Sec. 22a-174-24. Connecticut primary and secondary standards

(a) Definitions.

(1) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

(2) "Reference method" means a method of sampling and analyzing for an air pollutant, as described in Title 40 Code of Federal Regulations part 50, as from time to time may be amended.

(3) "Equivalent method" means any method of sampling and analyzing for an air pollutant that has been designated in accordance with Title 40 of Federal Regulations part 53, as from time to time may be amended.

(4) "Acceptable method" means a reference method, an equivalent method, or any other method determined by the Commissioner.

(b) The concentration of pollutants in the ambient air, as measured by an acceptable method, shall conform with levels specified below as the applicable air quality standards for these substances throughout Connecticut. No person shall operate a source, which has a significant impact on air quality as defined in subsection 22a-174-3(c), in such a manner as to cause or contribute to a violation of an ambient air quality standard listed in section 22a-174-24.

(c) Reference conditions. All measurements of air quality are corrected to a reference temperature of twenty (20) degrees C. and to a reference pressure of 760 millimeters of mercury (1,013.2 millibars or 29.92 inches of mercury).

(d) Connecticut primary ambient air quality standards for sulfur oxides (sulfur dioxide). The Connecticut primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide, are:

(1) 80 micrograms per cubic meter (0.03 ppm) - annual arithmetic mean.

(2) 365 micrograms per cubic meter (0.14 ppm) - maximum 24-hour concentration not to be exceeded more than once per year.

(e) Connecticut secondary ambient air quality standards for sulfur oxides (sulfur dioxide). The Connecticut secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide, is:

(1) 1,300 micrograms per cubic meter (0.5 ppm) - maximum 3-hour concentration not to be exceeded more than once per year.

(f) Connecticut primary ambient air quality standards for particulate matter.

(1) The level of the Connecticut primary 24-hour ambient air quality standard for particulate matter, measured as PM_{10}, is 150 micrograms per cubic meter 24-hour average concentration. The standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than one.

(2) The level of the Connecticut primary annual standard for particulate matter, measured as PM_{10}, is 50 micrograms per cubic meter, annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than 50 micrograms per cubic meter.

(g) Connecticut secondary ambient air quality standards for particulate matter.

(1) The level of the Connecticut secondary 24-hour ambient air quality standard for particulate matter, measured as PM_{10}, is 150 micrograms per cubic meter 24-hour average concentration. The standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, as determined in accordance with Appendix K of Title 40 Code of Federal Regulations Part 50 revised as of July 1, 1989, is equal to or less than one.

(2) The level of the Connecticut secondary annual standard for particulate matter, measured as PM_{10}, is 50 micrograms per cubic meter, annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of Title 40 Code of Federal

Regulations Part 50 revised as of July 1, 1989, is equal to or less than 50 micrograms per cubic meter.

(h) Connecticut primary and secondary ambient air quality standards for carbon monoxide. The Connecticut primary and secondary ambient air quality standards for carbon monoxide are:

(1) 10 milligrams per cubic meter (9 ppm) - maximum 8-hour concentration not to be exceeded more than once per year.

(2) 40 milligrams per cubic meter (35 ppm) - maximum 1-hour concentration not to be exceeded more than once per year.

(i) Connecticut primary and secondary ambient air quality standards for photochemical oxidants. The Connecticut primary and secondary ambient air quality standard for photochemical oxidants, measured and corrected for interferences due to nitrogen oxides and sulfur dioxide is: 235 micrograms per cubic meter (0.12 ppm) - maximum 1-hour concentration not to be exceeded more than once per year.

(j) Connecticut primary and secondary ambient air quality standards for hydrocarbons. The hydrocarbons standard is for use as a guide in achieving oxidant standards. The Connecticut primary and secondary ambient air quality standard for hydrocarbons is: 160 micrograms per cubic meter (0.24 ppm) - maximum 3-hour concentration (6 am to 9 am) not to be exceeded more than once per year.

(k) Connecticut primary and secondary ambient air quality standard for nitrogen dioxide. The Connecticut primary and secondary ambient air quality standard for nitrogen dioxide is : 100 micrograms per cubic meter (0.05 ppm) - annual arithmetic mean.

(l) Connecticut primary and secondary ambient air standards for lead. The Connecticut primary and secondary ambient air quality standard for lead and its compounds, measured as elemental lead is: 1.5 micrograms per cubic meter, maximum arithmetic mean averaged over three consecutive calendar months.

(m) Connecticut primary ambient air quality standard for dioxin emissions.

The Connecticut primary ambient air quality standard for dioxin emissions is 1.0 picograms per cubic meter annual average. For the purposes of determining compliance with this standard the Commissioner may use a concentration of 7.0 picograms per cubic meter 8-hour average. Within three years of the effective date of this subsection, the Commissioner shall refer this standard for review and comment by the hazardous air pollutant advisory panel.