

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 7736

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 (6)	
			lbs/hour	TPY
OX-MH-1	Material Handling (4)	Cr <sup>3+</sup>	0.004	0.013
		Crtot	0.004	0.013
		PM	< 0.01	0.03
		PM <sub>10</sub>	< 0.01	0.03
		PM <sub>2.5</sub>	< 0.01	0.03
201	Sulfate Unloading Vent	PM	0.03	0.14
		PM <sub>10</sub>	0.03	0.14
		PM <sub>2.5</sub>	0.03	0.14
202	Grinding Building Vent	PM	0.30	1.33
		PM <sub>10</sub>	0.30	1.33
		PM <sub>2.5</sub>	0.30	1.33
205	Ground Sulfate Vent	PM	0.04	0.15
		PM <sub>10</sub>	0.04	0.15
		PM <sub>2.5</sub>	0.04	0.15
210	Plant Stack (Blending/Reaction, Kiln Nos. 1 and 2 and Chromium Hydrate Line)	CO	1.89	8.30
		Cr <sup>3+</sup>	1.048	3.940
		Cr <sup>6+</sup>	0.024	0.041
		Crtot	1.072	3.981
		HBO <sub>2</sub>	0.04	0.18
		NH <sub>3</sub>	3.50	15.33
		NO <sub>x</sub>	70.55	186.48
		PM	6.06	14.74
		PM <sub>10</sub>	6.06	14.74
		PM <sub>2.5</sub>	6.06	14.74
		SO <sub>2</sub>	30.92	45.05
		VOC	0.12	0.54

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211	Filter Vent	Cr <sup>3+</sup>	0.006	0.026
		Cr <sup>6+</sup>	< 0.001	< 0.001
		Crtot	0.006	0.026
		PM	0.13	0.54
		PM <sub>10</sub>	0.13	0.54
		PM <sub>2.5</sub>	0.13	0.54
214	Packing/Dryer Stack (Product Bin Nos. 1, 2 and 3 T Bin, B Mill and General Area Packing)	CO	0.49	2.16
		Cr <sup>3+</sup>	0.696	3.046
		Cr <sup>6+</sup>	< 0.001	< 0.002
		Crtot	0.696	3.047
		NO <sub>x</sub>	1.02	2.40
		PM	1.27	5.53
		PM <sub>10</sub>	1.27	5.53
		PM <sub>2.5</sub>	1.27	5.53
		SO <sub>2</sub>	0.15	0.66
		VOC	0.03	0.14
OX1 to OXx	Chromic Oxide Storage Tanks (4) (5)	Cr <sup>3+</sup>	0.001	0.002
		Crtot	0.001	0.002
		PM	< 0.01	< 0.01
		PM <sub>10</sub>	< 0.01	< 0.01
		PM <sub>2.5</sub>	< 0.01	< 0.01
H1 to Hx	Hydrate Plant Storage Tanks (4) (5)	Cr <sup>3+</sup>	< 0.001	< 0.001
		Crtot	< 0.001	< 0.001
		PM	< 0.01	< 0.01
		PM <sub>10</sub>	< 0.01	< 0.01
		PM <sub>2.5</sub>	< 0.01	< 0.01
OX21	Gasoline Tank	VOC	2.80	0.75
OX23	Diesel Tank	VOC	< 0.01	< 0.01

- (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) CO - carbon monoxide

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Cr<sup>3+</sup> - trivalent chromium

Cr<sup>6+</sup> - hexavalent chromium

Crtot - total chromium

HBO<sub>2</sub> - metaboric acid

NH<sub>3</sub> - ammonia

NO<sub>x</sub> - total oxides of nitrogen

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

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

(4) Fugitive emissions are an estimate only.

(5) Total emissions from all tanks

(6) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: June 5, 2013