

Emission Sources - Maximum Allowable Emission Rates Before Brine System Modifications (10)

Permit Number 19718

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 (1)	Source Name (2)	Air Contaminant (3)	Emission Rates	
			lbs/hour	TPY (4)
62-32-11	Diesel Engine (6)	CO	3.61	0.18
		NO <sub>x</sub>	16.74	0.84
		PM	1.19	0.06
		PM <sub>10</sub>	1.19	0.06
		PM <sub>2.5</sub>	1.19	0.06
		SO <sub>2</sub>	1.11	0.06
		VOC	1.36	0.07
62-32-56	Fire Pump Engine (6)	CO	2.67	0.13
		NO <sub>x</sub>	12.40	0.62
		PM	0.88	0.04
		PM <sub>10</sub>	0.88	0.04
		PM <sub>2.5</sub>	0.88	0.04
		SO <sub>2</sub>	0.82	0.04
		VOC	1.01	0.05
62-32-56A	Fire Pump Engine (6)	CO	2.67	0.13
		NO <sub>x</sub>	12.40	0.62
		PM	0.88	0.04
		PM <sub>10</sub>	0.88	0.04
		PM <sub>2.5</sub>	0.88	0.04
		SO <sub>2</sub>	0.82	0.04
		VOC	1.01	0.05

Emission Sources - Maximum Allowable Emission Rates

62-36-3	Heater F-3	CO	0.90	0.33
		NO <sub>x</sub>	0.62	0.22
		PM	0.04	0.02
		PM <sub>10</sub>	0.04	0.02
		PM <sub>2.5</sub>	0.04	0.02
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.01
62-36-4	Heater F-4	CO	1.05	2.26
		NO <sub>x</sub>	1.15	2.47
		PM	0.09	0.22
		PM <sub>10</sub>	0.09	0.22
		PM <sub>2.5</sub>	0.09	0.22
		SO <sub>2</sub>	0.01	0.02
		VOC	0.06	0.16
62-36-8	Heater F-8	CO	1.32	0.58
		NO <sub>x</sub>	1.72	0.76
		PM	0.22	0.12
		PM <sub>10</sub>	0.22	0.12
		PM <sub>2.5</sub>	0.22	0.12
		SO <sub>2</sub>	0.02	0.01
		VOC	0.16	0.08
62-61-3	Sour Brine Degassing Flare	VOC	7.10	4.23
		NO <sub>x</sub>	2.95	2.97
		CO	9.34	15.79
		SO <sub>2</sub>	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		H <sub>2</sub> S	0.01	0.01
62-61-4	Sweet Brine Degassing Flare	VOC	1.80	3.11
		NO <sub>x</sub>	6.55	2.21
		CO	26.65	11.34
		SO <sub>2</sub>	0.01	0.01
		H <sub>2</sub> S	0.01	0.01
62-61-5	Main Flare (7)	VOC	204.07	14.54
		NO <sub>x</sub>	28.06	4.00
		CO	55.62	8.34
		SO <sub>2</sub>	0.01	0.01
		H <sub>2</sub> S	0.01	0.01
62-61-5	Main Flare MSS (8)	VOC	301.52	2.87
		NO <sub>x</sub>	87.39	0.90
		CO	175.68	1.88
		SO <sub>2</sub>	0.07	0.01
		H <sub>2</sub> S	0.01	0.01
62-0-0	Process Fugitives (5)	VOC	5.99	26.25
62-95-CT07	Sour Brine Pond	VOC	0.13	0.10
62-95-CT08	Sour Brine Pond	VOC	0.13	0.10
62-95-CT12 and 62-95-201	Combined Storage Pond and Brine Degassing Pit Emissions	VOC	3.43	4.89
62-95-207	Sour Brine Pond Vent	VOC	0.06	0.05
62-95-208	Sour Brine Pond Vent	VOC	0.06	0.05
MSS-ATM	MSS Emissions for line and equipment degassing	VOC	700.00	6.29
PAINT	Painting (9)	VOC	8.00	4.71

Emission Sources - Maximum Allowable Emission Rates

		PM	16.64	12.21
		PM <sub>10</sub>	16.64	12.21
		PM <sub>2.5</sub>	16.64	12.21
SDBLAST	Abrasive Blasting (9)	PM	2.86	1.30
		PM <sub>10</sub>	0.34	0.16
		PM <sub>2.5</sub>	0.05	0.02

- (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
  - 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>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>
  - 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
  - H<sub>2</sub>S - hydrogen sulfide
- (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) EPN 62-32-11, 62-32-56, and 62-32-56A are limited to 100 operating hours per year each for purposes of maintenance and testing but will also be used as necessary in emergency service.
- (7) These emissions include those related to maintenance activities associated with cavern inspections.
- (8) These emissions include those related to maintenance activities associated with line and equipment degassing/clearing.
- (9) These emission limits cover painting and abrasive blasting activities in designated areas of the facility site. The operator intends to authorize painting and abrasive blasting activities in other areas of the facility site through permit by rule.
- (10) The MAERT limits are applicable only to the configuration prior to the start of operation of the brine system modifications represented in the permit amendment (TCEQ Project No. 345548). Within 90 days of the start of operation of the brine system modifications represented in the permit amendment (TCEQ Project No. 345548), the permit holder shall submit an alteration request to the TCEQ Executive Director requesting to remove the MAERT limits.

Date: June 28, 2023

Emission Sources - Maximum Allowable Emission Rates

## Emission Sources - Maximum Allowable Emission Rates After Brine System Modifications (12)

Permit Number 19718

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 (1)	Source Name (2)	Air Contaminant (3)	Emission Rates	
			lbs/hour	TPY (4)
62-32-11	Diesel Engine (6)	CO	3.61	0.18
		NO <sub>x</sub>	16.74	0.84
		PM	1.19	0.06
		PM <sub>10</sub>	1.19	0.06
		PM <sub>2.5</sub>	1.19	0.06
		SO <sub>2</sub>	1.11	0.06
		VOC	1.36	0.07
62-32-56	Fire Pump Engine (6)	CO	2.67	0.13
		NO <sub>x</sub>	12.40	0.62
		PM	0.88	0.04
		PM <sub>10</sub>	0.88	0.04
		PM <sub>2.5</sub>	0.88	0.04
		SO <sub>2</sub>	0.82	0.04
		VOC	1.01	0.05
62-32-56A	Fire Pump Engine (6)	CO	2.67	0.13
		NO <sub>x</sub>	12.40	0.62
		PM	0.88	0.04
		PM <sub>10</sub>	0.88	0.04
		PM <sub>2.5</sub>	0.88	0.04
		SO <sub>2</sub>	0.82	0.04
		VOC	1.01	0.05

Emission Sources - Maximum Allowable Emission Rates

62-36-3	Heater F-3	CO	0.90	0.33
		NO <sub>x</sub>	0.62	0.22
		PM	0.04	0.02
		PM <sub>10</sub>	0.04	0.02
		PM <sub>2.5</sub>	0.04	0.02
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.01
62-36-4	Heater F-4	CO	1.05	2.26
		NO <sub>x</sub>	1.15	2.47
		PM	0.09	0.22
		PM <sub>10</sub>	0.09	0.22
		PM <sub>2.5</sub>	0.09	0.22
		SO <sub>2</sub>	0.01	0.02
		VOC	0.06	0.16
62-36-8	Heater F-8	CO	1.32	0.58
		NO <sub>x</sub>	1.72	0.76
		PM	0.22	0.12
		PM <sub>10</sub>	0.22	0.12
		PM <sub>2.5</sub>	0.22	0.12
		SO <sub>2</sub>	0.02	0.01
		VOC	0.16	0.08
62-61-3	Sour Brine Degassing Flare	VOC	7.34	4.62
		NO <sub>x</sub>	3.59	4.76
		CO	14.32	18.97
		SO <sub>2</sub>	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		H <sub>2</sub> S	0.01	0.01
62-61-4	Sweet Brine Degassing Flare	VOC	3.76	3.70
		NO <sub>x</sub>	6.32	3.58
		CO	25.18	14.25
		SO <sub>2</sub>	0.03	0.01
		H <sub>2</sub> S	0.01	0.01
62-61-5	Main Flare (7)	VOC	204.07	14.54
		NO <sub>x</sub>	28.06	4.00
		CO	55.62	8.34
		SO <sub>2</sub>	0.01	0.01
		H <sub>2</sub> S	0.01	0.01
62-61-5	Main Flare MSS (8)	VOC	301.52	2.87
		NO <sub>x</sub>	87.39	0.90
		CO	175.68	1.88
		SO <sub>2</sub>	0.07	0.01
		H <sub>2</sub> S	0.01	0.01
62-0-0	Process Fugitives (5)	VOC	6.02	26.38
62-95-CT07	Sour Brine Pond	VOC	(10)	(10)
62-95-CT08	Sour Brine Pond	VOC	(10)	(10)
62-95-CT09	Sweet Brine Pond	VOC	(11)	(11)
62-95-CT10	Sweet Brine Pond	VOC	(11)	(11)
62-95-CT12	Combined Storage Pond	VOC	(10)(11)	(10)(11)
62-95-CT13	Sweet Brine Pond	VOC	(11)	(11)
62-95-207	Sour Brine Pond Vent	VOC	(10)	(10)
62-95-208	Sour Brine Pond Vent	VOC	(10)	(10)



Emission Sources - Maximum Allowable Emission Rates

62-95-209	Sweet Brine Pond Vent	VOC	(11)	(11)
62-95-210	Sweet Brine Pond Vent	VOC	(11)	(11)
62-95-12	Combined Storage Pond Vent	VOC	(10)(11)	(10)(11)
62-95-213	Sweet Brine Pond Vent	VOC	(11)	(11)
SOBRNCAP	Sour Brine System Cap (10)	VOC	0.08	0.36
		H <sub>2</sub> S	< 0.01	< 0.01
SWBRNCAP	Sweet Brine System Cap (11)	VOC	1.52	6.64
MSS-ATM	MSS Emissions for line and equipment degassing	VOC	700.00	6.29
PAINT	Painting (9)	VOC	8.00	4.71
		PM	16.64	12.21
		PM <sub>10</sub>	16.64	12.21
		PM <sub>2.5</sub>	16.64	12.21
SDBLAST	Abrasive Blasting (9)	PM	2.86	1.30
		PM <sub>10</sub>	0.34	0.16
		PM <sub>2.5</sub>	0.05	0.02

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
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  - NO<sub>x</sub> - total oxides of nitrogen
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  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>
  - 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
  - H<sub>2</sub>S - hydrogen sulfide
- (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) EPN 62-32-11, 62-32-56, and 62-32-56A are limited to 100 operating hours per year each for purposes of maintenance and testing but will also be used as necessary in emergency service.
- (7) These emissions include those related to maintenance activities associated with cavern inspections.
- (8) These emissions include those related to maintenance activities associated with line and equipment degassing/clearing.

Emission Sources - Maximum Allowable Emission Rates

- (9) These emission limits cover painting and abrasive blasting activities in designated areas of the facility site. The operator intends to authorize painting and abrasive blasting activities in other areas of the facility site through permit by rule.
- (10) Sour Brine System Cap includes the following EPNs: 62-95-CT07, 62-95-CT08, 62-95-207, 62-95-208, 62-95-CT12, and 62-95-12. The combined emissions for these EPNs shall not exceed the emissions limitation in SOBRNCAP.
- (11) Sweet Brine System Cap includes the following EPNs: 62-95-CT09, 62-95-CT10, 62-95-209, 62-95-210, 62-95-CT13, 62-95-213, 62-95-CT12, and 62-95-12. The combined emissions for these EPNs shall not exceed the emissions limitation in SWBRNCAP.
- (12) The MAERT limits are applicable to the brine system modifications represented in the permit amendment (TCEQ Project No. 345548).

Date: June 27, 2023