

San Joaquin Valley Air Pollution Control District Supplemental Application Form

Gas Turbines

Please complete one form for each gas turbine.

This form must be accompanied by a completed Authority to Construct/Permit to Operate Application form

PERMIT TO BE ISSUED TO:

EQUIPMENT DESCRIPTION

Equipment Details	<input type="checkbox"/> Industrial Frame <input type="checkbox"/> Aero Derivative <input type="checkbox"/> Other: _____			
	Manufacturer: _____	Model: _____	Serial Number: _____	
	<input type="checkbox"/> Simple Cycle <input type="checkbox"/> Combined Cycle <input type="checkbox"/> Co-generation <input type="checkbox"/> Other: _____			
	Nominal (ISO) Rating: _____ MW (at 1 atm, 59°F, 60% Relative Humidity)			
Rule 4703 Type of Use and Emissions Monitoring Provisions	<input type="checkbox"/> Peaking Unit - limited to no more than 877 hrs/yr of operation <input type="checkbox"/> Emergency Standby - limited to less than 200 hrs/yr of operation <input type="checkbox"/> Full Time - must have either a Continuous Emission Monitoring System (CEMS) or an alternate emissions monitoring plan (must be approved by the APCO) <input type="checkbox"/> CEMS, please specify all pollutants monitored: <input type="checkbox"/> NO _x <input type="checkbox"/> CO <input type="checkbox"/> O ₂ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Alternate Emissions Monitoring Plan (please provide details in additional documentation)			
	<input type="checkbox"/> Is the unit equipped with an auxiliary/duct burner? <input type="checkbox"/> Yes <input type="checkbox"/> No (Note: If yes, please complete a <i>Boiler, Steam Generator, Dryer, and Process Heater Supplemental Application form</i> for the unit.)			
Fuel Use Meter	<input type="checkbox"/> Gaseous Fuel Meter <input type="checkbox"/> Liquid Fuel Meter <input type="checkbox"/> None			
Process Data	Will this unit be used in an electric utility rate reduction program? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Combustor(s)	Manufacturer: _____		Model: _____	
	Maximum Heat Input Rating (for all combustors @ ISO standard conditions): _____ Btu/hr			
	Water Injection: <input type="checkbox"/> Yes <input type="checkbox"/> No		Dry Low NO _x Technology: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Steam Injection: <input type="checkbox"/> Yes <input type="checkbox"/> No		Other NO _x Control Technology: _____	
EMISSIONS DATA				
Note: See District BACT and District Rule 4703 requirements for applicability to proposed unit at http://www.valleyair.org/busind/pto/bact/chapter3.pdf and http://www.valleyair.org/rules/curnrules/r4703.pdf				
Primary Fuel	Fuel Type: <input type="checkbox"/> Natural Gas <input type="checkbox"/> LPG/Propane <input type="checkbox"/> Diesel <input type="checkbox"/> Other: _____			
	Higher Heating Value: _____ Btu/gal or _____ Btu/scf	Sulfur Content: _____ % by weight or _____ gr/scf		
	Maximum Fuel Use @ HHV: _____ scf/hr or _____ gal/hr	Rated Efficiency (EFF _{Mfg}): _____ %		
Primary Fuel Emissions Data	Operational Mode	Steady State (ppmv) (lb/MMBtu)	Start-up (ppmv) (lb/hr)	Shutdown (ppmv) (lb/hr)
	Nitrogen Oxides			
	Carbon Monoxide			
	Volatile Organic Compounds			
	Duration		_____ hr/day _____ hr/yr	_____ hr/day _____ hr/yr
% O ₂ , dry basis, if corrected to other than 15%: _____ %				

EMISSIONS DATA (continued)

Secondary Fuel	When will the secondary fuel be used? <input type="checkbox"/> Primary fuel curtailment <input type="checkbox"/> Simultaneously with primary fuel <input type="checkbox"/> Other: _____						
	Fuel Type: <input type="checkbox"/> Natural Gas <input type="checkbox"/> LPG/Propane <input type="checkbox"/> Diesel <input type="checkbox"/> Other: _____						
	Higher Heating Value: _____ Btu/gal or _____ Btu/scf			Sulfur Content: _____ % by weight or _____ gr/scf			
	Maximum Fuel Use @ HHV: _____ scf/hr or _____ gal/hr			Rated Efficiency (EFF _{Mfg}): _____ %			
Secondary Fuel Emissions Data	Operational Mode	Steady State (ppmv) (lb/MMBtu)		Start-up (ppmv) (lb/hr)		Shutdown (ppmv) (lb/hr)	
	Nitrogen Oxides						
	Carbon Monoxide						
	Volatile Organic Compounds						
	Duration (please provide justification)				_____ hr/day	_____ hr/yr	_____ hr/day
% O ₂ , dry basis, if corrected to other than 15%: _____ %							
Source of Data	<input type="checkbox"/> Manufacturer's Specifications <input type="checkbox"/> Emission Source Test <input type="checkbox"/> Other _____ (please provide copies)						

EMISSIONS CONTROL

Emissions Control Equipment <small>(Check all that apply)</small>	<input type="checkbox"/> Inlet Air Filter/Cooler			<input type="checkbox"/> Lube Oil Vent Coalescer		
	<input type="checkbox"/> Selective Catalytic Reduction - Manufacturer: _____ Model: _____ <input type="checkbox"/> Ammonia (NH ₃) <input type="checkbox"/> Urea <input type="checkbox"/> Other: _____					
	<input type="checkbox"/> Oxidation Catalyst - Manufacturer: _____ Model: _____					
	Control Efficiencies: NO _x _____ %, SO _x _____ %, PM ₁₀ _____ %, CO _____ %, VOC _____ %					
	<input type="checkbox"/> Other (please specify): _____					
For units equipped with exhaust gas NO _x control equipment and rated < 10 MW, or rated ≥ 10 MW but operated < 4,000 hr/yr, one may choose at least one of the following alternate emission monitoring schemes in lieu of a CEMS (each option below must be approved by APCO on a case-by-case basis. Please include a detailed proposal for each option chosen): <input type="checkbox"/> Periodic NO _x emission concentration <input type="checkbox"/> Turbine exhaust O ₂ concentration <input type="checkbox"/> Air-to-Fuel ratio <input type="checkbox"/> Flow rate of reducing agents added to turbine exhaust <input type="checkbox"/> Catalyst inlet and outlet temperature <input type="checkbox"/> Catalyst inlet and exhaust O ₂ conc. <input type="checkbox"/> Other operational characteristics as approved by the APCO (specify on attached sheet)						

HEALTH RISK ASSESSMENT DATA

Operating Hours	Maximum Operating Schedule: _____ hours per day, and _____ hours per year					
Receptor Data	Distance to nearest Residence	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.			
	Direction to nearest Residence	_____	Direction from the stack to the receptor, i.e. Northeast or South.			
	Distance to nearest Business	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.			
	Direction to nearest Business	_____	Direction from the stack to the receptor, i.e. North or Southwest.			
Stack Parameters	Release Height	_____ feet above grade				
	Stack Diameter	_____ inches at point of release				
	Rain Cap	<input type="checkbox"/> Flapper-type <input type="checkbox"/> Fixed-type <input type="checkbox"/> None <input type="checkbox"/> Other: _____				
	Direction of Flow	<input type="checkbox"/> Vertically Upward <input type="checkbox"/> Horizontal <input type="checkbox"/> Other: _____° from vert. or _____° from horiz.				
Exhaust Data	Flowrate: _____ acfm			Temperature: _____ °F		
Facility Location	<input type="checkbox"/> Urban (area of dense population) <input type="checkbox"/> Rural (area of sparse population)					

FOR DISTRICT USE ONLY

Date: _____	FID: _____	Project: _____	Public Notice: [] Yes [] No
Comments: _____			