# BEST AVAILABLE CONTROL TECHNOLOGY (BACT) GUIDELINE 2.2

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| **Equipment Category:** | External Combustion Rated >0.400 MMBtu/hr to <5.000 MMBtu/hr |
| **Revision:** | 1.3 |
| **Date:** | September 28, 2021 |

| Pollutant | BACT Requirement | BACT Technology | Performance Standard | AIP/TF |
|---|---|---|---|---|
| $NO_x$ | 1 | Low-$NO_x$ burner, flue gas recirculation | 20 ppmvd @ 3% $O_2$ (>0.400 MMBtu/hr to <1.000 MMBtu/hr units) | AIP |
| | | | 12 ppmvd @ 3% $O_2$ (≥1.000 MMBtu/hr to ≤2.000 MMBtu/hr units) | AIP |
| | | | 9 ppmvd @ 3% $O_2$ (>2.000 MMBtu/hr to <5.000 MMBtu/hr units) | AIP |
| ROC | 1 | Good combustion practices | N/A | AIP |
| CO | 1 | Low-$NO_x$ burner, flue gas recirculation | 100 ppmvd @ 3% $O_2$ | AIP |
| $SO_x$, PM, $PM_{10}$, $PM_{2.5}$ | 1.a | PUC quality natural gas | ≤ 80 ppmv total sulfur and ≤ 4 ppmv $H_2S$ | AIP |
| | 1.b | Produced gas treated using a continuously operating sulfur removal system | Case-by-case | AIP |
| | 2 | Fuel Gas Sulfur Plan | N/A | AIP |

Notes:

1. $NO_x$ means oxides of nitrogen (as $NO_2$) and $SO_x$ means oxides of sulfur (as $SO_2$).
2. External combustion is defined as any combustion equipment permitted to be fired with liquid and/or gaseous and/or solid fossil fuel, which either (a) is used to produce steam or to heat water; or (b) transfers heat from combustion gases to water or process streams. This equipment category excludes oilfield steam generators.
3. AIP means Achieved in Practice. TF means Technologically Feasible.
4. BACT is the most stringent control technique for the emissions unit and equipment category that is either achieved in practice or technologically feasible/cost effective.
5. BACT determinations are subject to periodic updates without advanced notice.