

(sss) Multipollutant Control for Electric Utility Steam Generating Units

1. **Effective June 1, 2008**, no person shall cause, let, permit, suffer or allow the emissions of nitrogen oxides, sulfur dioxide, and mercury from the following:
 - (i). Plant Bowen Unit 3 unless such source is equipped and operated with selective catalytic reduction and flue gas desulfurization.
 - (ii). Plant Hammond Unit 1 unless such source is equipped and operated with flue gas desulfurization.
 - (iii). Plant Hammond Unit 2 unless such source is equipped and operated with flue gas desulfurization.
 - (iv). Plant Hammond Unit 3 unless such source is equipped and operated with flue gas desulfurization.
 - (v). Plant Hammond Unit 4 unless such source is equipped and operated with selective catalytic reduction and flue gas desulfurization.
 - (vi). Plant Yates Unit 1 unless such source is equipped and operated with flue gas desulfurization.
2. **Effective December 31, 2008**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
 - (i). Plant Bowen Unit 4 unless such source is equipped and operated with selective catalytic reduction and flue gas desulfurization.
 - (ii). Plant Scherer Unit 3 unless such source is equipped and operated with sorbent injection and a baghouse.
 - (iii). Plant Wansley Unit 1 unless such source is equipped and operated with selective catalytic reduction and flue gas desulfurization.
3. **Effective June 1, 2009**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:

- (i). Plant Bowen Unit 2 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (ii). Plant Scherer Unit 2 unless such source is equipped and operated with sorbent injection and a baghouse.
 - (iii). Plant Wansley Unit 2 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
4. **Effective December 31, 2009**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Scherer Unit 1 unless such source is equipped and operated with sorbent injection and a baghouse.
5. **Effective April 30, 2010**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Scherer Unit 4 unless such source is equipped and operated with sorbent injection and a baghouse.
6. **Effective June 1, 2010**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Bowen Unit 1 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
7. **Effective December 31, 2011**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Scherer Unit 3 unless such source is equipped and operated with selective catalytic reduction, flue gas desulfurization, sorbent injection, and baghouse.
8. **Effective December 31, 2012**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Scherer Unit 4 unless such source is equipped and operated with selective catalytic reduction, flue gas desulfurization, sorbent injection, and baghouse.

- (ii). Plant McDonough Unit 1 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
9. **Effective December 31, 2013**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Branch Unit 3 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (ii). Plant McDonough Unit 2 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (iii). Plant Scherer Unit 2 unless such source is equipped and operated with selective catalytic reduction, flue gas desulfurization, sorbent injection, and baghouse.
10. **Effective June 1, 2014**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Branch Unit 4 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
11. **Effective December 31, 2014**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Branch Unit 1 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (ii). Plant Branch Unit 2 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (iii). Plant Scherer Unit 1 unless such source is equipped and operated with selective catalytic reduction, flue gas desulfurization, sorbent injection, and baghouse.

12. **Effective June 1, 2015**, no person shall cause, let, permit, suffer or allow the emissions of mercury from the following as follows:
- (i). Plant Yates Unit 6 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
 - (ii). Plant Yates Unit 7 unless such source is equipped and operated with selective catalytic reduction (SCR) and flue gas desulfurization (FGD).
13. **[Option A: Effective January 1, 2010 OR Option B: Effective January 1, 2018]**, should the annual heat input (from coal combustion) of an affected unit or group of affected units exceed the levels specified in each subparagraph 12(i) through 12(iv), the owner/operator will comply with the requirements specified in subparagraphs 12(v):
- (i). Plant Kraft Units 1, 2, and 3 with a total annual heat input of 17,911,898 million Btu;
 - (ii). Plant McIntosh Unit 1 with a total annual heat input of 14,557,638 million Btu;
 - (iii). Plant Mitchell Unit 3 with a total annual heat input of 8,621,580 million Btu;
 - (iv). Plant Yates Units 2, 3, 4, and 5 with a total annual heat input of 33,608,398 million Btu.
 - (v). The owner/operator shall evaluate the economic and technical feasibility of additional mercury controls on the applicable affected unit specified in subparagraphs 13(i) through 13(iv), and submit a written evaluation to the Division no later than September 1 of the calendar year following the calendar year that the annual heat input exceeded the applicable level specified in subparagraphs 13(i) through 13(iv).
 - (vi). The Division will review the written evaluation submitted in accordance with subparagraph 13(v) and determine if additional mercury controls are required and, if additional mercury controls are required, establish deadlines for submission of a permit application(s) to the Division and for start-up of such mercury controls.

- (vii). The Division will document the results of its evaluation conducted in accordance with subparagraph 13(vi) and notify the owner and/or operator within a timely fashion whether additional mercury controls are required.
14. **Design, operation and maintenance requirements:** The owner/operator of an affected unit specified in subparagraphs 1 through 13 shall comply with the requirements of subparagraph 391-3-1-.02(2)(a)10.
15. **Control Equipment Monitoring Design Criteria: General Criteria**
For the anticipated range of operations of the applicable EGUs specified in subparagraphs 1 through 13, monitoring under this subparagraph 391-3-1-.02(2)(sss) shall meet the following general criteria:
- (i). The owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance for the control device, and any associated capture system. Indicators of performance may include, but are not limited to, direct or predicted emissions (including visible emissions or opacity), process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspections and maintenance activities conducted by the owner or operator.
 - (ii). The owner or operator shall establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges is according to manufacturer's recommendations for proper operation and maintenance of the applicable EGU and/or control device(s) (and associated capture system).
 - (iii). The owner or operator shall maintain performance within the indicator range(s) or designated condition(s) during applicable periods of operation of the EGU and/or control device.

- (iv). The ranges shall be established in accordance with the design and performance requirements in this subparagraph and documented in accordance with the requirements in subparagraph 16. If necessary to assure that the control device and associated capture system can satisfy this criterion, the owner or operator shall monitor appropriate process operational parameters(such as total throughput where necessary to stay within the rate capacity for a control device).
 - (v). The design of indicator ranges or designated conditions may be:
 - (I). Based on a single maximum or minimum value if appropriate (e.g., sorbent injection pound per hour rate) or at multiple levels that are relevant to distinctly different operating conditions (e.g., high versus load levels).
 - (II). Expressed as a function of process variables (e.g., an indicator range expressed as minimum to maximum pressure drop across a venturi throat in a particulate control scrubber).
 - (III). Expressed as maintaining the applicable parameter in particular operational status or designated condition (e.g., position of a damper controlling gas flow to the atmosphere through a by-pass duct).
16. **Control Equipment Monitoring Design Criteria: Performance Criteria**
The owner or operator shall design the monitoring to meet the following performance criteria:
- (i). Specifications that provide for obtaining data that are representative of the emissions or parameters being monitored (such as detector location and installation specifications, if applicable).

- (ii). For new or modified monitoring equipment, verification procedures to confirm the operational status of the monitoring prior to the date by which the owner or operator must conduct monitoring under an applicable air quality permit. The owner or operator shall consider the monitoring equipment manufacturer's requirements or recommendations for installation, calibration, and start-up operation.
- (iii). Quality assurance and control practices that are adequate to ensure the continuing validity of the data. The owner or operator shall consider manufacturer recommendations or requirements applicable to the monitoring in developing appropriate quality assurance and control practices.
- (iv). Specifications for the frequency of conducting the monitoring, the data collection procedures that will be used (e.g., computerized data acquisition and handling, alarm sensor, or manual log entries based on gauge readings), and, if applicable, the period over which discrete data points will be averaged for the purpose of determining whether an excursion or exceedance has occurred.
 - (l). At a minimum, the owner or operator shall design the period over which data are obtained and, if applicable, averaged consistent with the characteristics and typical variability of the EGU (including the control device and associated capture system). Such intervals shall be commensurate with the time period over which a change in control device performance that would require actions by owner or operator to return operations within normal ranges or designated conditions is likely to be observed.

17. **Control Equipment Monitoring Design Criteria: Submittal Requirements**
- (i). The owner or operator shall submit to the permitting authority monitoring that satisfies the design requirements in subparagraph 15. The submission shall include the following information:
 - (I). The indicators to be monitored to satisfy subparagraph 15;
 - (II). The ranges or designated conditions for such indicators, or the process by which such indicator ranges or designated conditions shall be established;
 - (III). The performance criteria for the monitoring to satisfy subparagraph 16
 - (ii). As part of the information submitted, the owner or operator shall submit a justification for the proposed elements of the monitoring. If the performance specifications proposed to satisfy subparagraph 15 include differences from manufacturer recommendations, the owner or operator shall explain the reasons for the differences between the requirements proposed by the owner or operator and the manufacturer's recommendations or requirements. The owner or operator also shall submit any data supporting the justification, and may refer to generally available sources of information used to support the justification (such as generally available air pollution engineering manuals, or EPA or permitting authority publications or appropriate monitoring for various types of control devices or capture systems).
 - (iii). If the monitoring submitted by the owner or operator requires installation, testing, or other necessary activities prior to use of the monitoring for purposes of subparagraphs 15 through 17(ii), the owner or operator shall include an implementation plan and schedule for installing, testing and performing any other appropriate activities prior to use of the monitoring. The implementation plan and schedule shall provide for use of the monitoring as expeditiously as practicable after approval of the monitoring in the part 70 permit, but in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after issuance of the part 70 permit.

- (iv). The owner or operator shall submit information under subparagraph 17(i) through (iii) as part of an application for a renewal of a part 70 permit.
18. **Alternative Control Technology:** The owner/operator of an affected unit specified in subparagraphs 1 through 12 may operate alternative control technology from that specified in the applicable subparagraphs 1 through 12 if the following requirements are met:
- (i). The use of the alternative control technology results in mercury emissions equivalent to or lower than the control technology requirement specified in applicable subparagraphs 1 through 12; and
 - (ii). The owner/operator has submitted the appropriate permit application(s) to the Division at least twelve months before the effective date of the applicable subparagraph 1 through 12; and
 - (iii). The Division has approved the operation of the alternative control technology.
19. The owner or operator of any EGU subject to this subsection may submit a request to the Director to delay implementation of any of the controls required by subparagraphs 1 through 12 for a specific EGU if there is a delay caused by reasonably unforeseen circumstances beyond the control of the owner operator. Such request shall be submitted no later than 180 days before the effective date of the applicable subparagraph 1 through 12. Any delay allowed under this subparagraph is subject to review and approval by the Division. Reasonably unforeseen circumstances beyond the control of the owner or operator shall include, without limitation, the following:
- (i). Failure to secure timely and necessary federal, state or local approvals, responses, notifications or permits to install the controls, provided that such approvals or permits have been timely and diligently sought;

- (ii). Act of God, act of war, insurrection, civil disturbance, flood or other extraordinary weather conditions, vandalism, contractor or supplier strikes or bankruptcy, or unanticipated breakage or accident to machinery or equipment despite diligent maintenance; and
 - (iii). Any other delay caused by unforeseeable circumstances beyond the reasonable control of owner or operator as reasonably determined by the Director.
20. Technology and Mercury Impact Review – Periodic Evaluation: The Director shall submit a report to the Department of Natural Resources Board by December 31, 2020. This report shall include:
- (i). An evaluation of the scientific and technology developments in relation to the control or reduction of mercury emissions from coal-fired EGUs.
 - (ii). An assessment of mercury concentrations in fish tissue in water bodies in the State.
 - (iii). Recommendations for revisions to paragraph(sss) or other actions based on the scientific and technological developments as well as mercury concentrations in fish tissue. [Note: If any changes are necessitated, the report shall state the effective date for additional control installation and operation as well as a revision to the available mercury allowances. Operation of any such additional controls and/or revision to available mercury allowances shall be no earlier than January 1, 2024.]
21. Technology and Mercury Impact Review – Periodic Evaluation: The Director shall submit proposed revisions to subparagraph 391-3-1-.02(2)(sss) and/or paragraph 391-3-1-.02(15) to the Georgia Department of Natural Resources Board by December 31, 2021 for any changes required by subparagraph 14(iii).