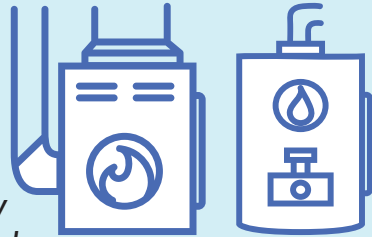


# Air District Appliance Rules – Furnaces and Water Heaters

**Proposed amendments to two Air District rules will support improvements to regional air quality and public health –**

**Regulation 9, Rule 4: Nitrogen Oxides from Fan Type Residential Central Furnaces, and Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters.**

*The proposed rule changes will not apply to gas appliances used for cooking, such as gas stoves.*



If adopted, the rule amendments will affect Bay Area households that use natural gas appliances – roughly about 2/3 of all households currently – and will:

- Improve overall regional air quality from the outdoor venting of these appliances

- Prevent up to 85 premature deaths per year
- Lower PM<sub>2.5</sub> exposure, particularly in communities of color
- Save up to \$890M per year in reduced health care costs and lost work due to PM<sub>2.5</sub> exposure:
  - About 60% of benefits can be achieved through elimination of NO<sub>x</sub> and secondary PM<sub>2.5</sub> emissions by switching to zero-NO<sub>x</sub> appliances.
  - About 40% of benefits can be achieved through additional elimination of primary PM<sub>2.5</sub> emissions by switching to fully zero-emission appliances.
  - Currently, the only zero-NO<sub>x</sub> appliances available are electric appliances.

## Health impacts from short- and long-term exposure

### NO<sub>x</sub>

- Coughing, wheezing, difficulty breathing
- Asthma
- Increased susceptibility to respiratory infections



### PM<sub>2.5</sub>

- Asthma and other respiratory conditions
- Neurological disease
- Heart attack
- Stroke
- Lung cancer
- Premature death



## Compliance Timeline

*The rule amendments would apply only to new appliances, and do not mandate retrofitting of existing appliances.*

**2027** – only zero NO<sub>x</sub> water heaters can be sold or installed in the Bay Area.

**2029** – only zero NO<sub>x</sub> furnaces can be sold or installed in the Bay Area.

**2031** – only zero NO<sub>x</sub> large commercial water heaters can be sold or installed in the Bay Area.



For more information:  
[baaqmd.gov/building-appliances](http://baaqmd.gov/building-appliances)



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

[BAAQMD.gov](http://BAAQMD.gov)