Emission Sources - Maximum Allowable Emission Rates

Permit Number 146452

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)
EP01	Boiler #1	PM	0.30	1.29
		PM_{10}	0.30	1.29
		$PM_{2.5}$	0.30	1.29
		SO_2	0.02	0.10
		NO_X	1.41	6.19
		VOC	0.21	0.94
		CO	3.26	14.28
EP02	Boiler #2	PM	0.30	1.29
		PM_{10}	0.30	1.29
		$PM_{2.5}$	0.30	1.29
		SO_2	0.02	0.10
		NO_X	1.41	6.19
		VOC	0.21	0.94
		CO	3.26	14.28
EP03	Boiler #3	PM	0.30	1.29
		PM_{10}	0.30	1.29
		$PM_{2.5}$	0.30	1.29
		SO_2	0.02	0.10
		NO_X	1.41	6.19
		VOC	0.21	0.94
		CO	3.26	14.28
EP04	Railcar Receiving Baghouse	PM	1.29	5.63
		PM_{10}	1.29	5.63
		$PM_{2.5}$	1.29	5.63

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EP05	Truck Receiving Baghouse	PM	0.77	3.38
		PM_{10}	0.77	3.38
		$PM_{2.5}$	0.77	3.38
EP06	Hammermill Baghouse	PM	0.75	3.29
		PM_{10}	0.75	3.29
		$PM_{2.5}$	0.75	3.29
EP07	Fermentation (CO2) Scrubber	VOC	8.48	37.16
EP08	Regenerative Thermal Oxidizer	PM	1.95	8.56
		PM_{10}	1.95	8.56
		$PM_{2.5}$	1.95	8.56
		SO_2	3.33	14.60
		NO_X	1.73	7.57
		VOC	1.95	8.54
		CO	2.48	10.87
EP09	DDGS Cooling and Transfer	PM	0.83	3.63
		PM_{10}	0.83	3.63
		$PM_{2.5}$	0.83	3.63
		VOC	1.74	7.62
EP10	DDGS Loadout Baghouse	PM	0.16	0.70
		PM_{10}	0.16	0.70
		$PM_{2.5}$	0.16	0.70
EP11	Loadout Flare	NO_X	0.59	2.56
		VOC	8.69	3.25
		CO	1.17	5.12
		SO_2	<0.01	<0.01
EP12	Emergency Firewater Pump Engine	PM	0.66	0.03
		PM_{10}	0.66	0.03
		$PM_{2.5}$	0.66	0.03
		SO_2	0.75	0.04

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		NO_X	9.30	0.47
		VOC	0.74	0.04
		CO	2.00	0.10
EP14	Cook Water Tank	VOC	1.04	4.55
EP15	Thin Stillage Tank	VOC	<0.01	<0.01
EP16	Syrup Tank	VOC	0.036	1.59
EP17	Liquefaction Tank No. 1 and No. 2	VOC	0.04	0.16
EP18	Whole Stillage Tank	VOC	<0.01	<0.01
EP19	Cook Water Tank 2	VOC	0.03	0.14
EP20	Cooling Tower	PM	0.67	2.93
		PM_{10}	0.10	0.44
		$PM_{2.5}$	<0.01	<0.01
T1	190 Proof Storage Tank	VOC	0.17	0.34
T2	200 Proof Storage Tank	VOC	0.36	0.35
T3	Denaturant Storage Tank	VOC	0.40	1.35
T4	Denatured Ethanol Storage Tank No. 1	VOC	0.34	0.19
T5	Denatured Ethanol Storage Tank No. 2	VOC	0.34	0.19
T6	Fuel Additive Tank	VOC	0.20	<0.01
T7	Bio-Oil Solids Return Tank	VOC	0.08	<0.01
T8	Bio-Oil Receiver #1	VOC	0.01	<0.01
T9	Bio-Oil Receiver #2	VOC	0.01	<0.01
T10	Bio-Oil Centrifuge Feed Tank	VOC	0.09	<0.01
T11	Bio-Oil Settling Tank No. 1	VOC	0.20	<0.01
T12	Bio-Oil Settling Tank No. 2	VOC	0.20	<0.01
RL-FUG	Railcar Grain Receiving Pit Fugitives (5)	PM	3.20	0.45
		PM_{10}	0.78	0.11
		$PM_{2.5}$	0.13	0.02
TR-FUG	Truck Grain Receiving Pit	PM	0.18	0.49

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		PM_{10}	0.04	0.11
		$PM_{2.5}$	0.01	0.02
SCALPER	Scalper Discharge Fugitives (5)	PM	0.31	0.85
		PM_{10}	0.17	0.48
		$PM_{2.5}$	0.03	0.08
DDGS-FUG	DDGS Storage	PM	0.01	0.03
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
LD-FUG	DDGS Loadout Spout Fugitives (5)	PM	0.01	0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
PELLET-FUG	Pellet Loadout Fugitives (5)	PM	0.17	0.12
		PM_{10}	0.04	0.03
		$PM_{2.5}$	0.04	0.03
WDGS-FUG	Wet Cake Fugitives (5)	VOC	0.29	1.28
TRLDFUG	Truck Denatured Ethanol Loadout Fugitives (5)	VOC	4.74	2.14
BTRLD-FUG	Bio-Oil Product Loading	VOC	0.03	<0.01
EQUIPFUG	Equipment Leaks – Fugitives (5)	VOC	0.29	1.28
PILE-FUG	Grain Pile Fugitives (5)	PM	5.98	0.57
		PM_{10}	1.42	0.14
		$PM_{2.5}$	0.23	0.02
MSSILEA	Inherently Low Emitting Activities	VOC	<0.01	<0.01
MSSFERMSD	Fermentation Shut Down	VOC	8.29	0.40
MSSMAINT	Routine Maintenance Fugitives (5)	VOC	31.39	2.04

(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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented

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PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide

(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.

Date: April 5, 2019