

Exhibit M: Response to 1.4.3-1**Updated Table 4.3-1: State and Federal Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standard | Federal Standard | |
|-------------------|-------------------------|--|--|--|
| | | | Primary | Secondary |
| O ₃ | 1 hour | 0.09 <u>parts per million</u> (ppm) (180 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) | Not Applicable (NA) | NA |
| | 8 hours | 0.070 ppm (137 $\mu\text{g}/\text{m}^3$) | 0.075 ppm (147 $\mu\text{g}/\text{m}^3$) | 0.075 ppm (147 $\mu\text{g}/\text{m}^3$) |
| PM ₁₀ | 24 hours | 50 $\mu\text{g}/\text{m}^3$ | 150 $\mu\text{g}/\text{m}^3$ | 150 $\mu\text{g}/\text{m}^3$ |
| | Annual arithmetic mean | 20 $\mu\text{g}/\text{m}^3$ | 50 $\mu\text{g}/\text{m}^3$ NA | 50 $\mu\text{g}/\text{m}^3$ NA |
| PM _{2.5} | 24 hours | NA | 35 $\mu\text{g}/\text{m}^3$ | 35 $\mu\text{g}/\text{m}^3$ |
| | Annual arithmetic mean | 12 $\mu\text{g}/\text{m}^3$ | 15 $\mu\text{g}/\text{m}^3$ | 15 $\mu\text{g}/\text{m}^3$ |
| CO | 1 hour | 20 ppm (23 milligrams per cubic meter [mg/m^3]) | 35 ppm (40 mg/m^3) | NA |
| | 8 hours | 9.0 ppm (10 mg/m^3) | 9 ppm (10 mg/m^3) | NA |
| | 8 hours (Lake Tahoe) | 6 ppm (7 mg/m^3) | NA | NA |
| NO ₂ | 1 hour | 0.18 ppm (339 $\mu\text{g}/\text{m}^3$) | 100 parts per billion (ppb) | NA |
| | Annual arithmetic mean | 0.030 ppm (57 $\mu\text{g}/\text{m}^3$) | 0.053 ppm (100 $\mu\text{g}/\text{m}^3$) | 0.053 ppm (100 $\mu\text{g}/\text{m}^3$) |
| SO ₂ | 1 hour | 0.25 ppm (655 $\mu\text{g}/\text{m}^3$) | 75 ppb | NA |
| | 3 hours | NA | NA | 0.5 ppm (1,300 $\mu\text{g}/\text{m}^3$) |
| | 24 hours | 0.04 ppm (105 $\mu\text{g}/\text{m}^3$) | 0.14 ppm (365 $\mu\text{g}/\text{m}^3$) | NA |
| | Annual arithmetic mean | NA | 0.030 ppm (80 $\mu\text{g}/\text{m}^3$) | NA |

| Pollutant | Averaging Time | California Standard | Federal Standard | |
|-----------|------------------|-----------------------|------------------------|------------------------|
| | | | Primary | Secondary |
| Lead | 30 days | 1.5 µg/m ³ | NA | NA |
| | Rolling 3 months | NA | 0.15 µg/m ³ | 0.15 µg/m ³ |
| | Quarterly | NA | 1.5 µg/m ³ | 1.5 µg/m ³ |
| Sulfates | 24 hours | 25 µg/m ³ | NA | NA |

Table Notes:

1. California standards for O₃, PM₁₀, PM_{2.5}, CO (except Lake Tahoe), NO₂, SO₂ (one hour and 24 hours), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Title 17, Section 70200 of the California Code of Regulations.
2. NAAQS (other than O₃, particulate matter [PM], and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth-highest eight-hour concentration in a year—averaged over three years—is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current federal policies.
3. The concentration is expressed first in the units used to promulgate the standard. The equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; “ppm” in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the health of the public.
6. National Secondary Standards: The levels of air quality necessary to protect public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used, but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
12. The CARB has identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects established. These actions allow for implementation of control measures at levels below the ambient concentrations specified for these pollutants. Note that the 1-hour national standard is in

units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

13. National lead standard, rolling three-month average; the final rule was signed October 15, 2008. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

9. National lead standard, rolling three month average; the final rule was signed October 15, 2008.