

## **What Does a Good Construction Permit Application Look Like? What are Some Things to Avoid in a Permit Application?**

Why is this important? The amount of time we spend on the application is affected by the information we receive on a permit application. The more question we have to ask, the more time we need to spend working on the application. Most of what I will share are not specifically required, but their inclusion will allow us to progress faster.

1. Are all the proper forms filled out? (Signature page, Form 2.0s, etc.) For Form 2.0, if the information is elsewhere on the application (i.e. emissions calculations), then it does not need to be included in the actual form.
2. Anything that is time sensitive, please put them near the beginning of the application. (e.g. in a cover letter). Specifically, these include preconstruction waivers or requested permit deadlines. If the facility wants to pay the filing fee by credit card, please mention this at the beginning and we can send the facility a link for credit card payment.
3. If confidential reviews are requested, must have two (2) separate applications. One confidential version and one public version where the confidential information has been redacted. (Alana will address this more in her section)
4. Please provide the excel spreadsheet instead of just the pdf file of the calculations
  - We have to verify everything in the calculations and it is sometimes hard for us to duplicate the calculations without the formula within the cells of the excel file.
5. Please include supporting evidence for everything, especially the values used to calculate emissions.
  - Control efficiencies (For those equipment without default values, or equipment where you are using values other than default.)
  - Capture efficiencies (Can you claim 100%?) If the facility cannot claim 100% capture, what is the value? Provide the design of the capture device (e.g. is it a hood, is it completely enclosed, is it in a building, and etc.).
  - Source of emission factors (AP-42, stack testing, etc.)

- If using stack testing results and the test has not been approved by our program, please include a copy of the test report.
  - Basis for calling projects separate if the projects occur in a short time frame.
  - Basis for calling facilities that have separate physical locations the same installation.
6. Please calculate the project emissions.
- For minor sources, that means PTE or Post-Project PTE minus Pre-Project PTE emissions. For major sources, that means a PTE, or Post-Project PTE minus Baseline Actual Emissions (BAE), or Projected Actual Emissions (PAE) minus BAE calculations.
  - Things to watch out for when calculating PTE-BAE or PAE-BAE emissions.
    - Make sure that the emission factors you use for both PTE and BAE are the same unless there has been changes that would lead to a change in emission factor. (e.g. change in the fuel type). If you have results from a new stack test, but the process has not changed since the baseline period, you cannot use the stack test results for PTE and another source, such as AP-42, for the BAE.
    - If there is a decrease in EF, that is not enough. A PTE-BAE calculation still has to be performed.
7. Don't forget to assign emission point/emission unit ID.
- Remember there is a distinction between emission units and emission points. When you assign emission unit IDs, each individual equipment should be assigned a separate ID number. When you assign emission point IDs, you can assign a single ID number for multiple equipment that emits at the same point.
  - Remember to assign unique numbers for you emission unit/emission point IDs. If the ID number has been used in the past, please don't change the ID. Don't assigned the same ID numbers if it already has been used for another unit/point. Please make sure that the ID number in the EIQ, the operating permit, and the construction permit match.
8. Don't forget about the HAPs Screening Model Action Levels (SMAL). For many HAPs, the SMAL is less than the major source level of 10 tpy.

9. For emission units that the facility deem to have “insignificant” emissions, we prefer to have calculated values instead of the just using the word “insignificant.” Whether an emission rate is “insignificant” depends on the type of pollutants. For example, the SMAL for formaldehyde is 2.0 tpy, but for dioxin/furans is  $6 \times 10^{-7}$  tpy. An emission rate of 0.1 tpy may not be significant for formaldehyde, but it is significant for dioxins/furans. Also, how do we prove that an emission unit has insignificant emissions, if we don’t calculate it? We can probably accept a unit as “insignificant” if it is fairly obvious (i.e. storage tanks).
10. Don’t forget federal and state rule applicability. Tell us whether a MACT, NESHAP, or a Missouri State Rule applies. Some MACT applicability depends on whether the equipment or the product belongs under a certain category and sometimes that can be difficult to determine.
11. Tell us whether the project affects any downstream equipment (i.e. whether it debottlenecks a process) and if not, why?
12. Tell us why you are modifying your process or adding the equipment?
13. Don’t forget the process flow diagram. You can only understand so much from written text.
14. Indicate how many equipment is involved in a process, not just a group name. (i.e. not just a mixing process, but how many mixers are actually used).
15. If you repeat something in the application, make sure they match up. This can include numbers such as MHDR, emission factors, etc., but can also include things such as the purpose behind the application.