Policy for Potential-to-Potential Netting Under Rule 13

Abstract

The following will outline a policy to allow for potential-to-potential (PtP) emissions netting under 45CSR13. The purpose of PtP netting under 45CSR13 is to allow proposed modifications at existing facilities to be reviewed as a Class 1 or Class 2 Administrative Update (A/U) when the net increase of the proposed modification - taking into account other creditable and enforceable decreases in potential emissions at the facility - is below zero or below the modification threshold, respectively.

This policy only addresses changes to the applicability of modifications to various review classifications and does not address the applicability of new constructions or have any effect on the permit determination process.

Authority

§45-13-5.1 states that: “No person shall cause, suffer, allow or permit the . . . modification . . . of any stationary source to be commenced without . . . obtaining a permit to . . . modify . . . the stationary source as required in this rule.” §45-13-2.17 defines a modification as “any physical change in or change in the method of operation of any existing stationary source” which results in an emissions increase of thresholds given under 2.17a and 2.17b.

As “emissions” and “increase” are not defined under 45CSR13, it is within DAQ’s discretionary authority to interpret the language of the rule to provide for a system of PtP netting with respect to criteria pollutants and aggregate Hazardous Air Pollutants (HAPs). For the same reason, it is also within the DAQ’s discretionary authority to exclude Toxic Air Pollutant (TAP) PtP netting within 45CSR13.

The result of the above discretionary reading of 45CSR13 is to allow existing sources to propose modifications and associated emission increases that, when taking into account other creditable and enforceable decreases in potential emissions at the facility, would “net out” of a full modification review process and be eligible for the appropriate A/U process dependent on what the final net emissions were calculated to be.

This policy would not limit the DAQ’s discretion given under §45-13-4.1a that allows the disqualification of a permitting action from the A/U process.

Procedure

Under this policy, a modification’s applicability to the Class 1 A/U, Class 2 A/U, and modification classification would be reviewed according to the “net potential-to-emit (PTE) increase” associated with the proposed physical change or change in the method of operation.
The procedure for calculating the net potential emissions increase is the difference between the proposed PTE increases and the proposed PTE decreases on a per-pollutant basis associated with a particular modification. The PTE increases and decreases shall both be calculated using a baseline of the emission unit’s PTE or allowable emissions, whichever is lower, and a future PTE as based on future permitted emission levels. All emissions shall be calculated and compared on both a maximum pound per hour and an annual in tons per year (TPY) basis. No credit may be taken for any emissions which were out of compliance with an emission limit in effect at the time the application is submitted. In effect, the net PTE increase will equal the difference between the post and pre-modification facility-wide PTE.

Further rules governing PtP netting under 45CSR13 are as follows:

- Hourly PTE shall be based on maximum hourly potential (on an appropriately averaged basis) and not as annual PTE averaged over 8,760 hours per year. All annual emissions shall be calculated on a rolling annual basis.

- All sources that are utilized to reduce emissions in the above calculations must have a verifiable record of having been on-site and operated within the 12 month period previous to the submission date of the application to make enforceable the reduction associated with the source.

- In most cases, PTE reductions shall be made federally enforceable at the time of permit issuance. However, on a case-by-case basis at the discretion of the DAQ, the permit may specify sunset times for the units used for reductions. This will most likely take place in replacement situations where a lower-polluting emission unit will be used to replace a higher-polluting emission unit. In no case shall a combination of units be allowed to operate concurrently that would result in a net PTE in excess of that which was used in determining review applicability.

- PtP netting is only affected by source or individual emission unit applicability to other state or federal rules only in as much as the requirements therein, in the judgement of the DAQ, make the permitting process too complex for the shorter time frame of the A/U process or reasonably warrant public notice. In these situations, the DAQ could exercise its right under §45-13-4.1a to require a full modification review or a Class 2 A/U, respectively.

- DAQ is not mandating equivalency determinations between emission units but is reserving the right to on a case-by-case basis.

Example

Big K Coal has a coal preparation plant consisting of both a grand-fathered processing plant and a (non-general) permitted train loadout. The train loadout was constructed without a stoker coal bypass conveying system that was part of the application and was permitted. Big K now wants to increase the throughput of the train loadout from 500 to 1,000 TPH and from 1,000,000 to 5,000,000
TPY. This change will increase the hourly PTE by 10 lb/hr and annual PTE of the facility by 30 TPY. Under our previous interpretation of 45CSR13, we would have required a full modification process for this permitting action.

Under the new PtP netting guidelines, the company proposes to remove the stoker coal bypass circuit (for a PTE reduction of 10 lb/hr and 5 TPY) and two crushers from the grand-fathered processing plant (for a PTE reduction of 7 lb/hr and 30 TPY) which will result in a total hourly PTE reduction of 17 lb/hr and a reduction in annual PTE of 35 TPY. They have requested that this action be reviewed as a Class 1 A/U as, when combined with the requested increase in throughout, it results in a net PTE reduction of 7 lb/hr and 5 TPY. We disagree, however, noting that the stoker coal bypass circuit was never constructed and therefore is not allowed to be used as a reduction in PTE. With the bypass circuit removed, the net PTE is increased by 3 lb/hr and 0 TPY.

Based on this increase, we state that while the action is not eligible for a Class 1 A/U (due to the net hourly PTE increase), it may be reviewed as a Class 2 A/U. We internally make the decision that the Subpart Y applicability to the units increased in capacity does not represent a level of complexity that would warrant a full modification process.