Emission Sources - Maximum Allowable Emission Rates

Permit Number 2590

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)
INCIN1	Thermal Oxidizer No. 1 (D013)	CO	1.40	-
		NO_x	1.69	-
		PM	0.13	-
		PM_{10}	0.13	-
		$PM_{2.5}$	0.13	-
		SO_2	<0.01	-
		VOC	7.08 (6)	-
INCIN2	Thermal Oxidizer No. 2 (D014)	CO	1.40	-
		NO_x	1.69	-
		PM	0.13	-
		PM_{10}	0.13	-
		$PM_{2.5}$	0.13	-
		SO_2	<0.01	-
		VOC	7.08 (6)	-
INCIN1/INCIN2	Total Cap of Thermal Oxidizer Nos. 1 and 2	CO	-	6.11
		NO_x	-	7.42
		PM	-	0.55
		PM_{10}	-	0.55
		$PM_{2.5}$	-	0.55
		SO_2	-	0.04
		VOC	-	3.17

Emission Sources - Maximum Allowable Emission Rates

TNK-1	Wastewater Collection Tank	VOC	<0.01	<0.01
TNK-2	Wastewater Collection Tank	VOC	<0.01	<0.01
TNK-3	Stormwater Run Off Tank	VOC	1.17	<0.01
BIO-TNK	Biotreatment Tank	VOC	0.12	0.54
CL-1	Clarifier	VOC	0.03	0.13
FUG	Plant Fugitives (5)	VOC	2.86	16.81
AREA-4	AREA-4 Loading	VOC	6.51	0.48
AREA-5	AREA-5 Loading	VOC	10.23	2.57
AREA-6	AREA-6 Loading	VOC	3.85	0.31
AREA-7	AREA-7 Loading	VOC	7.44	4.19
AREA-8	AREA-8 Loading	VOC	4.65	0.60
AREA-9	AREA-9 Loading	VOC	2.79	0.66
Area Cap	Total Cap of Loading	VOC	-	8.81
CS-1	Carbon Loading	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
S-603	Storage Tank S-603	VOC	16.12	0.80
S-604	Storage Tank S-604	VOC	12.96	1.02
S-606	Storage Tank S-606	VOC	5.94	0.10
S-607	Storage Tank S-607	VOC	<0.01	<0.01
S-608	Storage Tank S-608	VOC	3.52	0.80
S-609	Storage Tank S-609	VOC	<0.01	<0.01
S-623	Storage Tank S-623	VOC	<0.01	<0.01
S-624	Storage Tank S-624	VOC	0.02	<0.01
S-625	Storage Tank S-625	VOC	<0.01	<0.01
S-626	Storage Tank S-626	VOC	0.02	<0.01
S-627	Storage Tank S-627	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

S-628	Storage Tank S-628	VOC	<0.01	<0.01
S-629	Storage Tank S-629	VOC	0.48	<0.01
S-630	Storage Tank S-630	VOC	0.48	<0.01
S-631	Storage Tank S-631	VOC	<0.01	<0.01
S-632	Storage Tank S-632	VOC	<0.01	<0.01
S-633	Storage Tank S-633	VOC	<0.01	<0.01
S-634	Storage Tank S-634	VOC	<0.01	<0.01
S-635	Storage Tank S-635	VOC	0.04	<0.01
S-636	Storage Tank S-636	VOC	0.09	<0.01
		aq. H_3PO_4	<0.01	<0.01
S-637	Storage Tank S-637	VOC	0.36	<0.01
S-638	Storage Tank S-638	VOC	<0.01	<0.01
S-639	Storage Tank S-639	VOC	<0.01	<0.01
S-640	Storage Tank S-640	VOC	<0.01	<0.01
S-641	Storage Tank S-641	VOC	0.01	<0.01
S-645	Storage Tank S-645	VOC	0.29	0.02
S-647	Storage Tank S-647	aq. NaOH	<0.01	<0.01
S-655	Storage Tank S-655	VOC	11.91	0.39
S-656	Storage Tank S-656	VOC	11.91	0.40
S-663	Storage Tank S-663	VOC	0.10	0.04
S-673	Storage Tank S-673	VOC	0.01	<0.01
S-686	Storage Tank S-686	VOC	0.13	<0.01
S-690	Storage Tank S-690	VOC	<0.01	<0.01
S-693	Storage Tank S-693	VOC	0.01	<0.01
S-694	Storage Tank S-694	aq. $ZnCl_2$	<0.01	<0.01
S-695	Storage Tank S-695	VOC	<0.01	<0.01
S-697	Storage Tank S-697	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

S-701	Storage Tank S-701	VOC	11.92	0.21
S-703	Storage Tank S-703	VOC	11.92	0.24
S-704	Storage Tank S-704	VOC	7.33	0.11
S-706	Storage Tank S-706	VOC	2.41	0.07
S-707	Storage Tank S-707	VOC	0.63	0.02
S-708	Storage Tank S-708	HCl	<0.01	<0.01
S-710	Storage Tank S-710	VOC	0.96	0.05
S-711	Storage Tank S-711	VOC	7.14	0.04
S-712	Storage Tank S-712	VOC	<0.01	<0.01
S-713	Storage Tank S-713	VOC	5.76	0.23
S-714	Storage Tank S-714	VOC	13.97	1.49
		aq. H_3PO_4	<0.01	<0.01
S-716	Storage Tank S-716	VOC	<0.01	<0.01
S-717	Storage Tank S-717	VOC	<0.01	<0.01
S-718	Storage Tank S-718	VOC	<0.01	<0.01
S-719	Storage Tank S-719	VOC	0.98	0.01
S-720	Storage Tank S-720	VOC	12.36	0.28
S-721	Storage Tank S-721	VOC	0.08	<0.01
S-722	Storage Tank S-722	VOC	<0.01	<0.01
		aq. Salt	<0.01	<0.01
S-723	Storage Tank S-723	VOC	<0.01	<0.01
S-724	Storage Tank S-724	VOC	<0.01	<0.01
S-726	Storage Tank S-726	VOC	0.08	<0.01
S-727	Storage Tank S-727	VOC	<0.01	<0.01
S-728	Storage Tank S-728	VOC	<0.01	<0.01
S-729	Storage Tank S-729	VOC	4.55	0.07
S-730	Storage Tank S-730	VOC	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

S-731	Storage Tank S-731	VOC	0.08	<0.01
S-732	Storage Tank S-732	VOC	0.10	<0.01
S-733	Storage Tank S-733	VOC	<0.01	<0.01
S-734	Storage Tank S-734	aq. $NaHSO_3$	0.10	<0.01
S-735	Storage Tank S-735	VOC	0.54	0.07
S-736	Storage Tank S-736	VOC	0.54	0.06
S-737	Storage Tank S-737	VOC	<0.01	<0.01
S-741A	Storage Tank S-741A	VOC	<0.01	<0.01
S-741B	Storage Tank S-741B	VOC	0.02	<0.01
S-741C	Storage Tank S-741C	VOC	<0.01	<0.01
S-742A	Storage Tank S-742A	VOC	13.97	0.46
S-742B	Storage Tank S-742B	VOC	13.97	0.46
S-743A	Storage Tank S-743A	VOC	<0.01	<0.01
		aq. Salt	<0.01	<0.01
S-743B	Storage Tank S-743B	VOC	17.12	1.32
S-743C	Storage Tank S-743C	VOC	17.12	1.32
S-744A	Storage Tank S-744A	VOC	13.97	0.46
S-744B	Storage Tank S-744B	VOC	13.97	0.46
S-744C	Storage Tank S-744C	VOC	13.97	0.38
S-745A	Storage Tank S-745A	VOC	0.28	<0.01
		aq. Salt	<0.01	<0.01
S-745B	Storage Tank S-745B	VOC	0.02	0.01
S-745C	Storage Tank S-745C	VOC	0.03	0.01
S-746A	Storage Tank S-746A	VOC	<0.01	<0.01
S-746B	Storage Tank S-746B	VOC	<0.01	<0.01
S-746C	Storage Tank S-746C	VOC	<0.01	<0.01
S-747A	Storage Tank S-747A	VOC	0.33	0.01

Emission Sources - Maximum Allowable Emission Rates

S-747B	Storage Tank S-747B	VOC	0.33	0.01
S-747C	Storage Tank S-747C	VOC	0.33	0.01
S-748A	Storage Tank S-748A	VOC	<0.01	<0.01
S-748B	Storage Tank S-748B	VOC	<0.01	<0.01
		aq. Salt	<0.01	<0.01
S-748C	Storage Tank S-748C	VOC	<0.01	<0.01
S-749	Storage Tank S-749	aq. NaOH	<0.01	<0.01
S-751	Storage Tank S-751	VOC	<0.01	<0.01
S-752	Storage Tank S-752	H_2SO_4	<0.01	<0.01
S-754	Storage Tank S-754	aq. Salt	<0.01	<0.01
S-760	Storage Tank S-760	VOC	4.41	0.09
S-773	Storage Tank S-773	VOC	0.05	<0.01
S-784	Storage Tank S-784	VOC	0.05	<0.01
S-786	Storage Tank S-786	VOC	4.67	0.11
S-789	Storage Tank S-789	VOC	4.18	0.05
S-790	Storage Tank S-790	VOC	3.24	0.08
S-791	Storage Tank S-791	VOC	2.26	0.02
S-792	Storage Tank S-792	VOC	0.04	<0.01
S-794	Storage Tank S-794	VOC	0.83	<0.01
S-795	Storage Tank S-795	VOC	0.10	<0.01
S-796	Storage Tank S-796	VOC	0.09	<0.01
S-797	Storage Tank S-797	VOC	<0.01	<0.01
S-798	Storage Tank S-798	VOC	<0.01	<0.01
S-799	Storage Tank S-799	VOC	<0.01	<0.01
S-801	Storage Tank S-801	VOC	<0.01	<0.01
S-803	Storage Tank S-803	VOC	0.44	<0.01
S-804	Storage Tank S-804	VOC	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

S-815	Storage Tank S-815	aq. H_3PO_4	<0.01	<0.01
S-816	Storage Tank S-816	VOC	0.87	0.06
S-817	Storage Tank S-817	aq. H_3PO_3	<0.01	<0.01
S-818	Storage Tank S-818	aq. H_3PO_4	<0.01	<0.01
S-820	Storage Tank S-820	VOC	<0.01	<0.01
S-823	Storage Tank S-823	VOC	0.13	<0.01
S-824	Storage Tank S-824	VOC	0.17	0.06
S-836	Storage Tank S-836	aq. H_3PO_3	<0.01	<0.01
S-837	Storage Tank S-837	aq. Salt	<0.01	<0.01
S-838	Storage Tank S-838	aq. Salt	<0.01	<0.01
S-844	Storage Tank S-844	VOC	0.64	0.02
S-845	Storage Tank S-845	VOC	0.56	0.02
S-846	Storage Tank S-846	VOC	0.43	0.01
S-847	Storage Tank S-847	VOC	0.04	<0.01
S-848	Storage Tank S-848	VOC	0.32	0.01
S-849	Storage Tank S-849	VOC	<0.01	<0.01
S-852	Storage Tank S-852	VOC	<0.01	<0.01
S-859	Storage Tank S-859	VOC	13.18	0.16
S-860	Storage Tank S-860	VOC	1.76	0.05
S-861	Storage Tank S-861	VOC	<0.01	<0.01
S-863	Storage Tank S-863	VOC	<0.01	<0.01
		aq. Salt	<0.01	<0.01
S-865	Storage Tank S-865	VOC	<0.01	<0.01
Y-190	Bulk Bag Discharger	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
D2	Kewanee Boiler	CO	2.47	10.82

Emission Sources - Maximum Allowable Emission Rates

		NO_x	0.93	4.07
		PM	0.22	0.98
		PM_{10}	0.22	0.98
		$PM_{2.5}$	0.22	0.98
		SO_2	0.02	0.08
		VOC	0.16	0.71
D6	Carson Dowtherm Vaporizer	CO	0.46	2.02
		NO_x	0.55	2.40
		PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	0.04	0.18
		SO_2	<0.01	0.01
		VOC	0.03	0.13
D7	Dowtherm Vaporizer	CO	0.94	4.12
		NO_x	1.12	4.91
		PM	0.09	0.37
		PM_{10}	0.09	0.37
		$PM_{2.5}$	0.09	0.37
		SO_2	<0.01	0.03
		VOC	0.06	0.27
CT-2	Cooling Tower	VOC	0.19	0.83
		PM	0.05	0.20
		PM_{10}	0.05	0.20
		$PM_{2.5}$	0.05	0.20
EGEN	Emergency Generator	CO	1.59	0.08
		NO_x	7.38	0.37
		PM	0.52	0.03

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.52	0.03
		$PM_{2.5}$	0.52	0.03
		SO_2	0.49	0.02
		VOC	0.60	0.03
P146	Fire Pump #3	CO	1.90	0.10
		NO_x	8.84	0.44
		PM	0.63	0.03
		PM_{10}	0.63	0.03
		$PM_{2.5}$	0.63	0.03
		SO_2	0.58	0.03
		VOC	0.72	0.04
P173	Sump Pump	CO	0.40	0.02
		NO_x	1.86	0.09
		PM	0.13	<0.01
		PM_{10}	0.13	<0.01
		$PM_{2.5}$	0.13	<0.01
		SO_2	0.12	<0.01
		VOC	0.15	<0.01
P198	Firewater Pump #1	CO	2.46	0.12
		NO_x	11.44	0.57
		PM	0.81	0.04
		PM_{10}	0.81	0.04
		$PM_{2.5}$	0.81	0.04
		SO_2	0.76	0.04
		VOC	0.93	0.05

Emission Sources - Maximum Allowable Emission Rates

P326	Firewater Pump #2	CO	2.02	0.10
		NO_x	9.36	0.47
		PM	0.66	0.03
		PM_{10}	0.66	0.03
		$PM_{2.5}$	0.66	0.03
		SO_2	0.62	0.03
		VOC	0.76	0.04
P516	Sump Pump	CO	0.50	0.03
		NO_x	2.33	0.12
		PM	0.17	<0.01
		PM_{10}	0.17	<0.01
		$PM_{2.5}$	0.17	<0.01
		SO_2	0.15	<0.01
		VOC	0.19	<0.01
Maintenance Start and Shutdown (MSS) Activities				
		CO	4.19	

Emission Sources - Maximum Allowable Emission Rates

0.04				

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

0.02				

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

<0.01				

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

<0.01				

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

<0.01				

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

<0.01				

Emission Sources - Maximum Allowable Emission Rates

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Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

<0.01				
D2 MSS	Kewanee Boiler MSS	CO	3.71	0.02
		NO_x	1.40	0.01
		PM	0.34	<0.01
		PM_{10}	0.34	<0.01
		$PM_{2.5}$	0.34	<0.01
		SO_2	0.03	<0.01
		VOC	0.24	<0.01
D6 MSS	Carson Dowtherm Vaporizer MSS	CO	0.69	<0.01
		NO_x	0.67	<0.01
		PM	0.06	<0.01
		PM_{10}	0.06	<0.01
		$PM_{2.5}$	0.06	<0.01
		SO_2	<0.01	<0.01
		VOC	0.05	<0.01
D7 MSS	Dowtherm Vaporizer MSS	CO	1.41	0.01
		NO_x	1.20	0.01
		PM	0.13	<0.01
		PM_{10}	0.13	<0.01
		$PM_{2.5}$	0.13	<0.01
		SO_2	0.01	<0.01
		VOC	0.09	<0.01
EGENMSS	Emergency Generator MSS	CO	0.26	0.01
		NO_x	0.21	0.01
		PM	0.01	<0.01
		PM_{10}	0.01	<0.01
		$PM_{2.5}$	0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

		SO_2	0.01	<0.01
		VOC	0.10	<0.01
P146MSS	Fire Pump #3 MSS	CO	0.22	<0.01
		NO_x	0.16	<0.01
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	0.08	<0.01
P173MSS	Sump Pump MSS	CO	0.07	<0.01
		NO_x	0.52	<0.01
		PM	0.02	<0.01
		PM_{10}	0.02	<0.01
		$PM_{2.5}$	0.02	<0.01
		SO_2	0.01	<0.01
		VOC	0.03	<0.01
P198MSS	Firewater Pump #1 MSS	CO	0.41	0.01
		NO_x	0.15	<0.01
		PM	0.01	<0.01
		PM_{10}	0.01	<0.01
		$PM_{2.5}$	0.01	<0.01
		SO_2	<0.01	<0.01
		VOC	0.15	<0.01

Emission Sources - Maximum Allowable Emission Rates

P326MSS	Firewater Pump #2 MSS	CO	0.34	0.01
		NO_x	0.66	0.01
		PM	0.02	<0.01
		PM_{10}	0.02	<0.01
		$PM_{2.5}$	0.02	<0.01
		SO_2	0.01	<0.01
		VOC	0.13	<0.01
P516MSS	Sump Pump MSS	CO	0.12	<0.01
		NO_x	0.46	<0.01
		PM	0.04	<0.01
		PM_{10}	0.04	<0.01
		$PM_{2.5}$	0.04	<0.01
		SO_2	0.01	<0.01
		VOC	0.04	<0.01
VTMSS	Vacuum Truck MSS	VOC	0.70	0.05
MSSFUG	Leak Repair (5)	VOC	<0.01	<0.01
MSSFUG1	Area 1 Sump Cleaning (5)	VOC	0.28	<0.01
MSSFUG3	Area 3 tank and catch basin (5)	VOC	0.08	<0.01
MSSFUG4	Area 4 tank, catch basin, pump, and valve cleaning/maintenance (5)	VOC	6.12	0.47
MSSFUG5	Area 5 tank, catch basin, pump, valve, centrifuge, hopper, sample point, cleaning/maintenance, and filter changes (5)	VOC	0.71	0.09
MSSFUG6	Area 6 tank, catch basin, sump, pump, and valve cleaning/maintenance (5)	VOC	7.69	0.48
MSSFUG7	Area 7 tank, sump, and valve cleaning/maintenance, truck & drum filling, and line clearing (5)	VOC	0.31	0.01
MSSFUG8	Area 8 tank, sump, catch basin, pump and valve cleaning/maintenance (5)	VOC	0.69	0.09
MSSFUG9	Area 9 tank, sump, catch basin, pump and valve cleaning/maintenance (5)	VOC	0.41	0.03

Emission Sources - Maximum Allowable Emission Rates

(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
CO - carbon monoxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
aq. - substance is in an aqueous solution
HCl - hydrogen chloride
H_2SO_4 - sulfuric acid
H_3PO_3 - phosphorous acid
H_3PO_4 - phosphoric acid
$NaHSO_3$ - sodium bisulfite
NaOH - sodium hydroxide
$ZnCl_2$ - zinc chloride
(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) Assumes maximum hourly emission rate from either EPNs INCIN1 or INCIN2. Emissions are not additive.

Date: October 31, 2023