San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.1*

Last Update: 4/29/2022

Emergency Diesel-Fired IC Engine > 50 bhp Powering an Electrical Generator

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	EPA Tier 4 Final certification level or equivalent for applicable horsepower range**		
SOx	Very low sulfur diesel fuel (15 ppmw sulfur or less)		
PM10	EPA Tier 4 Final certification level or equivalent for applicable horsepower range**		
NOx	EPA Tier 4 Final certification level or equivalent for applicable horsepower range**		
CO	EPA Tier 4 Final certification level or equivalent for applicable horsepower range**		

**The following emission levels are equivalent to the EPA Tier 4 Final certification levels:
50 - < 75 bhp: 3.5 g-(NOx + VOC)/bhp-hr, 0.02 g-PM/bhp-hr, 3.7 g-CO/bhp-hr
75 - < 175 bhp: 0.30 g-NOx/bhp-hr, 0.015 g-PM/bhp-hr, 3.7 g-CO/bhp-hr, 0.14 g-VOC/bhp-hr
175 - ≤ 750 bhp: 0.30 g-NOx/bhp-hr, 0.015 g-PM/bhp-hr, 2.6 g-CO/bhp-hr, 0.14 g-VOC/bhp-hr
> 750 bhp: 0.50 g-NOx/bhp-hr, 0.02 g-PM/bhp-hr, 2.6 g-CO/bhp-hr, 0.14 g-VOC/bhp-hr

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***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.4*

Last Update: 3/2/2020

Emergency Diesel-Fired IC Engine Powering a Fire Pump

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Latest EPA Tier Certification level for applicable horsepower range		
SOx	Diesel fuel with sulfur content no greater than 0.0015% by weight		
PM10	- 0.1 grams/bhp-hr** (if T-BACT*** is triggered) - 0.15 grams/bhp-hr (if T-BACT*** is not triggered)		
NOx	Latest EPA Tier Certification level for applicable horsepower range		
CO	Latest EPA Tier Certification level for applicable horsepower range		

**Any engine model included in the ARB or EPA diesel engine certification lists and identified as having a PM10 emission rate of 0.149 g/bhhp-hr or less, based on ISO 8178 test procedure, shall be deemed to meet the 0.1 g/bhp-hr requirement.
***A site-specific Health Risk Analysis is used to determine if T-BACT is triggered.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.5*

Last Update: 7/16/2018

Emergency Gas-Fired IC Engine

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	1) LEAN BURN: 206 ppmv @ 15% O2 (1.0 g/bhp-hr) 2) RICH BURN: 60 ppmv @ 15% O2 (0.29 g/bhp-hr)		
SOx	Natural Gas, LPG, or Propane as fuel		
PM10	Natural Gas, LPG, or Propane as fuel		
NOx	1) LEAN BURN: < 500 BHP: 1.0 g/bhp-hr ≥ 500 BHP: 0.5 g/bhp-hr 2) RICH BURN: 25 ppmv @ 15% O2 (0.44 g/bhp-hr)		
CO	2.0 g/bhp-hr		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.7*

Last Update: 4/20/2020

Emergency Gasoline-Fired I.C. Engine *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.1*

Last Update: 4/20/2020

Diesel I.C. Engine - > 449 hp, used for Testing of Crankcase Emission Controls *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.2*

Last Update: 7/7/2020

Limited Use (1,000 hr/yr max) Diesel-Fired IC Engine - Located at a Stationary Source, non-emergency, non-Transportable, and not used to drive an electrical generator *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.3*

Last Update: 4/20/2020

Diesel Fired IC Engine - < 700 hp, Serving a Deep Water Channel Dredging Operation, and Not Used to Drive an Electrical Generator *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.5*

Last Update: 3/5/2001

Diesel I.C. Engine - Used for starting a Gas Turbine

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Positive Crankcase Ventilation (PCV) or Crankcase Control Device that is at least 90% efficient		
SOx	Low-sulfur fuel (< 500 ppm sulfur, by weight). or Very low-sulfur fuel (< 15 ppm sulfur by weight), where available.		
PM10	A Performance Standard of - = or < 0.02 grams/bhp-hr and - very low-sulfur fuel (15 ppmw sulfur) where available. or a Minimum Technology Standard - 0.1 grams PM10/bhp-hr, and - a catalytic particulate filter (or equal), and - very low-sulfur fuel (15 ppmw sulfur) where available.		
NOx	Certified NOx emissions of 6.9 g/bhp-hr or less		

Any engine model included in the ARB or EPA diesel engine certification lists and identified as having a PM10 emission rate of 0.149 grams/bhp-hr or less, based on ISO 8178 test procedure, shall be deemed to meet the 0.1 grams/bhp-hr requirement.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.8*

Last Update: 7/7/2020

Limited Life (1,000 hr total max life) Diesel-Fired IC Engine - < 600 bhp, and Not Used to Drive an Electrical Generator *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.2.11*

Last Update: 8/11/2014

Transportable Compression - Ignited IC Engines (Non-Agricultural)*

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 0.14 g-VOC/bhp-hr)		LPG/Propane Fired Engine
SOx	Very Low Sulfur Fuel (0.0015% fuel S by weight)		
PM10	Engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 0.01 g-PM10/bhp-hr)		LPG/Propane Fired Engine
NOx	Engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 1.5 g-NOx/bhp-hr)		LPG/Propane Fired Engine
CO	Engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 2.6 g-CO/bhp-hr)		LPG/Propane Fired Engine

*For the purposes of this BACT guideline, Transportable Compression -Ignited IC engines are IC engines that remain or will remain at a location (any single site at a building, structure, facility, or installation) for 12 months or less or a shorter period of time for an engine located at a seasonal source.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.1*

Last Update: 4/20/2020

Diesel Fired IC Engine - < 600 hp, Transportable Metal Contaminated Soil Processing Operation *RESCINDED*

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.12*

Last Update: 3/7/2019

Non-Agricultural Fossil** Fuel-Fired IC Engines > 50 bhp ***RESCINDED 3/7/19 - pending BACT guideline revision in progress***

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.14*

Last Update: 1/12/2009

Full-time Rich-burn IC Engine, Syngas-fueled*

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	25 ppmvd at 15% O2		
NOx	9 ppmvd at 15% O2	5 ppmvd at 15% O2	

*Syngas (synthetic gas) is derived from biomass (agricultural waste) by gasification or similar processes. Syngas is distinguished from waste gases by its low methane content (less than 5%) and comparatively high hydrogen gas content (15% or greater), although frequently over half of the syngas composition is non-combustible gases such as nitrogen and carbon dioxide.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.15*

Last Update: 3/6/2013

Waste Gas-Fired IC Engine**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	0.10 g/bhp-hr (lean burn and positive crankcase ventilation (PCV) or a 90% efficient crankcase control device or equivalent)		Fuel Cells (<0.02 lb-VOC/MW-hr as CH4)
Sox	Sulfur content of fuel gas < or = 40 ppmv (as H2S) (dry absorption, wet absorption, chemical H2S reduction, water scrubber, or equivalent) (may be averaged up to 24 hours for compliance)		
PM10	Sulfur content of fuel gas < or = 40 ppmv (as H2S)		
Nox	0.15 g/bhp-hr (lean-burn engine with SCR, rich-burn engine with 3-way catalyst, or other equivalent)		1. Fuel Cells (<0.05 lb/MW-hr) 2. Microturbines (<9 ppmv @ 15% O2) 3. Gas Turbine (<9 ppmv @ 15% O2) (Note: gas turbines only ABE for projects > or = to 3 MW)
CO	2.0 g/bhp-hr		1. Fuel Cells (<0.10 lb/MW-hr) 2. Microturbines (<60 ppmv @ 15% O2) 3. Gas Turbine (<60 ppmv @ 15% O2) (Note: gas turbines only ABE for projects > or = 3 MW)
Ammonia (NH3) Slip	< or = 10 ppmv @ 15% O2		

**For the purposes of this determination, waste gas is a gas produced from the digestion of material excluding municipal sources such as waste water treatment plants, landfills, or any source where siloxane impurities are a concern

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.16*

Last Update: 6/1/2006

Ag Stationary Compression-Ignited IC Engine

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		1. Electrification 2. NG Fired Engine to meet 4702 3. LPG/Propane Fired Engine to meet 4702
SOX	Very Low Sulfur Fuel (0.0015% fuel S by weight)		
PM10	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit less than or equal to 0.149 g-PM10/bhp-hr if triggers BACT for PM10)	PM Filter	1. Electrification 2. NG Fired Engine to meet 4702 3. LPG/Propane Fired Engine to meet 4702
NOX	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)	SCR	1. Electrification 2. NG Fired Engine to meet 4702 3. LPG/Propane Fired Engine to meet 4702
CO	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		1. Electrification 2. NG Fired Engine to meet 4702 3. LPG/Propane Fired Engine to meet 4702

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.17*

Last Update: 6/1/2006

Ag Transportable Compression-Ignited IC Engine

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		LPG/Propane Fired Engine to meet 4702 (either lean, or rich w/3-way catalyst)
SOX	Very Low Sulfur Fuel (0.0015% fuel S by weight)		
PM10	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		LPG/Propane Fired Engine
NOX	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		LPG/Propane Fired Engine to meet 4702 (either lean, or rich w/3-way catalyst)
CO	The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range. (Example: a 200 bhp engine proposed in 2007 shall emit =< 0.149 g-PM10/bhp-hr if triggers BACT for PM10)		LPG/Propane Fired Engine to meet 4702 (either lean, or rich w/3-way catalyst)

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.3.18*

Last Update: 4/27/2015

Landfill Gas-Fired Lean Burn IC Engine < 500 bhp, Stationary

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	0.20 g/bhp-hr (equivalent to 41 ppmvd @ 15% O2 as CH4)	0.14 g/bhp-hr (equivalent to 30 ppmv @ 15% O2 as CH4)(Selective Non-Catalytic Reduction (SNCR) system)	1. Fuel Cell (= or < 0.02 lb/MW-hr ≈ 2.0 ppmv VOC @ 15% O2 as CH4) 2. Microturbine
NOx	0.65 g/bhp-hr (equivalent to 50 ppmvd @ 15% O2)	0.15 g/bhp-hr (Selective Catalytic Reduction (SCR), or Selective Non-Catalytic Reduction (SNCR) system)	1. Fuel Cell (= or < 0.05 lb/MW-hr ≈ 1.5 ppmv @ 15% O2) 2. Microturbine (9 ppmv @ 15 % O2)

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.1*

Last Update: 10/1/2002

Gas Turbine - = or > 47 MMBtu/hr, Variable Load, Without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	0.007 lb/MMBtu, (Oxidation catalyst and natural gas fuel, or equal)		
SOx	PUC quality natural gas fuel		
PM10	0.015 lb/MMBtu and less than 5% opacity at lube oil vents, (Air inlet filter cooler, lube oil vent coalescer and natural gas fuel, or equal)		
NOx	8 ppmvd @ 15% O2 (Steady State) and 12 ppmv @ 15% O2 (Transitional State) (High-Temperature SCR, or equal)		
CO	0.024 lb/MMBtu, (Oxidation catalyst and natural gas fuel, or equal)		

** Achieved in Practice entries updated 10/01/02 based on operation of S-1792-5-X.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.2*

Last Update: 10/1/2002

Gas Turbine - = or > 50 MW, Uniform Load, with Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	2.0 ppmv @ 15% O2	1.5 ppmv @ 15% O2	
SOx	1. PUC-regulated natural gas or 2. Non-PUC-regulated gas with no more that 0.75 grains S/100 dscf, or equal.		
PM10	Air inlet filter cooler, lube oil vent coalescer and natural gas fuel, or equal		
NOx	2.5 ppmv dry @ 15% O2 (1-hr average, excluding startup and shutdown), (Selective catalytic reduction, or equal)	2.0 ppmv dry @ 15% O2 (1-hr average, excluding startup and shutdown), (Selective catalytic reduction, or equal)	
CO	6.0 ppmv @ 15% O2 (Oxidation catalyst, or equal)	4.0 ppmv @ 15% O2 (Oxidation catalyst, or equal)	

** Applicability lowered to > 50 MW pursuant to CARB Guidance for Permitting Electrical Generation Technologies. Change effective 10/1/02. Corrected error in applicability to read 50 MW not 50 MMBtu/hr effective 4/1/03.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.3*

Last Update: 1/18/2005

Gas Turbine with Heat Recovery (= > 3 MW and = < 10 MW)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	2.0 ppmv @ 15% O2, based on a three-hour average (catalytic oxidation or equal)		
SOx	PUC-regulated natural gas, LPG, or non-PUC-regulated natural gas with < 0.75 grains-S/100 dscf, or equal		
PM10	air inlet cooler, lube oil vent coalescer, and natural gas fuel		
NOx	2.5 ppmv @ 15% O2, based on a three-hour average (selective catalytic reduction or equal)		
CO	6.0 ppmv @ 15% O2, based on a three-hour average (catalytic oxidation or equal)		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.4*

Last Update: 4/5/2001

Limited Use (< 877 hours per year) Gas Fired Turbine = or < 26 MW, without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	PUC quality natural gas with fuel oil #2 as backup.	1. 90 % control efficiency (SCONOx, or equal). 2. 71% control efficiency (Oxidation catalyst, or equal)	
SOx	PUC quality natural gas.		
PM10	Natural gas, air intake filter, and a maximum lube vent exhaust visible emissions of 0% opacity with either • a lube oil coalescer, • a lube vent high efficiency particulate filter , or • a lube vent routed to the turbine or exhaust for oxidation.		
NOx	42 ppmvd @ 15% O2 (Water injection system, or equal).	1. 2.5 ppmv NOx @ 15% O2 (SCR, SCONOx, or equal). 2. 15 ppmv @ 15% O2 (Dry low NOx Combustors, or equal). 3. 25 ppmv @ 15% O2 (Dry low NOx Combustors, or equal).	
CO	PUC quality natural gas.	1. 90 % control efficiency (SCONOx, or equal). 2. 71% control efficiency (Oxidation catalyst, or equal)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.6*

Last Update: 9/30/2009

Gas Turbine - > 10 MW and < 50 MW, Uniform Load, with Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	2 ppmvd @ 15% O2 (as methane) over a 1 hour averaging period	None	None
SOx	PUC regulated natural gas or non-PUC regulated gas with no more than 0.75 gr S/100 scf`	None	None
PM10	Air inlet cooler/filter, lube oil vent coelescer and either PUC regulated natural gas or non-PUC regulated gas with no more than 0.75 gr S/100 scf	None	None
NOx	2 ppmvd @ 15% O2 over a 1 hour averaging period with reducing agent injection commencing at the time the catalyst reaches the temperature determined by the District to be appropriate	None	None
CO	4 ppmvd @ 15% over a 1 hour averaging period	None	None

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.7*

Last Update: 10/1/2002

Gas Turbine - = or > 50 MW , Uniform Load, without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	2.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).	1. 0.6 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst). 2. 1.3 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).	
SOx	PUC-regulated natural gas, LPG, or Non-PUC-regulated gas with = or < 0.75 grains S/100 dscf.		
PM10	Air inlet cooler/filter, lube oil vent coalescer (or equal) and either PUC regulated natural gas, LPG, or non-PUC-regulated gas with < 0.75 grains S/100 dscf.		
NOx	5.0 ppmvd** @ 15% O2, based on a three-hour average (high temp SCR, or equal).	1. 2.5 ppmvd** @ 15% O2, based on a one-hour average (high temperature Selective Catalytic Reduction (SCR), or equal). 2. 3.0 ppmvd** @ 15% O2, based on a three-hour average (high temp SCR, or equal).	
CO	6.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.8*

Last Update: 10/1/2002

Gas Turbine - < 50 MW, Uniform Load, Without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	2.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).	1. 90% control efficiency (SCONOx system, or equal).	
SOx	PUC-regulated natural gas, LPG, or Non-PUC-regulated gas with < 0.75 grains S/100 dscf, or equal.		
PM10	Air inlet cooler/filter, lube oil vent coalescer (or equal) and either PUC-regulated natural gas, LPG, or non-PUC-regulated gas with < 0.75 grains S/100 dscf.		
NOx	5.0 ppmvd** @ 15% O2, based on a three-hour average (high temp SCR, or equal).	1. 2.5 ppmv @ 15% O2 (SCONOx system, or equal). 2. 3.0 ppmv (Dry Low-NOx combustors and SCR, or equal)	
CO	6.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).	90% control efficiency (SCONOx system, or equal).	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.9*

Last Update: 10/1/2002

Gas Turbine - < 3 MW, Uniform Load, With or Without Heat Recovery

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	5.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).		
SOx	PUC-regulated natural gas, LPG, or Non-PUC-regulated gas with < 0.75 grains S/100 dscf, or equal.		
PM10	Air inlet cooler/filter, lube oil vent coalescer (or equal) and either PUC-regulated natural gas, LPG, or non-PUC-regulated gas with < 0.75 grains S/100 dscf.		
NOx	9.0 ppmvd** @ 15% O2, based on a three-hour average (high temp SCR, SCR, or equal).		
CO	10.0 ppmvd** @ 15% O2, based on a three-hour average (Oxidation catalyst, or equal).		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.10*

Last Update: 4/20/2020

Oxy-Fuel Combustor Powering a Steam Turbine, Power Output < 3 MW, without Heat Recovery, Uniform and Variable Load, Research Facility *RESCINDED*

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.4.11*

Last Update: 3/5/2015

Diesel-Fired Emergency Standby Turbine

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Ultra Low Sulfur Diesel		IC Engine (Latest EPA Tier Certification level for applicable horsepower range)
NOx	0.88 lb/MMBtu		IC Engine (Latest EPA Tier Certification level for applicable horsepower range)

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