Total Hot Trub Collection Tank Operations	VOC	--	1.71
BHB-15	Wort Aerator No. 1 (BHB-WA1) Vent	VOC	0.93	4.07
BHB-16	Wort Aerator No. 2 (BHB-WA2) Vent	VOC	0.93	4.07
BHB-25	Wort Aerator No. 3 (BHB-WA3) Vent	VOC	0.93	4.07
	Total Wort Aerator	VOC	--	5.51

## Emission Sources - Maximum Allowable Emission Rates

	Operations			
BHB-17	Press Effluent Tank (BHB-PET) and Lauter Tub Effluent Tank (BHB-LTET) Vent	VOC	0.04	0.07
BHB-18	Centrifuge Effluent Tank (BHB-CET) Vent	VOC	0.02	0.03
BHB-19	Centrifuge Feed Tank (BHB-CFT) Vent	VOC	0.02	0.03
BHB-26	Bulk Gypsum Silo (BHB-GYSILO) Bagfilter Vent	PM	0.01	0.01
		PM <sub>10</sub>	<0.01	<0.01
BHA-FUG	Two 50-Barrel Precoat Tanks (BHA-PCT), Two 50-Barrel Body Feed Tanks (BHA-BFT), and Carbon Filter Regenerators No. 1-10 (BHA-CFR)	PM (5)	<0.01	0.02
		PM <sub>10</sub> (5)	<0.01	0.02
		VOC (5)	0.01	0.04
BHB-FUG	Two Spent Grain Presses (BHB-SGP) and Carbon Filter Regenerators No. 11-13 (BHB-CFR)	VOC (5)	0.02	0.07
	Total Precoat Tank, Body Feed Tank, Spent Grain Press, and Carbon Filter Regenerator Operations	VOC (5)	--	0.07
<b>Stockhouses</b> <b>(Buildings 4 [No. 1], 4A [No. 2], 4X [No. 3], 4AX [No. 4 and 5], 68 [No. 6], 64 [No. 7], 65 [No. 8], 44 [No. 9], 45 [No. 10], and Undesignated [No. 10A])</b>				
SH1-1	Two 60-Barrel K-Filters (SH1-KF1 and SH1-KF2), Two	VOC	0.02	<0.01

Emission Sources - Maximum Allowable Emission Rates

	37-Barrel Schoene Beer Balance Tanks (SH1-SBB1), and Two 37-Barrel Filter Beer Balance Tanks (SH1-FBB1) Vent			
SH1-2	Two 90-Barrel K-Filters (SH1-KF4 and SH1-KF5), Two 70-Barrel Schoene Beer Balance Tanks (SH1-SBB2), and Two 70-Barrel Filter Beer Balance Tanks (SH1-FBB2) Vent	VOC	0.02	<0.01
SH1-3	One 1,240-Barrel Schoene Beer Tank (SH1-ST1), One 410-Barrel Schoene Beer Tank (SH1-ST2), Three 610-Barrel Schoene Beer Tanks (SH1-ST3), Seventeen 1,220-Barrel Schoene Beer Tanks (SH1-ST4), Thirteen 1,220-Barrel Lager Beer Tanks (SH1-LT1), Three 510-Barrel Lager Beer Tanks (SH1-LT2), and Twelve 1,220-Barrel Lager Beer Tanks (SH1-LT3) Vent	VOC	2.37	10.38
SH1-4	Three 610-Barrel Schoene Beer Tanks	VOC	1.43	6.26

## Emission Sources - Maximum Allowable Emission Rates

	(SH1-ST5), Six 1,220-Barrel Schoene Beer Tanks (SH1-ST6), Six 510-Barrel Lager Beer Tanks (SH1-LT4), Thirteen 1,220-Barrel Lager Beer Tanks (SH1-LT5), Six 410-Barrel Lager Beer Tanks (SH1-LT6), and Thirteen 1,220-Barrel Lager Beer Tanks (SH1-LT7) Vent			
SH1-4	Six 1,240-Barrel Schoene Beer Tanks (SH3-ST1), Six 1,240-Barrel Schoene Beer Tanks (SH3-ST2), Six 1,240-Barrel Schoene Beer Tanks (SH3-ST3), and Six 1,240-Barrel Schoene Beer Tanks (SH3-ST4) Vent	VOC	2.08	9.11
SH2-2	Twenty-one 1,240-Barrel Lager Beer Tanks (SH2-LT1), One 1,240-Barrel Lager Beer Tank (SH2-LT2), Twenty-one 1,220-Barrel Lager Beer Tanks (SH2-LT3), Twenty-one 1,220-Barrel Lager Beer Tanks (SH2-LT4), Twenty-one 1,220-Barrel Lager	VOC	2.23	9.77

## Emission Sources - Maximum Allowable Emission Rates

	Beer Tanks (SH2-LT5), and One 1,220-Barrel Lager Beer Tank (SH2-LT6) Vent			
SH5-1	Six 1,240-Barrel Lager Beer Tanks (SH5-LT1), Six 1,240-Barrel Lager Beer Tanks (SH5-LT2), Six 1,240-Barrel Lager Beer Tanks (SH5-LT3); and Six 1,240-Barrel Lager Beer Tanks (SH5-LT4) Vent	VOC	0.63	2.76
SH8-1	Twenty 3,600-Barrel Lager Beer Tanks (SH8-LT1) Vent	VOC	1.53	6.70
SH8-2	Twenty 3,600-Barrel Lager Beer Tanks (SH8-LT2) Vent	VOC	1.53	6.70
SH8-3	Twenty 3,600-Barrel Lager Beer Tanks (SH8-LT3) Vent	VOC	1.53	6.70
SH8-4	Nineteen 3,600-Barrel Lager Beer Tanks (SH8-LT4) Vent	VOC	1.45	6.35
SH10-1	Eight 4,240-Barrel Unitanks (SH10-UT) Vent	VOC	0.72	3.15
SH10A-1	Ten 4,800-Barrel Unitanks (SH10A-UT) Vent	VOC	1.02	4.47
	Total Schoene Beer Tank, Lager Beer Tank, and Unitank Operations	VOC	--	32.54
SH9-2	Carbon Dioxide Regeneration System	VOC	0.95	4.16



## Emission Sources - Maximum Allowable Emission Rates

	(Deodorizer, Scrubber, and Trap) No. 1 (SH9-CO2) Vent			
SH1-5	Carbon Dioxide Regeneration System (Deodorizer, Scrubber, and Trap) No. 2 (SH1-CO2) Vent	VOC	0.15	0.66
SH7-4	Carbon Dioxide Regeneration System (Deodorizer, Scrubber, and Trap) No. 3 (SH7-CO2) Vent	VOC	1.16	4.46
	Total Carbon Dioxide Regeneration System Operations	VOC	--	4.46
DESILO-1	Celite or Perlite Storage Silo No. 1 (SH1-DES1) Bagfilter Vent	PM	0.01	0.06
		PM <sub>10</sub>	0.01	0.06
DESILO-2	Celite or Perlite Storage Silo No. 2 (SH1-DES2) Bagfilter Vent	PM	0.01	0.06
		PM <sub>10</sub>	0.01	0.06
SH2-1	ACP System (SH2-ACP) Vent	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
SH3-1	K-Filter No. 3 (SH3-KF3), One 110-Barrel Schoene Beer Balance Tank (SH3-SBB), and One 90-Barrel Filter Beer	VOC	<0.01	<0.01

## Emission Sources - Maximum Allowable Emission Rates

	Balance Tank (SH3-FBB) Vent			
SH3-2	Celite or Perlite Sludge Disposal Rotary Filter (SH3-ROTF) Vent	VOC	0.02	0.03
SH4-1	Three 2,365-Barrel Alpha Fermentation Tanks (SH4-AFT1) and One 2,344-Barrel Alpha Fermentation Tank (SH4-AFT2) Vent	VOC	0.63	2.76
SH7-1	Twelve 6,050-Barrel Alpha Fermentation Tanks (SH7-AFT) Vent	VOC	4.85	21.24
SH7-2	Alpha Drop Receiver No. 1 (SH7-ADR1) Vent	VOC	0.56	2.45
SH7-3	Alpha Drop Receiver No. 2 (SH7-ADR2) Vent	VOC	0.56	2.45
SH9-1	Twelve 4,240-Barrel Alpha Fermentation Tanks (SH9-AFT1), Four 2,120-Barrel Alpha Fermentation Tanks (SH9-AFT2), Alpha Drop Receivers No. 3 (SH9-ADR1) and 4 (SH9-ADR2) Vent	VOC	5.08	22.25
	Total Alpha Fermentation Tank and Alpha Drop Receiver Operations	VOC	--	23.02
SH4-2	Spent Celite (D.E.) or Perlite Tank (SH4-SCT) Vent	VOC	0.02	0.03
SH6-HVAC	Spent Yeast Collection	VOC	8.98	17.70

Emission Sources - Maximum Allowable Emission Rates

	Tank No. 1 (SH6-SYC1), Schoene Sludge Collection Tank No. 1 (SH6-SSC1), Twelve 690-Barrel Cold Wort Settling Tanks (SH6-CWS), Eight 200-Barrel Yeast Brinks (SH6-YB1), Two 50-Barrel Yeast Brinks (SH6-YB2), and One 400-Barrel G Beer Tank (SH6-GBT) Vent			
SH6-1	Seven 850-Barrel Schoene Beer Decant Tanks (SH6-SDT), Seven 500-Barrel Filtered Beer Tanks (SH6-FBT1), and Seven 1,600-Barrel Filtered Beer Tanks (SH6-FBT2) Vent	VOC	1.27	5.56
SH6-2	Seven 850-Barrel Filtered Beer Tanks (SH6-FBT3) and Six 850-Barrel Filtered Beer Tanks (SH6-FBT4) Vent	VOC	0.70	3.07
SH6-3	Seven 850-Barrel Filtered Beer Tanks (SH6-FBT5), Eight 1,600-Barrel Filtered Beer Tanks (SH6-FBT6), One 850-Barrel Filtered Beer Tank (SH6-FBT7), Eight 1,600-Barrel Filtered Beer Tanks (SH6-FBT8), and Six 2,000-Barrel	VOC	2.80	9.39

## Emission Sources - Maximum Allowable Emission Rates

	Filtered Beer Tanks (SH6-FBT9) Vent			
	Total Filtered Beer Tank and Schoene Decant Tank Operations	VOC	--	9.39
SH8-HVAC	Two 1,500-Barrel Kraeusen Holding Tanks (SH8-KHT) Vent	VOC	0.01	0.02
SH8-5	Six Chip Washers (SH8-CW) Vent	VOC	1.80	7.88
SH1-FUG	Seven 510-Barrel Clear Beer Tanks (SH1-CBT), Five 510-Barrel Blowback Beer Tanks (SH1-BBT), Schoene Beer	PM (5)	0.01	0.02
	Receivers No. 1-3 (SH1-SR1, SH1-SR2, and SH1-SR3),	PM <sub>10</sub> (5)	0.01	0.02
	Five Chip Washers (SH1-CW), One 3-Barrel Tannin Concentrate Tank (SH1-TCT), One 50-Barrel Tannin Mix Tank (SH1-TMT), and One 37-Barrel Tannin Supply Tank (SH1-TST)	VOC (5)	2.56	8.46
	Total Chip Washer, Schoene Beer Receiver, Clear Beer Tank, Blowback Beer Tank, Tannin Concentrate Tank, Tannin Mix Tank, and Tannin Supply Tank Operations	VOC (5)	--	8.46

## Emission Sources - Maximum Allowable Emission Rates

SH3-FUG	Spent Celite (D.E.) or Perlite Dumpster (SH3-SCD)	VOC (5)	0.02	0.03
SH8-FUG	Spent Chips Dumpster (SH8-SCD)	VOC (5)	0.01	0.03
RDOCK-FUG3	Spent Chips Dumpster (RDOCK-SCD)	VOC (5)	0.01	0.03
	Total Spent Chips Dumpster Operations	VOC (5)	--	0.03
<b>Packaging</b> <b>(Buildings 5, 6, and 66 [Bottle Lines 04, 05, 06, 07, and 08; Keg Line 99; Can Lines 63, 64, 65, 66, and 67]; Recycle Dock; and Blockhouse)</b>				
BPS-1	Filler (BPS-B06F) and Pasteurizer (BPS- B06P) Vent	VOC	4.10	17.96
BPS-2	Filler (BPS-C66F) and Pasteurizer (BPS- C66P) Vent	VOC	4.66	20.41
BPS-FUG04	Filler (BPS-B04F), Pasteurizer (BPS- B04P), 3 Laser Coders (BPS- B04LC), and Glass Crusher (BPS- B04GC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		VOC (5)	3.69	16.16
BPS-FUG05	Filler (BPS-B05F), Pasteurizer (BPS- B05P), 3 Laser Coders (BPS- B05LC), and Glass Crusher (BPS- B05GC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		VOC (5)	3.70	16.21
BPS-FUG06	5 Laser Coders (BPS- B06LC) and Packers Dust Collector (BPS- B06TDC)	PM (5)	0.04	0.18
		PM <sub>10</sub> (5)	0.04	0.18

## Emission Sources - Maximum Allowable Emission Rates

BPS-FUG07	Filler (BPS-B07F), Pasteurizer (BPS-B07P), and 4 Laser Coders (BPS-B07LC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		VOC (5)	3.13	13.71
BPS-FUG08	Filler (BPS-B08F), Pasteurizer (BPS-B08P), and 3 Laser Coders (BPS-B08LC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		VOC (5)	3.13	13.71
BPS-FUG63	Filler No. 1 (BPS-C63F1), Filler No. 2 (BPS-C63F2), Pasteurizer (BPS-C63P), and Laser Coder (BPS-C63LC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		VOC (5)	5.00	21.90
BPS-FUG64	Filler (BPS-C64F), Pasteurizer (BPS-C64P), 2 Laser Coders (BPS-C64LC), and Carton Salvage Baler Dust Collector (BPS-C64BCS)	PM (5)	0.02	0.09
		PM <sub>10</sub> (5)	0.02	0.09
		VOC (5)	4.25	18.62
BPS-FUG65	Filler (BPS-C65F) and Pasteurizer (BPS-C65P)	VOC (5)	5.00	21.90
BPS-FUG66	2 Laser Coders (BPS-C66LC) and Carton Salvage Baler Dust Collector (BPS-C66BCS)	PM (5)	0.01	0.06
		PM <sub>10</sub> (5)	0.01	0.06
BPS-FUG67	Filler (BPS-C67F), Pasteurizer (BPS-C67P), and 2 Laser Coders (BPS-C67LC)	PM (5)	<0.01	0.04
		PM <sub>10</sub> (5)	<0.01	0.04
		PM <sub>2.5</sub> (5)	<0.01	0.04
		VOC (5)	4.65	20.37

## Emission Sources - Maximum Allowable Emission Rates

BPS-FUG99	Keg Washer (BPS-K99W) and Keg Filler (BPS-K99F)	VOC (5)	0.21	0.92
RDOCK-1	Carton Salvage Baler Dust Collector (RDOCK-BCS) Vent	PM	0.05	0.22
		PM <sub>10</sub>	0.05	0.22
RDOCK-FUG1	Glass Crusher (RDOCK-GC)	VOC (5)	0.59	2.58
RDOCK-FUG2	Can Crusher (RDOCK-CC)	VOC (5)	0.87	3.81
BLOCK-BCS	Carton Salvage Baler Dust Collector (BLOCK-BCS)	PM (5)	0.01	0.05
		PM <sub>10</sub> (5)	0.01	0.05
	Total Filler, Pasteurizer, Laser Coder, Carton Salvage Baler, Glass/Can Crusher, Keg Filler, Keg Washer, and Packers Dust Collector Operations	PM (5)	--	0.59
		PM <sub>10</sub> (5)	--	0.59
		PM <sub>2.5</sub> (5) (10)	--	0.04
		VOC (5)	--	89.76
BPS-4	Sleeve Removal System (BPS-SRS) Vent	PM <sub>10</sub>	0.04	0.17
		PM <sub>10</sub>	0.04	0.17
BPS-FUG04, BPS-FUG05, BPS-FUG06, BPS-FUG07, BPS-FUG08, BPS-FUG63, BPS-FUG64, BPS-FUG65, BPS-FUG66, BPS-FUG67, and BPS-FUG68	16 Ink Coders (BPS-B04MC thru B08MC, BPS-C63MC thru C67MC, and BPS-C63DC), 25 Videojet Coders (BPS-B06VJ, BPS-K99VJ, and BPS-C63VJ thru C67VJ), 13 Bottle Labelers (BPS-B04BL thru B08BL), and 22 Case Sealers	VOC (5)	10.22	12.82
		CH <sub>3</sub> OH (5)	1.65	1.95
		C <sub>6</sub> H <sub>4</sub> (OH) <sub>2</sub> (5)	<0.01	<0.01

## Emission Sources - Maximum Allowable Emission Rates

	(BPS-B04CS thru B08CS and BPS-C63CS thru C67CS)			
<b><u>Brewery Support Operations</u></b>				
<b>Utilities (General)</b>				
GEN-NH3	Refrigeration System (GEN-NH3)	NH <sub>3</sub> (5)	0.72	3.20
<b>Utilities (Building 7 [Powerhouse])</b>				
PWR-1	Boiler No. 1 (PWR-B01) Stack	PM	1.12 (6)	2.90 (6)
		PM <sub>10</sub>	1.12 (6)	2.90 (6)
		SO <sub>2</sub>	24.32 (6)	9.00 (6)
		NO <sub>x</sub>	11.44 (6)	36.30 (6)
		CO	6.72 (6)	29.40 (6)
		VOC	0.44 (6)	1.90 (6)
PWR-2	Boiler No. 2 (PWR-B02) Stack	PM	1.12 (6)	2.90 (6)
		PM <sub>10</sub>	1.12 (6)	2.90 (6)
		SO <sub>2</sub>	24.32 (6)	9.00 (6)
		NO <sub>x</sub>	11.44 (6)	36.30 (6)
		CO	6.72 (6)	29.40 (6)
		VOC	0.44 (6)	1.90 (6)
PWR-3	Boiler No. 3 (PWR-B03) Stack	PM	1.12 (7)	2.90 (7)
		PM <sub>10</sub>	1.12 (7)	2.90 (7)
		SO <sub>2</sub>	24.32 (7)	9.00 (7)
		NO <sub>x</sub>	2.96 (7)	12.96 (7)
		CO	6.72 (7)	29.40 (7)
		VOC	0.44 (7)	1.90 (7)



Emission Sources - Maximum Allowable Emission Rates

		SiO <sub>2</sub>	0.62	2.73
		HF	0.58	2.54
		HCl	0.69	3.04
PWR-4	Boiler No. 4 (PWR-B04) Stack	PM	2.28 (8)	4.70 (8)
		PM <sub>10</sub>	2.28 (8)	4.70 (8)
		SO <sub>2</sub>	49.10 (8)	76.60 (8)
		NO <sub>x</sub>	3.69 (8)	16.16 (8)
		CO	8.37 (8)	36.70 (8)
		VOC	0.55 (8)	2.40 (8)
		SiO <sub>2</sub>	0.78	3.41
		HF	0.72	3.16
		HCl	0.87	3.79
PWR-5	Boiler No. 5 (PWR-B05) Stack	PM	2.28 (8)	4.70 (8)
		PM <sub>10</sub>	2.28 (8)	4.70 (8)
		SO <sub>2</sub>	49.10 (8)	76.60 (8)
		NO <sub>x</sub>	3.69 (8)	16.16 (8)
		CO	8.37 (8)	36.70 (8)
		VOC	0.55 (8)	2.40 (8)
		SiO <sub>2</sub>	0.78	3.41
		HF	0.72	3.16
		HCl	0.87	3.79
PWR-6	Boiler No. 6 (PWR-B06) Stack	PM	1.40 (7)	4.10 (7)
		PM <sub>10</sub>	1.40 (7)	4.10 (7)
		SO <sub>2</sub>	30.31 (7)	39.80 (7)
		NO <sub>x</sub>	3.69 (7)	16.16 (7)

## Emission Sources - Maximum Allowable Emission Rates

		CO	8.37 (7)	36.70 (7)
		VOC	0.55 (7)	2.40 (7)
		SiO <sub>2</sub>	0.78	3.41
		HF	0.72	3.16
		HCl	0.87	3.79
	Total Operations for Boilers No. 3-6	SiO <sub>2</sub>	--	5.13
		HF	--	4.76
		HCl	--	5.70
Utilities (Near Building 9A)				
TRACK-01	Trackmobile Diesel Storage Tank (TRACK-DST) Vent	VOC	<0.01	<0.01
Maintenance (General)				
BREW-FUG	Fumigation (BREW-FUG)	CH <sub>3</sub> Br (VOC) (5)	0.30	1.29
		PH <sub>3</sub> (5)	<0.01	0.01
PHOS-RC	Railcar Fumigation (PHOS-RC)	PH <sub>3</sub> (5)	0.02	0.08
Maintenance (Building 6)				
BPS-FUGPW1	5-Gallon Parts Washer No. 1 (BPS-PW1)	VOC (5)	0.05	0.02
BPS-FUGPW2	5-Gallon Parts Washer No. 2 (BPS-PW2)	VOC (5)	0.05	0.02
BPS-FUGPW3	17-Gallon Parts Washer (BPS-PW3)	VOC (5)	0.05	0.06
Maintenance (Building 7)				
PWR-FUG	Parts Washer (PWR-PW)	VOC (5)	0.05	0.23
Maintenance				

## Emission Sources - Maximum Allowable Emission Rates

(Building 9)				
PAINT-FUG2	Paint Booth (PAINT-PSB) Filter Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		VOC	4.72	0.27
PAINT-FUG3	Paint Still (PAINT-STL)	VOC (5)	<0.01	0.02
Maintenance (Near Building 10)				
YARD-01	Carpenter Shop (YARD-CSDC) Vent	PM	0.77	0.80
		PM <sub>10</sub>	0.77	0.80
Maintenance (Building 66)				
FORK-FUG	Parts Washer (FORK-PW)	VOC (5)	0.05	0.23
Maintenance (Building 77)				
BRM-FUG	67-Gallon Parts Washer (BRM-PW)	VOC (5)	0.05	0.23
Safety (Near Building 10)				
FIRE-01	Fire Water Pump (Engine) (FIRE- WP) Stack	PM	0.68	0.17
		PM <sub>10</sub>	0.68	0.17
		SO <sub>2</sub>	0.64	0.16
		NO <sub>x</sub>	9.61	2.40
		CO	2.07	0.52
		VOC	0.78	0.20
FIRE-02	Fire Water Pump Diesel Storage Tank (FIRE-DST) Vent	VOC	<0.01	<0.01
Waste Treatment				
WWT-FUG	Wastewater Collection Fugitives	VOC (5)	0.33	1.43

## Emission Sources - Maximum Allowable Emission Rates

	(WWT-WCF)			
WWT-FUG1	Wastewater Station No. 1 (WWT-WS1)	VOC (5)	0.02	0.07
WWT-FUG2	Wastewater Collection Pit (WWT-WCP)	VOC (5)	0.02	0.11
BERS-1	Bio-Energy Recovery System Flare (BERS-FL)	SO <sub>2</sub>	60.60	36.90 (9)
		NO <sub>x</sub>	4.60	11.20 (9)
		CO	39.60	96.30 (9)
		H <sub>2</sub> S	0.64	0.42
BERS-2	Bio-Energy Recovery System Scrubber (Biofilter or Carbon Filter Backup) (BERS-BIO)	H <sub>2</sub> S (5)	1.50	2.24
BERS-3	Bio-Energy Recovery System Fugitives (BERS-FUG)	H <sub>2</sub> S (5)	<0.01	0.01
BERS-4	Bulk Magnesium Hydroxide Silo (BERS-4) Bagfilter Vent	PM	0.02	0.05
		PM <sub>10</sub>	<0.01	<0.01
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
PBR § 106.418 (Registration No. 70009)				
BPS-FUG04 and BPS-FUG07	5 Videojet Coders (BPS-B04VJ and BPS-B07VJ)	VOC	0.02	0.10
PBR § 106.371				
COND-CTS	16 Evaporative Condensers (COND-CTS)	PM	5.29	23.16
		PM <sub>10</sub>	5.29	23.16
PWRHS-CT	Powerhouse Cooling Tower (PWRHS-CT)	PM	4.68	20.51
		PM <sub>10</sub>	4.68	20.51

Emission Sources - Maximum Allowable Emission Rates

BERS-CTS	BERS Cooling Tower (BERS-CTS)	PM	0.88	3.86
		PM <sub>10</sub>	0.88	3.86
PBR § 106.511				
FIRE-03	Emergency Generator No. 1 (FIRE-PH)	PM	0.08	0.03
		PM <sub>10</sub>	0.08	0.03
		SO <sub>2</sub>	0.71	0.31
		NO <sub>x</sub>	5.43	2.38
		CO	0.74	0.32
		VOC	0.19	0.08
FIRE-04	Emergency Generator No. 2 (FIRE-PH2)	PM	0.06	0.03
		PM <sub>10</sub>	0.06	0.03
		SO <sub>2</sub>	0.32	0.14
		NO <sub>x</sub>	0.85	0.37
		CO	0.38	0.17
		VOC	0.03	0.02
PBR § 106.532				
BERS-BIOTK	BERS Biomass Tank (BERS-BIOTK)	H <sub>2</sub> S	<0.01	<0.01
WWT-FUG3	2 BERS Drum Filters (WWT-BDF)	VOC	0.02	<0.01
PBR § 106.263				
PAINT-FUG1	Immovable Objects Maintenance Painting (PAINT-OBJ)	PM	0.02	0.02
		PM <sub>10</sub>	0.02	0.02
		VOC	10.65	10.65

### Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) 

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
SO <sub>2</sub>	-	sulfur dioxide
NO <sub>x</sub>	-	total oxides of nitrogen
CO	-	carbon monoxide
VOC	-	volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NH <sub>3</sub>	-	ammonia
CH <sub>3</sub> OH	-	methanol
C <sub>6</sub> H <sub>4</sub> (OH) <sub>2</sub>	-	hydroquinone
SiO <sub>2</sub>	-	silica dioxide
HF	-	hydrogen fluoride
HCl	-	hydrogen chloride
CH <sub>3</sub> Br	-	methyl bromide
PH <sub>3</sub>	-	phosphine
H <sub>2</sub> S	-	hydrogen sulfide
- (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) Worst-case emission rate when firing natural gas or natural gas and fuel oil.
- (7) Worst-case emission rate when firing any combination of natural gas, natural gas and fuel oil, and landfill gas.
- (8) Worst-case emission rate when firing any combination of natural gas, fuel oil, landfill gas, and bio-gas (no bio-gas to flare).
- (9) Emission rate when firing full capacity of bio-gas (when bio-gas fuels the boilers, there are no emissions from the flare).
- (10) PM<sub>2.5</sub> emission limit only applies to EPN BPS-FUG67.

Dated March 5, 2012