

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 137328

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)
OCEF1	Flare 1	CO	4.93	--
		NO <sub>x</sub>	0.96	--
		SO <sub>2</sub>	0.22	--
		VOC	0.08	--
OCEMEF1	MSS to Flare 1	CO	917.66	--
		NO <sub>x</sub>	178.14	--
		SO <sub>2</sub>	0.22	--
		VOC	375.30	--
		HCl	0.16	--
OCECATOX	Catalytic Oxidizer	VOC	0.38	--
		CO	0.01	--
		NO <sub>x</sub>	0.01	--
		PM	0.01	--
		PM <sub>10</sub>	0.01	--
		PM <sub>2.5</sub>	0.01	--
OCEMECATOX	CatOx MSS	VOC	38.40	--
		CO	0.01	--
		NO <sub>x</sub>	0.01	--
		PM	0.01	--
		PM <sub>10</sub>	0.01	--
		PM <sub>2.5</sub>	0.01	--
OCEB1	Boiler 1	NO <sub>x</sub>	6.38	--

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		CO	19.84	--
		VOC	8.07	--
		PM	1.90	--
		PM <sub>10</sub>	1.90	--
		PM <sub>2.5</sub>	1.90	--
		SO <sub>2</sub>	6.02	--
		NH <sub>3</sub>	2.41	--
		H <sub>2</sub> SO <sub>4</sub>	0.37	--
		HCl	0.16	--
OCEB2	Boiler 2	NO <sub>x</sub>	6.38	--
		CO	19.84	--
		VOC	8.07	--
		PM	1.90	--
		PM <sub>10</sub>	1.90	--
		PM <sub>2.5</sub>	1.90	--
		SO <sub>2</sub>	6.02	--
		NH <sub>3</sub>	2.41	--
		H <sub>2</sub> SO <sub>4</sub>	0.37	--
		HCl	0.16	--
OCEMEB1	Boiler 1 MSS	NO <sub>x</sub>	6.00	--
		CO	1.32	--
		VOC	0.16	--
		PM	0.18	--
		PM <sub>10</sub>	0.18	--
		PM <sub>2.5</sub>	0.18	--
		SO <sub>2</sub>	0.43	--
		NH <sub>3</sub>	0.16	--
		H <sub>2</sub> SO <sub>4</sub>	0.03	--
OCEMEB2	Boiler 2 MSS	NO <sub>x</sub>	6.00	--

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		CO	1.32	--
		VOC	0.16	--
		PM	0.18	--
		PM <sub>10</sub>	0.18	--
		PM <sub>2.5</sub>	0.18	--
		SO <sub>2</sub>	0.43	--
		NH <sub>3</sub>	0.16	--
		H <sub>2</sub> SO <sub>4</sub>	0.03	--
Combustion Source Group Annual Emissions Cap	CatOx + Flare + Boiler; Routine + MSS	NO <sub>x</sub>	--	21.50
		CO	--	86.80
		VOC	--	13.72
		PM	--	5.89
		PM <sub>10</sub>	--	5.87
		PM <sub>2.5</sub>	--	5.87
		SO <sub>2</sub>	--	19.57
		NH <sub>3</sub>	--	7.39
		H <sub>2</sub> SO <sub>4</sub>	--	1.14
		HCl	--	0.09
OCECT1	Cooling Tower 1	VOC	13.66	1.89
		PM	1.41	4.16
		PM <sub>10</sub>	0.39	1.80
		PM <sub>2.5</sub>	0.01	0.01
OCEENG1	Engine for Firewater Pump 1	NO <sub>x</sub>	13.00	0.65
		CO	2.47	0.12
		SO <sub>2</sub>	0.78	0.04
		VOC	0.98	0.05
		PM	0.13	0.01
		PM <sub>10</sub>	0.13	0.01
		PM <sub>2.5</sub>	0.13	0.01

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OCEENG2	Engine for Firewater Pump 2	NO <sub>x</sub>	13.00	0.65
		CO	2.47	0.12
		SO <sub>2</sub>	0.78	0.04
		VOC	0.98	0.05
		PM	0.13	0.01
		PM <sub>10</sub>	0.13	0.01
		PM <sub>2.5</sub>	0.13	0.01
OCEENG3	Engine for Air Compressor 1	NO <sub>x</sub>	4.00	0.20
		CO	0.76	0.04
		SO <sub>2</sub>	0.24	0.01
		VOC	0.30	0.02
		PM	0.04	0.01
		PM <sub>10</sub>	0.04	0.01
		PM <sub>2.5</sub>	0.04	0.01
OCEENG4	Engine for Emergency Generator 1	NO <sub>x</sub>	16.00	0.68
		CO	3.04	0.13
		SO <sub>2</sub>	0.96	0.04
		VOC	1.20	0.05
		PM	0.16	0.01
		PM <sub>10</sub>	0.16	0.01
		PM <sub>2.5</sub>	0.16	0.01
OCELOAD	Truck Loading	VOC	0.03	0.01
OCE6716	Glycol Evaporator Steam Vent	VOC	105.00	1.80
OCEFU2	Process Area Fugitives (5)	VOC	0.88	3.84
		NH <sub>3</sub>	0.01	0.04
OCED6912	D-6912 MEG Make Tank	VOC	0.13	0.04
OCED6913	D-6913 MEG Make Tank	VOC	0.13	0.04
OCED6917	D-6917 Polyglycols Storage Tank	VOC	0.01	0.01

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OCED6921	D-6921 DEG Make Tank	VOC	0.01	0.01
OCED6922	D-6922 DEG Make Tank	VOC	0.01	0.01
OCED7612	D-7612 MEG Field Storage Tank	VOC	0.37	0.20
OCED7613	D-7613 MEG Field Storage Tank	VOC	0.37	0.20
OCED7621	D-7621 DEG Field Storage Tank	VOC	0.03	0.01
OCED7622	D-7622 DEG Field Storage Tank	VOC	0.03	0.01
OCED6920	D-6920 Polyglycols Field Storage Tank	VOC	0.01	0.01
OCED6870	D-6870 Crude Glycol Storage Tank	VOC	0.06	0.01
OCED6240	D-6240 Purge Glycol Storage Tank	VOC	0.01	0.01
OCEMEFU2	Equipment Opening Fugitives (MSS) (6)	VOC	23.08	0.73
OCEME6716	Steam Vent MSS	VOC	105.00	0.22

- (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
  - NH<sub>3</sub>
    - ammonia
  - HCl
    - hydrochloric acid
  - H<sub>2</sub>SO<sub>4</sub>
    - sulfuric acid
- (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) The emission includes 8.86 lb/hr & 0.61 tpy VOC, of inherently low emitting sources emissions addressed in Attachment A to the Special Conditions and which should be assumed to be emitted in any hour or 12 month period for which compliance is evaluated for the EPN.

Date: October 25, 2016