

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Source Caps

Permit No. 21918

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.

The sources and emission points authorized under this permit are noted in Attachment C, Emission Caps List.

Compliance with the emission rates is based on the aggregate emissions of the sources noted on the Emission Cap List Table which are subject to that cap.

AIR CONTAMINANTS DATA

VOC Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	(5)	999.37
	1998	(5)	999.37
	1999	(5)	805.2
	2000	(5)	906.3
	2001	(5)	882.6
	2002	(5)	871.4
	2003	(5)	859.6
	2004	(5)	853.5
	2005	(5)	832.3
	2006 - Final Cap	(5)	832.3

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SO₂ Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	451	515.1
	1998	451	515.1
	1999	451	514.6
	2000	451	514.6
	2001	451	513.8
	2002	451	513.8
	2003	451	513.8
	2004	451	513.8
	2005	451	513.8
	2006 - Final Cap	451	513.8

NO_x Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr (8/98)</u>	<u>TPY</u>
See Attachment C	1997	60.4	37.4
	1998	60.4	37.4
	1999	60.4	37.4
	2000	60.4	37.4
	2001	60.4	37.4
	2002	60.4	37.4
	2003	60.4	37.4
	2004	60.4	37.4
	2005	60.8	40.6
	2006 - Final Cap	60.8	40.6

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C0 Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr (8/98)</u>	<u>TPY</u>
See Attachment C	1997	24.3	69.6
	1998	24.3	69.6
	1999	24.3	69.6
	2000	24.3	69.6
	2001	24.3	69.6
	2002	24.3	69.6
	2003	24.3	69.6
	2004	24.3	69.6
	2005	24.4	70.5
	2006 - Final Cap	24.4	70.5

H₂S Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	62.4	242.7
	1998	56.5	220.6
	1999	41.7	157.2
	2000	40.8	161.7
	2001	40.8	161.7
	2002	40.5	161.7
	2003	40.5	161.7
	2004	40.5	161.7
	2005	40.5	161.7
	2006 - Final Cap	40.5	161.7

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PM Emission Cap

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	1.28	2.4
	1998	1.28	2.4
	1999	1.28	2.4
	2000	1.28	2.4
	2001	1.28	2.4
	2002	1.28	2.4
	2003	1.28	2.4
	2004	1.28	2.4
	2005	1.28	2.7
	2006 - Final Cap	1.28	2.7

Group A VOC Emission Cap (6)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	1113.07	(7)
	1998	808.9	(7)
	1999	813.3	(7)
	2000	809.9	(7)
	2001	645.9	(7)
	2002	645.9	(7)
	2003	154.3	(7)
	2004	154.3	(7)
	2005	154.3	(7)
	2006 - Final Cap	154.3	(7)

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Group B VOC Emission Cap (8)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	98.56	(7)
	1998	98.56	(7)
	1999	88.7	(7)
	2000	88.7	(7)
	2001	88.7	(7)
	2002	29.6	(7)
	2003	27.9	(7)
	2004	27.9	(7)
	2005	27.9	(7)
	2006 - Final Cap	27.9	(7)

Group C VOC Emission Cap (9)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	83.08	(7)
	1998	83.08	(7)
	1999	67.28	(7)
	2000	47.03	(7)
	2001	47.03	(7)
	2002	47.03	(7)
	2003	45.03	(7)
	2004	45.03	(7)
	2005	45.03	(7)
	2006 - Final Cap	45.03	(7)

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Group D VOC Emission Cap (10)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	1.68	(7)
	1998	0.81	(7)
	1999	0.81	(7)
	2000	0.81	(7)
	2001	0.81	(7)
	2002	0.81	(7)
	2003	0.81	(7)
	2004	0.81	(7)
	2005	0.81	(7)
	2006 - Final Cap	0.81	(7)

Ethyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	7.18	(7)
	1998	5.85	(7)
	1999	5.56	(7)
	2000	5.34	(7)
	2001	5.34	(7)
	2002	5.34	(7)
	2003	5.34	(7)
	2004	5.34	(7)
	2005	5.34	(7)
	2006 - Final Cap	5.34	(7)

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Isopropyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	6.94	(7)
	1998	6.56	(7)
	1999	5.51	(7)
	2000	3.64	(7)
	2001	3.64	(7)
	2002	3.64	(7)
	2003	3.64	(7)
	2004	3.64	(7)
	2005	3.64	(7)
	2006 - Final Cap	3.64	(7)

n Propyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	8.95	(7)
	1998	7.61	(7)
	1999	5.29	(7)
	2000	3.52	(7)
	2001	3.52	(7)
	2002	3.52	(7)
	2003	3.52	(7)
	2004	3.52	(7)
	2005	3.52	(7)
	2006 - Final Cap	3.52	(7)

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n Butyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	28.58	(7)
	1998	27.38	(7)
	1999	25.01	(7)
	2000	23.13	(7)
	2001	2.55	(7)
	2002	2.55	(7)
	2003	2.55	(7)
	2004	2.55	(7)
	2005	2.55	(7)
	2006 - Final Cap	2.55	(7)

t Butyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	7.43	(7)
	1998	7.31	(7)
	1999	4.82	(7)
	2000	3.02	(7)
	2001	3.02	(7)
	2002	3.02	(7)
	2003	3.02	(7)
	2004	3.02	(7)
	2005	3.02	(7)
	2006 - Final Cap	3.02	(7)

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Secondary Butyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	9.22	(7)
	1998	7.66	(7)
	1999	5.15	(7)
	2000	3.23	(7)
	2001	3.23	(7)
	2002	3.23	(7)
	2003	3.23	(7)
	2004	3.23	(7)
	2005	3.23	(7)
	2006 - Final Cap	3.23	(7)

Benzyl Mercaptan Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	0.43	(7)
	1998	0.43	(7)
	1999	0.42	(7)
	2000	0.42	(7)
	2001	0.42	(7)
	2002	0.42	(7)
	2003	0.42	(7)
	2004	0.42	(7)
	2005	0.42	(7)
	2006 - Final Cap	0.42	(7)

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1,2 Ethanedithiol Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	1.47	(7)
	1998	0.78	(7)
	1999	0.74	(7)
	2000	0.74	(7)
	2001	0.74	(7)
	2002	0.74	(7)
	2003	0.74	(7)
	2004	0.74	(7)
	2005	0.74	(7)
	2006 - Final Cap	0.74	(7)

Dimethyl Sulfide Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	18.68	(7)
	1998	18.68	(7)
	1999	2.9	(7)
	2000	2.9	(7)
	2001	2.9	(7)
	2002	2.9	(7)
	2003	2.9	(7)
	2004	2.9	(7)
	2005	2.9	(7)
	2006 - Final Cap	2.9	(7)

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Methyl Ethyl Sulfide Emission Cap (11)

<u>Sources</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
See Attachment C	1997	8.06	(7)
	1998	5.91	(7)
	1999	2.55	(7)
	2000	2.55	(7)
	2001	2.55	(7)
	2002	2.55	(7)
	2003	2.55	(7)
	2004	2.55	(7)
	2005	2.55	(7)
	2006 - Final Cap	2.55	(7)

Acetone Emission Cap

<u>Sources</u>	<u>lb/hr</u>	<u>TPY</u>
(12)	1.81	5.0

- (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 General Rule 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - particulate matter, suspended in the atmosphere, including PM₁₀.
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.

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CO - carbon monoxide
H₂S - hydrogen sulfide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) VOC hourly caps are restricted on a pollutant by pollutant basis.
- (6) Total hourly emissions of any single compound listed on Attachment A, Group A from the sources listed on Attachment C, Emission Caps List are restricted to this emission rate.
- (7) Total VOC emissions from all sources listed on Attachment C, Emission Caps List are restricted to the annual value represented under the VOC cap.
- (8) Total hourly emissions of any single compound listed on Attachment A, Group B from the sources listed on Attachment C, Emission Caps List are restricted to this emission rate.
- (9) Total hourly emissions of any single compound listed on Attachment A, Group C from the sources listed on Attachment C, Emission Caps List are restricted to this emission rate.
- (10) Total hourly emissions of any single compound listed on Attachment A, Group D from the sources listed on Attachment C, Emission Caps List are restricted to this emission rate.
- (11) Total hourly emissions of this compound from the sources listed on Attachment C, Emission Caps List are restricted to this emission rate.
- (12) Acetone is used as part of an automatic cleaning sequence for certain types of on-line analyzers employed in various locations throughout the facility.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

_____Hrs/day _____Days/week _____Weeks/year or _____
8,760 Hrs/year.

Dated_____