



## Previous GP-5 Vs. New GP-5 Applicability

Previous GP-5	New GP-5
NG-fired engines $\geq 100$ HP to $< 1500$ HP	All size NG-fired engines located at a non-major facility
Glycol Dehydrator	Glycol Dehydrator and associated equipment (excluding re-boiler)
	<ul style="list-style-type: none"><li>- Natural gas-fired simple cycle turbines.</li><li>- Centrifugal compressors.</li><li>- Natural gas fractionation process units (such as De-propanizer, De-ethanizer, De-butanizer).</li><li>- Storage vessels/tanks.</li><li>- Pneumatic controllers.</li><li>- Sweetening Units.</li><li>- Equipment leaks.</li></ul>



## Previous GP-5 vs. New GP-5 Engines

Pollutant	Previous GP-5 Lean-Burn or Rich-Burn Engines ≥100 HP to <1500 HP	New GP-5							Percent Reduction from Previous GP-5
		Lean-Burn			Percent Reduction from Previous GP-5	Rich-Burn			
		≤100 HP	>100 HP to ≤500 HP	>500 HP		≤100 HP	>100 HP to ≤500 HP	>500 HP	
NOx	<b>2.0</b>	2.0	1.0	<b>0.50</b>	<b>75%</b>	2.0	0.25	<b>0.20</b>	<b>90%</b>
CO	<b>2.0</b>	2.0	2.0	<b>47 ppmvd or 93% control</b>	<b>80%</b>	2.0	<b>0.30</b>	<b>0.30</b>	<b>85%</b>
VOC	<b>2.0</b>	-	0.70*	<b>0.25*</b>	<b>87.5%</b>	-	<b>0.20*</b>	<b>0.20*</b>	<b>90%</b>
HCHO	None	-	-	0.05		-	-	<b>2.7 ppmvd or 76% control</b>	

Allowable Emissions Limits for engines in g/bhp-hr or ppmvd corrected to 15% O<sub>2</sub>

\*NMNEHC (as propane excluding HCHO)

Percent reduction for engines > 500 HP



## New GP-5 Turbines

	New GP-5		
Pollutant	Simple Cycle Gas Turbines		
	≥ 1,000 HP to <5,000 HP	≥ 5,000 HP to ≤15,000 HP	>15,000 HP
NOx	25	15	15
CO	25	25	10 ppmvd or 93% control
VOC	9*	9*	5 ppmvd* or 50% control
HCHO	-	-	
PM	0.03 lb/MMBtu	0.03 lb/MMBtu	0.03 lb/MMBtu
Sulfur Content	-	-	-

**Note: Previous GP-5 is not applicable to turbines**

**Allowable Emissions Limits for engines in ppmvd corrected to 15% O<sub>2</sub> unless otherwise indicated**

**\*NMNEHC (as propane excluding HCHO)**

**Percent reduction for Turbines > 15,000 HP**



## Previous GP-5 Vs. New GP-5 Glycol Dehydrators

Previous GP-5	New GP-5
Glycol Dehydrator	Glycol Dehydrators and associated equipment including Gas-Condensate-Glycol (GCG) separators (Flash Tanks)
VOC > 10 tons per year are required to control 85% of VOC emissions.	New large glycol dehydrators are required to comply with the applicable 40 CFR Part 63, Subpart HH, and visible emissions and malodors requirements.
	New small glycol dehydrators which has a total uncontrolled PTE VOC emission rate in excess of 5 tons per year are required to control 95% of VOC emissions, work practice, testing, visible emissions, and malodors requirements.
	New small glycol dehydrators which has a total uncontrolled PTE VOC emission rate equal to or less than 5 tons per year are required to comply with visible emissions, and malodors requirements.