

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guideline

Source Category

Source:	Heater - Refinery Process	Revision:	4
		Document #:	94.3.1
Class:	>50 MMBtu/hr Heat Input	Date:	1/14/08

Determination

POLLUTANT	BACT 1. Technologically Feasible/ Cost Effective 2. Achieved in Practice	TYPICAL TECHNOLOGY
POC	1. n/d 2. n/s	1. n/d 2. Good Combustion Practice ^a
NOx	1. n/d 2. 5 ppmv @ 3% O ₂ Dry ^{c,d,e}	1. n/d 2. Selective Catalytic Reduction (SCR) + Low NO _x Burners ^{c,d}
SO₂	1. Natural Gas or Treated Refinery Gas Fuel w/ ≤50 ppmv Hydrogen Sulfide and ≤100 ppmv Total Reduced Sulfur ^a 2. Natural Gas or Treated Refinery Gas Fuel w/ ≤100 ppmv Total Reduced Sulfur ^a	1. Fuel Selection ^a 2. Fuel Selection ^a
CO	1. n/d 2. 10 ppmv @ 3% O ₂ Dry ^{c,d,f}	1. n/d 2. Good Combustion Practice in Conjunction w/ Selective Catalytic Reduction (SCR) System ^{c,d}
PM₁₀	1. n/d 2. Natural Gas or Treated Refinery Gas Fuel ^{a,b}	1. n/d 2. Fuel Selection ^{a,b}
NPOC	1. n/a 2. n/a	1. n/a 2. n/a

References

- a. BAAQMD A #8407
- b. BAAQMD A #30783
- c. ARB BACT Clearinghouse, based on several South Coast AQMD projects. Recommend ammonia slip limit of 10 ppmv at 3% O₂.
- d. Authority to Construct issued for BAAQMD applications 13424 & 13678 for CononcoPhillips Clean Fuels Expansion Project. For 85 MM BTU/hr furnace, the CO limit only applies at firing rates greater than 30 MM BTU/hr.
- e. NO_x determination by Continuous Emission Monitor (3-hour average); or BAAQMD approved equivalent.
- f. CO determination by Continuous Emission Monitor (3-hour average); or BAAQMD approved equivalent.