

# Major Source Determination

A **carbon black** plant has equipment with the following Emissions in tons/year:

<b>Operation</b>	<b>NOx</b>	<b>VOC</b>	<b>PM10</b>	<b>CO</b>
Main Process	35	98	80	240
Boiler	10	1	2	5
Gasoline Dispensing		2		

The facility receives some raw materials from a facility with the following emissions:

<b>Process</b>	<b>NOx</b>	<b>VOC</b>	<b>PM10</b>	<b>CO</b>
Raw Material Plant	10	10	10	10

The facility is located in an area that is:

- **Attainment for NO<sub>2</sub>**
- **Attainment for CO**
- **Marginal non-attainment for Ozone**
- **Serious non-attainment for PM<sub>10</sub>**

Is this a major stationary source for PSD? If so for what pollutants?

Is this a major stationary source for NSR? If so for what pollutants?

## NSR “Major Source” Thresholds for NSR for Ozone, CO and PM Depend on Non-attainment Classification

Area Classification		Major Source PTE (tpy)
<b>Ozone</b>	<b>Marginal</b>	<b>100</b> (precursors i.e. NOx and VOC)
Ozone	Moderate	100
Ozone	Serious	50
Ozone	Severe	25
Ozone	Extreme	10
CO	Moderate	100
CO	Serious	50
PM10	Moderate	100
<b>PM10</b>	<b>Serious</b>	<b>70</b>

# PSD Source Categories with 100 tpy Major Source Thresholds

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1. Coal cleaning plants (with thermal dryers)
2. Kraft pulp mills
3. Portland cement plants
4. Primary zinc smelters
5. Iron and steel mills
6. Primary aluminum ore reduction plants
7. Primary copper smelters
8. Municipal incinerators capable of charging more than 250 tons of refuse per day
9. Hydrofluoric acid plants
10. Sulfuric acid plants
11. Nitric acid plants
12. Petroleum refineries
13. Lime plants
14. Phosphate rock processing plants
15. Coke oven batteries
16. Sulfur recovery plants
17. **Carbon black plants (furnace process)**
18. Primary lead smelters
19. Fuel conversion plants
20. Sintering plants
21. Secondary metal production plants
22. Chemical process plants
23. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
24. Taconite ore processing plants
25. Glass fiber processing plants
26. Charcoal production plants
27. Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units (BTU) per hour heat input
28. Fossil-fuel boilers (or combination thereof) totaling more than 250 million BTU/ hour heat input

# Significant Emission Rates PSD (tpy)

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• <b>Carbon monoxide</b>	<b>100</b>
• <b>Nitrogen oxides</b>	<b>40</b>
• Sulfur dioxide	40
• Particulate matter (PM/PM-10)	25/15
• Ozone (VOC)	40 (of VOCs)
• Lead	0.6
• Asbestos	0.007
• Fluorides	3
• Sulfuric acid mist	7
• Hydrogen sulfide (H <sub>2</sub> S)	10
• Total Reduced sulfur compounds (including H <sub>2</sub> S)	10

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Gasoline Dispensing		2		

The facility receives some raw materials from a facility with the following emissions:

Process	NOx	VOC	PM10	CO
Raw Material Plant	10	10	10	10
<b>Total Project</b>	<b>55</b>	<b>111</b>	<b>92</b>	<b>255</b>

The facility is located in an area that is:

- **Attainment for NO<sub>2</sub>** (100 / 40 tons/year)
- **Attainment for CO** (100 / 100 tons/year)
- **Marginal non-attainment for Ozone** (100 tons/year – Precursors NO<sub>x</sub> & VOC)
- **Serious non-attainment for PM<sub>10</sub>** (70 tons/year)

Is this a major stationary source for PSD? **(Yes)** If so for what pollutants? **(CO & NO<sub>2</sub>)**

Is this a major stationary source for NSR? **(Yes)** If so for what pollutants? **(VOC & PM<sub>10</sub>)**