

Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

Date: January 27, 2000
To: Permit Reviewers
From: Tammy Villarreal, Manager, Chemical/Coatings Section
Mark Gibbs, Manager, Mechanical Combustion Section
Subject: Recommended Monitoring for Gas-Fired Heaters and Boilers

This memo provides guidance on typical emission monitoring that is required in permits for fired units such as heaters and boilers. If the firing rate is less than 40 Million British thermal units (MMBtu), there are typically no requirements other than to monitor firing rate. For other units, the typical additional requirements are in the table below. The facility must meet all requirements in all the applicable row(s).

Facility Size	Monitoring Requirements
All	Monitor firing rate
Is greater than 40 MMBtu/hr	Stack sample for nitrogen oxide (NO _x) and carbon monoxide (CO) Continuously monitor hydrogen sulfide (H ₂ S) in fuel gas, if used Pipeline natural gas does not require H ₂ S continuous monitoring
Firing rate is greater than 100 MMBtu/hr or NO _x emissions is greater than 50 tons per year (either triggers requirement)	NO _x and CO - continuous emissions monitor (CEMS) or predictive emission monitoring system (PEMS)
Any with any NO _x add-on control (such as selective catalytic reduction)	NO _x CEMS or PEMS Continuous monitoring for any slip (such as ammonia) Direct monitoring is not required

All reviews are still performed on a case-by-case basis. Monitoring requirements may be more restrictive based on factors such as compliance history, estimated emissions, and federal applicability concerns. There also may be a case made for more lenient monitoring based on factors such as the cost to retrofit an existing facility.