



SC DEPARTMENT *of* **ENVIRONMENTAL SERVICES**

MEMORANDUM

TO: **BAQ Air Permitting Division**

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DATE: **May 5, 2020**

SUBJECT: **Streamlining Multiple Applicable Requirements on the same Emissions Unit**

In general, the Bureau intends to implement the guidance contained in the March 5, 1996, EPA White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program (EPA White Paper No. 2) when streamlining Title V permit requirements. A source may propose in its Title V permit application to streamline more than one applicable requirement into a single permit condition. The overall objective would be to establish the most stringent permit limit that will assure compliance with all related applicable requirements for an emission unit. An applicant requesting to streamline requirements should provide the information stated in EPA White Paper No. 2, Section II(A)(2)(a). Streamlining may be incorporated at permit renewal or through the Title V significant modification process.

The following definitions will be used in this guidance:

A Streamlined requirement is the most stringent permit limit that will assure compliance with all related applicable requirements for an emission unit.

Subsumed requirements are those applicable requirements which remain in effect but are considered to be streamlined under a more stringent applicable requirement. Compliance

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with the subsumed requirements is assured through compliance with the over-riding Title V permit streamlined condition for the more stringent applicable requirement.

Hybrid streamlining involves emission limits and/or work practices for an emission unit that are expressed in different forms and/or averaging times to be reduced to a single set of requirements. Hybrid streamlining is more complex and may not always be viable. Refer to White Paper No. 2 for additional information.

Although streamlining may be initiated by either the applicant or the Bureau of Air Quality, it can only be implemented where the permit applicant consents to its use.

A source violating a streamlined emission limitation in its Title V permit may be subject to enforcement action for violation of one (or more) of the subsumed applicable emission limits.

For a detailed discussion of streamlining requirements, see the EPA's "White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program" (March 5, 1996).

Emission Limits: Multiple emission limits may be streamlined into one limit. The permit's statement of basis shall include a discussion on the stringency of the applicable requirements demonstrating why it is appropriate to streamline the limit. Streamlining for emission limits is easily applied when the emission limits to be streamlined/subsumed are all in the same units of measurement (i.e. lb/MMBtu, ppm, etc.), or the units of measurement can be converted to a common format and/or units of measure. Different limit formats do not automatically preclude streamlining; however, it will require a more detailed discussion to demonstrate the streamlined limit is at least as stringent as the subsumed limits.

In determining the stringency of an emission limit the averaging times should be reviewed closely. For example, a 0.5 pound per hour limit averaged over 3 hours, may not necessarily be more stringent than a 0.75 pound per hour limit averaged over an hour. This may be a case where hybrid streamlining could be used by combining the 0.5 lbs/hr with the 1-hour averaging period.

Monitoring/Recordkeeping/Reporting Requirements: Pursuant to EPA White Paper No. 2, section II(A)(2)(e), the monitoring, recordkeeping, and reporting requirements associated with the most stringent emissions requirement are presumed appropriate for use with the streamlined emissions limit. However, this should be evaluated and confirmed.

Incorporating the Streamlined/Subsumed requirements into the Title V permit: The most stringent streamlined applicable requirement and regulatory citation will be listed in the permit followed by the regulatory citations of the subsumed limits in parenthesis and the word "Subsumed". Streamlining can be done at permit renewal or by using the significant

modification procedures for Title V permits. Also as recommended in the EPA White Paper No. 2 a permit shield for the subsumed requirements should be incorporated.

In some cases, more stringent permit requirements than required by existing state or federal rules are included in permits as part of the permit drafting process and comments received from the public. In these cases, the Bureau believes these more stringent requirements can be used to streamline and subsume the less stringent state and federal requirements as long as they are federally enforceable. The Bureau does not at this time intend to allow streamlining of short-term health-based limits.

Department Evaluated Preapproved Streamlining:

Pursuant to the EPA White Paper No. 2 the permitting authority at its option may evaluate multiple permit requirements for a source category and predetermine acceptable streamlining approaches. This does not preclude applicants from proposing their own streamlining or require applicants to use the permit streamlining option.

40 CFR Part 63, Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

PM

The Department has evaluated 40 CFR Part 63, Subpart DDDDD (Boiler MACT) and has determined streamlining opportunities exist with South Carolina Regulation 62.5, Standard No. 1 provided the applicant chooses to comply with the Boiler MACT by meeting the heat input PM emission limits in Tables 1 and 2 as applicable. The highest PM emission limit contained in these tables is 0.44 lb per million Btu per hour (Btu/hr) of heat input. This limit is more stringent than the 0.6 lbs per million Btu/hr heat input in Standard No. 1 for boiler sizes less than 1300 million Btu/hr. For boilers 1300 million Btu/hr and larger heat input the Standard No. 1 PM limit is determined by the equation $E = 57.84P - 0.637$ with P being the boiler heat input and E the allowable emission rate. Setting E to 0.44, the highest allowed PM emission rate in the Boiler MACT, and solving for P indicates that for any boiler up to 2119 million Btu/hr heat input, the Standard No. 1 PM allowable would be greater than or equal to the PM limit in the Boiler MACT, and the Standard No. 1 PM limits could be subsumed by the Boiler MACT without further review and justification.

Opacity

The Opacity limits in Standard No. 1 are 40% for boilers constructed prior to February 11, 1971 and 20% for boilers constructed after that date. Standard No. 1 also allows for limited exceedances of Opacity during soot blowing. The Boiler MACT contains an Opacity operating limit found in Table 4 for certain boilers. In all instances where an opacity operating limit is required the Opacity must be maintained at or below 10% (daily block average) or as

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established during the compliance test for PM or TSM. The department has determined it is acceptable to subsume the Standard No. 1 opacity limits into the boiler MACT operating limit for opacity. The 10% operating limit should be adequate to ensure the 20% or 40% opacity limit as applicable in Standard No. 1 would be achieved over the six- minute averaging period. A facility establishing an opacity operating limit other than 10% during the Boiler MACT compliance test would not be allowed an opacity operating limit greater than 15%. The Department believes the 15% operating limit would provide an adequate margin to account for the differences in the averaging periods of the two standards. For sources subject to the opacity operating limit in the Subpart DDDDD, the opacity requirement in Standard 1 may be subsumed by the operating limit in Subpart DDDDD Table 4. A violation of the operating limit would be presumed a violation of the Standard No. 1 opacity limit.

Another option for streamlining the Opacity limits in Standard No.1 falls under the EPA White Paper No. 2 discussion on subsuming limitations for classes of pollutants provided it can be shown that the streamlined limit will regulate the same set of pollutants to the same extent as the underlying applicable requirements. In this case we are considering PM and opacity as a class of pollutants. This is based on the fact that the EPA (in the Boiler MACT rule) has used an opacity operating limit as a method to demonstrate continuous compliance with an applicable PM limit. Furthermore, facilities in South Carolina have also used site specific data to show a correlation between PM and Opacity. Therefore, for sources that do not directly have an opacity operating limit in Subpart DDDDD to subsume the Standard No. 1 opacity limit, they may provide operating data to show a correlation between PM and opacity. The data should include historical data and test data from the Subpart DDDDD compliance tests. Provided that data shows that the facility would have continuous compliance with the Standard No. 1 opacity limits as long as the facility complies with the PM limit in the Boiler MACT, then the Department will determine it is acceptable to subsume the Standard No. 1 opacity limit into the Boiler MACT PM limit, and compliance with the Boiler MACT will ensure compliance with Standard No. 1 opacity requirements.

The Standard No 1 PM testing requirements may also be subsumed by the Subpart DDDDD testing requirements. This can be in combination with or separate from the streamlining of the PM emission limit. Please see the memo entitled "Streamlining PM Source Testing for requirements contained in Standard No. 1 and 40 CFR 63, subpart DDDDD" dated May 5, 2020 for a detailed explanation on why the Department has determined it is appropriate to subsume the Standard No.1 testing requirements into the Boiler MACT.

Monitoring, Reporting and Recordkeeping required by the Boiler MACT have been determined to be adequate to ensure compliance with subsumed applicable requirements. In cases where a facility is currently required to maintain and operate COMs it is expected that these requirements will continue. For Emission Units where Part 64 Compliance Assurance Monitoring (CAM) would be applicable for the subsumed requirements the Department has determined the monitoring required by the Boiler MACT is sufficient to

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show compliance and Part 64 can be subsumed and considered exempt pursuant to 40 CFR 64.2(b)(1). In all cases the monitoring should be reviewed and a discussion included in the statement of basis on the sufficiency of the streamlined monitoring.

The above notwithstanding. The stringency of a potential streamlined requirement should be verified before implementing a streamlined approach in a particular case.

This document is intended as guidance and should not be relied upon to create any substantive or procedural rights. The Department reserve the right to act in variance with this guidance.

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Record of Revisions	
DATE	Description of Change
August 16, 2016	Initial Draft Memo
May 5, 2020	Final Memo
July 1, 2024	Updated to new agency logo