UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
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ATLANTA, GEORGIA 30303-8960

August 1, 2016

Karen D. Hays
Chief, Air Protection Branch
Georgia Environmental Protection Division
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Dear Ms. Hays:

The Region 4 Office of the U.S. Environmental Protection Agency received the Georgia Environmental Protection Division (EPD) prehearing proposal on July 1, 2016, responding to the EPA's June 12, 2015, final State Implementation Plan (SIP) call and finding of substantial inadequacy with respect to the treatment of excess emissions during periods of startup, shutdown and malfunction (SSM). We have completed our preliminary review and have enclosed our comments for your consideration.

We look forward to continuing to work with you and your staff. If you have any questions, please contact Ms. Lynorae Benjamin, Chief, Air Regulatory Management Section at (404) 562-9040, or have your staff contact Mr. Richard Wong at (404) 562-8726.

Sincerely,

R. Scott Davis
Chief
Air Planning and Implementation Branch

Enclosure

cc: Eric Cornwell, Air Protection Branch, GA EPD
James Boylan, Air Protection Branch, GA EPD
Elizabeth Munsey, Air Protection Branch, GA EPD

The U.S. Environmental Protection Agency Comments on Georgia's Prehearing Submittal Addressing the SSM SIP Call

I. Key Comments

1. **Proposed provision 391-3-1-.02(2)(a)7.(ii)(I)IV.B.** provides that, during periods of startup and shutdown, sources subject to any of the SIP emission limitations identified in paragraph 391-3-1-.02(2)(a)7.(ii) may choose to comply with alternative work practice standards (A) through (M), as applicable, for fuel burning sources and pollution control devices installed to meet applicable emission limitations, as applicable. These standards do not appear to reflect consideration of the seven specific criteria the EPA recommends for developing alternative emission limitations that apply during startup and shutdown. *See* Final SSM SIP Call Rule, 80 FR 33840, 33980/2 (June 12, 2015). Specific concerns the EPA has with this provision include:

    a. These requirements seem to have been developed without consideration of whether sources are capable of complying with otherwise applicable numeric pollutant emission limits. The EPA does not recommend establishing alternative emission limitations for sources that are capable of meeting their existing emission limitations at all times.

    b. These requirements have not been tailored for specific sources or source categories. Control requirements that apply during startup and shutdown must be clearly stated as components of the emission limitation and must meet the applicable level of control required for the type of SIP provision (*e.g.,* be reasonably available control technology for sources located in nonattainment areas). A generically applicable requirement to operate control equipment to the maximum extent possible is not a component of an emission limitation for a specific source category. The EPA recommends that, in order to be approvable (*i.e.,* meet Clean Air Act (CAA) requirements), alternative requirements applicable to a source during startup and shutdown should be narrowly tailored and take into account considerations such as the technological limitations of the specific source category and the control technology that is feasible during startup and shutdown.

2. Related to the comment above, the EPA notes that many of the listed Alternative Work Practice Standards in **391-3-1-.02(2)(a)7.(ii)(I)IV.B.** appear to contain exempt periods, presumably due to technological limitations of the control equipment. Some of the standards also require operation "as specified by the manufacturer," which makes these standards difficult or impractical to enforce and may also result in exempt periods. For example, for units using baghouses, no emission limitation would apply whenever "the inlet gas temperature is below the dew point or the manufacturer's recommended minimum operating temperature." As discussed in the Final SIP Call notice, in accordance with the CAA, some emission limitation must apply at all times. Examples of potential alternative emission limitations that may be applied include use of additional emission controls, use of cleaner burning fuels, and establishment of higher numerical emission limits. (Note that establishment of higher numerical emission limits that are reasonable, appropriate and practically enforceable likely would not be considered SIP backsliding under CAA sections 193 and 110(l) if the alternative emissions limit is added to the SIP at the same time that the exemption from existing SIP emission limitations is removed.)

3. **Proposed Rule 391-3-1-.02(2)(a)7.(ii)(I)(V) (Similar Process Equipment Alternative Work Practice Standards Option)** provides that in lieu of the General Alternative Work Practice Standards Option the owner or operator of a source may follow the startup and shutdown work practice standards in federal rules included in 40 CFR Part 60 or 40 CFR Part 63, provided that the rule contains specific work practice standards for startup and shutdown periods. The provision also notes that those federal rules are adopted by Georgia as 391-3-1-.02(8) and (9).

   While the EPA has recommended that certain federal rules may provide good examples of approaches for appropriate and feasible alternative emission limitations for states to apply during startup and shutdown in a SIP provision (in particular those federal rules that have been revised or newly promulgated since 2008), the SIP must be clear as to what the applicable limitations are for each source at all times. Therefore, this provision should specify which sources or source categories will comply with the startup/shutdown procedures contained in federal rules and which provisions from those federal rules are applicable. The State should also not automatically assume that emission limitation requirements in recent new emissions standards for hazardous air pollutants (NESHAP) and new source performance standards (NSPS) are appropriate for all sources regulated by the SIP. The universe of sources regulated under the federal NSPS and NESHAP programs is not identical to the universe of sources regulated by states for purposes of the national ambient air quality standards (NAAQS). Moreover, the pollutants regulated under the NESHAP (*i.e.,* hazardous air pollutants) are in many cases different than those that would be regulated for purposes of attaining and maintaining the NAAQS, protecting prevention of significant deterioration (PSD) increments, improving visibility and meeting other CAA requirements. *See* Final SSM SIP Call Rule, 80 FR at 33916/2-3. The EPA also recommends giving consideration to the seven specific criteria as appropriate considerations for developing emission limitations in SIP provisions that apply during startup and shutdown. See *id.* at 33980/2.

   To adopt federal rule SSM provisions into the SIP, the EPA suggests that a state's rule include in the SIP provision the relevant language from the federal rule that serves as the applicable limitation during startup/shutdown. Alternatively, the SIP could include reference to the specific applicable provisions. For example, the rule might provide that steam generating units subject to Georgia Rule 391-3-1-.02(2)(b) and (d) shall, during periods of startup and shutdown, comply with the applicable work practice standards specified in Table 3 to 40 CFR 63 Subpart UUUUU. Such provision should also specify the version of the CFR (*i.e.,* the "as of" date).

4. **Proposed rule 391-3-1-.02(2)(a)7.(ii)(I)(VI)** provides that in lieu of options (ii)(I)IV. or (ii)(I)V. above, the owner or operator of a source may comply with a source-specific alternative work practice standard for startup and shutdown periods that has been incorporated into a federally enforceable permit. The EPA notes, however, that emission limits that are specified only in a permit are not in the SIP unless and until they are submitted for approval into the SIP. For example, unless the permit (or its contents) is approved into the SIP, the emission reductions attributable to those limits that are only in the permit cannot be counted towards attainment plan requirements (*e.g.,* reasonable further progress). The fact that the EPA approved the permitting program itself does not mean that EPA has approved the actual content of each permit or made it an approved part of the SIP. *See* Final SSM SIP Call Rule, 80 FR at 33915/3 and 33922/3.

   In the context of emission limits contained in a state's implementation plan, the EPA views the approach of establishing alternative emission limitations through a permit as a form of "director's discretion" problem addressed in the SIP call notice because it would allow the state to create

alternatives to SIP emission limits without complying with the CAA's SIP revision requirements. Among other things, a permit-based approach to establishing an alternative emission limitation (that does not involve submitting the permit requirement to the EPA for inclusion in the SIP) eliminates the EPA's role in reviewing and approving SIP emission limitations to ensure that they are "enforceable" as required by CAA section 110(a)(2)(A) (*i.e.*, that they are sufficiently specific regarding the source's obligations and include adequate monitoring, recordkeeping, and reporting requirements). Accordingly, a permitting process cannot be used to create alternatives to SIP emission limitations for sources during startup and shutdown in lieu of a SIP revision.

A state may elect to use the permit development process as a means to evaluate and establish alternative emission limits for startup and shutdown for a specific source, but then submit that information to support a source-specific SIP revision. The State may be able to use the permit development process at the same time with the development of the SIP revision for efficiency. Alternative emission limitations established in this way would have to meet the necessary level of stringency for both purposes and be legally and practically enforceable.

5. **Proposed rule 391-3-1-.02(2)(a)9.,** titled "Startup, Shutdown and Malfunction Emissions for Certain Rules," provides that upon EPA's approval of Georgia's SIP call submittal, "the provisions of this paragraph 9. shall apply to all sources subject to emission limitations and standards in 391-3-1-.02(2)(zz), (ggg), (iii), (ppp), (qqq), (sss), (uuu), and (www)." Note that the EPA did not comment on this provision in the previous draft rule because the draft indicated Georgia did not intend to include it in the final SIP submission. Although this provision appears to be directed at rules that are not part of the approved SIP, the EPA would have concerns with approving it because it includes language that prompted the SIP Call.

6. **Proposed rule 391-3-1-.02(2)(a)11.,** titled "Malfunction Emissions," would be a new provision for addressing excess emission during malfunction events. However, **proposed rule 391-3-1-.02(2)(a)7.,** titled "Startup, Shutdown, and Malfunction Emissions," also makes references to excess emissions during malfunction events, and this appears to be conflicting and/or redundant. Please clarify whether EPD's intent is to remove the malfunction references from **proposed rule 391-3-1-.02(2)(a)7.**

   Moreover, the EPA notes that the SIP must require sources to comply with applicable emissions limitations, which may include alternative emission limitations approved into the SIP for certain periods of operation. The alternative to comply with a "source specific malfunction work practice standard permit condition" does not appear to be approvable because the proposed rule does not require that such alternatives be approved into the SIP (and likewise does not specify that such alternative emission limitations are not effective for federal law or SIP purposes until they are approved by the EPA as part of the SIP). Thus, as discussed above, a permitting process cannot be used to create alternatives to SIP emission limitations unless such alternative limitations are incorporated into the SIP (and do not become effective until incorporated into the SIP).

   The EPA further notes that it may not be feasible for the State to develop approvable alternative emission limitations that are specifically applicable to malfunctions. As the EPA explained in the final SSM SIP Call, a malfunction is unpredictable as to the timing of the start of the malfunction event, its duration, and its exact nature. The effect of a malfunction on emissions is therefore unpredictable and variable, making the development of an alternative emission limitation for malfunctions problematic. There may be rare instances in which certain types of malfunctions at

certain types of sources are foreseeable and foreseen and thus are an expected mode of source operation. In such circumstances, the EPA believes that sources should be expected to meet the otherwise applicable emission limitation in order to encourage sources to be properly designed, maintained and operated in order to prevent or minimize any such malfunctions. To the extent that a given type of malfunction is so foreseeable and foreseen that the state considers it a normal mode of operation that is appropriate for a specifically designed alternative emission limitation, then such alternative should be developed in accordance with the recommended criteria for alternative emission limitations. *See* Final SSM SIP Call Rule, 80 FR at 3397.9/2-3.

7. **Proposed rule 391-3-1-.02(2)(a)7.(ii)** states "This paragraph 7.(ii) also applies to emission limitations established in accordance with the new source review requirements in 391-3-1-.02(7)(b) and/or 391-3-1-.03(8) that do not expressly address startup and shutdown emissions." Proposed rule 391-3-1-.02(2)(a)7.(ii)(I)I.B. provides that compliance with those emission limitations may be achieved by one of the alternative work practice standards during startup and shutdown. In addition to the other concerns noted, the EPA is concerned that the alternative compliance options for startup and shutdown would be available for limits established for a source through the State's new source review (NSR) program without ensuring compliance with that program. A fully approvable SIP emission limitation, including periods of startup and shutdown, must meet all substantive requirements of the CAA applicable to such a SIP provision. For purposes of nonattainment NSR and PSD permitting, any alternative emission limit applicable to startup and shutdown periods must constitute the "lowest achievable emissions rate" (for nonattainment NSR) or must reflect the use of "best available control technology" (for PSD). To satisfy CAA requirements, such alternative emission limits must be established on a source-specific basis through the PSD and nonattainment NSR permitting process, not in a static rule.

II. General Comments

1. The prehearing submittal appears to include all of the current state-adopted provisions of rule 391-3-1-.02(2). The EPA notes that some portions of this rule as shown in the submittal have not yet been approved by the EPA. The prehearing submittal requests comment only on the revisions to subparagraphs 391-3-1-.02(2)(a)7., 391-3-1-.02(2)(a)9. and 391-3-1-.02(2)(a)11. Therefore, the EPA's comments on this prehearing submittal are limited to these specific subparagraphs and should not be construed as comment on the other subparagraphs, some of which appear to contain state-adopted revisions.

   The EPA also notes that the prehearing submittal shows the strike-through text (*i.e.,* existing text being revised) of subparagraph 391-3-1-.02(2)(a)9. to be only "[reserved]," whereas the current EPA-approved version of this subparagraph still includes a provision titled "Kraft Pulp Mill TRS Compliance Schedules."

2. **Proposed rules 391-3-1-.02(2)(a)7.(iii)** and **391-3-1-.02(2)(a)11(iii)** include automatic rescission language which would provide that if the SSM SIP call is somehow invalidated or withdrawn in the future, such action will render paragraphs 391-3-1-.02(2)(a)7.(ii) and 391-3-1-.02(2)(a)11(i) and (ii) void. Based upon the public hearing notice, the EPA understands that Georgia does not intend to request approval of rules **391-3-1-.02(2)(a)7.(iii)** and **391-3-1-.02(2)(a)11.(iii)** into the State's implementation plan.

3. **Proposed rule 391-3-1-.02(2)(a)7.(ii)(I)I.** provides that "[c]ompliance with the emission limitations and standards identified in paragraph 391-3-1-.02(2)(a)7.(ii) shall be achieved by either Option A. or B. below:" Use of the term "option" is also used in the later provisions regarding alternative work practice standards. To reduce possible confusion, the EPA recommends striking the phrase "Option A. or B. below" from the text of provision 391-3-1-.02(2)(a)7.(ii)(I)I (*i.e.,* so the provision would state: "Compliance with the emission limitations and standards identified in paragraph 391-3-1-.02(2)(a)7.(ii) shall be achieved by either:)."

4. **Proposed rule 391-3-1-.02(2)(a)7.(ii)(III)A.** requires the owner or operator of a source that chooses to comply with alternative work practice standards for startup and shutdown to maintain documentation regarding the details of such events. While these generic requirements are not emission limitations, the EPA agrees they are important and necessary documentation requirements.

5. **Proposed rule 391-3-1-.02(2)(a)7.(ii)(I)IV(A) (General Work Practice Standard Part 1)** contains generic regulatory requirements to operate in a manner consistent with good air pollution control practice for minimizing emissions and to operate air pollution control devices to the maximum extent practicable, considering process and control device limitations and safety constraints. While these "general duty" requirements cannot alone be alternative emission limitations for startup and shutdown, the EPA agrees they are appropriate SIP requirements to impose upon sources. The EPA recommends making the requirements of this paragraph apply to all sources, not just those using option (ii)(I)IV.

6. **Proposed rule 391-3-1-.02(2)(a)7.(ii)(I)III.A.(B)** requires the owner or operator to document which option ((ii)(IV), (ii)(V), or (ii)(VI)) is followed during each period of startup and shutdown. Please note that the State should ensure that the requirements applicable to a source are established up front, before a startup or shutdown event occurs.