

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. 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 *	
			lb/hr	TPY**
INCIN1	Incinerator No. 1	CO	1.40	
		NO <sub>x</sub>	0.83	
		PM	0.13	
		SO <sub>2</sub>	0.01	
		VOC	4.87	
INCIN2	Incinerator No. 2	CO	1.40	
		NO <sub>x</sub>	0.83	
		PM	0.13	
		SO <sub>2</sub>	0.01	
		VOC	4.87	
Total Cap of INCIN1 and INCIN2		CO		6.11
		NO <sub>x</sub>		3.64
		PM		0.55
		SO <sub>2</sub>		0.04
		VOC		6.81
INCIN1/INCIN2 MSS	Incinerators Nos. 1 and 2 MSS Startup & shutdowns	CO	4.19	0.04
		NO <sub>x</sub>	2.49	0.02
		PM	0.38	0.01
		SO <sub>2</sub>	0.03	0.01
		VOC	0.27	0.01
TNK-1	WW Collection Tank	VOC	0.01	0.01
TNK-2	WW Collection Tank	VOC	0.01	0.01
BIO-TNK	Bio Treat Tank	VOC	0.12	0.54
CL-1	Clarifier	VOC	0.03	0.13
FUG	Plant Fugitives (4)	VOC	2.49	10.90
MSSFUG	Leak Repairs (4)	VOC	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
AREA-1	Loading	VOC	0.65	0.60
MSSFUG1	Area 1 Sump cleaning (4)	VOC	0.28	0.01
AREA-2	Loading	VOC	0.65	0.02
AREA-3	Loading	VOC	0.65	1.11
MSSFUG3	Area 3 tank and catch basin cleaning/maintenance (4)	VOC	0.08	0.01
AREA-4	Loading	VOC	0.65	0.75
MSSFUG4	Area 4 tank, catch basin, pump and valve cleaning/maintenance (4)	VOC	6.12	0.47
AREA-5	Loading	VOC	0.65	1.18
MSSFUG5	Area 5 tank, catch basin, pump, valve, centrifuge, hopper, sample point, cleaning/maintenance and filter changes (4)	VOC	0.71	0.09
AREA-6	Loading	VOC	0.65	0.54
MSSFUG6	Area 6 tank, catch basin, sump, pump, and valve cleaning/maintenance	VOC	7.68	0.48
AREA-7	Loading	VOC	0.97	5.67
MSSFUG7	Area 7 tank, sump, pump, and valve cleaning/maintenance, truck & drum filling line clearing (4)	VOC	0.31	0.01
AREA-8	Loading	VOC	0.65	0.98
MSSFUG8	Area 8 tank, sump, catch basin, pump and valve	VOC	0.69	0.09

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	cleaning/maintenance (4)			
AREA-9	Loading	VOC	0.65	1.04
MSSFUG9	Area 9 tank, sump, catch basin, pump and valve cleaning/maintenance (4)	VOC	0.41	0.03
CS-1	Carbon Loading	PM	0.01	0.01
S-603	Storage Tank	VOC	0.07	0.01
S-604	Storage Tank	VOC	9.43	0.62
S-605	Storage Tank	VOC	11.91	0.80
S-606	Storage Tank	VOC	7.92	0.15
S-608	Storage Tank	VOC	0.01	0.01
S-609	Storage Tank	VOC	0.14	0.01
S-618	Storage Tank	VOC	0.01	0.01
S-619	Storage Tank	VOC	0.01	0.01
S-621	Storage Tank	VOC	0.01	0.01
S-622	Storage Tank	VOC	0.01	0.01
S-623	Storage Tank	VOC	0.36	0.01
S-624	Storage Tank	VOC	0.11	0.01
S-625	Storage Tank	VOC	0.06	0.01
S-626	Storage Tank	VOC	0.11	0.01
S-627	Storage Tank	VOC	0.06	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-628	Storage Tank	VOC	0.01	0.01
S-629	Storage Tank	VOC	0.01	0.01
S-630	Storage Tank	VOC	0.01	0.01
S-631	Storage Tank	VOC	0.53	0.01
S-632	Storage Tank	VOC	0.01	0.01
S-633	Storage Tank	VOC	0.01	0.01
S-634	Storage Tank	VOC	0.06	0.01
S-635	Storage Tank	VOC	0.02	0.01
S-636	Storage Tank	VOC	0.01	0.01
		aq. Salt	0.01	0.01
S-637	Storage Tank	VOC	0.02	0.01
S-638	Storage Tank	VOC	2.69	0.02
S-639	Storage Tank	VOC	0.23	0.01
S-640	Storage Tank	VOC	0.05	0.01
S-641	Storage Tank	VOC	0.36	0.01
S-644	Storage Tank	aq. AlCl <sub>3</sub>	0.61	0.01
S-645	Storage Tank	VOC	11.91	
S-646	Storage Tank	VOC	11.91	
Total Cap of S-645 and S-646		VOC		1.55
S-647	Storage Tank	aq. NaOH	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-655	Storage Tank	VOC	11.91	0.39
S-656	Storage Tank	VOC	11.91	0.40
S-663	Storage Tank	VOC	0.75	0.07
S-665	Storage Tank	VOC	0.03	0.01
S-666	Storage Tank	VOC	0.01	0.01
S-669	Storage Tank	VOC	0.01	0.01
S-670	Storage Tank	VOC	0.52	0.01
S-671	Storage Tank	VOC	0.93	0.03
S-673	Storage Tank	VOC	0.34	0.01
S-680	Storage Tank	aq. Salt	0.01	0.01
S-686	Storage Tank	VOC	0.03	0.01
S-690	Storage Tank	VOC	0.01	0.01
S-691	Storage Tank	aq. Salt	0.01	0.01
S-692	Storage Tank	VOC	0.50	0.01
S-693	Storage Tank	VOC	0.01	0.01
S-694	Storage Tank	aq. ZnCl <sub>2</sub>	0.01	0.01
S-695	Storage Tank	VOC	0.01	0.01
S-701	Storage Tank	VOC	11.92	0.21
S-703	Storage Tank	VOC	11.92	0.24

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-704	Storage Tank	VOC	4.66	0.04
S-705	Storage Tank	VOC	2.46	0.05
S-706	Storage Tank	VOC	3.21	0.14
S-707	Storage Tank	VOC	0.63	0.01
S-708	Storage Tank	aq. HCl	16.81	0.19
S-710	Storage Tank	VOC	0.37	0.01
S-711	Storage Tank	VOC	3.79	0.06
S-712	Storage Tank	VOC	0.01	0.01
S-713	Storage Tank	VOC	3.54	0.08
S-714	Storage Tank	VOC	13.97	1.49
S-716	Storage Tank	VOC	0.06	0.01
S-717	Storage Tank	VOC	0.06	0.01
S-718	Storage Tank	VOC	0.01	0.01
S-719	Storage Tank	VOC	3.23	0.13
S-720	Storage Tank	VOC	4.81	0.10
S-721	Storage Tank	VOC	1.44	0.03
S-722	Storage Tank	aq. Salt	0.01	0.01
S-723	Storage Tank	VOC	0.53	0.01
S-724	Storage Tank	VOC	0.01	0.01
S-725	Storage Tank	VOC	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		aq. Salt	0.01	0.01
S-726	Storage Tank	VOC	2.72	0.06
S-727	Storage Tank	VOC	0.09	0.01
S-728	Storage Tank	VOC	0.41	0.01
S-729	Storage Tank	VOC	8.65	0.21
S-730	Storage Tank	VOC	0.52	0.01
S-731	Storage Tank	VOC	9.52	0.10
S-732	Storage Tank	VOC	0.54	0.01
S-733	Storage Tank	VOC	0.01	0.01
S-734	Storage Tank	aq. NaHSO <sub>3</sub>	0.01	0.01
S-735	Storage Tank	VOC	0.01	0.01
S-736	Storage Tank	VOC	0.92	0.04
S-737	Storage Tank	VOC	2.32	0.01
S-741A	Storage Tank	VOC	0.04	0.01
S-741B	Storage Tank	VOC	0.03	0.01
S-741C	Storage Tank	VOC	0.01	0.01
S-742A	Storage Tank	VOC	13.97	0.46
S-742B	Storage Tank	VOC	13.97	0.46
S-742C	Storage Tank	VOC	13.97	0.46
S-743A	Storage Tank	aq. Salt	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-743B	Storage Tank	aq. Salt	0.01	0.01
S-743C	Storage Tank	VOC	0.01	0.01
S-744A	Storage Tank	VOC	13.97	0.46
S-744B	Storage Tank	VOC	13.97	0.46
S-744C	Storage Tank	VOC	13.97	0.38
S-745A	Storage Tank	VOC	0.28	0.01
S-745B	Storage Tank	VOC	0.02	0.01
S-745C	Storage Tank	VOC	0.03	0.01
S-746A	Storage Tank	VOC	0.01	0.01
S-746B	Storage Tank	VOC	0.01	0.01
S-746C	Storage Tank	VOC	0.01	0.01
S-747A	Storage Tank	VOC	0.33	0.01
S-747B	Storage Tank	VOC	0.33	0.01
S-747C	Storage Tank	VOC	0.33	0.01
S-748A	Storage Tank	VOC	0.01	0.01
S-748B	Storage Tank	aq. Salt	0.01	0.01
S-748C	Storage Tank	VOC	0.01	0.01
S-749	Storage Tank	aq. NaOH	0.01	0.01
S-751	Storage Tank	VOC	0.01	0.01



EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-752	Storage Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
S-753	Storage Tank	VOC	11.74	0.88
S-754	Storage Tank	aq. Salt	0.12	0.01
S-760	Storage Tank	VOC	0.33	0.01
S-761	Storage Tank	VOC	0.01	0.01
S-762	Storage Tank	VOC	0.01	0.01
S-773	Storage Tank	VOC	0.42	0.01
S-774	Storage Tank	VOC	0.01	0.01
S-775	Storage Tank	VOC	0.30	0.01
S-776	Storage Tank	VOC	0.24	0.01
S-777	Storage Tank	VOC	0.19	0.01
S-778	Storage Tank	VOC	0.22	0.01
S-779	Storage Tank	VOC	0.27	0.01
S-780	Storage Tank	VOC	3.81	0.15
S-781	Storage Tank	VOC	0.07	0.01
S-782	Storage Tank	VOC	11.91	0.54
S-783	Storage Tank	VOC	11.91	0.54
S-785	Storage Tank	VOC	0.01	0.01
S-786	Storage Tank	VOC	3.26	0.08
S-789	Storage Tank	VOC	4.04	0.08

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-790	Storage Tank	VOC	0.07	0.01
S-791	Storage Tank	VOC	5.01	0.12
S-792	Storage Tank	VOC	0.01	0.01
S-793	Storage Tank	VOC	0.01	0.01
S-794	Storage Tank	VOC	0.01	0.01
S-795	Storage Tank	VOC	0.53	0.01
S-796	Storage Tank	VOC	0.53	0.01
S-797	Storage Tank	VOC	0.01	0.01
S-798	Storage Tank	VOC	0.01	0.01
S-799	Storage Tank	VOC	0.01	0.01
S-801	Storage Tank	VOC	0.01	0.01
S-802	Storage Tank	VOC	3.72	0.06
S-803	Storage Tank	VOC	0.44	0.01
S-804	Storage Tank	VOC	0.33	0.01
S-811	Storage Tank	VOC	14.33	1.66
S-812	Storage Tank	VOC	14.33	1.64
S-815	Storage Tank	aq. H <sub>3</sub> PO <sub>4</sub>	0.02	0.01
S-816	Storage Tank	VOC	0.66	0.02
S-817	Storage Tank	aq. H <sub>3</sub> PO <sub>3</sub>	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-818	Storage Tank	aq. H <sub>3</sub> PO <sub>4</sub>	0.07	0.01
S-820	Storage Tank	VOC	0.64	0.05
S-821	Storage Tank	VOC	0.01	0.01
S-823	Storage Tank	VOC	0.07	0.01
S-824	Storage Tank	VOC	0.56	0.17
S-825	Storage Tank	VOC	11.91	1.18
S-836	Storage Tank	aq. H <sub>3</sub> PO <sub>3</sub>	0.01	0.01
S-837	Storage Tank	aq. Salt	0.01	0.01
S-838	Storage Tank	aq. Salt	0.01	0.01
S-844	Storage Tank	VOC	3.32	0.01
S-845	Storage Tank	VOC	3.03	0.01
S-846	Storage Tank	VOC	0.07	0.01
S-847	Storage Tank	VOC	0.53	0.01
S-848	Storage Tank	VOC	3.21	0.01
S-859	Storage Tank	VOC	0.16	0.01
S-860	Storage Tank	VOC	3.12	0.01
S-863	Storage Tank	aq. Salt	0.01	0.01
S-865	Storage Tank	VOC	0.01	0.01
S-866	Storage Tank	VOC	0.01	0.01
Y-190	Bulk Bag Discharger	PM	0.01	0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CAS	Carbon Adsorber	VOC	0.58	0.04
PFCLN	Cleaning Station	VOC	1.71	1.04
D2	Kewanee Boiler	CO	2.47	10.82
		NO <sub>x</sub>	0.93	4.07
		PM	0.22	0.98
		SO <sub>2</sub>	0.02	0.08
		VOC	0.16	0.71
D2 MSS	Kewanee Boiler MSS Startup & shutdowns	CO	3.71	0.02
		NO <sub>x</sub>	1.40	0.01
		PM	0.34	0.01
		SO <sub>2</sub>	0.03	0.01
		VOC	0.24	0.01
CT-1	Cooling Tower (4)	VOC	0.17	0.74
		PM	0.25	1.09
D6	Carson Downtherm Vaporizer	CO	0.46	2.02
		NO <sub>x</sub>	0.55	2.40
		PM	0.04	0.18
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.13
D6MSS	Carson Downtherm Vaporizer MSS Startup & shutdowns	CO	0.69	0.01
		NO <sub>x</sub>	0.67	0.01
		PM	0.06	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.05	0.01
D7	Downtherm Vaporizer	CO	0.94	4.12
		NO <sub>x</sub>	1.12	4.91
		PM	0.09	0.37
		SO <sub>2</sub>	0.01	0.031
		VOC	0.06	0.27

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
D7MSS	Downtherm Vaporizer MSS Startup & shutdowns	CO	1.41	0.01
		NO <sub>x</sub>	1.20	0.01
		PM	0.13	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.09	0.01
EGEN	Emergency Generator	CO	1.59	0.08
		NO <sub>x</sub>	7.38	0.37
		PM	0.52	0.03
		SO <sub>2</sub>	0.49	0.02
		VOC	0.60	0.03
EGENMSS	Emergency Generator MSS	CO	0.27	0.01
		NO <sub>x</sub>	0.21	0.01
		PM	0.01	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.10	0.01
P146	Fire Pump #3	CO	1.90	0.10
		NO <sub>x</sub>	8.84	0.44
		PM	0.63	0.03
		SO <sub>2</sub>	0.58	0.03
		VOC	0.72	0.04
P146MSS	Fire Pump #3 MSS	CO	0.22	0.01
		NO <sub>x</sub>	0.16	0.01
		PM	0.01	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.08	0.01
P173	Sump Pump	CO	0.40	0.02
		NO <sub>x</sub>	1.86	0.09
		PM	0.13	0.01
		SO <sub>2</sub>	0.12	0.01
		VOC	0.15	0.01
P173MSS	Sump Pump MSS	CO	0.07	0.01
		NO <sub>x</sub>	0.52	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		PM	0.02	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.01
P198	Fire Pump #1	CO	2.46	0.12
		NO <sub>x</sub>	11.44	0.57
		PM	0.81	0.04
		SO <sub>2</sub>	0.76	0.04
		VOC	0.93	0.05
P198MSS	Fire Pump #1 MSS	CO	0.41	0.01
		NO <sub>x</sub>	0.15	0.01
		PM	0.01	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.15	0.01
P326	Fire Pump #2	CO	2.02	0.10
		NO <sub>x</sub>	9.36	0.47
		PM	0.66	0.03
		SO <sub>2</sub>	0.62	0.03
		VOC	0.76	0.04
P326MSS	Fire Pump #2 MSS	CO	0.34	0.01
		NO <sub>x</sub>	0.66	0.01
		PM	0.02	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.13	0.01
P516	Sump Pump	CO	0.50	0.03
		NO <sub>x</sub>	2.33	0.12
		PM	0.17	0.01
		SO <sub>2</sub>	0.15	0.01
		VOC	0.19	0.01
P516MSS	Sump Pump MSS	CO	0.12	0.01
		NO <sub>x</sub>	0.46	0.01
		PM	0.04	0.01
		SO <sub>2</sub>	0.01	0.01
		VOC	0.04	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
VTMSS	Vacuum Truck MSS	VOC	0.70	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)
  - AlCl<sub>3</sub> - aluminum chloride
  - aq. - substance is in an aqueous solution
  - CO - carbon monoxide
  - HCl - hydrogen chloride
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
  - H<sub>3</sub>PO<sub>3</sub> - phosphorous acid
  - H<sub>3</sub>PO<sub>4</sub> - phosphoric acid
  - NaHSO<sub>3</sub> - sodium bisulfite
  - NaOH - sodium hydroxide
  - NH<sub>3</sub> - ammonia
  - NO<sub>x</sub> - total oxides of nitrogen
  - PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
  - SO<sub>2</sub> - sulfur dioxide
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1
  - ZnCl<sub>2</sub> - zinc chloride
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

\* Emission rates are based on operating 8,760 hours per year.

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated September 20, 2011

---