

PSD APPLICATION CHECKLIST

Submittals for a PSD Permit Application

I. Forms – The following forms can be found on the WDNR website and should be included with the application. Each of these forms may be submitted through the online system.

- 4530-100 Facility Identification
- 4530-101 Facility Plot Plan
- 4530-102 Source and Site Descriptions
- 4530-103 Stack Identification
- 4530-134 Signature Page
- 4530-126 & -128 Emission Unit Emission Summary
- 4530-127 & -129 Facility Emission Summary
- 4530-### All other applicable forms for each emission unit and control device which is part of the project
- All other forms related to your facility's specific functions and/or processes

Note: There is no specific form for a BACT analysis, please attach separately.

II. Narrative

- A descriptive narrative of the project. This should include, but is not limited to:
 - A detailed description of what is involved in the project.
 - How the project ties into the facility.
 - The effects of the project on facility production, economics, and the environment.

A narrative is often the easiest way to explain the proposed construction or modification at the facility and may improve the department's understanding of the project.

III. Net Emission Increases

- All associated emission increases were included in the calculated net emissions increases for each pollutant associated with this project.
- Emission increases at any support facilities and/or facilities under common control were included in the project's net emissions increase.
- All increases from any emission unit which was debottlenecked or may realize an increase in utilization as a result of the proposed project have been included.
- If project netting, all associated emission decreases were included in the calculated net emissions increase for each pollutant.
- Documentation supporting emission calculations are included with the application.
- All sources of emission data, including emission factors, have been identified. (ie. stack test data, EPA emission factors, site specific research, etc.)
- Rationale for including or not including any support facilities, facilities under common control, and operations which may experience an increase in utilization, is given.

IV. BACT Analysis

- Documentation supporting a “top down” BACT analysis for each unit that is a source of a pollutant which has a significant net emission increase. If multiple pollutants are of concern, a separate BACT analysis should be done for each. This evaluation should include each of the following 5 steps.
 - Identify all control technologies – include all add-on controls and source reduction techniques; consider combining controls. Also identify the source of your information and include justification as to why it’s considered as a control technology
 - Eliminate technically infeasible options – clearly demonstrate technical infeasibility by physical, chemical, or engineering principles. (Cost may not be considered in this step)
 - Rank the remaining control technologies by control effectiveness. This should include an evaluation of:
 - Percent of pollutant removed
 - Expected emission rate (TPY)
 - Energy impacts
 - Environmental impacts
 - Economic impacts
- During this analysis, there should be consideration for combining control technologies and source reduction techniques to yield lower emission rates. (Provide the methodology for estimating costs and benefits and any other applicable explanation for determining factors contributing to the rank.)
- Evaluate the most effective controls – determine feasibility of each technology starting with the most effective first; once a technology is found to be feasible, no further analysis is needed.
- Select BACT – the most effective control technology not eliminated in the step above shall be proposed as BACT. Submit to the department the proposed control technology or method, an emission limitation and compliance demonstration methods. Proposed emission limitations should include an averaging time, a justification for any proposed averaging time longer than one hour, and a proposed compliance demonstration method.
- A visible emissions BACT analysis – This type of analysis is required when any pollutant that may impact visible emissions is subject to BACT.

V. Air Quality Analysis

- Perform a modeling analysis of the proposed source and submit documentation of the analysis, including correspondence with USEPA and approved modeling protocol, along with the electronic modeling files.

With modeling analyses, please include:

- Scaled plot plan showing location of buildings; location of stacks; heights of all buildings; fenced or inaccessible boundary; significant topography
- Stack parameters: emissions (MTE rates, PTE rates, desired rates, actual rates); heights; inside diameters; normal and maximum exit velocity; normal and maximum temperature
- Large scale map showing streets, landmarks, topography and nearby sources

VI. Additional Impacts Analysis

- Growth Analysis
- Soils and Vegetation Analysis
- Class II Visibility Impact Analysis
- Notification has been sent to all federal land managers (FLM), including tribal nations with Class I areas, who may be impacted by the project and all application materials were provided to the FLM with this notification.

VII. Class I Area Impact Analysis

- Class I Increment Analysis (if applicable)
- Class I AQRV Analysis