

Pollutant	Averaging Period	PSD Significant Emission Rates (SERs) ^a (tons/year)	Significant Monitoring Concentrations (SMCs) (µg/m ³)	Class II Significant Impact Levels (SILs) (µg/m ³)	PSD Increments (µg/m ³)		National Ambient Air Quality Standards (NAAQS) ^b				
					Class		Primary		Secondary		Form (i.e., How Standard is Applied)
					I	II	(µg/m ³)	(ppm)	(µg/m ³)	(ppm)	
PM ₁₀	Annual	15 ^c	--	1	4	17	50 ^d	-- ^d	50 ^d	-- ^d	Annual arithmetic mean, averaged over 3 years ^d
	24-hour		10	5	8	30	150	--	150	--	Not to be exceeded more than once per year on average over 3 years
PM _{2.5}	Annual	10 of PM _{2.5} 40 of SO ₂	--	0.13 ^f	1	4	9.0	--	15.0	--	Annual arithmetic mean from single or multiple monitors, averaged over 3 years
	24-hour	40 of NO _x ^e	0 ^g	1.2 ^f	2	9	35	--	35	--	98th percentile of concentrations in a given year, averaged over 3 years
SO ₂ ^{h,i}	Annual	40	--	1	2	20	(80)	0.03	(26)	0.010	Annual arithmetic mean, averaged over 3 years
	24-hour		13	5	5	91	(365)	0.14	--	--	Not to be exceeded more than once per calendar year
	3-hour		--	25	25	512	--	--	(1,300)	0.5	Not to be exceeded more than once per calendar year
	1-hour		-- ^j	-- ^j	-- ^j	-- ^j	(196)	0.075	--	--	3-year average of the 99 th percentile of the annual distribution of daily maximum 1-hour concentrations
NO ₂	Annual	40 of NO _x	14	1	2.5	25	(100)	0.053	(100)	0.053	Annual arithmetic mean
	1-hour		-- ^j	-- ^j	-- ^j	-- ^j	(188)	0.1	--	--	3-year average of the 98 th percentile of the annual distribution of daily maximum 1-hour concentrations
Ozone	8-hour	40 of VOC or NO _x	VOC or NO _x emissions increase > 100 tpy	1 ppb	--	--	(137)	0.070	(137)	0.070	3-year average of annual 4th highest daily maximum 8-hour concentrations
CO	8-hour	100	575	500	--	--	(10,000)	9	--	--	Not to be exceeded more than once per calendar year
	1-hour		--	2,000	--	--	(40,000)	35	--	--	Not to be exceeded more than once per calendar year
Lead ^k	Rolling 3-month avg.	0.6	0.1	--	--	--	0.15	--	0.15	--	Maximum arithmetic mean

a. Lower SERs apply in certain nonattainment areas for nonattainment new source review. Sources within 10 km of Class I areas can trigger PSD if impacts exceed 1 µg/m³ (24-hour average).

b. The NAAQS are expressed in the Code of Federal Regulations in µg/m³ for particulate matter and lead and in ppm or ppb for other pollutants. For reference, any standard expressed in ppm or ppb has its corresponding equivalent standard at 25°F and 760 mm Hg shown in parentheses. The equivalent standards were calculated by multiplying the concentration in ppm by the molecular weight divided by 0.02447.

c. In addition to PM₁₀, there is a PSD SER for Total Suspended Particulate (TSP) of 25 tpy.

d. EPA revoked the PM₁₀ annual standard effective December 18, 2006. See 71 FR 61144 for additional details.

e. NO_x emissions regulated unless demonstrated not to be a PM_{2.5} precursor. Ammonia and VOC emissions are presumed not to be precursors. See 73 FR 28321 for additional details.

f. EPA allows states to use alternate SILs if properly justified, but does not allow a value higher than 0.3 µg/m³ (Annual) or 1.2 µg/m³ (24-hour). For more information see the "Supplement to Guidance for Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program" memo from Richard Wayland and Scott Mathias on April 30, 2024.

g. On January 22, 2013, the U.S. DC Court of Appeals vacated the PM_{2.5} SMC of 4 µg/m³.

h. The existing annual and 24-hour SO₂ NAAQS will be revoked one year after the effective date in areas with a designated status for the revised SO₂ NAAQS, per 40 CFR §50.4(e).

i. EPA issued memoranda explaining that permit applicants and authorities may use a demonstration of compliance with the 1-hr primary SO₂ NAAQS as an alternative demonstration approach to demonstrate compliance with both the 3-hr and annual secondary SO₂ NAAQS.

j. PSD Increments, Significant Impact Levels, and Significant Monitoring Concentration levels for the 1-hour SO₂ and NO₂ standards have not yet been proposed. However, interim Significant Impact Levels of 3 ppb (~7.8 µg/m³) for SO₂ and 4 ppb (~7.5 µg/m³) for NO₂ were provided by EPA in general guidance implementation memos dated August 23, 2010 and June 28, 2010, respectively.

k. The calendar quarter standard of 1.5 µg/m³ is no longer in effect for areas designated on November 18, 2010 or November 8, 2011 but will remain in effect until implementation plans to attain or maintain the 2008 standard are approved for areas designated nonattainment for the 1978 standard.

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					Class		Primary		Secondary		Form (i.e., How Standard is Applied)
					I	II	(µg/m ³)	(ppm)	(µg/m ³)	(ppm)	
Total Reduced Sulfur (including H ₂ S)	1-hr	10	10	--	--	--	--	--	--	--	--
Reduced Sulfur Compounds (including H ₂ S)	1-hr	10	10	--	--	--	--	--	--	--	--
Hydrogen Sulfide	1-hr	10	0.2	--	--	--	--	--	--	--	--
CFC's and Halons	--	-- ^m	--	--	--	--	--	--	--	--	--
Municipal Solid Waste Landfill Emissions	--	50 (as nonmethane organic compounds)	--	--	--	--	--	--	--	--	--
Municipal Waste Combustor Acid Gases	--	40 (as sulfur dioxide and hydrogen chloride)	--	--	--	--	--	--	--	--	--
Municipal Waste Combustor Metals	--	15 (as particulate matter)	--	--	--	--	--	--	--	--	--
Municipal Waste Combustor Organics	--	3.5x10 ⁻⁶ (as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	--	--	--	--	--	--	--	--	--
Sulfuric Acid Mist	--	7	--	--	--	--	--	--	--	--	--
Fluorides ⁿ	24-hr	3	0.25	--	--	--	--	--	--	--	--
Greenhouse Gases (GHG)	--	75,000 ^o (as CO ₂ e)	--	--	--	--	--	--	--	--	--

l. Although removed from PSD applicability by the 1990 CAAA, some states may still regulate mercury, beryllium, vinyl chloride, asbestos, arsenic, benzene, radionuclides and hydrogen fluoride under their PSD programs.

m. PSD Significant Emission Rates have not been established for CFC and Halon compounds. Generally, any increase in emissions triggers PSD for these pollutants.

n. Only fluoride compounds other than hydrogen fluoride are PSD pollutants, since hydrogen fluoride was removed from PSD applicability by the 1990 CAAA.

o. As provided under "subject to regulation" definitions in 40 CFR 51.166(b)(48) and 52.21(b)(49). Unlike other pollutant SERs, a GHG SER is not listed in 40 CFR 51.166(b)(23) or 52.21(b)(23).