How to Avoid Common Mistakes of Section (7) and (8) Permit Applications

Monitoring and Modeling

An applicant for a PSD permit is required to conduct an air quality analysis of the ambient impacts associated with the construction and operation of the proposed new source or modification to demonstrate that new emissions emitted from the proposed major stationary source or major modification , in conjunction with other applicable emissions from existing sources (including secondary emissions), will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard (NAAQS) or PSD increment. Generally the air quality analysis will involve an assessment of existing air quality which may include ambient monitoring data and predictions using air dispersion modeling of ambient concentrations that will result from the applicant's proposed project and future growth associated with the project. The Air Pollution Control Program's modeling unit should be consulted prior to starting any modeling exercises.

Once an applicant is ready to start modeling for a particular project, the **modeling protocol** should be submitted to the APCP for approval. At least 90 days should be allowed for evaluation and approval of the modeling protocol.

One of the more common overlooked issues in modeling exercises is the determination of **pre-construction monitoring** requirements. Preliminary modeling should be performed to if project impacts exceed pre-construction monitoring levels. Pre-construction monitoring is required for at least one year, which would delay permit issuance if discovered late in the process. The APCP may exempt the applicant from this requirement if either (1) the highest modeled concentration for the applicable averaging time caused by the proposed significant (net) emissions increase, or (2) the modeled concentration of other on-property sources is less than the prescribed significant monitoring value in 40 CFR Part 52.21(I)(8)(I). If a potential threat to the NAAQS is identified by the modeling predictions, the continuous monitoring data may be required, even if the project meets the requirements for this exemption. The applicant should establish the need for an exemption from monitoring requirements as soon as possible through discussion with the APCP.

If pre-application air quality monitoring is required, submit a monitoring plan for review and approval before actual monitoring begins. At least 30 days should be allowed for the evaluation of any pre-application modeling. Perform at least one year (representing at least the 12-month period immediately preceding the PSD application) of continuous ambient monitoring data for any criteria pollutant proposed to be emitted in significant amounts. Less than one year of data may be acceptable if a complete and adequate analysis can be accomplished with the resulting data. In no cases should the data be collected over a timeframe shorter than four months. (The APCP could require air quality monitoring data for noncriteria pollutants in certain cases.) Specifically, if monitoring is required for the pre-cursors for ozone please allow 30 days for monitoring set-up. Ozone monitoring must start at the start of the ozone season, which is April 1st of any given year. A full year of ozone monitoring is required.

As an alternative, the applicant can supply data from an existing monitoring network. If these concentrations meet EPA requirements for representativeness, then an exemption from pre-construction monitoring may be granted. Data from state monitors can be obtained from the APCP.

Another issue that frequently causes delay in major permit reviews is the late request of modeling **inventory**. Gathering the required modeling inventory for a given source takes considerable manpower and work hours. Submitting a formal inventory request at least 6 months prior to submittal of an application is highly recommended to avoid any delays in receiving this information.

Documentation on emission factors and calculations
Including emission calculations and emission factor citations with the permit application helps us review your project. Without such citations and calculations, we will have to reproduce the work that you have done to ensure that the facility will meet state and federal requirements. Reproducing your work takes time on our part, which can delay the issuance of your permit.

Make sure the permit application is complete and accurate. Read and follow the directions that accompany each application form. Don't forget to include the appropriate permit fee amount. Type or complete the application in blue or black ink. A responsible official must sign the application in ink. Be sure to include information for all of the equipment that you plan to install. Not only is it important to tell us what you will install, but also it is very important that you install the equipment that you specified in your permit application. By avoiding "as built" differences, you can avoid potential permit violations and having to wait for a permit modification. If your plans change after you have submitted an application, you have an obligation to submit updated information to APCP. You may also be required to conduct a computer modeling analysis of the impacts your project will have on the ambient air.

Class I Areas
Contact the Federal Land Manager for all Class I areas that are affected by the construction or modification. The following is a list of the Class I areas in Missouri and surrounding states:

State	Area	Managing Agency
Missouri	Mingo	Fish and Wildlife Services
Missouri	Hercules Glade	Forest Service
Arkansas	Upper Buffalo	Forest Service