



# Form 400-E-12 Gas Turbine

Mail To:  
SCAQMD  
P.O. Box 4944  
Diamond Bar, CA 91765-0944  
Tel: (909) 396-3385  
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section A - Operator Information	
Facility Name (Business Name of Operator That Appears On Permit):	Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):
Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):	
	Fixed Location      Various Locations

Section B - Equipment Description							
Turbine	Manufacturer: _____ Model: _____ Serial No.: _____ Size (based on Higher Heating Value - HHV): Manufacturer Maximum Input Rating: _____ MMBTU/hr _____ kWh Manufacturer Maximum Output Rating: _____ MMBTU/hr _____ kWh						
Function (Check all that apply)	<table style="width:100%; border: none;"> <tr> <td style="width: 33%;">Electrical Generation</td> <td style="width: 33%;">Driving Pump/Compressor</td> <td style="width: 33%;">Emergency Peaking Unit</td> </tr> <tr> <td>Steam Generation</td> <td>Exhaust Gas Recovery</td> <td>Other (specify): _____</td> </tr> </table>	Electrical Generation	Driving Pump/Compressor	Emergency Peaking Unit	Steam Generation	Exhaust Gas Recovery	Other (specify): _____
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Steam Generation	Exhaust Gas Recovery	Other (specify): _____					
Cycle Type	<table style="width:100%; border: none;"> <tr> <td style="width: 50%;">Simply Cycle</td> <td style="width: 50%;">Regenerative Cycle</td> </tr> <tr> <td>Combined Cycle</td> <td>Other (specify): _____</td> </tr> </table>	Simply Cycle	Regenerative Cycle	Combined Cycle	Other (specify): _____		
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Combustion Type	<table style="width:100%; border: none;"> <tr> <td style="width: 33%;">Tubular</td> <td style="width: 33%;">Can-Annular</td> <td style="width: 33%;">Annular</td> </tr> </table>	Tubular	Can-Annular	Annular			
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Fuel (Turbine)	<table style="width:100%; border: none;"> <tr> <td style="width: 33%;">Natural Gas</td> <td style="width: 33%;">LPG</td> <td style="width: 33%;">Digester Gas*</td> </tr> <tr> <td>Landfill Gas*</td> <td>Propane</td> <td>Refinery Gas*      Other*: _____</td> </tr> </table> <p><small>* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).</small></p>	Natural Gas	LPG	Digester Gas*	Landfill Gas*	Propane	Refinery Gas*      Other*: _____
Natural Gas	LPG	Digester Gas*					
Landfill Gas*	Propane	Refinery Gas*      Other*: _____					
Heat Recovery Steam Generator (HRSG)	Steam Turbine Capacity: _____ MW Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F Superheated Steam Output Capacity: _____ lb/hr @ _____ °F						
Duct Burner	Manufacturer: _____ Model: _____ Number of burners: _____ Rating of each burner (HHV): _____ Type:      Low NOx (please attach manufacturer's specifications) Other: _____ Show all heat transfer surface locations with the HRSG and temperature profile						
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**Section B - Equipment Description (Cont.)**

<b>Air Pollution Control</b>	Selective Catalytic Reduction (SCR)* Oxidation Catalyst* Steam/Water Injection: Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel * Separate application is required.	Selective Non-Catalytic Reduction (SNCR)* Other (specify)*: _____ Capital Cost: _____ Installation Cost: _____ Annual Operating Cost: _____
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<b>Oxidation Catalyst Data (If Applicable)</b>	Manufacturer: _____ Model: _____ Catalyst Dimensions: Length: _____ ft. _____ in. Width: _____ ft. _____ in. Height: _____ ft. _____ in. Catalyst Cell Density: _____ cells/sq.in. Pressure Drop Across Catalyst: _____ Manufacturer's Guarantee: CO Control Efficiency: _____ % Catalyst Life: _____ yrs VOC Control Efficiency: _____ % Operating Temp. Range: _____ °F Space Velocity (gas flow rate/catalyst volume): _____ Area Velocity (gas flow/wetted catalyst surface area): _____ VOC Concentration into Catalyst: _____ PPMVD@ 15%O <sub>2</sub> CO Concentration inot Catalyst: _____ PPMVD@ 15%O <sub>2</sub>
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**Section C - Operation Information**

Pollutants	Maximum Emissions Before Control *		Maximum Emissions After Control	
	PPM@15% O <sub>2</sub> , dry	lb/hour	PPM@15% O <sub>2</sub> , dry	lb/hour
ROG				
NOx				
CO				
PM <sub>10</sub>				
SOx				
NH <sub>3</sub>				
* Based on temperature, fuel consumption, and MW output.				
Reference (attach data):				
Manufacturer Emission Data	EPA Emission Factors	AQMD Emission Factors	Source Test	

<b>Stack or Vent Data</b>	Stack Height: _____ ft. _____ in. Stack Diameter: _____ ft. _____ in.
	Exhaust Temperature: _____ °F Exhaust Pressure: _____ inches water column
	Exhaust Flow Rate: _____ CFM Oxygen Level: _____ %

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**Section C - Operation Information (cont.)**

<b>Startup Data</b>	No. of Startups per day: _____ No. of Startups per year: _____ Duration of each startup: _____ hrs.				
<b>Shutdown Data</b>	No. of Shutdowns per day: _____ No. of Shutdowns per year: _____ Duration of each Shutdown: _____ hrs.				
<b>Startup and Shutdown Emissions Data</b>	<b>Pollutants</b>	<b>Startup Emissions</b>		<b>Shutdown Emissions</b>	
		PPM@15% O <sub>2</sub> , dry	lb/hour	PPM@15% O <sub>2</sub> , dry	lb/hour
	ROG				
	NOx				
	CO				
	PM <sub>10</sub>				
	SOx				
	NH <sub>3</sub>				
<b>Monitoring and Reporting</b>	Continuous Emission Monitoring System (CEMS): CEMS Make: _____				
	CEMS Model: _____				
	Will the CEMS be used to measure both on-line and startup/shutdown emissions?      Yes              No				
	The following parameters will be continuously monitored:				
	NOx	CO	O <sub>2</sub>		
Fuel Flow Rate		Ammonia Injection Rate	Other (specify): _____		
Ammonia Stack Concentration:		Ammonia CEMS Make: _____			
		Ammonia CEMS Model: _____			
<b>Operating Schedule</b>	Normal: _____ hours/day      _____ days/week      _____ weeks/yr				
	Maximum: _____ hours/day      _____ days/week      _____ weeks/yr				

**Section D - Authorization/Signature**

I hereby certify that all information contained herein and information submitted with this application is true and correct.

<b>Preparer Info</b>	Signature: _____	Date: _____	Name: _____	
	Title: _____	Company Name: _____	Phone #: _____	Fax #: _____
<b>Contact Info</b>	Name: _____	Phone #: _____	Fax #: _____	
	Title: _____	Company Name: _____	Email: _____	

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information.