

## 1.04 PREVENTION OF SIGNIFICANT DETERIORATION APPROVAL

- ❑ *Question: Am I planning on installing new equipment or modifying, replacing or moving existing equipment that will be a source of air emissions?*

### Why do I need this approval?

To prevent significant deterioration of ambient air quality, the Prevention of Significant Deterioration (PSD) approval seeks to limit the amount of air pollutants released by a new or modified facility proposing to locate in an area that meets national ambient air quality standards (NAAQS). NAAQS have been established by EPA for the following air pollutants: particulate matter (PM<sub>10</sub>), sulfur oxides, carbon monoxide, ozone, nitrogen dioxide, and lead. With the exception of ozone levels in portions of the state, Maryland does not have any other significant air pollution problems.

The PSD approval is needed for:

A. New air pollution sources that have the potential to emit at least 100 tons per year of any regulated pollutant, if the proposed source belongs to one of 26 named PSD source categories listed below (see COMAR 26.11.01.01B(37)):

- Fossil fuel-fired steam electric plants of more than 250 million btu/hr heat input
- Municipal incinerators capable of charging more than 250 tons of refuse per day
- Fossil fuel boilers (or combination of them) totaling more than 250 million btu/hr heat input
- Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
- Coal cleaning plants with thermal dryers
- Kraft pulp mills
- Portland cement plants
- Primary zinc smelters
- Primary aluminum ore reduction plants
- Iron and steel mill plants
- Primary copper smelters
- Hydrofluoric, sulfuric, and nitric acid plants
- Petroleum refineries
- Lime plants
- Phosphate rock processing plants
- Coke oven batteries
- Sulphur recovery plants
- Primary lead smelters
- Carbon black plants (furnace process)
- Fuel conversion plants
- Secondary metal production plants
- Sintering plants
- Chemical process plants
- Taconite ore processing plants
- Glass fiber processing plants
- Charcoal production plants

B. New air pollution sources that have the potential to emit at least 250 tons per year of a regulated pollutant from unlisted source categories.

C. Major modifications to an existing major facility which will result in a net emissions increase above the following levels:

Pollutant	Tons per Year
Carbon Monoxide	100
Nitrogen Oxide	40
Sulfur Dioxide	40
Tsp/Pm-10	20/15
Volatile Organic Compounds (VOC)	40
Lead	0.6

### What laws or regulations give MDE the legal authority to issue this approval?

FEDERAL: Clean Air Act, Part C, 42 USC sec. 7470 et seq., 40 CFR Part 52.21 1994 Edition.

STATE: Environment Article, Title 2, Subtitle 4; COMAR 26.11.02.09 and 12; COMAR 26.11.06.14.

### What is the process to get this approval?

Applicants for PSD approval are strongly urged to solicit input from the Department prior to beginning the application process. The approval can piggyback on the Permit to Construct public review process or go a separate route which is more involved than the one discussed here.

- 1) The Department receives the application and reviews it for completeness. The applicant is notified of any deficiencies.
- 2) The Department invoices the applicant for the application fee.
- 3) The Department examines the application to determine compliance with all applicable federal and state regulations and makes a preliminary determination.
- 4) The Department publishes its preliminary determination and solicits comments from EPA, neighboring states, and the public.
- 5) The Department officially responds to all comments received and makes a final determination to issue or deny the approval.

### Before I apply for this approval, do I need to get any approvals from the local or federal government?

Applicants should check with county zoning authorities to see whether they need zoning approval.

**Is this approval directly related or contingent on other approvals?**

A permit to construct is required in addition to the PSD approval prior to construction. It is preferred that the applicant submit an application for a permit to construct when submitting a request for PSD approval. For any source having the potential to adversely impact a federally-protected Class I area \*, the Department will notify and involve the Federal Land Manager who is the designated authority for protecting these areas.

**Are there any other requirements?**

PRE-APPROVAL: The PSD application requires the following:

- 1) One year of preconstruction air quality monitoring, including meteorological data for the relevant area, if suitable data are not currently available;
- 2) Emission control plans that include the best available control technology;
- 3) Ambient impact analysis based on air quality dispersion modeling and;
- 4) Additional impact analyses on nearby federally-designated Class I areas \*. This assessment includes possible adverse effects on soil, vegetation, or visibility.

\* Class I areas in this region include Dolly Sods and Otter Creek Wildernesses in West Virginia, Shenandoah National Park in Virginia, and Brigantine National Wildlife Refuge in New Jersey.

POST-APPROVAL: Continued approval depends on meeting federally-enforceable emission limits and the best available control technology requirements.

**How long should I expect it to take to get this approval once I submit a complete application?**

14 months

**Once I get this approval, how long will it last?**

This is a one-time approval.

**How much will this approval cost?**

\$20,200 which becomes part of the permit to construct application fee for the project for which the PSD approval is sought.

**Who do I contact with additional questions?**

William Paul or Justin Hsu  
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