

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 21587 and PSD-TX-807

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.

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | <u>Emission Rates*</u> lb/hr (4) TPY | |
|---------------------------|--------------------|-----------------------------|--------------------------------------------|--|
|---------------------------|--------------------|-----------------------------|--------------------------------------------|--|

LONG-TERM EMISSION LIMITS NOT TO EXCEED

Based on 125 hours of fuel oil firing and 8,635 hours of natural gas firing per consecutive 12-month period, with duct burner operation on natural gas for 8,760 hours per consecutive 12-month period.

| | | | | |
|------|------------------------------------------------------------------------|---------|----|-------|
| SJS1 | 80 MWe Gas Turbine GE Frame 7EA with 550 MMBtu/hr Duct Burner | NOx | -- | 439.4 |
| | | CO | -- | 415.0 |
| | | PM/PM10 | -- | 50.9 |
| | | VOC | -- | 38.8 |
| | | SO2 | -- | 18.6 |
| SJS2 | 80 MWe Gas Turbine GE Frame 7EA with 550 MMBtu/hr Duct Burner | NOx | -- | 439.4 |
| | | CO | -- | 415.0 |
| | | PM/PM10 | -- | 50.9 |
| | | VOC | -- | 38.8 |
| | | SO2 | -- | 18.6 |

SHORT-TERM EMISSION LIMITS

Case I: Turbines firing fuel oil with duct burners firing natural gas.

| | | | | |
|------|------------------------------------------------------------------------|---------|-------|----|
| SJS1 | 80 MWe Gas Turbine GE Frame 7EA with 550 MMBtu/hr Duct Burner | NOx | 364.5 | -- |
| | | CO | 112.5 | -- |
| | | PM/PM10 | 19.5 | -- |
| | | VOC | 12.5 | -- |
| | | SO2 | 235.3 | -- |
| SJS2 | 80 MWe GAS Turbine | NOx | 364.5 | -- |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| | | | |
|-------------------|---------|-------|----|
| GE Frame 7EA | CO | 112.5 | -- |
| with 550 MMBtu/hr | PM/PM10 | 19.5 | -- |
| Duct Burner | VOC | 12.5 | -- |
| | SO2 | 235.3 | -- |

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | <u>Emission Rates*</u> lb/hr (4) TPY | |
|---------------------------|--------------------|-----------------------------|-----------------------------------------|--|
| (5) | | | | |

Case II: Turbines firing fuel oil with duct burners unfired.

| | | | | |
|------|--------------------|---------|-------|----|
| SJS1 | 80 MWe Gas Turbine | NOx | 320.0 | -- |
| | GE Frame 7EA | CO | 71.0 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 15.0 | -- |
| | Duct Burner | VOC | 5.5 | -- |
| | | SO2 | 235.0 | -- |
| SJS2 | 80 MWe Gas Turbine | NOx | 320.0 | -- |
| | GE Frame 7EA | CO | 71.0 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 15.0 | -- |
| | Duct Burner | VOC | 5.5 | -- |
| | | SO2 | 235.0 | -- |

Case III: Turbines firing natural gas with duct burners unfired.

| | | | | |
|------|--------------------|---------|------|----|
| SJS1 | 80 MWe GAS Turbine | NOx | 62.0 | -- |
| | GE Frame 7EA | CO | 52.0 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 7.0 | -- |
| | Duct Burner | VOC | 2.2 | -- |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| | | | | |
|------|--------------------|---------|------|----|
| | | SO2 | 0.7 | -- |
| SJS2 | 80 MWe Gas Turbine | NOx | 62.0 | -- |
| | GE Frame 7EA | CO | 52.0 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 7.0 | -- |
| | Duct Burner | VOC | 2.2 | -- |
| | | SO2 | 0.7 | -- |

Case IV: Turbines firing natural gas with duct burners fired.

| | | | | |
|------|--------------------|---------|-------|----|
| SJS1 | 80 MWe Gas Turbine | NOx | 106.5 | -- |
| | GE Frame 7EA | CO | 93.5 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 11.5 | -- |
| | Duct Burner | VOC | 9.2 | -- |
| | | SO2 | 1.0 | -- |

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates* lb/hr (4) TPY | |
|---------------------------|--------------------|-----------------------------|----------------------------------|----|
| <u>(5)</u> | | | | |
| SJS2 | 80 MWe Gas Turbine | NOx | 106.5 | -- |
| | GE Frame 7EA | CO | 93.5 | -- |
| | with 550 MMBtu/hr | PM/PM10 | 11.5 | -- |
| | Duct Burner | VOC | 9.2 | -- |
| | | SO2 | 1.0 | -- |

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name.

(3) NOx - total oxides of nitrogen

PM - particulate matter

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

PM10 - particulate matter less than 10 microns

CO - carbon monoxide

SO2 - sulfur dioxide

VOC - volatile organic compounds as defined in General Rule 101.1

(4) Maximum hourly emissions based on 20°F ambient temperature.

(5) Annual emissions based on 70°F ambient temperature with 125 hours of fuel oil firing and 8,635 hours of natural gas firing per year, with duct burners in operation.

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

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760