

Texas Commission on Environmental Quality
Fact Sheet - Prevention of Significant Deterioration (PSD) and Nonattainment Significant Emissions

PSD Major Source Thresholds [40 CFR § 51.166(b)(1) and 30 TAC § 116.164(a)(1)]

- *Named Source.* One of the listed stationary source categories with a PTE of 100 tpy or more of a regulated pollutant, including fugitive emissions.
 - Coal cleaning plants (with thermal dryers);
 - Kraft pulp mills;
 - Portland cement plants;
 - Primary zinc smelters;
 - Iron and steel mills;
 - Primary aluminum ore reduction plants;
 - Primary copper smelters;
 - Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - Hydrofluoric, sulfuric, or nitric acid plants;
 - Petroleum refineries;
 - Lime plants;
 - Phosphate rock processing plants;
 - Coke oven batteries;
 - Sulfur recovery plants;
 - Carbon black plants (furnace process);
 - Primary lead smelters;
 - Fuel conversion plants;
 - Sintering plants;
 - Secondary metal production plants;
 - Chemical process plants—Not included, facilities that produce ethanol by natural fermentation included in the NAICS codes 325193 or 312140;
 - Fossil-fuel boilers (or combinations) totaling > 250 million BTUs per hour heat input;
 - Petroleum storage and transfer units with total storage capacity above 300,000 barrels;
 - Taconite ore processing plants;
 - Glass fiber processing plants;
 - Charcoal production plants;
 - Fossil fuel-fired steam electric plants > 250 million BTUs per hour heat input.
- *Un-Named Source.* Any stationary source with a PTE of 250 tpy or more of a regulated pollutant. Include fugitive emissions in the tpy emission rate at an un-named source which, as of August 7, 1980, is regulated under NSPS or NESHAP.
- A *minor source* is a named or un-named source with emissions less than major source amounts.
- A source that is major for any regulated pollutant is major for all regulated pollutants.

PSD Major Source SER [40 CFR § 51.166(b)(23) and 30 TAC § 116.164(a)(2)]

- PSD review is required at an existing minor source, if the project increase meets either the named or un-named major source threshold by itself, or
- At an existing major source, if the net emissions increase equals or exceeds the SER.

Criteria Pollutant	Major Source Modification SER (tpy)
CO	100
NO _x	40
SO ₂	40
Ozone as VOC	40
Ozone as NO _x	40
PM	25
PM ₁₀ (includes condensable emissions)	15
PM _{2.5} (includes condensable emissions)	10
Pb	0.6

Non Criteria Pollutant	Major Source Modification SER (tpy)
H ₂ S	10
TRS	10
Reduced sulfur compounds (including H ₂ S)	10
H ₂ SO ₄	7
Fluoride excluding HF	3
GHGs	Greater than zero as GHG and 75,000 as CO ₂ e
Any regulated pollutant not listed in 40 CFR § 51.166(b)(23)(i)	Greater than zero

Other	Measured as	Major Source Modification SER (tpy)
Municipal waste combustor organics	total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans	3.5×10^6
Municipal waste combustor metals	Particulate matter	15
Municipal waste combustor acid gases	SO ₂ and hydrogen chloride	40
Municipal solid waste landfills	Nonmethane organic compounds	50
Any new or modified major source within 10 kilometers of a Class I area	Any criteria pollutant	Any rate or net increase with a 24-hour impact of $\geq 1 \mu\text{g}/\text{m}^3$

Nonattainment Major Source Emission Rates [40 CFR §§ 51.165 (a)(1)(iv)(A), 51.165 (a)(1)(x)(A), 51.165(a)(9), 51.165(a)(10)]

Nonattainment areas, counties, and classifications. Refer to the [Texas State Implementation Plan](#) website. Nonattainment areas, emission limits, and offsets are pollutant specific. Applies to an existing minor source in a nonattainment area if the project is a major source by itself and the emissions increase (no netting allowed) equals or exceeds the major source limits for the applicable classification. Note that when multiple nonattainment classifications for the same pollutant apply in a nonattainment area, the most stringent nonattainment classification is used for air permitting.

Criteria Pollutant	Nonattainment Area Classification	County or Area	Nonattainment Major Source (tpy)	Nonattainment Major Source Modification (tpy)	Offset Ratio Minimum
Ozone as VOC or NO _x	Moderate	DFW(10 counties) (2008 standard)	100	40	1.15 to 1
Ozone as VOC or NO _x	Moderate	HGB (8 counties) (2008 standard)	100	40	1.15 to 1
PM ₁₀	Moderate	City of El Paso	100	15	1.00 to 1
Pb	Nonattainment	Portion of Collin County	100	0.6	1.00 to 1
SO ₂	Nonattainment	Portions of Freestone, Anderson, Rusk, Panola, and Titus Counties (2010 standard)	100	40	1.00 to 1

Pollutant and Acronym Key

BTU = British thermal unit

CFR = Code of Federal Regulations

CO = carbon monoxide

CO₂e = carbon dioxide equivalent

DFW = Dallas-Fort Worth

GHGs = greenhouse gases

HF = hydrogen fluoride

HGB = Houston-Galveston-Brazoria

H₂S = hydrogen sulfide

H₂SO₄ = sulfuric acid

µg/m³ = microgram per cubic meter

NAICS = North American Industry Classification System

NO₂ = nitrogen dioxide

NO_x = oxides of nitrogen. Criteria pollutant and PM_{2.5} precursor evaluated as NO₂ and ozone precursor evaluated as NO_x.

NESHAP = National Emission Standards for Hazardous Air Pollutants

NSPS = New Source Performance Standards

Ozone = criteria pollutant evaluated based on emissions of NO_x and VOC

Pb = lead

PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less (includes condensable emissions)

PM_{2.5} = particulate matter with an aerodynamic diameter of 2.5 microns or less (includes condensable emissions)

PSD = Prevention of Significant Deterioration

PTE = potential to emit

SER = significant emission rate

SO₂ = sulfur dioxide. Criteria pollutant and PM_{2.5} precursor.

TAC = Texas Administrative Code

tpy = tons per year

TRS = total reduced sulfur

VOC = volatile organic compounds