

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 170552 and PSDTX1610

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)
HEX-01	Hexene Plant Fugitives (5)	VOC	3.18	13.91
HEX-02, PE3-11A, PE3-11B, PE3-10, PE3-15	Hexene Plant Routine Waste Gas Control Device Hourly CAP (6)	VOC (Elevated Flare or EGF Option)	26.30	-
		VOC (Thermal Oxidizer Option)	1.71	-
		NO <sub>x</sub> (Elevated Flare Option)	2.06	-
		CO (Elevated Flare Option)	10.59	-
		NO <sub>x</sub> (EGF Option)	4.17	-
		CO (EGF Option)	16.62	-
		NO <sub>x</sub> (Thermal Oxidizer Option)	4.05	-
		CO (Thermal Oxidizer Option)	5.56	-
		PM (Thermal Oxidizer Option)	0.50	-
		PM <sub>10</sub> (Thermal Oxidizer Option)	0.50	-
		PM <sub>2.5</sub> (Thermal Oxidizer Option)	0.50	-
		SO <sub>2</sub> (Thermal Oxidizer Option) (7)	0.03	-
HEX-02, PE3-11A, PE3-11B, PE3-10, PE3-15	Hexene Plant Routine Waste Gas Control Device Annual CAP (6)	VOC	-	4.40
		NO <sub>x</sub>	-	6.86
		CO	-	10.49
		PM	-	0.80
		PM <sub>10</sub>	-	0.80
		PM <sub>2.5</sub>	-	0.80
		SO <sub>2</sub>	-	0.04
HEX-03	Tank Truck Loading (Fugitives)	VOC	1.27	1.35
HEX-04	Uncontrolled	VOC	7.04	1.85

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	Polyethylene Wax Loading and Cooling			
HEX-05	Emergency Engine	VOC	3.96	0.20
		NO <sub>x</sub>	3.96	0.20
		CO	3.46	0.17
		PM	0.20	0.01
		PM <sub>10</sub>	0.20	0.01
		PM <sub>2.5</sub>	0.20	0.01
		SO <sub>2</sub>	0.01	0.01
HEX-07	Mineral Oil Seal Drum	VOC	11.40	0.08
PE3-10, PE3-15	Hexene Plant Truck and Railcar Loading and Routine Process Waste Gas to PE3 Flare System Hourly CAP (8)	VOC	6.14	-
		NO <sub>x</sub> (Elevated Flare Option)	0.46	-
		CO (Elevated Flare Option)	2.35	-
		NO <sub>x</sub> (EGF Option)	0.92	-
		CO (EGF Option)	3.68	-
		SO <sub>2</sub>	0.01	-
PE3-10, PE3-15	Hexene Plant Truck and Railcar Loading and Routine Process Waste Gas to PE3 Flare System Annual CAP (8)	VOC	-	2.10
		NO <sub>x</sub>	-	0.78
		CO	-	3.11
		SO <sub>2</sub>	-	0.01
HEX-06	Hexene Plant MSS Fugitives	VOC	32.28	0.45
		PM	0.01	0.01
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	0.01	0.01
PE3-10, PE3-15, HEX-TEMP	Hexene Plant MSS Contributions to PE3 Flare System or Temporary Control Device Hourly CAP	VOC	363.96	-
		NO <sub>x</sub> (Elevated Flare Option)	60.14	-
		CO (Elevated Flare Option)	349.18	-
		NO <sub>x</sub> (EGF Option)	122.06	-
		CO (EGF Option)	547.84	-
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PE3-10, PE3-15, HEX-TEMP	Hexene Plant MSS Contributions to PE3 Flare System or	VOC	-	7.05
		NO <sub>x</sub>	-	8.44

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	Device Annual CAP			
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- (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)
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|-------------------|--|
| 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  |
| EGF               | - Enclosed Ground Flare  |
- (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) Emission rates in this hourly and annual emissions CAP are from Hexene Plant routine waste gases routed to the PE3 Plant thermal oxidizer waste gas header or Hexene Plant thermal oxidizer waste gas header. The emissions in this CAP also include the option for routing these waste gases to the PE3 Plant flare header. This CAP does not include emissions from Railcar Loading, Truck Loading, or Hexene Plant process vents, which are routed to the PE3 Plant flare waste gas header.
- (7) Elevated Flare and Enclosed Ground Flare (EPNs PE3-10, PE3-15) emissions from Pilot Gas (including SO<sub>2</sub>) are authorized under the PE3 Plant NSR Permit No. 127838.
- (8) Emission rates in this hourly and annual emissions CAP are from Hexene Plant routine waste gases routed to the PE3 Plant flare waste gas header, including only emissions from Railcar Loading, Truck Loading, and Hexene Plant process vents. This CAP does not include emissions from routing of thermal oxidizer waste gases to the flare system.

Date: September 22, 2023