Federal and State Ambient Air Quality Standards

The U.S. Environmental Protection Agency (EPA) sets *National Ambient Air Quality Standards (NAAQS)* to protect public health and welfare from harmful effects of certain commonly occurring pollutants known as "criteria" pollutants. The EPA requires that states monitor the ambient air to determine attainment of the NAAQS and regulate industries that emit these and other pollutants.

Two types of standards have been established. **Primary standards** set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. **Secondary standards** set limits to protect public welfare which includes protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.

Ambient Air Quality Standards

Air Pollutant	Hawaii Standard	Federal Primary Standard	Federal Secondary Standard
Carbon Monoxide			
1-hour average	9 ppm	35 ppm	None
8-hour average	4.4 ppm	9 ppm	None
Lead			
3-month average	1.5 $\mu g/m^3$ (calendar quarter)	0.15 $\mu g/m^3$ (running 3-month)	Same as primary
Nitrogen Dioxide			
1-hour average	None	100 ppb	None
Annual average	0.04 ppm	0.053 ppm	Same as primary
Particulate Matter (PM_{10})			
24-hour block average	150 $\mu g/m^3$	150 $\mu g/m^3$	Same as primary
Annual average	50 $\mu g/m^3$	None	None
Particulate Matter ($PM_{2.5}$)			
24-hour block average	None	35 $\mu g/m^3$	Same as primary
Annual average	None	15 $\mu g/m^3$	Same as primary
Ozone			
8-hour rolling average	0.08 ppm	0.075 ppm	Same as primary
Sulfur Dioxide			
1-hour average	None	75 ppb	None
3-hour block average	0.5 ppm	-	0.5 ppm
24-hour block average	0.14 ppm	0.14 ppm	-
Annual average	0.03 ppm	0.03 ppm	-
Hydrogen Sulfide			
1-hour average	25 ppb	None	None

ppb = parts per billion by volume
ppm = parts per million by volume
$\mu g/m^3$ = micrograms per cubic meter of air