

## SWCAA Test/Tune Guidance for New or Replacement Natural Gas Boilers/Combustion Units

Boiler / Combustion Unit Size (MMBtu/hr)	Emission Limits		Emission Testing Required?	Emission Monitoring Required?	Corrective Action Trigger	Compliance Demonstration
	Target Concentration Limits (ppm)	Tonnage Limit Specified in Permit? (tpy)				
<b>Water heaters only</b> < 0.4 SWCAA 400-070(13)	≤20 NO <sub>x</sub>	No, but include in facility PTE.	None	None	No	None
< 2.0 (Boilers/heaters)	≤12-30 NO <sub>x</sub> * ≤20-50 CO* SWCAA 400-072(4)(b)	Yes. Cumulative with other small equipment	None	Every 12 months from initial tune-up	Yes	Proper Maintenance, Timely Action
≥2.0 – <10.0 (Boilers/heaters)	≤9-20 NO <sub>x</sub> * ≤20-50 CO*	Yes. Unit specific.	Initial and Periodic 5-10 yrs	Every 12 months from initial test	Yes	Reference Test
≥10 - < 50 (Boilers/heaters)	≤9 NO <sub>x</sub> * ≤20 CO*	Yes. Unit specific.	Initial and Periodic 1-7 yrs*	Every 12 months from initial test	Yes	Reference Test
≥ 50 (Boilers/heaters)	≤9 NO <sub>x</sub> * ≤20 CO*	Yes. Unit specific.	Initial and Periodic 1-3 yrs*	Every 12 months from initial test	Yes	Reference Test

\* Depends on specific application

This guidance generally applies to combustion units that have some capability to manipulate, control, or affect the combustion characteristics of the burner. This means some adjustment capability to the combustion air or fuel delivery system (e.g. flow, pressure, mixing device, flue gas recirculation). For the size ranges identified above, there is an expectation that most units will have this capability. Units that do not may not be approvable.