

Clear the Air

2019 Regulations

SJVAPCD Rule 4305

BOILERS, STEAM GENERATORS AND PROCESS HEATERS - PHASE 2

| Category | Operated on Gaseous Fuel | Operated on Liquid Fuel |
|--|------------------------------|------------------------------|
| For all units, except box or cabin type units and vertical cylindrical process heaters | 30 ppmv or 0.036 lb/MMBtu | 40 ppmv or 0.052 lb/MMBtu |
| For box or cabin type units, and vertical cylindrical process heaters | 147 ppmv or 0.18 lb/MMBtu | 155 ppmv or 0.2 lb/MMBtu |

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BOILERS, STEAM GENERATORS AND PROCESS HEATERS - PHASE 3

| Category | Operated on Gaseous Fuel | | | Operated on Liquid Fuel | |
|---|--------------------------|-----------------|-----------------|-------------------------|-----------------|
| | NOx Limit | | CO Limit (ppmv) | NOx Limit | CO Limit (ppmv) |
| | Standard Option | Enhanced Option | | | |
| A ≤20 MMBtu/hr except C, D, E, F, G, H and I | 15PPMV | 9PPMV | 400 | 40PPMV | 400 |
| B <20 MMBtu/hr except C, D, E, F, G, H and I | 9PPMV | 6PPMV | 400 | 40PPMV | 400 |
| C Oilfield Steam Generators | 15PPMV | No option | 400 | 40PPMV | 400 |
| D Refineries <5 MMBtu/hr up to 65MMBtu/hr | 30PPMV | No option | 400 | 40PPMV | 400 |
| E Refineries <65 MMBtu/hr up to 110MMBtu/hr | 25PPMV | No option | 400 | 40PPMV | 400 |
| F Refineries <110 MMBTU/hr | 5PPMV | No option | 400 | 40PPMV | 400 |
| G Load-following | 15PPMV | 9PPMV | 400 | 40PPMV | 400 |
| H Permit operated annual heat input of 9 billion Btu/year to 30 billion Btu/year | 30PPMV | No option | 400 | 40PPMV | 400 |
| I Permit operated burners ≤5 MMBtu/hr but the total of all unit burners is <5 MMBtu/hr Note, products of combustion must not come in contact with the products of combustion on any other burner | 30PPMV | No option | 400 | 40PPMV | 400 |

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SJVAPCD Rule 4307

BOILERS, STEAM GENERATORS AND PROCESS HEATERS - 2.0 MMBTU/HR TO 5.0 MMBTU/HR
 (RULE 4307 CERTIFIED UNITS)

| Type of Unit | NOx Limit | CO Limit | |
|--|-----------|-----------------|---|
| Operated on Gaseous Fuel | 30PPMV | 400 | |
| Operated on Liquid Fuel | 40PPMV | 400 | |
| I Atmospheric | | | |
| Type of Unit | NOx Limit | CO Limit (ppmv) | Effective Date |
| A A new or replacement unit that is not included in Section I. B. | 12PPMV | 400 | Upon Installation of a new or replacement unit on and after January 1, 2010 |
| B A new or replacement unit that is one of the following: 1. used at a school 2. in an oilfield or refinery 3. a glycol reboiler 4. heat input <1.8 billion Btu but >5 billion Btu per calendar year | 12PPMV | 400 | Upon Installation of a new or replacement unit on and after January 1, 2016 |
| II Non-Atmospheric | | | |
| Type of Unit | NOx Limit | CO Limit (ppmv) | Effective Date |
| A A new or replacement unit that is not included in Section II. B. | 9PPMV | 400 | Upon Installation of a new or replacement unit on and after January 1, 2010 |
| B A new or replacement unit that is one of the following: 1. used at a school 2. in an oilfield or refinery 3. a glycol reboiler 4. heat input <1.8 billion Btu but >5.0 billion Btu per calendar year | 9PPMV | 400 | Upon Installation of a new or replacement unit on and after January 1, 2016 |

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BOILERS, STEAM GENERATORS AND PROCESS HEATERS - 0.075 MMBTU/HR TO LESS THAN 2.0 MMBTU/HR
 (CERTIFIED WATER HEATERS)

| Type and Size of Unit, in MMBtu/hr | NOx Limit (at 3% stack gas oxygen by volume on a dry basis) | |
|---|--|----------------------------------|
| | PUC Gas | Non PUC Gas or Liquid |
| | lb/MMBtu of heat input (ppmv) | lb/MMBtu of heat input (ppmv) |
| Units greater than or equal to 0.075 but less than or equal to 0.4, except as specified below | 0.024 (20) | 0.093 (77) |
| Units greater than 0.4 but less than 2.0, except as specified below | 0.024 (20) | 0.036 (30) |
| Instantaneous water heaters greater than or equal to 0.075 but less than or equal to 0.4 | 0.024 (20) | 0.093 (77) |
| Instantaneous water heaters greater than 0.4 but less than 2.0 | 0.024 (20) | 0.036 (30) |
| Pool heaters greater than or equal to 0.075 but less than or equal to 0.4 | 0.068 (55) | 0.093 (77) |
| Pool heaters greater than 0.4 but less than 2.0 | 0.024 (20) | 0.036 (30) |

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DRYERS, DEHYDRATORS AND OVENS

| Process Description | NOx Limit (in ppmv) | | CO Limit (in ppmv) | |
|--|---------------------|-------------------|--------------------|-------------------|
| | Gaseous Fuel Fired | Liquid Fuel Fired | Gaseous Fuel Fired | Liquid Fuel Fired |
| Asphalt/Concrete Plants | 4.3 | 12.0 | 42 | 64 |
| Milk, Cheese, and Dairy Processing < 20 MMBtu/h | 3.5 | 3.5 | 42 | 42 |
| Milk, Cheese, and Dairy Processing ≥ 20 MMBtu/hr | 5.3 | 5.3 | 42 | 42 |
| Other processes not described above | 4.3 | 4.3 | 42 | 42 |