

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

**Source Category**

<b>Source:</b>	<i>Heater - Refinery Process, Natural or Induced Draft</i>	<b>Revision:</b>	<b>3</b>
		<b>Document #:</b>	<b>94.1.1</b>
<b>Class:</b>	<i>5 MMBtu/hr to &lt;50 MMBtu/hr Heat Input</i>	<b>Date:</b>	<b>08/12/94</b>

**Determination**

<b>POLLUTANT</b>	<b>BACT</b> 1. Technologically Feasible/ Cost Effective 2. Achieved in Practice	<b>TYPICAL TECHNOLOGY</b>
<b>POC</b>	1. n/d 2. n/s	1. n/d 2. Good Combustion Practice <sup>a</sup>
<b>NO<sub>x</sub></b>	1. 10 ppmv @ 3% O <sub>2</sub> Dry <sup>a,b,c,e</sup> 2. 25 ppmv @ 3% O <sub>2</sub> Dry <sup>a,b,e</sup>	1. Selective Catalytic Reduction (SCR) + Low NO <sub>x</sub> Burners <sup>a,b,c</sup> 2. Low NO <sub>x</sub> Burners; or Low NO <sub>x</sub> Burners + Selective Non-Catalytic Reduction (SNCR) <sup>a,d</sup>
<b>SO<sub>2</sub></b>	1. Natural Gas or Treated Refinery Gas Fuel w/ ≤50 ppmv Hydrogen Sulfide and ≤100 ppmv Total Reduced Sulfur <sup>a</sup> 2. Natural Gas or Treated Refinery Gas Fuel w/ ≤100 ppmv Total Reduced Sulfur <sup>a</sup>	1. Fuel Selection <sup>a</sup> 2. Fuel Selection <sup>a</sup>
<b>CO</b>	1. n/d 2. 50 ppmv @ 3% O <sub>2</sub> Dry <sup>a,f</sup>	1. n/d 2. Good Combustion Practice <sup>a</sup>
<b>PM<sub>10</sub></b>	1. n/d 2. Natural Gas or Treated Refinery Gas Fuel <sup>a,b</sup>	1. n/d 2. Fuel Selection <sup>a,b</sup>
<b>NPOC</b>	1. n/a 2. n/a	1. n/a 2. n/a

**References**

- a. BAAQMD
- b. BAAQMD A #30783
- c. BAAQMD A #3318
- d. BAAQMD A #8407
- e. NO<sub>x</sub> determination by BAAQMD Source Test Method ST-13A or B (average of three 30-minute sampling runs); or Continuous Emission Monitor (3-hour average); or BAAQMD approved equivalent.

*f. CO determination by BAAQMD Source Test Method ST-6 (average of three 30 minute sampling runs); or Continuous Emission Monitor (3-hour average); or BAAQMD approved equivalent.*