

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20869 and PSDTX800

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)
Case I: Turbines Firing Natural Gas with Duct Burners Unfired				
OC8 S81	85 MWe Gas Turbine GE Model PG7111(EA)	NO _x	52.29	201.96
		CO	58.68	226.65
		SO ₂	2.17	8.32
		PM	5.00	21.90
		PM ₁₀	5.00	21.90
		VOC	1.50	5.87
OC8 S82	85 MWe Gas Turbine GE Model PG7111(EA)	NO _x	52.29	201.96
		CO	58.68	226.65
		SO ₂	2.17	8.32
		PM	5.00	21.90
		PM ₁₀	5.00	21.90
		VOC	1.50	5.87
OC8 S83	85 MWe Gas Turbine GE Model PG7111(EA)	NO _x	52.29	201.96
		CO	58.68	226.65
		SO ₂	2.17	8.32
		PM	5.00	21.90
		PM ₁₀	5.00	21.90
		VOC	1.50	5.87
Case IIa: Gas Turbines and Duct Burners Firing Natural Gas				
OC8 S81	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	64.27	241.52
		CO	100.01	390.57
		SO ₂	3.07	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76
		VOC	3.27	12.37
OC8 S82	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	64.27	241.52
		CO	100.01	390.57
		SO ₂	3.07	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76

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		VOC	3.27	12.37
OC8 S83	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	64.27	241.52
		CO	100.01	390.57
		SO ₂	3.07	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76
		VOC	3.27	12.37
Case III: Turbines Firing Natural Gas and Duct Burners Firing a Combination of Process Gas and Natural Gas				
OC8 S81	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	72.76	272.99
		CO	100.01	390.57
		SO ₂	3.06	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76
		VOC	3.27	12.37
OC8 S82	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	72.76	272.99
		CO	100.01	390.57
		SO ₂	3.06	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76
		VOC	3.27	12.37
OC8 S83	85 MWe Gas Turbine GE Model PG7111(EA) with 590 MMBtu/hr Duct Burner	NO _x	72.76	272.99
		CO	100.01	390.57
		SO ₂	3.06	11.61
		PM	10.90	43.76
		PM ₁₀	10.90	43.76
		VOC	3.27	12.37
VOC Sources				
OC8 SC801	Solvent Cleaner	VOC	0.08	0.33
OC8 ST8006	Distillate Tank Vent	VOC	0.06	0.26
OC8 FU1	Fugitives	VOC	1.22	5.32
OC2 ST100	Distillate Tank Vent	VOC	0.12	0.48
OC2 FU 8	Fugitives	VOC	0.63	2.73
Authorization for operation of gas turbine OC8 S81 at reduced load using inlet bleed heat is authorized by Standard Permit (SP) for Pollution Control Projects, Permit Registration No. 71322. This authorization is incorporated by reference and reduced load operation remains authorized by the SP and subject to the emission limits listed below:				
OC8 S81	85 MWe Gas Turbine GE Model PG7111(EA) Power 8 Gas Turbine	CO	100.01	390.57
		NO _x	134.47	521.11

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		PM ₁₀	10.90	45.29
		SO ₂	3.18	12.32
		VOC	3.27	12.88

- (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_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 PM_{2.5} - total particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.

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