PUBLIC NOTICE

Tennessee Valley Authority (TVA) – Gallatin Fossil Plant has applied to the Tennessee Department of Environment and Conservation, Division of Air Pollution Control for renewal of their major source (Title V) operating permit subject to the provisions of Tennessee Air Pollution Control Regulations 1200-03-09-.02(11) (Title V Regulations). A major source operating permit is required by both the Federal Clean Air Act and Tennessee’s air pollution control regulations. However, it should be noted that this facility has a current major source operating permit.

The applicant is Tennessee Valley Authority (TVA) – Gallatin Fossil Plant with a site address of 1499 Steam Plant Road, Gallatin, TN 37066. They have applied for renewal of their existing major source (Title V) operating permit for their fossil-fuel-fired electric utility and associated operations.

EPA has agreed to treat this draft Part 70 permit as a proposed Part 70 permit and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA’s 45-day review period will cease to be performed concurrently with the public notice period. In this case, EPA’s 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. The status regarding EPA’s 45-day review of these permits and the deadline for submitting a citizen’s petition can be found at the following website address:

https://www.epa.gov/CAA-permitting/tennessee-proposed-title-v-permits

Copies of the application materials and draft permits are available for public inspection during normal business hours at the following locations:

- Tennessee Department of Environment and Conservation
  Division of Air Pollution Control
  Nashville Environmental Field Office
  711 R.S. Gass Blvd.
  Nashville, TN 37216

- Tennessee Department of Environment and Conservation
  Division of Air Pollution Control
  William R. Snodgrass Tennessee Tower
  312 Rosa L. Parks Avenue, 15th Floor
  Nashville, TN 37243

Electronic copies of the draft permits are available by accessing the TDEC internet site located at:


Questions concerning the source(s) may be addressed to Travis Blake at (615) 532-0617 or by e-mail at travis.blake@tn.gov.

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be received no later than 4:30 PM on August 5, 2022. To assure that written comments are received and addressed in a timely manner, written comments must be submitted using one of the following methods:

1. **Mail, private carrier, or hand delivery:** Address written comments to Ms. Michelle W. Owenby, Director, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue 15th Floor, Nashville, Tennessee 37243.

2. **E-mail:** Submit electronic comments to air.pollution.control@tn.gov.

A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to review information maintained at the above-mentioned depositories should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such review. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue 22nd Floor, Nashville, TN 37243, 1-(866)-253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.

Air Pollution Control
DATE: JUNE 27, 2022
Assigned to – Travis Blake
OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-02(11) of the Tennessee Air Pollution Control Regulations (TAPCR). The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

| Date Issued: | *****DRAFT***** |
| Date Expires: | *****DRAFT***** |

**Issued To:**
Tennessee Valley Authority (TVA) Gallatin Fossil Plant

**Installation Address:**
1499 Steam Plant Road
Gallatin

**Installation Description:**
Coal Fired Steam Electric Generating Plant:

<table>
<thead>
<tr>
<th>Facility ID:</th>
<th>83-0025</th>
</tr>
</thead>
<tbody>
<tr>
<td>83-0025-01-04</td>
<td>Coal Fired Boilers</td>
</tr>
<tr>
<td>83-0025-05-08</td>
<td>Gas Fired Combustion Turbines</td>
</tr>
<tr>
<td>83-0025-10</td>
<td>Coal Handling Facility - Barge Unloading</td>
</tr>
<tr>
<td>83-0025-11</td>
<td>Coal Handling Facility - Rail Car Unloading</td>
</tr>
<tr>
<td>83-0025-12</td>
<td>Dry Fly Ash Handling Storage Silo</td>
</tr>
<tr>
<td>83-0025-13</td>
<td>Railcar Thawer</td>
</tr>
<tr>
<td>83-0025-14</td>
<td>Gas Fired Combustion Turbines</td>
</tr>
</tbody>
</table>

| 83-0025-15 | Gas-Fired Heater |
| 83-0025-16 | Auxiliary Boiler |
| 83-0025-19 | Control Units Materials Handling Operations |
| 83-0025-20 | Coal Combustion Products (CCP) Landfill |
| 83-0025-23 | Coal Screening |
| 83-0025-27 | Air Curtain Incinerator |
| 83-0025-28 | South Rail Loop Landfill |

**Renewal Application Due Date:**
Between ***** and ******

**Primary SIC:** 49

**Information Relied Upon:**
Renewal Application dated December 10, 2020

(continued on the next page)
## CONTENTS

### SECTION A

**GENERAL PERMIT CONDITIONS**

<table>
<thead>
<tr>
<th>A1. Definitions</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2. Compliance requirement</td>
<td>1</td>
</tr>
<tr>
<td>A3. Need to halt or reduce activity</td>
<td>1</td>
</tr>
<tr>
<td>A4. The permit</td>
<td>1</td>
</tr>
<tr>
<td>A5. Property rights</td>
<td>1</td>
</tr>
<tr>
<td>A6. Submittal of requested information</td>
<td>1</td>
</tr>
<tr>
<td>A7. Severability clause</td>
<td>2</td>
</tr>
<tr>
<td>A8. Fee payment</td>
<td>2</td>
</tr>
<tr>
<td>A9. Permit revision not required</td>
<td>3</td>
</tr>
<tr>
<td>A10. Inspection and entry</td>
<td>3</td>
</tr>
<tr>
<td>A11. Permit shield</td>
<td>3</td>
</tr>
<tr>
<td>A12. Permit renewal and expiration</td>
<td>4</td>
</tr>
<tr>
<td>A13. Reopening for cause</td>
<td>4</td>
</tr>
<tr>
<td>A14. Permit transference</td>
<td>5</td>
</tr>
<tr>
<td>A15. Air pollution alert</td>
<td>5</td>
</tr>
<tr>
<td>A16. Construction permit required</td>
<td>5</td>
</tr>
<tr>
<td>A17. Notification of changes</td>
<td>5</td>
</tr>
<tr>
<td>A18. Schedule of compliance</td>
<td>5</td>
</tr>
<tr>
<td>A19. Title VI</td>
<td>6</td>
</tr>
<tr>
<td>A20. 112(r)</td>
<td>6</td>
</tr>
</tbody>
</table>

### SECTION B

**GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT**

<table>
<thead>
<tr>
<th>B1. Recordkeeping</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2. Retention of monitoring data</td>
<td>7</td>
</tr>
<tr>
<td>B3. Reporting</td>
<td>7</td>
</tr>
<tr>
<td>B4. Certification</td>
<td>7</td>
</tr>
<tr>
<td>B5. Annual compliance certification</td>
<td>7</td>
</tr>
<tr>
<td>B6. Submission of compliance certification</td>
<td>8</td>
</tr>
<tr>
<td>B7. Emergency provisions</td>
<td>8</td>
</tr>
<tr>
<td>B8. Excess emissions reporting</td>
<td>9</td>
</tr>
<tr>
<td>B9. Malfunctions, startups and shutdowns - reasonable measures required</td>
<td>9</td>
</tr>
<tr>
<td>B10. Reserved</td>
<td>9</td>
</tr>
<tr>
<td>B11. Report required upon the issuance of a notice of violation for excess emissions</td>
<td>9</td>
</tr>
</tbody>
</table>
## CONTENTS

### SECTION C

**PERMIT CHANGES**

- C1. Operational flexibility changes 11
- C2. Section 502(b)(10) changes 11
- C3. Administrative amendment 11
- C4. Minor permit modifications 12
- C5. Significant permit modifications 12
- C6. New construction or modifications 12

### SECTION D

**GENERAL APPLICABLE REQUIREMENTS**

- D1. Visible emissions 13
- D2. General provisions and applicability for non-process gaseous emissions 13
- D3. Non-process emission 13
- D4. General provisions and applicability for process gaseous emissions 13
- D5. Particulate emissions from process emission sources 13
- D6. Sulfur dioxide emission standards 13
- D7. Fugitive dust 13
- D8. Open burning 14
- D9. Asbestos 14
- D10. Annual certification of compliance 14
- D11. Emission Standards for Hazardous Air Pollutants 14
- D12. Standards of Performance for New Stationary Sources 14
- D13. Gasoline Dispensing Facilities 14
- D1. Internal Combustion Engines 14
## CONTENTS

### SECTION E

**SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Fee payment.</td>
<td>15</td>
</tr>
<tr>
<td>E2</td>
<td>General Facility Requirements.</td>
<td>17</td>
</tr>
<tr>
<td>E3</td>
<td>Coal Fired Boilers (83-0025-01-04).</td>
<td>24</td>
</tr>
<tr>
<td>E4</td>
<td>Combustion Turbines (83-0025-05-08).</td>
<td>31</td>
</tr>
<tr>
<td>E5</td>
<td>Coal Handling Facility (83-0025-10, 83-0025-11).</td>
<td>34</td>
</tr>
<tr>
<td>E6</td>
<td>Ash Handling Process Storage Silo (83-0025-12).</td>
<td>36</td>
</tr>
<tr>
<td>E7</td>
<td>Rail Car Thawer (83-0025-13).</td>
<td>37</td>
</tr>
<tr>
<td>E8</td>
<td>Combustion Turbines and Gas Fired Heaters NGH1 and NGH2 (83-0025-14).</td>
<td>38</td>
</tr>
<tr>
<td>E9</td>
<td>Gas Fired Heater NGH3 (83-0025-15).</td>
<td>46</td>
</tr>
<tr>
<td>E10</td>
<td>Auxiliary Boiler (83-0025-16).</td>
<td>48</td>
</tr>
<tr>
<td>E11</td>
<td>Control Equipment Material Handling and Storage (83-0025-19).</td>
<td>50</td>
</tr>
<tr>
<td>E12</td>
<td>Coal Combustion Product (CCP) Landfill (83-0025-20).</td>
<td>53</td>
</tr>
<tr>
<td>E13</td>
<td>Coal Screening Operation (83-0025-23).</td>
<td>54</td>
</tr>
<tr>
<td>E14</td>
<td>Air Curtain Incinerator (83-0025-27)</td>
<td>56</td>
</tr>
<tr>
<td>E15</td>
<td>South Rail Loop Landfill (83-0025-28)</td>
<td>60</td>
</tr>
</tbody>
</table>

END OF PERMIT NUMBER 578731

---

**ATTACHMENT 1** Opacity Matrix Decision Tree for Visible Emission Evaluation by TVEE Methods 1 and 2 and EPA Method 9, amended September 11, 2013

**ATTACHMENT 2** Letters from U.S. EPA Region 4 and TVA Concerning Alternative Testing and Monitoring, 40 CFR 60 Subpart GG

**ATTACHMENT 3** Nonapplicable Requirements

**ATTACHMENT 4** Cross-State Air Pollution Rule Requirements

**ATTACHMENT 5** Consent Decree Reporting Requirements

**ATTACHMENT 6** Summary of Acid Rain Program Monitoring Requirements

**ATTACHMENT 7** Optional SO₂ Emissions Data Protocol for Gas-fired and Oil-fired Units

**ATTACHMENT 8** Agreement Letters

**ATTACHMENT 9** EPA Determination Letter Dated May 15, 2017

**ATTACHMENT 10** Watering Truck Routes

**ATTACHMENT 11** Acid Rain Permit

**ATTACHMENT 12** Title V Fee Selection Form (APC 36)
SECTION A

GENERAL PERMIT CONDITIONS

A permit issued under the provisions of paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

A1. Definitions. Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

A2. Compliance requirement. All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act.

The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11)(e)2(i) and 1200-03-09-.02(11)(e)1(vi)(I)

A3. Need to halt or reduce activity. The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11)(e)1(vi)(II)

A4. The permit. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11)(e)1(vi)(III)

A5. Property rights. The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11)(e)1(vi)(IV)

A6. Submittal of requested information. The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02(11)(e)1(vi)(V)
A7. **Severability clause.** The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

TAPCR 1200-03-09.02(11)(c)(v)

A8. **Fee payment.**

(a) The permittee shall pay an annual Title V emission fee based upon the responsible official's choice of actual emissions, allowable emissions, or a combination of actual and allowable emissions; and on the responsible official’s choice of annual accounting period. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A Title V annual emission fee will not be charged for emissions in excess of the cap. Title V annual emission fees will not be charged for carbon monoxide or for greenhouse gas pollutants solely because they are greenhouse gases.

(b) Title V sources shall pay allowable based emission fees until the beginning of the next annual accounting period following receipt of their initial Title V operating permit. At that time, the permittee shall begin paying their Title V fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees. Once permitted, the Responsible Official may revise their existing fee choice by submitting a written request to the Division no later than December 31 of the annual accounting period for which the fee is due.

(c) When paying annual Title V emission fees, the permittee shall comply with all provisions of 1200-03-26-.02 and 1200-03-09-.02(11) applicable to such fees.

(d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.

1. Sources that are subject to federally promulgated hazardous air pollutant under 40 CFR 60, 61, or 63 will place such regulated emissions in the regulated hazardous air pollutant (HAP) category.

2. A category of miscellaneous HAPs shall be used for hazardous air pollutants listed at part 1200-03-26-.02(2)(i)12 that are not subject to federally promulgated hazardous air pollutant standards under 40 CFR 60, 61, or 63.

3. HAPs that are also in the family of volatile organic compounds, particulate matter, or PM10 shall not be placed in either the regulated HAP category or miscellaneous HAP category.

4. Sources that are subject to a provision of chapter 1200-03-16 New Source Performance Standards (NSPS) or chapter 0400-30-39 Standards of Performance for New Stationary Sources for pollutants that are neither particulate matter, PM10, sulfur dioxide (SO2), volatile organic compounds (VOC), nitrogen oxides (NOx), or hazardous air pollutants (HAPs) will place such regulated emissions in an NSPS pollutant category.

5. The regulated HAP category, the miscellaneous HAP category, and the NSPS pollutant category are each subject to the 4,000-ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

6. Major sources that wish to pay annual emission fees for PM10 on an allowable emission basis may do so if they have a specific PM10 allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM10 emission basis, it may do so if the PM10 actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM10 emission levels must be made as part of the source’s major source operating permit in advance in order to exercise this option. The PM10 emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000-ton cap provisions of subparagraph 1200-03-26-.02(2)(i) shall also apply to PM10 emissions.

TAPCR 1200-03-26-.02 and 1200-03-09-.02(11)(c)(vii)
A9. **Permit revision not required.** A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

TAPCR 1200-03-09-.02(11)(e)(viii)

A10. **Inspection and entry.** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or an authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:

(a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

(d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)(ii)

A11. **Permit shield.**

(a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:

1. Such applicable requirements are included and are specifically identified in the permit; or

2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

(b) Nothing in this permit shall alter or affect the following:

1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;

2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or

4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.

(c) Permit shield is granted to the permittee.

TAPCR 1200-03-09-.02(11)(e)(6)
A12. **Permit renewal and expiration.**

(a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.

(b) If the permittee submits a timely and complete application for permit renewal the source will not be considered to be operating without a permit until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).

(c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)2 and 3, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. **Reopening for cause.**

(a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:

1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.

2. Additional requirements become applicable to an affected source under the acid rain program.

3. The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.

(d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.

2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.

3. If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).
4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR. 1200-03-09-.02(11)(f)6 and 7.

A14. **Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:

   (a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and

   (b) written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)4(i)(IV) and 1200-03-09-.03(6)

A15. **Air pollution alert.** When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.

A16. **Construction permit required.** Except as exempted in TAPCR 1200-03-09-.04, or excluded in TAPCR 1200-03-02-.01(1)(aa) or 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

TAPCR 1200-03-09-.01(1)(a)

A17. **Notification of changes.** The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.

   (a) change in air pollution control equipment

   (b) change in stack height or diameter

   (c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

A18. **Schedule of compliance.** The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11)(d)3 and 40 CFR Part 70.5(c)
Title VI

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

(b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

(c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.

A20. 112 (r). Sources which are subject to the provisions of Section 112(r) of the federal Clean Air Act or any federal regulations promulgated thereunder, shall annually certify in writing to the Technical Secretary that they are properly following their accidental release plan. The annual certification is due in the office of the Technical Secretary no later than January 31 of each year. Said certification will be for the preceding calendar year.

TAPCR 1200-03-32-.03(3)
SECTION B

GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

B1. **Recordkeeping.** Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.

(a) Where applicable, records of required monitoring information include the following:

1. The date, place as defined in the permit, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The company or entity that performed the analysis;
4. The analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions as existing at the time of sampling or measurement.

(b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B2. **Retention of monitoring data.** The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

B3. **Reporting.** Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B4. **Certification.** Except for reports required under “State Only” requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

TAPCR 1200-03-09-.02(11)(d)4

B5. **Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(a) The identification of each term or condition of the permit that is the basis of the certification;

(b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
(c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* “Excursion” shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** “Exceedance” shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

B6. Submission of compliance certification. The compliance certification shall be submitted to:

| The Tennessee Department of Environment and Conservation Environmental Field Office specified in Section E of this permit | and | Air Enforcement Branch U. S. EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303 |

TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

B7. Emergency provisions. An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology-based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.

2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.

3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

4. The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in rule 1200-03-20-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in rule 1200-03-20-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
(b) In any enforcement proceeding the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Division 1200-03 or other applicable requirement.

TAPCR 1200-03-09-.02(11)(e)7

**B8. Excess emissions reporting.**

(a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.

(b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than 24 hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

1. Stack or emission point involved
2. Time malfunction, startup, or shutdown began and/or when first noticed
3. Type of malfunction and/or reason for shutdown
4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-20-.03 and .04

**B9. Malfunctions, startups and shutdowns - reasonable measures required.** The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants) and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories).

TAPCR 1200-03-20-.02

**B10. Reserved.**

**B11. Report required upon the issuance of a notice of violation for excess emissions.** The permittee must submit within 20 days after receipt of the notice of violation, the data required below. If this data has previously been available to the Technical Secretary
prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same 20-day time period. The minimum data requirements are:

(a) The identity of the stack and/or other emission point where the excess emission(s) occurred;

(b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

(c) The time and duration of the emissions;

(d) The nature and cause of such emissions;

(e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;

(f) The steps taken to limit the excess emissions during the occurrence reported, and

(g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the 20-day period specified shall preclude the admissibility of the data for determination of potential enforcement action.

TAPCR 1200-03-20-.06(2), (3) and (4)
SECTION C
PERMIT CHANGES

C1. **Operational flexibility changes.** The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:

- **(a)** The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.
- **(b)** The change cannot be a modification under any provision of Title I of the Federal Act or Division 1200-03.
- **(c)** Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
- **(d)** The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.
- **(e)** Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.
- **(f)** The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.
- **(g)** The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

C2. **Section 502(b)(10) changes.**

- **(a)** The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.

- **(b)** The written notification must be signed by a facility Title V responsible official and include the following:
  1. a brief description of the change within the permitted facility;
  2. the date on which the change will occur;
  3. a declaration and quantification of any change in emissions;
  4. a declaration of any permit term or condition that is no longer applicable as a result of the change; and
  5. a declaration that the requested change is not a Title I modification and will not exceed allowable emissions under the permit.

- **(c)** The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

C3. **Administrative amendment.**

- **(a)** Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.
(b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.

(c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

C4. Minor permit modifications.

(a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).

(b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.

(c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

(d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. Significant permit modifications.

(a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).

(b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. New construction or modifications.

Future construction at this facility that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:

(a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.

(b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).

(c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)
SECTION D
GENERAL APPLICABLE REQUIREMENTS

D1. **Visible emissions.** With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of 20% for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of 20% (six-minute average) except for one six-minute period per one hour of not more than 40% opacity. Sources constructed or modified after July 7, 1992 shall utilize six-minute averaging.

Consistent with the requirements of TAPCR Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under TAPCR 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or an authorized representative upon request.

TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)

D2. **General provisions and applicability for non-process gaseous emissions.** Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-06-.03(2)

D3. **Non-process emission standards.** The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.

D4. **General provisions and applicability for process gaseous emissions.** Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.

TAPCR 1200-03-07-.07(2)

D5. **Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.

D6. **Sulfur dioxide emission standards.** The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.

D7. **Fugitive Dust.**

(a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-20.

TAPCR 1200-03-08

D8. Open burning. The permittee shall comply with TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. Asbestos. Where applicable, the permittee shall comply with the requirements of TAPCR 1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(2)(d) and 40 CFR, Part 61

D10. Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

D11. Emission Standards for Hazardous Air Pollutants. When applicable, the permittee shall comply with TAPCR 0400-30-38 for all emission sources subject to a requirement contained therein.

TAPCR 0400-30-38

D12. Standards of Performance for New Stationary Sources. When applicable, the permittee shall comply with TAPCR 0400-30-39 for all emission sources subject to a requirement contained therein.

TAPCR 0400-30-39

D13. Gasoline Dispensing Facilities. When applicable, the permittee shall comply with TAPCR 1200-03-18-.24 for all emission sources subject to a requirement contained therein.


(a) All stationary reciprocating internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-38-.01.

(b) All stationary compression ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-39-.01.

(c) All stationary spark ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of TAPCR 0400-30-39-.02.

TAPCR 0400-30-38 and 39
# SECTION E

**SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS**

<table>
<thead>
<tr>
<th>REGULATED POLLUTANTS</th>
<th>ALLOWABLE EMISSIONS (tons per AAP)</th>
<th>ACTUAL EMISSIONS (tons per AAP)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICULATE MATTER (PM)</td>
<td>2,985.11</td>
<td>AEAR</td>
<td>Does not include PM HAP emissions</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>SO₂</td>
<td>17,911</td>
<td>AEAR</td>
<td>Includes all fee emissions.</td>
</tr>
<tr>
<td>VOC</td>
<td>252.9</td>
<td>AEAR</td>
<td>Does not include VOC HAP emissions.</td>
</tr>
<tr>
<td>NOₓ</td>
<td>32,340</td>
<td>AEAR</td>
<td>Includes all fee emissions.</td>
</tr>
</tbody>
</table>

**CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAPs WITHOUT A STANDARD)***

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ALLOWABLE EMISSIONS (tons per AAP)</th>
<th>ACTUAL EMISSIONS (tons per AAP)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC FAMILY GROUP</td>
<td>11.40</td>
<td>AEAR</td>
<td>Fee emissions are not included in VOC above.</td>
</tr>
<tr>
<td>NON-VOC GASEOUS GROUP</td>
<td>15.72</td>
<td>AEAR</td>
<td></td>
</tr>
<tr>
<td>PM FAMILY GROUP</td>
<td>1.58</td>
<td>AEAR</td>
<td>Fee emissions are not included in PM above.</td>
</tr>
</tbody>
</table>

**CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAPs WITH A STANDARD)**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ALLOWABLE EMISSIONS (tons per AAP)</th>
<th>ACTUAL EMISSIONS (tons per AAP)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC FAMILY GROUP</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>NON-VOC GASEOUS GROUP</td>
<td>0.06</td>
<td>AEAR</td>
<td>40 CFR 63 Subpart UUUUU</td>
</tr>
<tr>
<td>Mercury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM FAMILY GROUP</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***

<table>
<thead>
<tr>
<th>EACH NSPS POLLUTANT NOT LISTED ABOVE</th>
<th>ALLOWABLE EMISSIONS (tons per AAP)</th>
<th>ACTUAL EMISSIONS (tons per AAP)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES**

**AAP**  The Annual Accounting Period (AAP) is a 12 consecutive month period that either (a) begins each July 1st and ends June 30th of the following year when fees are paid on a fiscal year basis, or (b) begins January 1st and ends December 31st of the same year when paying on a calendar year basis. The Annual Accounting Period at the time of renewal issuance began **January 1, 2022**, and ends **December 31, 2022**. The next Annual Accounting Period begins **January 1, 2023**, and ends **December 31, 2023**, unless a request to change the annual accounting period is submitted by the responsible official as required by subparagraph 1200-03-26-.02(9)(b) of the TAPCR and approved by the Technical Secretary. If the permittee wishes to revise their annual accounting period or their annual emission fee basis as allowed by subparagraph 1200-03-26-.02(9)(b) of the TAPCR, the responsible official must submit the request to the Division in writing on or before December 31 of the annual accounting period for which the fee is due. If a change in fee basis from allowable emissions to actual emissions for any pollutant is requested, the request from the responsible official must include the methods that will be used to determine actual emissions. Changes in fee bases must be made using the Title V Fee Selection form, form number APC 36 (CN-1583), included as Attachment 12 to this permit and available on the Division of Air Pollution Control’s website.

**N/A**  N/A indicates that no emissions are specified for fee computation.

**AEAR**  If the permittee is paying annual emission fees on an actual emissions basis, **AEAR** indicates that an Actual Emissions Analysis is Required to determine the actual emissions of:
(1) each regulated pollutant (Particulate matter, SO₂, VOC, NOₓ and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
(2) each pollutant group (VOC Family, Non-VOC Gaseous, and Particulate Family),
(3) the Miscellaneous HAP Category,
(4) the Specific HAP Category, and
(5) the NSPS Category

under consideration during the Annual Accounting Period.

* Category of Miscellaneous HAP (HAP Without A Standard): This category is made up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, the Miscellaneous HAP Category is subject to the 4,000-ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

** Category of Specific HAP (HAP with A Standard): This category is made up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, each individual hazardous air pollutant of the Specific HAP Category is subject to the 4,000-ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

*** Category of NSPS Pollutants Not Listed Above: This category is made up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the PM, SO₂, VOC or NOₓ emissions from each source in this permit. For fee computation, each NSPS pollutant not listed above is subject to the 4,000-ton cap provisions of subparagraph 1200-03-26-.02(2)(i) of the TAPCR.

END NOTES

The permittee shall:

1. Pay Title V annual emission fees, on the emissions and year bases requested by the responsible official and approved by the Technical Secretary, for each annual accounting period (AAP) by the payment deadline(s) established in TAPCR 1200-03-26-.02(9)(g). Fees may be paid on an actual, allowable, or mixed emissions basis; and on either a state fiscal year or a calendar year, provided the requirements of TAPCR 1200-03-26-.02(9)(b) are met. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within 15 days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8).
2. Sources paying annual emissions fees on an allowable emissions basis: pay annual allowable based emission fees for each annual accounting period no later than April 1 of each year pursuant to TAPCR 1200-03-26-.02(9)(d).
3. Sources paying annual emissions fees on an actual emissions basis: prepare an actual emissions analysis for each AAP and pay actual based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d). The actual emissions analysis shall include:
   a. the completed Fee Emissions Summary Table,
   b. each actual emissions analysis required, and
   c. the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary’s representative. The summary must include sufficient information for the Technical Secretary to determine the accuracy of the calculations. These calculations must be based on the annual fee basis approved by the Technical Secretary (a state fiscal year [July 1 through June 30] or a calendar year [January 1 through December 31]). These records shall be used to complete the actual emissions analyses required by the above Fee Emissions Summary Table.
4. Sources paying annual emissions fees on a mixed emissions basis: for all pollutants and all sources for which the permittee has chosen an actual emissions basis, prepare an actual emissions analysis for each AAP and pay actual based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d). The actual emissions analysis shall include:
   a. the completed Fee Emissions Summary Table,
(b) each **actual emissions analysis** required, and
(c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary’s representative. The summary must include sufficient information for the Technical Secretary to determine the accuracy of the calculations. These calculations must be based on the fee bases approved by the Technical Secretary (payment on an actual or mixed emissions basis) and payment on a state fiscal year (July 1 through June 30) or a calendar year (January 1 through December 31). These records shall be used to complete the **actual emissions analysis**.

For all pollutants and all sources for which the permittee has chosen an allowable emissions basis, pay allowable based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d).

(5) When paying on an actual or mixed emissions basis, submit the **actual emissions analyses** at the time the fees are paid in full.

The annual emission fee due dates are specified in TAPCR 1200-03-26-.02(9)(g) and are dependent on the Responsible Official’s choice of fee bases as described above. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within 15 days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

**Payment of the fee due and the actual emissions analysis (if required) shall be submitted to The Technical Secretary at the following address:**

**Payment of Fee to:**
The Tennessee Department of Environment and Conservation
Division of Fiscal Services
Consolidated Fee Section – APC
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 10th Floor
Nashville, Tennessee 37243

**Actual Emissions Analyses to:**
The Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Emission Inventory Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

or

An electronic copy (PDF) of actual emissions analysis can also be submitted to: **apc.inventory@tn.gov**

**E2-1. Reporting requirements.**

(a) **Semiannual reports.** Semiannual reports shall cover the six-month periods from **January 1** through **June 30** and from **July 1** through **December 31** and shall be submitted within 60 days after the end of each six-month period. Subsequent reports shall be submitted within 60 days after the end of each six-month period following the first report. The first semiannual report following issuance of this permit shall cover the following permits and reporting periods:

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Reporting Period Begins</th>
<th>Reporting Period Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>561209</td>
<td>1st day of SAR period (with year)</td>
<td>day before new permit issuance (with year)</td>
</tr>
<tr>
<td>578731</td>
<td>Issuance Date of new permit (with year)</td>
<td>end of SAR period (with year)</td>
</tr>
</tbody>
</table>

These semiannual reports shall include:

1. Any monitoring and recordkeeping required by conditions **E2-11, E3-13, E4-4, E4-7, E5-1, E5-3, E6-1, E6-2, E7-3, E8-11, E9-4, E10-4, E11-1, E12-2, E13-6, E14-1, and E15-1** of this permit. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

2. The visible emission evaluation readings from conditions **E3-8, E4-5, E5-3, E6-3, E8-10, E9-5, E10-3, E11-3, E12-3, E13-5, E14-3, and E15-3** of this permit if required. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

3. Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.
These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2-1(b) of this permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)

(b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with each term or condition contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

1. The identification of each term or condition of the permit that is the basis of the certification;

2. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

3. The status of compliance with each term or condition of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

4. Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* “Excursion” shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** “Exceedance” shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

Annual compliance certifications shall cover the 12-month period from January 1 to December 31 and shall be submitted within 60 days after the end of each 12-month period. The first annual compliance certification following issuance of this permit shall cover the following permits and reporting periods:

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Reporting Period Begins</th>
<th>Reporting Period Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>561209</td>
<td>January 1, 2022</td>
<td>day before new permit issuance (with year)</td>
</tr>
<tr>
<td>578731</td>
<td>Issuance Date of new permit (with year)</td>
<td>December 31, 2022</td>
</tr>
</tbody>
</table>

These certifications shall be submitted to: **TN APCD** and **EPA**

Division of Air Pollution Control and Air Enforcement Branch
Nashville Environmental Field Office
711 R. S. Gass Blvd.
Nashville, Tennessee 37216
or
Email (signed PDF copy): APC.NashEFO@tn.gov

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667
TAPCR 1200-03-09-.02(11)(e)3(v)
Retention of Records. All records required by any condition in Section E of this permit must be retained for a period of not less than five years. Additionally, these records shall be kept available for inspection by the Technical Secretary or a Division representative.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

(d) MACT Reports (40 CFR 63 Subpart DDDDDD). The permittee shall submit the MACT reports required by 40 CFR 63 Subpart DDDDDD (Conditions E8-17, E9-6, and E10-5). The permittee shall submit each report in accordance with §63.7550(h) and Table 9 of Subpart DDDDDD. Copies of all reports shall be submitted to the Technical Secretary at the following address:

Tennessee Department of Environment and Conservation or E-mail (signed PDF copy):
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

E-mail (signed PDF copy): Air.Pollution.Control@tn.gov

Since affected units covered by this permit are subject only to a requirement to conduct annual and biennial tune-ups according to §§63.7540(a)(10) and (11), the permittee may submit annual and biennial compliance reports instead of a semiannual compliance report. Pursuant to §63.10(a)(5), all MACT compliance reports shall be included with the next semiannual report required by Condition E2-1(a) following the end of each semiannual reporting period.

Pursuant to §63.7550(h)(3) the permittee shall submit all reports required by Table 9 of Subpart DDDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx), if the reporting form specific to Subpart DDDDDD is available in CEDRI at the time that the report is due. If the reporting form specific to Subpart DDDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the address listed in §63.13.

(e) MATS Reports (40 CFR 63 Subpart UUUUU).

Permit issue date through December 31, 2023: The permittee shall submit the reports required by 40 CFR 63 Subpart UUUUU (Condition E3-17). The permittee shall submit each report in accordance with §63.10031 and Table 8 of Subpart UUUUU. Reporting periods shall be January 1 through June 30 and July 1 through December 31 of each calendar year. Each compliance report must be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Reports shall be submitted in accordance with §63.10031(f), as applicable. Copies of all reports shall be submitted to the Technical Secretary at the following address:

Tennessee Department of Environment and Conservation or E-mail (signed PDF copy):
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

E-mail (signed PDF copy): Air.Pollution.Control@tn.gov

On and after January 1, 2024: On and after January 1, 2024, the permittee shall comply with the electronic reporting requirements in accordance with §63.10031 and the provisions referenced therein.

TAPCR 1200-03-09-.03(8) and 1200-03-09-.02(11)(e)1(iii)(II), 40 CFR §63.10031

(f) 40 CFR 60 Subpart GG Excess Emissions reports (83-0025-14). The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60 Subpart GG (Condition E8-13) and §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in §60.334(j). These reports shall cover the six-month periods from January 1 through June 30 and from July 1 through December 31 and shall be submitted within 60 days after the end of each six-month period to the address in Condition E2-1(e).

TAPCR 1200-03-09-.03(8) and 40 CFR §60.334
(g) **Periodic Visible Emissions Evaluations for 83-0025-27 (40 CFR 60 Subpart CCCC):** The permittee shall perform periodic visible emission evaluations and furnish the Technical Secretary a written report of the results of the evaluations, which demonstrate compliance with the opacity standards as specified in Condition E14-3 of this permit. The next test report following issuance of this permit is due June 9, 2023. Each subsequent report shall be submitted within 12 months of submittal of the previous report. The written reports shall be submitted to the Environmental Field Office and the Compliance Validation Program as indicated below:

<table>
<thead>
<tr>
<th>Division of Air Pollution Control</th>
<th>Division of Air Pollution Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>William R. Snodgrass Tennessee Tower</td>
<td>711 R.S. Gass Boulevard</td>
</tr>
<tr>
<td>312 Rosa L. Parks Avenue, 15th Floor</td>
<td>Nashville, TN 37216</td>
</tr>
<tr>
<td>Nashvillle, TN 37243</td>
<td></td>
</tr>
</tbody>
</table>

E-mail (signed PDF copy):

**Compliance Validation Program**
Air.Pollution.Control@TN.gov

**Nashville Environmental Field Office**
APC.NashEFO@TN.gov

TAPCR 1200-03-09-.03(8), 40 CFR §60.2260

(h) **NSPS Performance Test Reports for Coal Preparation Plants (40 CFR 60 Subpart Y).** An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in 40 CFR 60 Subpart Y. Within 60 days after completing each performance evaluation, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE database (see 40 CFR §60.258(d)). For performance tests that cannot be entered into WebFIRE (i.e., Method 9 opacity performance tests) the owner or operator of the affected facility must mail a summary copy to the United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

Copies of all reports shall be submitted to the Technical Secretary at the address in Condition E2-1(e).

40 CFR §60.255(b), §60.258(d), and TAPCR 1200-03-09-.03(8)

(i) **Consent Decree Reporting Requirements:** The permittee shall comply with the reporting requirements specified in Attachment 5 of this permit. In addition to the reports required by Attachment 5, TVA shall provide a written report to EPA, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within 15 days of when TVA knew or should have known of any such violation. In this report, TVA shall explain the cause or causes of the violation and all measures taken or to be taken by TVA to prevent such violations in the future and measures taken or to be taken to mitigate the environmental effects of such violation, if any.

(j) **VOC and NO\textsubscript{X} Reporting:** The permittee shall report to the Technical Secretary information and data concerning actual emissions of Volatile Organic Compounds (VOC) or Nitrogen Oxides (NO\textsubscript{X}) from stationary sources at this facility in accordance with subparts 1200-03-18-.02(8) and 1200-03-27-.02(6) of the Tennessee Air Pollution Control Regulations. This information and data shall be in the form prescribed by the Technical Secretary and shall be submitted before March 31 of the year following the calendar year for which the information and data is reported. Each report shall be signed by the responsible official, certifying that the information and data contained in the report is accurate to the best knowledge of the individual certifying the report. These reports shall be submitted to the address in Condition E2-1(e).

**E2-2. Recordkeeping: Data Entry Requirements**

(a) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than 30 days from the end of the month for which the data is required.

(b) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven days from the end of the week for which the data is required.

(c) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven days from the end of the day for which the data is required.

(a) For all emission sources that use the opacity matrix decision trees (Attachment 1) to comply with a visible emissions requirement, including emission sources for which visible emissions are not required by the opacity matrix, if the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

(b) Compliance with the fugitive emission requirements of Condition D7(b) shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986. These evaluations shall be made semiannually.

TAPCR 1200-03-08, 1200-03-09-.02(11)(c)(iii), and 1200-03-10-.02(1)(a)

E2-4. Ambient Monitoring for SO₂

Consistent with the provisions of TAPCR 1200-03-14-.01(6), each owner or operator of a fuel burning installation having a total rated capacity greater than 1,000 MMBtu/hr of sulfur dioxide during calendar year 1972 or any other calendar year thereafter must comply with the following requirements:

(a) Demonstrate to the satisfaction of the Technical Secretary, that the sulfur dioxide emitted either alone or in contribution to other sources will not interfere with attainment and maintenance of any primary or secondary air quality standard.

(b) Install and maintain air quality sensors to monitor attainment and maintenance of ambient air quality standards in the areas influenced by the emissions from such installation. Such shall be done in the manner prescribed by the Technical Secretary. Results of such monitoring shall be provided to the Technical Secretary in the manner and form as he shall direct. Owners or operators may petition and be granted permission by the Technical Secretary to terminate ambient air quality monitoring provided two calendar years air quality data has been generated in the area under the influence of the source’s emissions to verify compliance with the Tennessee Ambient Air Quality Standards. Petitions may be granted if the following conditions are met:

(1) The source must be located in an attainment area and must not significantly impact a sulfur dioxide nonattainment area.

(2) Measurements of air quality in the vicinity of the source demonstrate that ambient sulfur dioxide levels do not exceed 75% of the Tennessee Ambient Air Quality Standards.

(c) All calculations performed pursuant to demonstration required by TAPCR 1200-03-14-.01(6) shall assume that the process emission source and fuel burning installation is operating at a maximum rated capacity.

TAPCR 1200-03-14-.01(6)

Compliance Method: Pursuant to the approval letter from the Technical Secretary dated February 1, 2008, this facility has met the requirements of paragraphs (b)(1) and (b)(2) of this condition, and ambient SO₂ monitoring is not required.

E2-5. Consent Decree/Federal Facilities Compliance Agreement

The permittee is placed on notice that this facility is subject to an enforceable Consent Decree with the Tennessee Valley Authority (State of Alabama et. al. v. TVA, Civil Action No. 3:11-cv-00170, filed April 14, 2011, approved June 30, 2011), which imposes certain requirements at this facility. In a letter dated September 4, 2014, TVA elected to install and operate a selective catalytic reduction system (SCR) and dry flue gas desulfurization system (FGD) in order to meet the requirements of Paragraphs 72 and 88 of the Consent Decree. Continuous operation of these controls was required no later than December 31, 2017, as specified by Paragraphs 69 and 85 of the Consent Decree. TVA shall comply with the reporting requirements specified in Attachment 5 of this permit.

In addition to the reports required by Attachment 5, TVA shall provide a written report to EPA, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within 15 days of when TVA knew or should have known
of any such violation. In this report, TVA shall explain the cause or causes of the violation and all measures taken or to be taken by TVA to prevent such violations in the future and measures taken or to be taken to mitigate the environmental effects of such violation, if any.

TAPCR 1200-03-06-.01(7), 1200-03-14-.01(3), Consent Decree

**Compliance Method:** Compliance with this condition shall be assured by the reporting requirements of Condition E2-1(i).

**E2-6.** Unless otherwise specified in this permit, the averaging time for an emission standard shall be the same time period as that of the compliance test method approved by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)(I)II

**E2-7. Identification of Responsible Official, Technical Contact, and Billing Contact**

(a) The application that was utilized in the preparation of this permit is dated December 10, 2020, and was signed by Responsible Official William T. Patterson, Plant Manager of the permitted facility. The letter dated October 25, 2021, identifies Michael K. Bottorff, Plant Manager, as the Responsible Official of the permitted facility. If this person terminates employment or is assigned different duties and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within 30 days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants.

(b) The application that was utilized in the preparation of this permit is dated December 10, 2020, and identifies Michael T. Gray as the Principal Technical Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within 30 days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.

(c) The application that was utilized in the preparation of this permit is dated December 10, 2020, and identifies Michael G. Tritapoe as the Billing Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Billing Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within 30 days of the change. The notification shall include the name and title of the new Billing Contact and certification of truth and accuracy.

**E2-8. Nonapplicable Requirements**

The Technical Secretary, in acting on the permit application dated December 10, 2020, has determined that certain requirements specifically identified and listed in Attachment 3 are not applicable to the source.

TAPCR 1200-03-09-.02(11)(e)6

**E2-9. Acid rain program**

(a) The permittee shall not produce emissions in excess of allowances held under Title IV of the Federal Clean Air Act, the regulations promulgated thereunder, and TAPCR 1200-03-30.

(b) The permittee shall not be subject to the permit revision requirements of TAPCR 1200-03-09-.02(11)(f) for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.

(c) Where an applicable requirement of the Federal Act is more stringent than the Federal regulations promulgated under Title IV of the Federal Act, both provisions shall be incorporated into the permit and shall be enforceable by the administrator.
(d) No limit shall be placed on the number of allowances held by this source under the acid rain program. The permittee may not use allowances as a defense for noncompliance with any other applicable requirement.

(e) Any allowance shall be accounted for according to the regulations promulgated under Title IV of the Federal Clean Air Act and the provisions of TAPCR 1200-03-30.

(f) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75 and section 407 of the Act and regulations implementing section 407 of the Act (Attachment 6).

(g) Acid Rain Permit 877420 is included with this permit as Attachment 11.

TAPCR 1200-03-09-.02(11)(e)(iv) and 1200-03-30

E2-10. Emissions Inventory Requirements (State-Only)

The permittee shall submit emissions inventories in accordance with TAPCR 1200-03-10-.05.

E2-11. Recordkeeping Requirements for Watering Trucks

For all operations that require fugitive emissions control by the operation of a watering truck on paved and unpaved haul roads, the permittee shall maintain the daily dust suppression log shown in Table E2-11 (an alternative format that provides the same information shall be acceptable). This log shall include the information included in the watering truck drivers’ daily reports as they drive the routes that include Material Handling and Storage (83-0025-19, Condition E11-2) and CCP landfill (83-0025-20, Condition E12-1) (see Attachment 10). These records, and a record of the plant route (map or written description of the route) must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

For the South Rail Loop Landfill (83-0025-28, Condition E15-2), the permittee shall maintain the daily dust suppression log shown in Table E2-11 (an alternative format that provides the same information shall be acceptable) on and after the initial startup date of the source. These records, and a record of the plant route (map or written description of the route) must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

<table>
<thead>
<tr>
<th>Date</th>
<th>Wet Suppression Used (Y/N)?*</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If the water truck is not used for dust suppression due to precipitation, note the amount of precipitation within the last day.

E2-12. 40 CFR 63 Subpart YYYY

Combustion turbines 1-4 (83-0025-05, 06, 07, and 08) and combustion turbines 5-8 (83-0025-14) are affected sources pursuant to 40 CFR 63 Subpart YYYY (National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines). Pursuant to 40 CFR §63.6090(b)(4), these existing stationary combustion turbines (commenced construction or reconstruction on or before January 14, 2003) do not have to meet the requirements of 40 CFR 63 Subparts YYYY or A. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.

TAPCR 1200-03-09-.03(8), 40 CFR 63 Subpart YYYY

**Compliance Method:** Compliance shall be assured by annual certification, as required in Condition E2-1(b).
**Source Description**

**Four Coal-Fired Boilers - Steam and Electricity Generation:**

- **Nominal heat input:** 11,564 MMBtu/hr
- **Nameplate capacity:** 1,256 MW
- **Baghouse control.** TVA designated emission units Boilers 1-4 with stack ID’s 21-24

---

**Conditions E3-1 through E3-17 apply to 83-0025-01-04**

**E3-1.** The fuel burning equipment at this installation consists of four Combustion Engineering coal-fired boilers installed in 1956. The units are pulverized-coal, tangentially-fired, dry bottom boilers without fly ash reinjection. The facility is permitted to burn the following fuels:

1. Coal with No. 2 fuel oil or reprocessed oil used for startup;
2. Wood;
3. Fuel oil or reprocessed oil may also be burned as follows:
   i. under non-steady-state and low-load conditions to ensure flame stability, and
   ii. to supplement boiler heat input when the heat input from coal is insufficient.

**Compliance Method:** Compliance with this condition shall be assured by compliance with the recordkeeping requirements of §63.10032(d)(1) and **Condition E3-17** (keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used) and the reporting requirements of §§63.10031(c)(2) and (3) (report the total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period; indicate whether new types of fuel were burned during each reporting period).

**E3-2.** The amount of on-spec oil, as defined at 40 CFR 279, and nonhazardous solvents that can be burned in this fuel burning installation shall not exceed 100,000 gallons per year.

**Compliance Method:** Compliance with this condition shall be assured by compliance with the recordkeeping requirements established by **Conditions E3-1 and E3-17**. The permittee shall also maintain records, as required by 40 CFR Part 279, documenting that any used oil burned in the boiler meets the requirements of 40 CFR §279.11. These records shall be maintained at the facility and shall be available for inspection by the Technical Secretary or an authorized representative.

**E3-3.** The permittee may conduct test burns of fuels other than those listed in **Conditions E3-1 and E3-2** for up to 30 operating days without a construction permit or a reopening of this permit provided that:

(a) Notification is provided to the Technical Secretary at least 30 days prior to initiation of the burning of such fuels; Notification at a minimum shall include a copy of the test plan; the fuels to be burned; an estimated start date and completion date; an estimate of the impact on control devices; and an estimate of the impact on emissions;

(b) The source complies with all applicable emission limitations; and

(c) The permittee agrees to perform such additional testing as may be required by the Technical Secretary.

The permanent use of such fuels shall be allowed upon completion of testing unless the Technical Secretary determines that a permit revision is required. Such determination will examine triggering control requirements under the PSD, NESHAPS, NSPS or other programs. In any event, the Technical Secretary shall issue an approval or disapproval for the continuing use of the alternate fuel.

**Compliance Method:** Compliance with this condition shall be assured by compliance with the recordkeeping requirements established by **Condition E3-1**.
E3-4. **Particulate Matter Emission Limit**

Particulate matter (PM) emitted from this fuel burning installation shall not exceed 0.030 lb/MBtu of heat input.

TAPCR 1200-03-06-.02(1), 1200-03-09-.02(11)(e1)(iii), Consent Decree

**Compliance Method:** Compliance with this condition shall be assured as follows:

(a) The permittee shall perform stack testing of this fuel burning installation to demonstrate compliance with the applicable particulate emissions limits. Testing shall be performed every calendar year, and a particulate source test report shall be filed with the Technical Secretary within 45 days after completion of the testing. Ten days prior to conducting the source test, the permittee shall provide notice of such test to the Technical Secretary to afford the opportunity to have an observer present. Testing shall be conducted in accordance with TAPCR 1200-03-12 and 40 CFR 60, Appendix A, Method 5 and ensuring that the front half filter temperature shall be 160° ± 14 °C (320° ± 25 °F). The continuous opacity monitoring system that serves each unit shall be fully operational prior to and during the performance test of that unit. The opacity data generated during this compliance testing shall be incorporated into the test report. Stack testing performed as part of an annual relative response audit (RRA) under 40 CFR 63, Subpart UUUUU (Condition E3-17) shall be considered to satisfy this requirement.

(b) The permittee shall operate the continuous opacity monitoring system (COMS) to provide an indication of good operational and maintenance practices. The COMS shall comply with Conditions E3-9, E3-10, E3-11, E3-12, and E3-13 of this permit.

(c) The Technical Secretary may require additional performance testing for exceedances of the *de minimis* criteria specified in TAPCR 1200-03-20-.06. The permittee shall conduct performance tests upon written notification of the Technical Secretary, within the time period specified in the written notification.

(d) The permittee shall continuously operate each PM control device on each unit. “Continuously operate” means that when a pollution control technology is used at a unit, it shall be operated at all times such unit is in operation (except during a malfunction that is determined to be a Force Majeure Event), so as to minimize emissions to the greatest extent technically practicable consistent with the technological limitations, manufacturers’ specifications, fire prevention codes, and good engineering and maintenance practices for such pollution control technology and the unit.

The permittee shall maintain the PM control device consistent with manufacturers’ specifications, the operational design of the unit, and good engineering practices and shall replace bags as needed on each baghouse to maximize collection efficiency.

E3-5. **SO₂ and NOₓ Emission Limits**

(a) Sulfur dioxide (SO₂) emissions from coal-fired boilers 1, 2, 3, and 4 shall not exceed a 30-boiler operating day rolling average value (combined total for all four boilers) of 1,971 pounds per hour (lb/hr). This limit shall apply at all times, except during periods of startup and shutdown. During periods of startup and shutdown, the permittee shall comply with the applicable work practice standards specified in Table 3 to 40 CFR 63 Subpart UUUUU and use the relevant definitions in §63.10021(b).

TAPCR 1200-03-14-.01(3), agreement letter dated June 23, 2016 (Attachment 8), Conditions 2 and 3 of construction permit 971197F.

**Compliance Method:** Compliance with this emission standard shall be determined through the use of continuous in-stack monitoring for sulfur dioxide. Continuous monitoring for SO₂ shall meet the requirements of TAPCR 1200-03-10-.02 and Conditions E3-6, E3-7, E3-12, and E3-13 of this permit. All 30-day rolling averages shall be calculated as specified in 40 CFR §63.10021(b).

**Note to Condition E3-5:** “Boiler operating day” means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the EGU, excluding startup periods or shutdown periods. It is not necessary for the fuel to be combusted the entire 24-hour period.

(b) Nitrogen oxides (NOₓ) emitted from this fuel burning installation shall not exceed 0.45 lb/MMBtu of heat input (30-day rolling average).
For the purpose of netting against the natural gas-fired NOX emissions from the gas conversion of the Gallatin Fossil Plant combustion turbines, NOX emissions from this fuel burning installation shall not exceed 0.44 lb/MMBtu (12-month rolling average).

TAPCR 1200-03-27-.02(2), TAPCR 1200-03-27-.03(1)(b), agreement letter dated August 27, 1999

**Compliance Method:** Compliance with the NOX emission limits shall be determined through continuous emission monitoring for NOX. The 30-day rolling average shall be calculated on the basis of all valid daily averages for the last 30 operating days, with a minimum data requirement of 22 days of valid data. Continuous monitoring for NOX shall meet the requirements of TAPCR 1200-03-10-.02 and **Conditions E3-6, E3-7, E3-12, and E3-13** of this permit.

**E3-6. Operational Availability Condition for the Sulfur Dioxide and Nitrogen Oxides Monitoring Systems**

The use of continuous in-stack monitoring for sulfur dioxide and nitrogen oxides is the method by which this fuel burning installation proves continual compliance with the applicable emissions limitations. Therefore, for this fuel burning installation to demonstrate continual compliance with the applicable sulfur dioxide and nitrogen oxides emission limitations, each SO2 and NOX monitoring system shall be fully operational for at least 95% of the operational time of the monitored units during each semiannual reporting period. An operational availability level of less than this amount may be considered the basis for declaring the fuel burning installation in noncompliance with the applicable monitoring requirements, unless the reasons for the failure to maintain these levels of operational availability are accepted by the Division as being legitimate malfunctions of the instruments or due to limited operation of the monitored units. Furthermore, should the sulfur dioxide monitoring system remain inoperative for more than 7 consecutive days, then the use of backup monitoring will be required.

TAPCR 1200-03-10-.02(1)(a) and 1200-03-10-.04(2)(a)

**Compliance Method:** Compliance with this condition shall be assured compliance with **Condition E3-13**.

**E3-7. Quality Assurance Condition for the Sulfur Dioxide and Nitrogen Oxides Monitoring System**

Quality assurance checks shall be performed on the sulfur dioxide and nitrogen oxides monitoring systems on an annual basis. The quality assurance checks shall consist of a repetition of the relative accuracy portion of the Performance Specification Test. Written reports of the quality assurance checks shall be submitted to the Technical Secretary.

Within 90 days of each major modification or major repair of any sulfur dioxide or nitrogen oxides monitor, diluent monitor, or electronic signal combining system, a repeat of the performance specification test shall be conducted. A written report of the performance specification test shall be submitted to the Technical Secretary as proof of the continuous operation of the sulfur dioxide emissions monitoring system within acceptable limits.

TAPCR 1200-03-10-.02(1)(a)

**Compliance Method:** Reports shall be submitted as required to the Compliance Validation program at the address in **Condition E2-1(g)**.

**E3-8. Visible emissions from this fuel burning installation shall not exceed 20% opacity (six-minute average) except for one six-minute period per one hour of not more than 40% percent opacity, as specified in TAPCR 1200-03-05-.01(1). Opacity data reduction shall be accomplished by EPA Method 9 utilizing the procedures outlined in the current 40 CFR 60, Appendix A.**

TAPCR 1200-03-05-.01(1), 1200-03-09-.02(11)(e)(iii), and 1200-03-10-.02(1)

**Compliance Method:** Compliance with this condition shall be assured as follows:

(a) Consistent with the provisions of TAPCR 1200-03-05-.03(1), compliance with the applicable visible emissions standards shall be determined by a certified reader using Method 9. The opacity shall be evaluated semiannually using Method 9 unless a valid reading cannot be made. In the event that a valid reading cannot be taken within six months, and provided that at least one reading was attempted during the six-month period, an additional 30 days shall be allowed in which to attempt another reading. If a valid reading cannot again be made, the permittee shall within 60 days of the end of the six-month period submit a report describing its efforts to obtain valid readings, and the reasons it could not.
(b) Compliance shall also be assured by the monitoring, recordkeeping, and reporting specified in **Condition E3-4** of this permit.

**E3-9.** Consistent with the requirements of TAPCR 1200-03-05-.02 and 1200-03-20, due allowance shall be made for visible emissions in excess of that allowed in **Condition E3-8** which are necessary or unavoidable due to routine startup and shutdown conditions.

Routine startups as used above shall only cover startups which have less than 20.0 hours of visible emission levels in excess of the standard in paragraph 1200-03-05-.01(1) and shall not include any periods of time in which visible emissions exceed 80% opacity (six-minute averages) for more than 6.5 hours. Routine shutdowns as used above shall only cover shutdowns which have less than 20.0 hours of visible emission levels in excess of the standard in paragraph 1200-03-05-.01(1) and shall not include any periods of time in which visible emissions exceed eighty 80% opacity (six-minute averages) for more than 3.5 hours. For overlapping multiple unit startups and shutdowns, the full exempt period shall apply from the beginning of each individual boiler startup or shutdown. A log of all malfunctions and nonroutine startups and shutdowns shall be maintained in accordance with Rule 1200-03-20-.04. Irrespective of the start-up and shutdown exemptions set forth on this operating permit for any source, no emission shall be allowed which can be proved by the Technical Secretary to cause or contribute to any violations of the Ambient Air Quality Standards contained in Chapter 1200-03.

**TAPCR 1200-03-05-.02(1) and 1200-03-20-.06(1)**

**Compliance Method:** A log of all malfunctions and nonroutine startups and shutdowns shall be maintained in accordance with TAPCR 1200-03-20-.04. Irrespective of the startup and shutdown exemptions set forth on this operating permit for any source, no emission shall be allowed which can be proved by the Technical Secretary to cause or contribute to any violations of the ambient air quality standards contained in TAPCR 1200-03.

**E3-10. Operational Availability Condition for the Opacity Monitoring System**

Each in-stack opacity monitoring system for this fuel burning installation shall be fully operational for at least 95% percent of the operational time of the monitored units during each semiannual reporting period. Operational availability levels of less than this amount may be considered the basis for declaring the fuel burning installation in noncompliance with the applicable monitoring requirements, unless the reasons for the failure to maintain this level of operational availability are accepted by the Division as being legitimate malfunctions of the instruments or due to limited operation of the monitored units.

**TAPCR 1200-03-10-.04(2)(a)2**

**Compliance Method:** Compliance with this condition shall be assured by compliance with **Condition E3-13**.

**E3-11. Quality Assurance Condition for the Opacity Monitoring System**

On-stack quality assurance audits shall be conducted on a semiannual basis. This on-stack quality assurance audit shall consist of a repetition of the calibration error portion of Performance Specification 1 (40 CFR 60, Appendix B) utilizing the on-stack audit device, and written reports of the audits shall be submitted to the Technical Secretary.

Alternatively, an off-stack quality assurance audit may be conducted on a biennial basis. If elected, this quality assurance audit shall include, at a minimum, a repetition of the calibration portion of 40 CFR 60, Appendix B, Performance Specification 1. Both the monitor transceiver and retroreflector must be removed from the stack and set up to the stack path length prior to conducting the quality assurance audit. Written reports of the quality assurance checks shall be submitted to the Technical Secretary. Prior to the commencing of the use of this option, the Technical Secretary shall be informed in writing of the election of this option. Utilization of this option shall not be cause for the reopening of this permit.

Within 90 days of each major modification or major repair of any opacity monitor or the electronic signal combining system, a repeat of the performance specification test shall be conducted, and a written report of it submitted to the Technical Secretary as proof of the continuous operation of the opacity monitoring system within acceptable limits.

**TAPCR 1200-03-10-.02(1)(a)**

**Compliance Method:** Reports shall be submitted as required to the Compliance Validation program at the address in **Condition E2-1(g)**.

**E3-12. Data Averaging for Sulfur Dioxide, Nitrogen Oxides, and Opacity**
For nitrogen oxides and sulfur dioxide, 18 valid one-hour data averages are required in order to calculate a valid daily average (midnight to midnight). One-hour averages shall be calculated from four or more equally spaced data averages over each one-hour period, except during periods when calibration, quality assurance, or maintenance are being performed. A valid one-hour average during these periods shall consist of at least two data points with each representing a 15-minute time period. Hourly sulfur dioxide emission rates are not calculated if the affected facility is operated less than 30 minutes in a one-hour period. For nitrogen oxides, the 30-day rolling average is calculated on the basis of all valid daily averages for the last 30 operating days, with a minimum data requirement of 22 days of valid data.

“One day” is defined as the 24-hour time period from midnight to midnight and “one hour” is defined as any of the 24 successive 60-minute time blocks beginning at midnight.

Average values for opacity may be obtained by integration over the six-minute averaging period or by arithmetically averaging a minimum of 24 equally spaced, instantaneous opacity measurements per six-minute period. Opacity data recorded during periods of monitoring system breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages.

TAPCR 1200-03-09-.02(11)(e)(1)(iii), 1200-03-10-.02(1)(a), and 1200-03-10-.02(2)

**Compliance Method:** Compliance with this condition shall be assured by compliance with **Condition E3-13**.

### E3-13. Reports for Sulfur Dioxide, Nitrogen Oxides, and Opacity

From the emissions data generated by the continuous in-stack opacity sulfur dioxide and nitrogen oxides monitoring systems, reports of opacity emissions over 20%, and sulfur dioxide and nitrogen oxides emissions shall be generated. The format of these reports shall meet the requirements of Paragraph 1200-03-10-.02(2) of the Tennessee Air Pollution Control Regulations.

(a) For opacity monitoring required by **Condition E3-4**, the reports shall consist of:

1. The magnitude in actual percent opacity of all six-minute averages of opacity greater than 20% for each hour of operation of the source minus one six-minute exempt period of no more than 40% opacity;

2. The date and time identifying each period during which the system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. The Technical Secretary may require proof of system performance whenever system repairs or adjustments have been made;

3. When no emissions over 20% opacity have occurred and the system has not been inoperative, repaired, or adjusted, such information shall be included in the report; and

4. The nature and cause of emissions over 20% opacity, if known.

(b) For sulfur dioxide and nitrogen oxides monitoring required by **Condition E3-5**, the reports shall consist of:

1. Emission averages, in the units of the applicable standard, for each averaging period during operation of the source.

2. Identification of each averaging period in which the applicable standard was exceeded and the nature and cause of excess emissions, if known;

3. The date and time identifying each period during which the system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. The Technical Secretary may require proof of system performance whenever system repairs or adjustments have been made; and

4. When no excess emissions have occurred and the system has not been inoperative, repaired, or adjusted, such information shall be included in the report.

TAPCR 1200-03-10-.02(2) and 1200-03-09-.02(11)(e)1(iii)

**Compliance Method:** Compliance shall be assured by semiannual reporting, as required in **Condition E2-1(a)**.
E3-14. Cross-State Air Pollution Rule (CSAPR) Requirements

The permittee shall comply with the applicable provisions of 40 CFR 97 Subparts AAAAA (CSAPR NO$_X$ Annual Trading Program), CCCCC (CSAPR SO$_2$ Group 1 Trading Program), and EEEEE (CSAPR NO$_X$ Ozone Season Group 2 Trading Program). The permittee shall comply with paragraphs 74 through 78 of the Consent Decree regarding the use and surrender of NO$_X$ allowances, and with paragraphs 90 through 93 of the Consent Decree regarding the use and surrender of SO$_2$ allowances. The permittee may sell, bank, use, trade, or transfer any allowances in accordance with paragraphs 82 and 94 of the Consent Decree (Super-Compliance Allowances). For surrender of allowances, the permittee shall comply with paragraphs 79, 80, 95, and 96 of the Consent Decree. CSAPR general requirements are included in Attachment 4 of this permit.


E3-15. Continuous Operation of NO$_X$ and SO$_2$ Control Equipment

The permittee shall continuously operate any pollution control technology or combustion control (including, but not limited to, SCR, FGD, PM Control Device, SNCR, Low NO$_X$ Burner (LNB), Overfire Air (OFA) or Separated Overfire Air (SOFA)) at all times such Unit is in operation, except during a Malfunction that is determined to be a Force Majeure Event as defined by the Consent Decree. This continuous operation serves to minimize emissions to the greatest extent technically practicable consistent with the technological limitations, manufacturers’ specifications, fire prevention codes, and good engineering and maintenance practices for such pollution control technology or combustion control and the Unit. This condition specifically applies to such equipment as the installed SCR and dry FGD for NO$_X$ and SO$_2$ emissions control.

TAPCR 1200-03-09-.03(8), Consent Decree

Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

E3-16. Compliance with System-Wide Annual NO$_X$ and SO$_2$ Tonnage Limits

During each calendar year all Units in the TVA System and any New CC/CT Units constructed pursuant to Paragraph 117 of the Consent Decree, collectively, shall not emit NO$_X$ or SO$_2$ in excess of the System-Wide Annual Tonnage Limitations found in paragraphs 67-69 and 82-84 of the Consent Decree.

TAPCR 1200-03-09-.03(8), Consent Decree

Compliance Method: In accordance with 40 CFR 75, TVA shall use CEMS to monitor emissions of NO$_X$ and SO$_2$ to demonstrate compliance with the System-Wide Annual Tonnage Limitations.

E3-17. Mercury and Air Toxics Standards (MATS) requirements (coal-fired units, not low rank virgin coal)

(a) The permittee shall comply with the following emission limits:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Input-Based Standard</th>
<th>Output-Based Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Filterable PM</td>
<td>0.030 lb/MMBtu</td>
<td>0.30 lb/MWh$^2$</td>
</tr>
<tr>
<td>(b) Total non-Hg HAP metals</td>
<td>0.000050 lb/MMBtu</td>
<td>0.50 lb/GWh</td>
</tr>
<tr>
<td>(c) Individual HAP metals:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antimony (Sb)</td>
<td>0.80 lb/TBtu</td>
<td>0.0080 lb/GWh</td>
</tr>
<tr>
<td>Arsenic (As)</td>
<td>1.1 lb/TBtu</td>
<td>0.020 lb/GWh</td>
</tr>
<tr>
<td>Beryllium (Be)</td>
<td>0.20 lb/TBtu</td>
<td>0.0020 lb/GWh</td>
</tr>
<tr>
<td>Cadmium (Cd)</td>
<td>0.30 lb/TBtu</td>
<td>0.0030 lb/GWh</td>
</tr>
<tr>
<td>Chromium (Cr)</td>
<td>2.8 lb/TBtu</td>
<td>0.030 lb/GWh</td>
</tr>
<tr>
<td>Cobalt (Co)</td>
<td>0.80 lb/TBtu</td>
<td>0.0080 lb/GWh</td>
</tr>
</tbody>
</table>
### Emission Limits for Existing EGUs (Table 2 of Subpart UUUUU)

Comply with the following input or output-based emission limits and with other requirements in Table 2 of Subpart UUUUU.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Input-Based Standard</th>
<th>Output-Based Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (Pb)</td>
<td>1.2 lb/TBtu</td>
<td>0.020 lb/GWh</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>4.0 lb/TBtu</td>
<td>0.050 lb/GWh</td>
</tr>
<tr>
<td>Nickel (Ni)</td>
<td>3.5 lb/TBtu</td>
<td>0.040 lb/GWh</td>
</tr>
<tr>
<td>Selenium (Se)</td>
<td>5.0 lb/TBtu</td>
<td>0.060 lb/GWh</td>
</tr>
<tr>
<td>HCl/SO₂ - comply with (a) or (b)³</td>
<td>0.0020 lb/MMBtu</td>
<td>0.020 lb/MWh</td>
</tr>
<tr>
<td>HCl</td>
<td>0.20 lb/MMBtu</td>
<td>1.5 lb/MWh</td>
</tr>
<tr>
<td>SO₂</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury - comply with (a) or (b)</td>
<td>1.2 lb/TBtu</td>
<td>0.013 lb/GWh</td>
</tr>
<tr>
<td>CEMS or sorbent trap</td>
<td>1.0 lb/TBtu</td>
<td>0.011 lb/GWh</td>
</tr>
<tr>
<td>30-day or 90-day LEE testing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. For LEE emissions testing for total PM, total HAP metals, individual HAP metals, HCl, and HF, the required minimum sampling volume must be increased nominally by a factor of two.

2. Gross output.

3. You may not use the alternate SO₂ limit if your EGU does not have some form of FGD system and SO₂ CEMS installed.

(b) The permittee shall comply with the following requirements:

<table>
<thead>
<tr>
<th>Description</th>
<th>Subpart UUUUU Requirement</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission limits</td>
<td>The emission limits and operating limits apply at all times except during periods of startup and shutdown</td>
<td>§63.10000(a)</td>
</tr>
<tr>
<td>Work practice standards</td>
<td>Operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</td>
<td>§63.10000(b)</td>
</tr>
<tr>
<td>Low emitting EGU (LEE)</td>
<td>Comply with §63.10000(c), as applicable.</td>
<td>§63.10000(c)</td>
</tr>
<tr>
<td>Site-specific monitoring plan</td>
<td>Comply with §63.10000(d), as applicable.</td>
<td>§63.10000(d)</td>
</tr>
<tr>
<td>Emissions averaging</td>
<td>Comply with §§63.10009 and 63.10022, as applicable.</td>
<td>§63.10009, §63.10022</td>
</tr>
<tr>
<td>Work practice standards</td>
<td>Comply with Table 3 provisions for existing EGU, coal-fired EGU during startup, coal-fired EGU during shutdown.</td>
<td>§63.10000(a)</td>
</tr>
<tr>
<td>Operating limits</td>
<td>Comply with Table 4 provisions for PM CPMS, as applicable.</td>
<td>§63.9991(a)(2)</td>
</tr>
<tr>
<td>Performance testing</td>
<td>Comply with Table 5.</td>
<td>§63.10006 and §63.10007</td>
</tr>
<tr>
<td>PM CPMS operating limits</td>
<td>Comply with §63.10023, as applicable. Comply with Table 6 provisions for filterable PM, total non-mercury HAP metals, individual non-mercury HAP metals, total HAP metals, or individual HAP metals, as applicable.</td>
<td>§63.10007</td>
</tr>
<tr>
<td>Demonstrating continuous compliance</td>
<td>Comply with §§63.10020 and 63.10021, as applicable. Comply with Table 7 provisions for CEMS, quarterly performance testing, periodic tune-ups, and work practice standards for coal-fired EGUs during startup and shutdown.</td>
<td>§63.10021</td>
</tr>
</tbody>
</table>
### Description

<table>
<thead>
<tr>
<th>Subpart UUUUU Requirement</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notification requirements</td>
<td>As specified in §63.10030.</td>
</tr>
<tr>
<td>Recordkeeping requirements</td>
<td>As specified in §63.10032 and §63.10033.</td>
</tr>
<tr>
<td>Reporting requirements</td>
<td>Comply with §63.10031 and Table 8.</td>
</tr>
<tr>
<td>MACT General Provisions</td>
<td>General Provisions apply as indicated in Table 9.</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8), 40 CFR 63 Subpart UUUUU

**Compliance Method:** Compliance shall be assured by compliance with the specific monitoring, recordkeeping, and reporting established in the Notifications of Compliance Status (NOCS) dated August 19, 2016 (Unit 2) and August 23, 2016 (Units 1, 3, and 4), and by semiannual reporting, as required in **Condition E2-1(e).**

#### 83-0025-05, 06, 07, and 08

**Source Description:** Combustion Turbine Electric Generating Plant: Four simple cycle turbines with 5,140 MMBtu/hr Nominal Heat Input at 0° F (1,285 MMBtu/hr each unit), 428.4 MW electrical output (107.1 MW each unit), natural gas or no. 2 oil fired. TVA designated emission units 3-6 (turbines 1-4).

**RACT Conditions E4-1 through E4-9 apply to 83-0025-05, 06, 07, and 08**

**E4-1.** PM emitted from this source shall not exceed 0.1 lb/MMBtu of heat input (daily average).

TAPCR 1200-03-06-.02(2)(a), TAPCR 1200-03-09-.02(11)(e)(iii), Condition 3 of PSD permit 949583F

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil and natural gas (*Table E4-1*). Compliance shall be assured by compliance with the fuel usage restrictions of **Conditions E4-4 and E4-9** and the records required by **Condition E4-7.**

**Table E4-1: AP-42 Emission Factors for Stationary Combustion Turbines**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>Natural Gas</td>
<td>0.0066</td>
<td>AP-42, Table 3.1-2a</td>
</tr>
<tr>
<td></td>
<td>No. 2 Fuel Oil</td>
<td>0.012</td>
<td></td>
</tr>
</tbody>
</table>

**E4-2.** Sulfur dioxide emitted from this source shall not exceed 0.8 lb/MMBtu of heat input (one-hour average).

TAPCR 1200-03-14-.02(2)(b), Condition 4 of PSD permit 949583F

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil and natural gas (*Table E4-2*). Compliance shall be assured by compliance with the fuel usage restrictions of **Conditions E4-4 and E4-9** and the records required by **Condition E4-6.**

**Table E4-2: SO₂ Emission Factors**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Natural Gas</td>
<td>0.00056</td>
<td>Table 1.4-2 (Note 1)</td>
</tr>
<tr>
<td></td>
<td>No. 2 Fuel Oil</td>
<td>0.051</td>
<td>AP-42, Table 3.1-2a (Note 2)</td>
</tr>
</tbody>
</table>

**Notes:**

1. Emission factor is based on EPA’s default sulfur content (2,000 grains sulfur per million standard feet of natural gas), assuming that 100% of fuel sulfur is converted to SO₂.
2. Fuel oil with 0.05% sulfur content by weight.

**E4-3.** Except as provided in **Condition E4-8**, only natural gas and No. 2 fuel oil shall be used as fuels for this source. The sulfur content of the fuel oil shall not exceed 0.05% percent by weight. This fuel sulfur content restriction is established pursuant to TAPCR 1200-03-09-.01(4) (PSD netting for construction of 83-0025-14).

TAPCR 1200-03-09-.01(4), 1200-03-09-.02(11)(e)(i)(iii), Condition 5 of operating permit 052719F

**Compliance Method:** A record of the sulfur analysis of each shipment of fuel oil used at this fuel burning installation or certification statement by the vendor that the fuel oil will not contain more than 0.05% sulfur by weight shall be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

**E4-4.** Visible emissions from this source shall not exceed 20% percent opacity except for one six-minute period per one hour of not more than 40% opacity as specified in TAPCR 1200-03-05-.01(1). Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(1), 1200-03-05-.03(6)

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

**E4-5.** The total output for the four GAF combustion turbines shall not exceed 162,000 megawatt-hours for the seven-month period from April 1 through October 31 of each year. During this period, these turbines shall be fired exclusively on natural gas, except that No. 2 oil may be fired as follows:

(a) When testing is being conducted of turbines, following repairs to those turbines;

(b) When, except as noted in **Condition E4-5(a)**, the turbines are started without gas being immediately available, that is without gas purchased and in-line to the facility, and until gas purchase is made and gas is in-line to the facility;

(c) When natural gas delivery is interrupted by the gas supplier and until gas delivery is resumed; and

(d) When natural gas cannot be burned as a result of malfunction, as defined in TAPCR 1200-03-02-.01, provided the applicable provisions of TAPCR 1200-03-20 are satisfied.

TAPCR 1200-03-27-.03(1)(a), 1200-03-09-.02(11)(e)(i)(iii), Conditions 7 and 9 of PSD permit 949583F

**Compliance Method:** Records shall be maintained documenting the durations of all instances of occurrences as described in (a), (b), and (c) above. For each instance of an occurrence as described in (b) above during workday normal business hours, records shall be maintained documenting the measures taken to expeditiously replace oil combustion with gas. Compliance is also assured by the recordkeeping required by **Condition E4-6**.

**E4-6.** A monthly log of the following information must be maintained at the facility and kept available for inspection by the Technical Secretary or an authorized representative:

(a) No. 2 fuel oil usage

(b) Natural gas usage

(c) Hours of operation

(d) Maintenance inspections and repairs

(e) Megawatt hour output

TAPCR 1200-03-27-.03(1)(a) and 1200-03-09-.02(11)(e)(i)(iii), Condition 8 of PSD permit 949583F

**Compliance Method:** Compliance shall be assured by semiannual reporting, as required in **Condition E2-1(a)**.

**E4-7.** Reasonably available control technology (RACT) for this source has been determined to be as described in the January 1998 document “Reasonably Available Control Technology Demonstration for the Combustion Turbines at the Tennessee Valley
Authority Gallatin Fossil Plant’. The requirements specified in Conditions E4-3, E4-5, and E4-6 have been determined to be RACT for nitrogen oxide emissions from this source.

TAPCR 1200-03-27-.03(1)(a), Condition 9 of PSD permit 949583F

E4-8. The use of an alternative fuel shall not be considered a change in the method of operation if the source is designed to accommodate such alternative fuel and the permittee demonstrates that the alternative fuel will assure compliance with the applicable PM, SO2, and opacity standards.

TAPCR 1200-03-09-.03(8) and 1200-03-02-.01(1)(aa)2(iii)

Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

E4-9. Combustion turbines 1 through 4 were constructed in 1975 and have not been modified as defined by §60.14. The requirements of 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines) do not apply to this source.

TAPCR 1200-03-09-.03(8)
**Title V Operating Permit 578731**

**Expiry Date:**

---

**83-0025-10 and 83-0025-11**

**Source Description:**

**Solid Fuel Handling Process:** Currently coal is the only solid fuel received at GAF, but TVA may co-fire wood waste in the future. Coal can be received by barge or rail transport, but there is currently no coal received by rail, and TVA anticipates the barge unloading system to be the routine delivery method.

The barge unloading system consists of a clamshell unloader with a maximum offloading rate of 1,400 tons/hour. Coal is dumped into the unloader surge hopper and fed onto conveyor BC-3 within the enclosure of the barge unloader building. Conveyor BC-3 empties into the enclosed crusher building, and a double-roll full-feed crusher is used to achieve size reduction to 1.25-inch top size. The crusher delivers its product to conveyor BC-4 for delivery to Transfer Station D. As-received coal is sampled using a rotary-sweep two-stage sampling system, and unused material is returned to conveyor BC-3.

Coal unloaded by a rotary car dumper is transferred via conveyor BC-1 to two Bradford Breakers. A distillate oil-fired car thawer is utilized when needed during cold weather to aid in unloading railcars. The breakers reduce received coal to an acceptable size, and the sized coal is discharged to conveyor BC-2. BC-2 transfers to Transfer Station D. A sampling building is located along conveyor BC-1. The sampling building provides an enclosure for all sampling equipment other than the swing arm primary cutter.

Coal received from the barge or railcar unloading systems discharges onto conveyors BC-5, BC-6, or BC-11 at Transfer Station D. BC-5 and BC-6 convey coal to Transfer Station B and BC-11 conveys coal to stockout. From Transfer Station B, conveyors BC-7 and BC-8 discharge to conveyors BC-9 and BC-10 at Transfer Station A. BC-9 and BC-10 distribute coal to the plant bunkers (one per boiler) via use of traveling trippers. Pan scrapers or dozers are used to transport coal from stockout to the underground reclaim hopper. Coal is transferred from the reclaim hopper to conveyor BC-13, which conveys coal to Transfer Station C.

Conveyors and transfer points are fully or partially enclosed where feasible. Fugitive dust control for the barge unloading system is achieved by using foam suppression at the discharge of BC-3 and water/surfactant suppression at the clamshell unloader. TVA expects that the foam suppression will achieve 90% control efficiency at the initial application point, and residual dust suppression is estimated to diminish by 10% at each subsequent transfer or operation. TVA expects a minimum control efficiency of 80% for the water/surfactant spray. Water sprays are utilized as needed for control of fugitive dust during railcar unloading (to avoid freezing of coal and equipment, the sprays may not be operated during freezing conditions).

*CVA emission points 7, 8, and 9.*

---

**Conditions E5-1 through E5-3 apply to 83-0025-10**

**E5-1.** The maximum input rate for this source (barge unloading and crusher building) shall not exceed 1,400 tons of coal per hour on a daily average basis (midnight to midnight) and 4,780,000 tons of coal during any period of 12 consecutive months.

TAPCR 1200-03-07-.01(5) and agreement letter dated March 22, 1996 (Attachment 8)

**Compliance Method:** Daily records of coal handled by this source, daily records of operating hours, and monthly records of 12-month rolling total throughput shall be maintained at the facility and kept available for inspection by the Technical Secretary or an authorized representative.

**E5-2.** PM emitted from the barge unloader, coal crusher, and conveying system shall not exceed 7.5 lb/hr (24-hour average basis) and 18.0 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.01(5), agreement letter dated March 22, 1996 (Attachment 8)

**Compliance Method:** Compliance shall be assured as follows:

(a) Compliance shall be assured by the recordkeeping requirements in **Condition E5-1.**
(b) Wet suppression shall be used as needed to control fugitive emissions at the discharge from the clamshell unloader to the surge hopper. The main crusher and conveyors shall be enclosed.

(c) Wet suppression shall be used as needed when using pan scrapers to control fugitive emissions at the coal storage yard. The coal breakers shall be enclosed.

(d) The wet suppression system shall be maintained, operated as needed and inspected twice per year. All inspections shall be documented and the records of inspections must be maintained at the facility and kept available for inspection by the Technical Secretary or an authorized representative.

(e) Compliance with this condition is also based upon the emission calculations in the application dated December 10, 2020 (pages 8-22 through 8-27).

E5-3. **NSPS Requirements (40 CFR 60 Subpart Y):** This source is subject to, and shall comply with, the provisions of 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation and Processing Plants) as indicated in **Table E5-3**.

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.250</td>
<td>The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 200 tons of coal per day.</td>
<td>This source was constructed in 1959 and modified in 1997. The affected facility includes coal processing and conveying equipment (including breakers and crushers), coal storage systems, and transfer and loading systems. The source does not include a thermal dryer or pneumatic coal cleaning equipment. The following requirements do not apply: §60.252, §60.253, §60.254(b), §60.254(c), §60.255(b), §60.255(c), §60.255(d), §60.255(e), §60.255(f), §60.255(g), §60.255(h), §60.256, §60.257(b), §60.258(a), §60.258(b)(1), and §60.258(b)(2).</td>
</tr>
<tr>
<td>§60.251</td>
<td>Definitions</td>
<td>Conveyors BC-2 and BC-3, barge unloading system, and double-roll full-feed crusher (TVA emission unit 9).</td>
</tr>
<tr>
<td>§60.254(a)</td>
<td>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20% opacity or greater.</td>
<td>Conveyors BC-2 and BC-3, barge unloading system, and double-roll full-feed crusher (TVA emission unit 9). Initial performance tests were completed May 29-30, 1997.</td>
</tr>
<tr>
<td>§60.255(a), §60.257(a), §60.258(c)</td>
<td>An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257. The owner or operator must determine compliance with the applicable opacity standards using Method 9 (Appendix A-4 of Part 60), as specified in §§60.257(a)(1) through (3). Submit the results of initial performance tests to the Administrator or delegated authority, consistent with §60.8.</td>
<td>Conveyors BC-2 and BC-3, barge unloading system, and double-roll full-feed crusher (TVA emission unit 9). Initial performance tests were completed May 29-30, 1997.</td>
</tr>
</tbody>
</table>
Table E5-3: 40 CFR 60 Subpart Y Requirements (Coal Preparation and Processing Plants) for 83-0025-10

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.257(b)(3)</td>
<td>For the purpose of reports required under §60.7(c), any owner operator subject to the provisions of this subpart shall report semiannually periods of excess emissions as follows: All six-minute average opacities that exceed the applicable standard.</td>
<td>Conveyors BC-2 and BC-3, barge unloading system, and double-roll full-feed crusher (TVA emission unit 9).</td>
</tr>
</tbody>
</table>

**Compliance Method:** Periods of excess emissions shall be submitted with the semiannual report required by **Condition E2-1(a)** of this permit.

Source Description: **Dry Fly Ash Storage Silo:** The dry fly ash storage silo was once used to store dry fly ash for contracted sales. With the addition of the dry scrubber and baghouses to catch the coal combustion products (CCP), the dry fly ash storage silo is not being operated.

When it was used, air displaced by ash being deposited in the ash storage silo and the fluidizing air being introduced into the silo was vented to atmosphere via a bin vent bag filter. The only means of unloading the silo was through the telescoping chute used to load tanker trucks. The chute was equipped with an exhaust fan and piping which discharge back into the silo.

**TVA designated emission unit 11**

Conditions E6-1 through E6-3 apply to 83-0025-12

**E6-1.** The maximum input rate for this source shall not exceed 300,000 lb/hr on a daily average basis (midnight to midnight).

**TAPCR 1200-03-09-.02(11)(e)1(i)**

**Compliance Method:** Daily records of fly ash handled by this source, including daily and 12-month total throughput, shall be maintained at the facility and kept available for inspection by the Technical Secretary or an authorized representative.

**E6-2.** PM emitted from this source shall not exceed 3.5 lb/hr on a daily average basis.

**TAPCR 1200-03-07-.01(5), agreement letter dated May 16, 1984**

**Compliance Method:** A fabric filter shall be used to control PM emissions during all truck loading operations. The permittee shall perform and record semiannual inspections of the exterior of the fabric filter, including the ductwork and exhaust. The permittee shall initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the permittee finds that an abrasion hole, emissions problem, and/or plugging problem has developed during an inspection of the fabric filter. The inspection records shall include the date and time of each inspection, the results of each inspection (e.g., the identification of an abrasion hole, emissions problem, and/or plugging problem), and the date and time for which each corrective action is initiated and completed. Inspection records shall also include the initials of the person performing the inspection(s) and corrective action(s), along with the date, time, and any relevant comments.

**E6-3.** Visible emissions from this source shall not exceed 20% opacity for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period as specified in TAPCR 1200-03-05-.01. Visible emissions from this source shall be determined by Tennessee Visible Emission Evaluation (TVEE) Method 2 as adopted by the Tennessee Air Pollution Control Board on August 24, 1984.

**TAPCR 1200-03-05-.01(1)**

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).
**Source Description:** Railcar Thawer: Gallatin Fossil Plant has a rail car thawer that can operate in the winter season as needed to unload frozen coal from rail cars. The rail car thawer will not operate between May 1 and October 31 of each calendar year. Presently no coal is delivered by rail, so the rail car thawer is not being used. The rail car thawer is a pressure-fed orifice combustor designed to burn 150 gallons per hour of No. 2 fuel oil (21 MMBtu/hr). TVA designated emission unit 10 (not subject to NESHAP DDDDD).

**Conditions E7-1 through E7-5 apply to 83-0025-13**

**E7-1.** PM emitted from this source shall not exceed 0.5 lb/MMBtu of heat input (24-hour average).

TAPCR 1200-03-06-.02(1)

*Compliance Method:* Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil (*Table E7-1*). Compliance shall be assured by compliance with *Conditions E7-4 and E7-5*.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/1,000 gal)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filterable PM</td>
<td>No. 2 Fuel Oil</td>
<td>3.3</td>
<td>AP-42, Table 1.3-1</td>
</tr>
</tbody>
</table>

**E7-2.** SO₂ emitted from this source shall not exceed 5.0 lb/MMBtu of heat input (24-hour average).

TAPCR 1200-03-14-.02(1)(a)

*Compliance Method:* Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil (*Table E7-3*). Compliance shall be assured by compliance with *Conditions E7-4 and E7-5*.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/1,000 gal)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>No. 2 Fuel Oil</td>
<td>71 (see note)</td>
<td>AP-42, Table 1.3-1</td>
</tr>
</tbody>
</table>

*Note:* the AP-42 emission factor for SO₂ is equal to 142S, where S equals the maximum sulfur content of No. 2 fuel oil (0.5 % by weight).

**E7-3.** This source shall not be operated between May 1 and October 31 of each calendar year.

TAPCR 1200-03-09-.03(8)

*Compliance Method:* Monthly records of fuel usage by this source, including the amount and type of fuel burned, shall be maintained at the facility and kept available for inspection by the Technical Secretary or an authorized representative.

**E7-4.** Except as provided in *Condition E7-5*, only No. 2 fuel oil shall be burned in the rail car thawer.

TAPCR 1200-03-09-.03(8)

*Compliance Method:* Compliance with this condition shall be assured by compliance with *Condition E7-3*.

**E7-5.** The use of an alternative fuel shall not be considered a change in the method of operation if the source is designed to accommodate such alternative fuel and the permittee demonstrates that the alternative fuel will assure compliance with the applicable PM, SO₂, and opacity standards.

TAPCR 1200-03-09-.03(8) and 1200-03-02-.01(1)(aa)2(iii)
Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

| 83-0025-14 | Source Description | Combustion Turbine Electric Generating Plant: | Combustion turbines 5-8 (General Electric Model PG7121EA) began operation in May 2000 and are utilized during periods of peak power demand. The combustion turbines can burn either natural gas or No. 2 fuel oil at the following input and output rates:

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Mode</th>
<th>Heat Input (MMBtu/hr)</th>
<th>Output (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>Base Mode</td>
<td>1,183</td>
<td>104.6</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>Peak Mode</td>
<td>1,271</td>
<td>112.2</td>
</tr>
<tr>
<td>No. 2 Fuel Oil</td>
<td>Base Mode</td>
<td>1,263</td>
<td>108.1</td>
</tr>
</tbody>
</table>

The ratings for these CTs vary with fuel, temperature, and operating mode. The ratings shown in this table are at 0°F.

Total annual output from combustion turbines 5-8 shall is limited to 951,800 MWh, of which no more than 315,600 MWh may occur during oil-fired operation. Combustion turbines 5-8 are equipped with evaporative inlet fogging, dry low-NOx burners, and water injection to control NOX emissions. SO2 emissions are controlled by the use of low-sulfur fuels, and good combustion practices; clean fuels minimize emissions of PM, CO, VOC, and other pollutants (e.g., trace metals).

Two natural gas heaters (NGH1 and NGH2) heat water in heat exchangers to vaporize any condensate in the natural gas that is fed to the combustion turbines. The heat input for the natural gas heaters is 15.56 MMBtu/hr (7.78 MMBtu/hr each) and they have a combined annual fuel usage limit of 66.6 million standard cubic feet of natural gas.

Fuel oil for the four turbines is stored in three storage tanks (5,000,000 gallons each). The fuel-oil storage tanks and other associated tanks (e.g., eight CT lubricating oil tanks and their vapor extractors), are considered insignificant emission sources.

Combustion turbines – TVA designated emission units 13-16
Natural gas heaters – TVA designated emission units 17 and 18

Conditions E8-1 through E8-18 apply to 83-0025-14

E8-1. Except as provided in Condition E8-2, only natural gas and No. 2 fuel oil shall be used as fuels for the combustion turbines. This operational restriction shall represent BACT for the combustion turbines for PM, CO, and VOC emissions.

TAPCR 1200-03-09-.01(4), condition 3 of PSD construction permit 954975F. Condition 3 of construction permit 960221F.

Compliance Method: Compliance with this condition shall be assured by compliance with Condition E8-11.

E8-2. The use of an alternative fuel shall not be considered a change in the method of operation if the source is designed to accommodate such alternative fuel and the permittee demonstrates that the alternative fuel will assure compliance with the applicable PM, SO2, and opacity standards.

TAPCR 1200-03-09-.03(8), 1200-03-02-.01(1)(aa)2(iii), and Condition 4 of construction permit 960221F

Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

E8-3. Only natural gas shall be used as fuel for the natural gas heaters. Natural gas usage by the heaters shall not exceed 66.6 million standard cubic feet during any period of 12 consecutive months. This operational restriction shall represent BACT for the natural gas heaters for PM, CO, VOC, and NOX emissions.

TAPCR 1200-03-09-.01(4), Condition 4 of PSD construction permit 954975F. Condition 5 of construction permit 960221F.
Compliance Method: Compliance with this limit shall be assured by compliance with Condition E8-11.

**E8-4.** The sulfur content of the No. 2 fuel oil shall not exceed 0.05% by weight.

TAPCR 1200-03-09-.01(4), Condition 5 of PSD construction permit 954975F. Condition 6 of construction permit 960221F.

Compliance Method: Compliance with this limit shall be assured by compliance with Condition E8-11.

**E8-5.** The total electricity production for this fuel-burning installation shall not exceed 951.8 gigawatt-hours per year. No more than 315.6 gigawatt-hours of annual production shall occur during oil-fired operation, with the remainder of annual production to occur during gas-fired operation.

TAPCR 1200-03-06-.01(7) and 1200-03-14-.01(3), Condition 5 of PSD construction permit 954975F, Condition 7 of construction permit 960221F.

Compliance Method: Compliance with these limits shall be assured by compliance with Condition E8-11.

**E8-6.** PM emitted from this source shall not exceed the following limits (Table E8-6a):

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>Pollutant</th>
<th>Emission Limit</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>while firing natural gas</td>
<td>while firing fuel oil</td>
</tr>
<tr>
<td>Combustion Turbines</td>
<td>PM</td>
<td>7.34 lb/hr each unit</td>
<td>15.7 lb/hr each unit</td>
</tr>
<tr>
<td>Natural Gas Heaters</td>
<td></td>
<td>0.469 lb/MMBtu</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Compliance Method: Compliance with this condition is based upon the following EPA AP-42 emission factors for fuel combustion (Table E8-6b). Compliance shall be assured by compliance with Conditions E8-1 and E8-11.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filterable PM</td>
<td>Natural Gas</td>
<td>0.0019</td>
<td>AP-42, Table 3.1-2a</td>
</tr>
<tr>
<td></td>
<td>No. 2 Fuel Oil</td>
<td>0.0043</td>
<td></td>
</tr>
</tbody>
</table>

**E8-7.** Sulfur dioxide (SO₂), carbon monoxide (CO), and volatile organic compounds (VOC) emitted from each combustion turbine unit of this fuel-burning installation shall not exceed the following limits (Table E8-7), based on operation at full capacity:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Limits (lb/MMBtu of heat input)</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>while firing natural gas: 0.0006</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>while firing fuel oil: 0.05</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>while firing natural gas: 0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>while firing fuel oil: 0.01</td>
<td></td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.01(4)(j), Condition 8 of PSD construction permit 950853F, and Condition 9 of construction permit 960221F

Compliance Method: Compliance with this condition shall be assured by compliance with Conditions E8-1, E8-4, and E8-11.

**E8-8.** NOₓ emitted from this fuel-burning installation (combustion turbines 5-8) shall not exceed 556.0 tons per calendar year.

TAPCR 1200-03-27-.03(1)(a) and 1200-03-09-.01(4)(j), Condition 9 of PSD construction permit 950853F, and Condition 10 of construction permit 960221F

Compliance Method: Compliance with this limit shall be assured by compliance with Condition E8-12.
E8-9. Exhaust NO\textsubscript{X} concentrations shall not exceed 15 parts per million by volume, dry basis (ppmvd) corrected to 15% oxygen when burning natural gas and 42 ppmvd corrected to 15% oxygen when burning No. 2 fuel oil, based on 30-operating-day rolling averages. These limitations shall represent BACT for NO\textsubscript{X} emissions. NO\textsubscript{X} concentrations during startup, shutdown, tuning, and periods of fuel switching shall not be included in determining compliance with the 30-operating-day rolling averages. Startup is defined as the period beginning with initial ignition of fuel in the unit and ending 21 minutes after synchronization of the unit to the grid. Shutdown is defined as the 25-minute period immediately prior to cessation of fuel ignition in the unit. Fuel switching is defined as the period commencing when a turbine decreases load to accommodate the fuel switch and ends 30 minutes after the commencement of this action. The commencement and ending of this action shall be noted by the permittee on the report required by Condition E8-11 of this permit. There shall be no more than three fuel switching periods per calendar day. The permittee shall keep documentation of the commencement and end of each fuel switching period. The exclusion of startup, shutdown, and fuel switching periods only applies to the determination of compliance with the above-specified 30-operating-day rolling average NO\textsubscript{X} concentration limits. This exclusion does not affect the NO\textsubscript{X} emission limits found in Condition E8-8.

TAPCR 1200-03-09-.01(4), Condition 10 of PSD construction permit 950853F, and Condition 11 of construction permit 960221F

**Compliance Method:** Compliance with this condition shall be assured by compliance with Conditions E8-11 and E8-12.

E8-10. Visible emissions from this fuel-burning installation shall not exhibit greater than 10% opacity. Opacity data reduction shall be accomplished utilizing procedures outlined in the current 40 CFR 60, Appendix A, Method 9 (six-minute average).

TAPCR 1200-03-05-.01(3), Condition 10 of PSD construction permit 950853F, and Condition 12 of construction permit 960221F

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

E8-11. A monthly log of the following information must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative:

(a) No. 2 fuel oil usage
(b) Natural gas usage for the combustion turbines
(c) Natural gas usage for the natural gas heaters NGH 1 and NGH2
(d) Sulfur analyses for each shipment of No. 2 fuel oil or certification statement by the vendor that the fuel oil sulfur content shall not exceed 0.05 percent by weight
(e) Electric generation output
(f) Hours of operation for each fuel/mode combination
(g) Maintenance inspections and repairs

This log must be retained for a period of not less than five years.

TAPCR 1200-03-09-.02(11)(e)(i)(iii), Condition 13 of construction permit 960221F

E8-12. NO\textsubscript{X} emissions from each combustion turbine shall be monitored using continuous emissions monitoring systems (CEMS). These CEMS shall be installed and maintained in accordance with the requirements of 40 CFR Part 75.

TAPCR 1200-03-27-.03(1)(a) and 1200-03-30-.01 and Condition 14 of construction permit 960221F

**Compliance Method:** Compliance with this condition shall be assured by the compliance with the monitoring, recordkeeping, and reporting procedures of 40 CFR Part 75.

E8-13. This source is subject to, and shall comply with, the provisions of 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines) as indicated in Table E8-13.
<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.330</td>
<td>The provisions of this subpart are applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuel fired. A facility that commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of Subpart GG except as provided in §60.332 (e) and (j).</td>
<td>Entire source</td>
</tr>
<tr>
<td>§60.331</td>
<td>Definitions</td>
<td>Entire source</td>
</tr>
<tr>
<td>§60.332(a)(1), §60.332(b)</td>
<td>No owner or operator subject to the provisions of Subpart GG shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\text{STD} = 0.0075 \left( \frac{14.4}{Y} + F \right)$</td>
<td>Combustion turbines 5, 6, 7, and 8 (electric utility stationary gas turbines with a heat input at peak load greater than 100 MMBtu/hr, based on the lower heating value of the fuel fired).</td>
</tr>
<tr>
<td></td>
<td>where: $\text{STD} =$ allowable ISO corrected (if required as given in §60.335(b)(1)) NO\text{X} emission concentration (% by volume at 15% oxygen and on a dry basis), $Y =$ manufacturer's rated heat rate at manufacturer's rated load (kJ per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of $Y$ shall not exceed 14.4 kJ per watt hour, and $F =$ NO\text{X} emission allowance for fuel-bound nitrogen as defined in §60.332(a)(4).</td>
<td></td>
</tr>
<tr>
<td>§§60.332(a)(2), (c), (d), (e)</td>
<td>NO\text{X} emission limits for stationary gas turbines with a heat input at peak load less than 100 MMBtu/hr or with a manufacturer's rated base load at ISO conditions of 30 megawatts or less (excluding electric utility stationary gas turbines).</td>
<td>Not applicable to 83-0025-14</td>
</tr>
<tr>
<td>§§60.332(a)(3) and (4)</td>
<td>The owner or operator may choose to apply a NO\text{X} allowance for fuel-bound nitrogen and determine the appropriate $F$-value in accordance with §60.332(a)(4) or may accept an $F$-value of zero.</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
<tr>
<td>§60.332(f), §60.334(j)(3)</td>
<td>Stationary gas turbines using water or steam injection for control of NO\text{X} emissions are exempt from §60.332(a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
<tr>
<td>§§60.332(g), (h), (i), (j), (k), (l)</td>
<td>Exemptions from NO\text{X} standards</td>
<td>Not applicable to 83-0025-14</td>
</tr>
<tr>
<td>§60.333(a)</td>
<td>No owner or operator subject to the provisions of Subpart GG shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain SO\text{2} in excess of 0.015% by volume at 15% oxygen and on a dry basis.</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
<tr>
<td>§60.333(b)</td>
<td>No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8% by weight (8,000 ppmw).</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
</tbody>
</table>
### Table E8-13: 40 CFR 60 Subpart GG Requirements (Stationary Gas Turbines) for 83-0025-14

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.334(a)</td>
<td>Except as provided in §60.334(b), the owner or operator of any stationary gas turbine using water or steam injection to control NO(_X) emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.</td>
<td>Not applicable to 83-0025-14. CEMS are used to monitor NO(_X) emissions.</td>
</tr>
<tr>
<td>§60.334(b)</td>
<td>The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO(_X) emissions may, as an alternative to §60.334(a), install, certify, maintain, operate, and quality-assure a CEMS consisting of NO(_X) and O(_2) monitors. A CO(_2) monitor may also be used to adjust measured NO(_X) concentrations to 15% O(_2) in accordance with §60.334(b). CEMS, if used, shall be installed, certified, maintained and operated in accordance with §§60.334(b)(1) through (3).</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
<tr>
<td>§60.334(c)</td>
<td>Any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and does not use steam or water injection to control NO(_X) emissions may use a CEMS that meets the requirements of §60.334(b).</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
<tr>
<td>§§60.334(d), (e), and (f)</td>
<td>Monitoring requirements for turbines constructed after July 8, 2004.</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
<tr>
<td>§60.334(g)</td>
<td>The steam or water to fuel ratio or other parameters that are continuously monitored as described in §§60.334(a), (d) or (f) shall be monitored during the performance test to establish acceptable values and ranges.</td>
<td>Not applicable to 83-0025-14. CEMS are used to monitor NO(_X) emissions.</td>
</tr>
<tr>
<td>§60.334(h)(1)</td>
<td>Monitor the total sulfur content of the fuel fired in the turbine, except as provided in §60.334(h)(3). The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4,000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference—see § 60.17), which measure the major sulfur compounds may be used.</td>
<td>Not applicable to 83-0025-14 (alternative monitoring applies).</td>
</tr>
<tr>
<td>§60.334(h)(2)</td>
<td>Monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.</td>
<td>Not applicable to 83-0025-14. CEMS are used to monitor NO(_X) emissions.</td>
</tr>
<tr>
<td>§60.334(h)(3)</td>
<td>The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the Administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the sources of information in §60.334(h)(3)(i) or (ii) to make the required demonstration.</td>
<td>Combustion turbines 5, 6, 7, and 8</td>
</tr>
</tbody>
</table>

---

**Title V Operating Permit 578731**

Expiration Date: ******DRAFT******
Table E8-13: 40 CFR 60 Subpart GG Requirements (Stationary Gas Turbines) for 83-0025-14

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.334(i)(1)</td>
<td>The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows: for fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to 40 CFR Part 75. If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day. Alternative monitoring applies for fuel oil sulfur content (see §60.334(i)(3) and Attachment 2). CEMS are used to monitor NO\textsubscript{X} emissions.</td>
<td>Combustion turbines 5, 6, 7, and 8. See Attachment 2 for approved schedules.</td>
</tr>
<tr>
<td>§60.334(i)(2)</td>
<td>The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows: for gaseous fuel, any applicable nitrogen content value shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in §60.334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.</td>
<td>Combustion turbines 5, 6, 7, and 8. See Attachment 2 for approved schedules.</td>
</tr>
<tr>
<td>§60.334(i)(3)</td>
<td>Notwithstanding the requirements of §60.334(i)(2), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in §§60.334(i)(3)(i) and (ii), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.333.</td>
<td>Combustion turbines 5, 6, 7, and 8. See Attachment 2 for approved schedules.</td>
</tr>
<tr>
<td>§60.334(j)(1)(i)</td>
<td>Excess emissions and monitor downtime reports for turbines using water or steam to fuel ratio monitoring.</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
<tr>
<td>§60.334(j)(1)(ii)</td>
<td>Excess emissions and monitor downtime reports for turbines that take an emission allowance for fuel bound nitrogen.</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
<tr>
<td>§60.334(j)(1)(iii)</td>
<td>Excess emissions and monitor downtime reports for turbines using NO\textsubscript{X} and diluent CEMS. An hour of excess emissions shall be any unit operating hour in which the four-hour rolling average NO\textsubscript{X} concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO\textsubscript{X} concentration or diluent CEMS. Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst-case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).</td>
<td>Combustion turbines 5, 6, 7, and 8.</td>
</tr>
<tr>
<td>§60.334(j)(1)(iv)</td>
<td>Excess emissions and monitor downtime reports for turbines that monitor combustion parameters or parameters that document proper operation of the NO\textsubscript{X} emission controls.</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
</tbody>
</table>
Table E8-13: 40 CFR 60 Subpart GG Requirements (Stationary Gas Turbines) for 83-0025-14

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
<th>Affected Emission Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.334(j)(2)</td>
<td>Excess emissions and monitor downtime reports for turbines monitoring the fuel sulfur content under §60.334(h). For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted and shall evaluate excess emissions according to §60.334(j)(2)(i). When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours and ends on the date and hour of the next valid sample.</td>
<td>Daily sampling, flow proportional sampling, and storage tank sampling are not applicable to 83-0025-14. TVA relies upon vendor analysis to monitor the sulfur content of the fuel oil (see Attachment 2).</td>
</tr>
<tr>
<td>§60.334(j)(4)</td>
<td>Emergency fuel reporting requirements.</td>
<td>Not applicable to 83-0025-14.</td>
</tr>
<tr>
<td>§60.19(e), §60.334(j)(5)</td>
<td>Submittal of periodic reports.</td>
<td>Reports shall be submitted in accordance with Condition E2-1(f).</td>
</tr>
<tr>
<td>§60.335</td>
<td>Test methods and procedures</td>
<td>Combustion turbines 5, 6, 7, and 8, except as noted in Attachment 2.</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8) and 40 CFR Part 60 Subpart GG

**Compliance Method:** In accordance with sections §60.7(c) and §60.334(j), excess emissions must be reported for all periods of unit operation, including startup, shutdown, and malfunction. Reports of excess emissions and monitor downtime shall be submitted in accordance with **Condition E2-1(f)**.

**E8-14.** Each NOx CEMS shall be fully operational for at least 95% of the operating time of the monitored unit during each six-month semiannual reporting period, as specified in **Condition E2-1(f)**. An operational availability of less than this amount may be the basis for declaring a unit in noncompliance with the applicable monitoring requirement, unless the reasons for the failure to maintain this level of availability are accepted by the Division as being legitimate malfunctions of the instruments, or due to limited hours of operation. Further, should the NOx CEMS be inoperative for more than seven consecutive days, the use of a backup monitor may be required. For purposes of calculating operational availability for each NOx CEMS, the total operational time of the unit while combusting natural gas and No. 2 fuel oil shall be divided into the total CEMS downtime while combusting natural gas and No. 2 fuel oil. Time periods of normal calibration shall not count as CEMS downtime.

TAPCR 1200-03-10-.04
E8-15. Quality assurance checks shall be performed on each CEMS in accordance with the requirements of 40 CFR Part 75. The quality assurance checks shall consist of a repetition of the relative accuracy portion of the Performance Specification Test. Reports of each quality assurance check shall be submitted to the Technical Secretary electronically via e-mail at air.pollution.control@tn.gov.

TAPCR 1200-03-10-.02(1)(a), 1200-03-09-.03(8), and Appendix B to 40 CFR Part 75

E8-16. The permittee shall calculate SO2 emissions from this source in accordance with Appendix D to 40 CFR Part 75 (Optional SO2 Emissions Data Protocol for Gas-fired and Oil-fired Units - Attachment 7).

TAPCR 1200-03-09-.02(11)(e)(1)(iv) and 1200-03-30

E8-17. Natural gas heaters NGH1 and NGH2 are subject to and shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, And Institutional Boilers and Process Heaters) as indicated in Table E8-17.

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>§§63.7500(a)(1)</td>
<td>Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 or the operating limits in Table 4 to Subpart DDDDD.</td>
</tr>
<tr>
<td>§§63.7500(a), §63.7515(d), §§63.7540(a) (11), Table 3 to Subpart DDDDD</td>
<td>A new or existing boiler or process heater without a continuous oxygen trim system and with a heat input capacity of less than 10 MMBtu/hr but greater than 5 MMBtu/hr in the unit designed to burn gas 1 subcategory: conduct a tune-up of the boiler or process heater biennially as specified in §63.7540. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up.</td>
</tr>
<tr>
<td>§63.7500(a)(3)</td>
<td>At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</td>
</tr>
<tr>
<td>§63.7505(a)</td>
<td>General compliance requirements. The emission and operating limits apply at all times the affected unit is operating except as noted in §63.7500(f).</td>
</tr>
<tr>
<td>§63.7495(d), §63.7545</td>
<td>Notification requirements</td>
</tr>
<tr>
<td>§63.7550, Table 9 to Subpart DDDDD</td>
<td>Reporting requirements</td>
</tr>
<tr>
<td>§§63.7555(a)(1) and (2)</td>
<td>General recordkeeping requirements</td>
</tr>
<tr>
<td>§§63.7555(a)(3), (b), (c), (d), Table 8 to Subpart DDDDD</td>
<td>Recordkeeping requirements for limited use boilers, emission limits, periodic monitoring, emissions averaging, energy efficiency</td>
</tr>
<tr>
<td>§63.7560</td>
<td>Records retention</td>
</tr>
<tr>
<td>§63.7565, Table 10 to Subpart DDDDD</td>
<td>General Provisions applicability</td>
</tr>
<tr>
<td>§63.7575</td>
<td>Definitions</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8), 40 CFR Part 63 Subpart DDDDD

Compliance Method: The permittee shall submit reports in accordance with Condition E2-1(d).

E8-18. CO, VOC, and NOX emitted from the gas heaters shall not exceed the limits in Table E8-18a during any period of 12 consecutive months.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>2.80</td>
</tr>
<tr>
<td>NOX</td>
<td>3.33</td>
</tr>
</tbody>
</table>
**Title V Operating Permit 578731**

**Expiration Date:** ******DRAFT******

| VOC   | 0.18 |

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of natural gas (Table E8-18b). Compliance shall be assured by compliance with **Conditions E8-3 and E8-11**.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMscf)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Natural Gas</td>
<td>84</td>
<td>AP-42, Table 1.4-1</td>
</tr>
<tr>
<td>NO\textsubscript{X}</td>
<td>Natural Gas</td>
<td>100</td>
<td>AP-42, Table 1.4-1</td>
</tr>
<tr>
<td>VOC</td>
<td>Natural Gas</td>
<td>5.5</td>
<td>AP-42, Table 1.4-2</td>
</tr>
</tbody>
</table>

**Table E8-18b: AP-42 Emission Factors for Natural Gas Combustion**

**83-0025-15 Source Description:** Gas Fired Heater NGH3: Heating of natural gas feed to combustion turbines of source 83-0025-05-08, 11 MMBtu/hr nominal heat input TVA designated emission units 19 and 20 (heater 3)

**Conditions E9-1 through E9-7 apply to 83-0025-15**

**E9-1.** Only natural gas shall be used as fuel for this source.

TAPCR 1200-03-09-.03(8) and 1200-3-27-.03(1)(a), Condition 3 of construction permit 951949F

**Compliance Method:** Compliance with this condition shall be assured by compliance with **Condition E9-4**.

**E9-2.** PM emitted from this source shall not exceed 0.569 lb/MMBtu (one-hour average) and 1.0 tons during any period of 12 consecutive months.

TAPCR 1200-03-06-.01(7) and 1200-03-06-.02(2), the agreement letter dated September 2, 1999 (Attachment 8), Condition 4 of construction permit 951949F

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factor for combustion of natural gas (Table E9-2). Compliance shall be assured by compliance with **Condition E9-4**.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMscf)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filterable PM</td>
<td>Natural Gas</td>
<td>7.6</td>
<td>AP-42, Table 1.4-2</td>
</tr>
</tbody>
</table>

**Table E9-2: AP-42 Emission Factors for Natural Gas Combustion**

**E9-3.** SO\textsubscript{2} emitted from this source shall not exceed 5.0 lb/MMBtu of heat input (one-hour average) and 1.0 tons during any period of 12 consecutive months.

TAPCR 1200-03-14-.01(3) and 1200-03-14-.02(2)(a), the agreement letter dated September 2, 1999 (Attachment 8)

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of natural gas (Table E9-3). Compliance shall be assured by compliance with **Condition E9-4**.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMscf)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO\textsubscript{2}</td>
<td>Natural Gas</td>
<td>0.6</td>
<td>AP-42, Table 1.4-2</td>
</tr>
</tbody>
</table>

**Table E9-3: AP-42 Emission Factors for Natural Gas Combustion**

46
E9-4.  In accordance with the emission netting requested by TVA for the gas conversion of the combustion turbines of fuel burning installation 83-0025-05-08, natural gas usage for this source shall not exceed 47 million cubic feet per calendar year.

TAPCR 1200-03-09-.01(4), Condition 6 of construction permit 951949.  PSD avoidance.

**Compliance Method:** Compliance with this limit shall be demonstrated by recordkeeping of natural gas usage on a monthly basis.

E9-5.  Visible emissions from this source shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period.  Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(3) and 1200-03-05-.03(6)

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

E9-6.  This source is subject to and shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, And Institutional Boilers and Process Heaters) as indicated in Table E9-6.

### Table E9-6: 40 CFR 63 Subpart DDDDD Requirements for 83-0025-15

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>§§63.7500(a)(1)</td>
<td>Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 or the operating limits in Table 4.</td>
</tr>
<tr>
<td>§63.7500(a), §63.7515(d), §§63.7540(a)(10), Table 3 to Subpart DDDDD</td>
<td>A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 MMBtu/hr or greater: Conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in the Gas 1 subcategory will conduct this tune-up as a work practice for all regulated emissions under this subpart. Each annual tune-up specified in §63.7540(a)(11) must be conducted no more than 13 months after the previous tune-up.</td>
</tr>
<tr>
<td>§63.7500(a)(3)</td>
<td>At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</td>
</tr>
<tr>
<td>§63.7505(a)</td>
<td>General compliance requirements. The emission and operating limits apply at all times the affected unit is operating except as noted in §63.7500(f).</td>
</tr>
<tr>
<td>§63.7495(d), §§63.7530(e) and (f), §63.7545</td>
<td>Notification requirements</td>
</tr>
<tr>
<td>§63.7550, Table 9 to Subpart DDDDD</td>
<td>Reporting requirements</td>
</tr>
<tr>
<td>§§63.7555(a)(1) and (2)</td>
<td>General recordkeeping requirements</td>
</tr>
<tr>
<td>§§63.7555(a)(3), (b), (c), (d), Table 8 to Subpart DDDDD</td>
<td>Recordkeeping requirements for limited use boilers, emission limits, periodic monitoring, emissions averaging, energy efficiency</td>
</tr>
<tr>
<td>§63.7565, Table 10 to Subpart DDDDD</td>
<td>General Provisions applicability</td>
</tr>
<tr>
<td>§63.7575</td>
<td>Definitions</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8), 40 CFR Part 63 Subpart DDDDD

**Compliance Method:** The permittee shall submit reports in accordance with **Condition E2-1(d).**

E9-7.  CO, VOC, and NO\textsubscript{X} emissions shall not exceed the limits in **Table E9-7a** during each calendar year.

### Table E9-7a: CO, VOC, and NO\textsubscript{X} Emission Limits

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions (tons/year)</th>
</tr>
</thead>
</table>

---

47
TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of natural gas (Table E9-7b). Compliance shall be assured by compliance with Condition E9-4.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/MMscf)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Natural Gas</td>
<td>84</td>
<td>AP-42, Table 1.4-1</td>
</tr>
<tr>
<td>NOX</td>
<td>Natural Gas</td>
<td>100</td>
<td>AP-42, Table 1.4-1</td>
</tr>
<tr>
<td>VOC</td>
<td>Natural Gas</td>
<td>5.5</td>
<td>AP-42, Table 1.4-2</td>
</tr>
</tbody>
</table>

83-0025-16 **Source Description:** **Auxiliary Heating Boiler:** The auxiliary heating boiler is designed to provide steam to the building heating system when all four coal-fired boiler units are out of service and building heat is required due to cold weather. The auxiliary boiler has not operated for approximately 20 years and currently there are no plans to operate the boiler in the future. The boiler is rated at 21.84 MMBtu/hr (according to 1954 acceptance test data) and burns only No. 2 fuel oil or alternate fuel oils that meet all applicable standards.

TVA designated emission unit 12

Conditions E10-1 through E10-5 apply to 83-0025-16

**E10-1.** Particulate matter emitted from this source shall not exceed 0.49 lb/MMBtu of heat input (one-hour average).

TAPCR 1200-03-06-.02(1)

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil (Table E10-1). Compliance shall be assured by compliance with the fuel usage restrictions of Condition E10-4 and the reporting requirements of Condition E10-5.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/1,000 gal)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filterable PM</td>
<td>No. 2 Fuel Oil</td>
<td>2</td>
<td>AP-42, Table 1.3-1</td>
</tr>
</tbody>
</table>

**E10-2.** Sulfur dioxide emitted from this source shall not exceed 5.0 lb/MMBtu of heat input (one-hour average).

TAPCR 1200-03-14-.02(1)(a)

**Compliance Method:** Compliance with this condition is based upon the following EPA AP-42 emission factors for combustion of fuel oil (Table E10-2). Compliance shall be assured by compliance with the fuel usage restrictions of Condition E10-4 and the reporting requirements of Condition E10-5.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Fuel</th>
<th>Emission Factor (lb/1,000 gal)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filterable PM</td>
<td>No. 2 Fuel Oil</td>
<td>71**</td>
<td>AP-42, Table 1.3-1</td>
</tr>
</tbody>
</table>
**42S, where S = weight % sulfur in oil (0.5 % maximum sulfur content)**

**E10-3.** Visible emissions from this source shall not exceed 20% opacity for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period. Visible emissions shall be determined by Tennessee Visible Emission Evaluation Method 2 as adopted by the Tennessee Air Pollution Control Board on August 24, 1984.

TAPCR 1200-03-05-.01(1)

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

**E10-4.** Only No. 2 fuel oil shall be used as fuel for this source. The use of an alternative fuel shall not be considered a change in the method of operation if the source is designed to accommodate such alternative fuel and the permittee demonstrates that the alternative fuel will assure compliance with the applicable PM, SO₂, and opacity standards.

TAPCR 1200-03-09-.03(8), TAPCR 1200-03-02-.01(1)(aa)2(iii)

**Compliance Method:** Compliance shall be assured by reporting total fuel usage, including a description of the fuel, in accordance with §63.7550(c)(5)(vi) and **Condition E10-5**.

**E10-5. 40 CFR Part 63 Subpart DDDDDD**

The permittee is subject to and shall comply with the requirements of 40 CFR Part 63 Subpart DDDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters), as indicated in **Table E10-5**.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comply with each applicable emission limit in Table 2 to Subpart DDDDDD.</td>
<td>§63.7500(a)(1), Table 2 to Subpart DDDDDD</td>
</tr>
</tbody>
</table>

**Table E10-5: 40 CFR Part 63 Subpart DDDDDD**

**Specific Applicability Determinations for 83-0025-16**

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Pollutant</th>
<th>Emission Limits (excluding startup and shutdown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units designed to burn liquid fuel</td>
<td>HCl</td>
<td>1.1E-03 lb/MMBtu</td>
</tr>
<tr>
<td></td>
<td>Mercury</td>
<td>2.0E-06 lb/MMBtu</td>
</tr>
<tr>
<td>Units designed to burn light liquid fuel</td>
<td>CO</td>
<td>130 ppmv, dry basis corrected to 3% O₂</td>
</tr>
<tr>
<td></td>
<td>Filterable PM (or TSM)</td>
<td>7.9E-03 lb/MMBtu [PM] (or 6.2E-05 lb/MMBtu [TSM])</td>
</tr>
</tbody>
</table>

Demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or CMS, including CEMS or PM CPMS where applicable. You may demonstrate compliance with the applicable emission limit for HCl, mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance stack testing. Conduct all performance tests, as applicable, in accordance with §63.7520. Conduct all fuel analyses, as applicable, in accordance with §63.7521.

For existing affected sources that have not operated between the effective date of the rule and the compliance date, complete the initial compliance demonstration, as specified in §§63.7510(a) through (d), no later than 180 days after restart of the affected source and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to Subpart DDDDDD (General Provisions applicability). Complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than 30 days after restart of the affected source.

§63.7510(j)
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Rule Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater – conduct a tune-up of the boiler or process heater annually.</td>
<td>§63.7500(a)(1), §63.7540(a)(10), Table 3 to Subpart DDDDD</td>
</tr>
<tr>
<td>Comply with applicable work practice standards during startup and shutdown.</td>
<td>§63.7500(a)(1), §63.7500(f), §63.7540(d), Table 3 to Subpart DDDDD</td>
</tr>
<tr>
<td>At all times, operate and maintain the affected source and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</td>
<td>§63.7500(a)(3)</td>
</tr>
<tr>
<td>Emission and operating limits apply at all times except as noted in §63.7500(f).</td>
<td>§63.7505(a)</td>
</tr>
<tr>
<td>If your boiler or process heater is in the unit designed to burn light liquid subcategory and you combust ultra-low sulfur liquid fuel, you do not need to conduct further performance tests (stack tests or fuel analyses) if the pollutants measured during the initial compliance performance tests meet the emission limits in Tables 1 or 2 of Subpart DDDDD. Demonstrate ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis. If you intend to use a fuel other than ultra-low sulfur liquid fuel, natural gas, refinery gas, or other gas 1 fuel, conduct new performance tests within 60 days of burning the new fuel type.</td>
<td>§63.7515(h)</td>
</tr>
<tr>
<td>Notification requirements</td>
<td>§63.7545</td>
</tr>
<tr>
<td>Reporting and recordkeeping requirements</td>
<td>§63.7550, §63.7555, §63.7560, Table 9 to Subpart DDDDD</td>
</tr>
<tr>
<td>Applicability of General Provisions</td>
<td>§63.7565, Table 10 to Subpart DDDDD</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8), 40 CFR Part 63 Subpart DDDDD
**Source Description**

**Material Handling and Storage Equipment associated with Additional Pollution Control Units:** The reagent for the dry sorbent injection (i.e., dry FGD) system is hydrated pebble lime (90% calcium oxide). Pebble lime is delivered by pneumatic trucks, stored in one of four silos, and pneumatically conveyed into smaller day-bins (two day-bins for each boiler). Pebble lime is mechanically conveyed from the day-bins and hydrated prior to being injected into the flue gas stream. Filter vents on the silos and day-bins control PM emissions to no greater than 0.004 grains per standard cubic foot of exhaust flow. Only during filling operations is air exhausted through the filter vents. Fluidizing air is not required during storage of the pebble lime.

Activated carbon injection (ACI) is used to control mercury emissions. Activated carbon is delivered by pneumatic truck to vented storage silos. There is one silo for each boiler unit. Each silo is equipped with a filtered vent, and the maximum clean air dust concentration exiting each filtered vent is 0.004 grains per standard cubic foot. Only during filling operations is air exhausted through these filtered vents.

Coal combustion products (CCP) captured by the fabric filters is dropped into a vacuum pressure transfer system and blown with vacuum blowers into one of two storage silos. Each silo handles byproduct from two boiler. The vacuum pressure system for each silo has two operating pumps with filter separators. Each silo operates alternately and is equipped with a bin vent filter and a pin-mix unloader. Prior to discharging into trucks, the CCP is conditioned by adding water to achieve a moisture content of 20%. CCP is hauled 2.68 miles (round-trip) to a landfill that is constructed on the northern section of the property. The road to the landfill is paved and wet suppression is used to control fugitive emissions. The maximum amount of CCP processed (permit limit) is 987,000 tons per year.

**Conditions E11-1 through E11-3 apply to 83-0025-19**

**E11-1.** This source consists of the material handling and storage units listed in Table E11-1a.

(a) Particulate matter emitted from this source shall not exceed the limits in Table E11-1a.

<table>
<thead>
<tr>
<th>Source</th>
<th>Storage Unit Description</th>
<th>No. of Stacks</th>
<th>Volumetric flow for each stack (dscfm)*</th>
<th>Total volumetric flow (dscfm)</th>
<th>Allowable PM emissions (grains/dscf)</th>
<th>Equivalent PM Emissions (lb/hr)</th>
<th>Allowable PM Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pebble Lime Storage</td>
<td>Four Silos</td>
<td>4</td>
<td>750</td>
<td>3,000</td>
<td>0.004</td>
<td>0.103</td>
<td>0.134 (at approx. 2,600 hours each unit)</td>
</tr>
<tr>
<td>(27-30)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pebble Lime Storage</td>
<td>Eight day bins, two for each boiler</td>
<td>8</td>
<td>600</td>
<td>4,800</td>
<td>0.004</td>
<td>0.165</td>
<td>0.721</td>
</tr>
<tr>
<td>(31-38)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activated carbon storage</td>
<td>Four silos</td>
<td>4</td>
<td>350</td>
<td>1,400</td>
<td>0.004</td>
<td>0.0480</td>
<td>0.0437 (at approx. 1,820 hours each unit)</td>
</tr>
<tr>
<td>(40-43)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCP Vacuum System</td>
<td>Two vented storage silos fed by four vacuum pumps with</td>
<td>4</td>
<td>3,455</td>
<td>13,820</td>
<td>0.004</td>
<td>0.474</td>
<td>2.08</td>
</tr>
<tr>
<td>(44-49)</td>
<td>two spares</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCP Storage Silos</td>
<td>Two vented storage silos</td>
<td>2</td>
<td>689</td>
<td>1,378</td>
<td>0.004</td>
<td>0.0473</td>
<td>0.207</td>
</tr>
<tr>
<td>(52-53)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TAPCR 1200-03-07-.01(5), agreement letter dated March 12, 2013. Condition E19-1 of construction permit 966537P.

(b) The throughput of the pebble lime storage silos and activated carbon storage silos shall not exceed the limits in Table E11-1b.

Table E11-1b: Material Throughput Limits

<table>
<thead>
<tr>
<th>Unit Identification</th>
<th>Description</th>
<th>Number of Exhaust Stacks</th>
<th>Type of Material Transferred</th>
<th>12-Consecutive Month Allowable Material Throughput (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pebble Lime Storage (27-30)</td>
<td>4 Silos</td>
<td>4</td>
<td>Pebble Lime</td>
<td>276,676</td>
</tr>
<tr>
<td>Activated carbon storage (40-43)</td>
<td>4 silos</td>
<td>4</td>
<td>Activated carbon</td>
<td>6,045</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-09-.03(8), agreement letter dated March 12, 2013. Condition E19-1 of construction permit 966537P.

Compliance Method: Compliance with this condition shall be assured as follows:

(a) For all units other than the CCP Vacuum System (44-49), the baghouses will be maintained, kept in good operating condition, and inspected semiannually to ensure compliance with the applicable particulate matter limits.

(b) For the CCP Vacuum System (44-49), compliance shall be assured by maintaining a minimum pressure drop of 3.0 inches of water column across each baghouse. The pressure drop for each baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted. For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags, provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

(c) Records of material input, as indicated in Tables E11-1c and E11-1d, shall be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

Table E11-1c: Records of Monthly Material Throughput for Pebble Lime Storage Units (27-30)

<table>
<thead>
<tr>
<th>Month, Year</th>
<th>Monthly Throughput of Pebble Lime (tons)</th>
<th>12 Consecutive Month Total Throughput of Pebble Lime (tons)*</th>
</tr>
</thead>
</table>

*This value consists of the throughput for the current month plus the throughput for the previous 11 months.

Table E11-1d: Records of Monthly Material Throughput for Activated Carbon Storage (40-43)

<table>
<thead>
<tr>
<th>Month, Year</th>
<th>Monthly Throughput of Activated Carbon (tons)</th>
<th>12 Consecutive Month Total Throughput of Activated Carbon (tons)*</th>
</tr>
</thead>
</table>

*This value consists of the throughput for the current month plus the throughput for the previous 11 months.

TAPCR 1200-03-09-.03(8), Condition E19-1 of permit 966537P
E11-2. Fugitive emissions from this source shall be controlled as specified in TAPCR 1200-03-08-.01. Specifically, no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such a manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the visible emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20, as determined by Tennessee Visible Emissions Evaluation (TVEE) Method 4.

TAPCR 1200-03-08-.01, Condition E19-3 of construction permit 966537P

**Compliance Method:** Compliance with this condition shall be assured by **Conditions E2-3 and E2-11.**

E11-3. Visible emissions from emission points (stacks) at this source shall not exhibit greater than 10% opacity, except for one six-minute period in any one-hour period and for no more than four six-minute periods in any 24-hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

TAPCR 1200-03-05-.01(3), agreement letter dated March 12, 2013
### 83-0025-20 Source Description

**Coal Combustion Products (CCP) Landfill:** The landfill receives CCP with 20% moisture content. The maximum amount and permit limit of CCP processed is 987,000 tons per year. Tri-axle dump trucks, articulated trucks, and landfill equipment provide on-site movement and maintenance of the production CCP. Fugitive air emissions associated with vehicles on haul roads and equipment operating on the exposed areas of landfill are estimated using the unpaved road emission equation: EPA AP-42, 5th Edition, Section 13.2.2, Unpaved Roads, November 2006. To meet TDEC APC fugitive dust standards, water suppression is utilized where needed to maintain control of fugitive dust emissions with control measures estimated at 95% efficiencies. In addition, all trucks and landfill equipment are not expected to generate fugitive dust emissions in such a manner to produce visible emissions beyond the property line.

The maximum disturbed area subject to wind erosion is 10 acres. This area is used to estimate wind erosion based on the equation for active (frequently distributed) storage piles in EPA’s Fugitive Dust Background Document for Best Available Control Measures, Section 2.3.1.3, September 1992.

---

**Conditions E12-1 through E12-3 apply to 83-0025-20**

#### E12-1

Fugitive emissions from this source shall be controlled as specified in TAPCR 1200-03-08-.01. Specifically, no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such a manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the visible emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20, as determined by Tennessee Visible Emissions Evaluation (TVEE) Method 4.

TAPCR 1200-03-08-.01, Condition E20-1 of construction permit 966537F

**Compliance Method:** Compliance with this condition shall be assured by **Conditions E2-3 and E2-11**.

#### E12-2

The maximum amount of CCP processed for reuse or for disposal shall not exceed 987,000 tons during any period of 12 consecutive months. The permittee may be required to submit emission calculations for any modification in handling or disposal procedures.

TAPCR 1200-03-07-.01(5), agreement letter dated March 12, 2013. Condition E20-3 of construction permit 966537F.

**Compliance Method:** Records of CCP processed, as indicated in **Table E12-2**, shall be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

<table>
<thead>
<tr>
<th>Month / Year</th>
<th>Current Month CCP processed for reuse or disposal in (tons)</th>
<th>12 Consecutive Month CCP processed for reuse or disposal in (tons)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This value consists of the current month plus the preceding 11 months. Until the CCP material has been processed for reuse or disposed in the landfill for 12 months, the value of material loaded into the landfill up to that date shall be entered.

#### E12-3

Visible emissions from roads and parking areas shall not exhibit greater than 10% opacity as determined by Tennessee Visible Emission Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and August 24, 1984.

TAPCR 1200-03-05-.03(6), Condition E20-4 of construction permit 966537F

**Compliance Method:** Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).
### 83-0025-23 Source Description

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Coal Screening Operation - Reclaim of Contaminated Coal:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovered coal is</td>
<td>conveyed to outdoor coal storage; source is subject to</td>
</tr>
<tr>
<td></td>
<td>40 CFR 60, Subpart Y. The two diesel engines</td>
</tr>
<tr>
<td></td>
<td>associated with this source are nonroad engines</td>
</tr>
<tr>
<td></td>
<td>as defined at 40 CFR §89.2, and these units are</td>
</tr>
<tr>
<td></td>
<td>not subject to 40 CFR 60, Subpart III or 40 CFR 63,</td>
</tr>
<tr>
<td></td>
<td>Subpart ZZZZ; they are not required to be permitted.</td>
</tr>
<tr>
<td></td>
<td>TVA designated emission point 62.</td>
</tr>
</tbody>
</table>

### Conditions E13-1 through E13-6 apply to 83-0025-23

**E13-1.** The maximum process weight rate for this source is stated as 350 tons per hour of coal/clay/rock mixture.

TAPCR 1200-03-09-.02(11)(f)5(ii)(II)1 and the application dated December 10, 2020

**Compliance Method:** Compliance with this condition is based on the information provided with the application dated December 10, 2020. The permittee shall not modify the source to increase the design capacity without first having applied for and received from the Technical Secretary a construction permit or Title V modification in accordance with TAPCR 1200-03-09. Compliance shall be assured by annual certification, as required in **Condition E2-1(b).**

**E13-2.** PM emitted from this source shall not exceed 44.2 pounds per hour.

TAPCR 1200-03-07-.03(1)

**Compliance Method:** Compliance is based on the maximum process rate specified in **Condition E13-1** and the emission calculations included with the application dated December 10, 2020. Compliance shall be assured by annual certification, as required in **Condition E2-1(b).** The maximum actual particulate emissions from this source are calculated as 1.01 pounds per hour.

**E13-3.** This facility is subject to and shall comply with the applicable provisions of 40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation and Operating Plants). Pursuant to §60.254, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in (a) and (b) below as applicable to the affected facility.

(a) Except as provided in **E13-3(b),** the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10% opacity or greater.

(b) Equipment used in the loading, unloading, and conveying operations of open storage piles is not subject to the opacity limitations of §60.254(b)(1) (**E13-3(a)).**

TAPCR 1200-03-09-.03(8) and 40 CFR §60.254(b)

**Compliance Method:** Compliance with this condition shall be assured by compliance with **Conditions E13-4, E13-5, and E13-6.** Pursuant to §60.258(b), the permittee shall report all six-minute average opacities that exceed the applicable standard. These reports shall be submitted with the Title V semiannual reports required by **Condition E2-1(h).**

**E13-4.** Pursuant to §60.255, an owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards on 40 CFR 60 Subpart Y.

Pursuant to 40 CFR §§60.8 and 60.258(c), within 60 days after achieving the maximum production rate at which each affected facility (Coal Processing/Coal Screening Operation) subject to an opacity standard will be operated, but not later than 180 days after initial startup of the affected facility, the owner or operator of the affected facility shall conduct an initial performance test and furnish the Technical Secretary a written report of the results of such performance test(s). Results of the initial performance test shall be submitted to the Compliance Validation Section at the address listed in **Condition E2-1(h).**

Thereafter, a new performance test must be conducted according to the following requirements, as applicable:
(a) If any six-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed. [§60.255(b)(2)(i)]

(b) If all six-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed. [§60.255(b)(2)(ii)]

(c) Within 60 days after completing each performance evaluation, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE database (see 40 CFR §60.258(d)). For performance tests that cannot be entered into WebFIRE (i.e., Method 9 opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

TAPCR 1200-03-09-.03(8), 40 CFR §§60.8, 60.255(b)(2) and 60.258(c) and (d)

Compliance Method: The permittee shall submit reports of each performance test in accordance with Conditions E2-1(h) and E13-4(c).

E13-5. Pursuant to 40 CFR §60.257, the permittee must determine compliance with the applicable opacity standards as specified in (a) through (c) of this condition:

(a) Method 9 of 40 CFR 60 Appendix A-4 and the procedures in §60.11 must be used to determine opacity, with the following exceptions:

(i) The duration of this performance test shall be one hour (ten six-minute averages).

(ii) If, during the initial 30 minutes of the performance test, all of the six-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from one hour to 30 minutes.

(b) To determine opacity for fugitive coal dust emissions sources, the following additional requirements must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(c) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5% opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.257(a)

Compliance Method: The permittee shall submit reports of each performance test as required by Conditions E2-1(h) and E13-4.
E13-6. Pursuant to §60.258, the owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain a logbook (written or electronic) onsite and make it available upon request. The logbook shall record the following information:

(a) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

(b) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

(c) The amount and type of coal processed each calendar month.

(d) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.258(a)

Compliance Method: These records shall be maintained at the facility and shall be available for inspection by the Technical Secretary or an authorized representative.

83-0025-27 Source Description | Air Curtain Incinerator: TVA plans to clear 119 acres for a landfill expansion project (South Rail Loop Lined Landfill) to store the ash from the Ash Pond Complex. The total amount of wood waste generated (92,500 cubic yards with 0.33 tons per cubic yard) equates to 30,525 tons of wood waste. An air curtain incinerator is planned to incinerate the wood waste.

| Conditions E14-1 through E14-7 apply to 83-0025-27 |

E14-1. Input Limitations

(a) The maximum design charge rate of waste material, as defined in Condition E14-5, (wet or dry) for this unit is 12 tons per hour.

(b) The maximum amount of waste materials, as defined in Condition E14-5, processed or burned (wet or dry) in this unit shall not exceed 17,600 tons during any period of 12 consecutive months.

TAPCR 1200-03-09-.01(1)(d), agreement letter dated July 14, 2020 (Attachment 8), and Condition S1-1 of construction permit 978221 (PSD avoidance limit).

Compliance Method: Compliance shall be assured as follows:

(a) Hourly charge rate: Compliance with this condition is based on the information provided with the application dated December 10, 2020. The permittee shall not modify the source to increase the design capacity without first having applied for and received from the Technical Secretary a construction permit or Title V modification in accordance with TAPCR 1200-03-09. Compliance shall be assured by annual certification, as required in Condition E2-1(b).

(b) Annual charge rate: The permittee shall maintain a record of the amount of clean lumber, wood waste, and yard waste burned during each calendar month at the facility. This record shall be in a form that readily demonstrates compliance with this limit (see example below). All records shall be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.
Table E14-1: Waste Material Burned

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Amount of Material Burned for Current Month (tons)</th>
<th>Type of Material Burned</th>
<th>Amount of Material Burned (tons/12 consecutive months)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The tons per 12 consecutive month value is the sum of the amount of material burned (in tons) in the current month plus the amount of material burned (in tons) in the 11 preceding months. For the first 11 months following initial startup of the source, this value will be equal to the value for the combined totals of the “Amount of Material Burned for Current Month”.

E14-2. Emission Limitations

(a) Particulate matter (PM/PM$_{10}$) emitted from this source shall not exceed 14.9 tons during all intervals of 12 consecutive months.

(b) Fine particulate matter (PM$_{2.5}$) emitted from this source shall not exceed 9.9 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-09-.01(4), agreement letter dated July 14, 2020 (Attachment 8), and Condition S1-4 of construction permit 978221 (PSD avoidance limit).

Compliance Method: Compliance shall be assured as follows:

(a) The permittee shall maintain and repair the emission source as required to assure compliance with the specified emission limits. Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than 30 days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than 30 days from activity completion.

(b) Compliance with this condition will also be assured by compliance with Condition E14-1. Compliance is based on emission factors of 1.3 lb PM$_{10}$ and 1.1 lb PM$_{2.5}$ per ton of material, as provided by the manufacturer.

E14-3. Visible Emissions Requirements (40 CFR 60 Subpart CCCC)

Pursuant to 40 CFR §60.2010, this new air curtain incinerator (ACI) is subject to and shall comply with the provisions of 40 CFR 60, Subpart CCCC (Standards of Performance for Commercial and Industrial Solid Waste Incineration Units). The applicable provisions of Subpart CCCC are incorporated into this permit in accordance with TAPCR 1200-03-09-.03(8).

(a) Except as noted in Condition E14-3(b), visible emissions from this source shall not exhibit greater than 10% opacity as determined by EPA Method 9, as published in 40 CFR 60, Appendix A (six-minute average).

(b) Visible emissions from this source during startup shall not exhibit greater than 35% opacity as determined by EPA Method 9, as published in 40 CFR 60, Appendix A (six-minute average). For the purposes of this permit, “startup” is defined as the first 30 minutes of operation of this source.

(c)Startup for this source is defined as “the period of time between the activation of the system and the first charge to the unit.” It does not include any warmup period during which the unit combuts fossil fuel or other solid waste fuel but receives no municipal solid waste. Shutdown is defined as “the period of time after all waste has been combusted in the primary chamber.” The ACI must be in shutdown condition immediately prior to the startup (allowing up to 35% opacity during the first 30 minutes of startup operation). Startup operation can occur more than once per day only if the ACI’s operation met the definition of “shutdown” prior to each instance of a “startup period that is within the first 30 minutes of operation.” The source would have to demonstrate that all waste has been combusted in the primary chamber between a down or idle time and the next charge to the system. There could not be another “startup period”
without a shutdown of the ACI occurring first. This source is allowed up to 35% opacity within its first 30 minutes of startup only when predicated on a defined shutdown period. The permittee shall document when shutdown conditions occur in order to substantiate when each startup period begins.

(d) The permittee must meet the opacity limits as provided in this condition during all instances of smoldering. If smoldering occurs during a presumed shutdown period or idle time, the Division may find it appropriate to reclassify the period as other than shutdown or idle time.

40 CFR §§60.2250(a) and (b) and the EPA determination letter dated May 15, 2017 (Attachment 9)

Compliance Method: Visible emissions from this source shall be tested in accordance with Condition E14-4 and reported in accordance with Condition E2-1(g).

E14-4. Performance Testing Requirements (40 CFR 60 Subpart CCCC)

(a) The permittee shall conduct annual opacity tests and furnish the Technical Secretary a written report of the results of the visible emissions evaluation, which demonstrates compliance with the opacity standards as specified in Condition E14-3 of this permit. Each annual opacity test shall be conducted no more than 12 calendar months following the date of the previous test, and the written reports shall be submitted in accordance with Condition E2-1(g).

(b) At least 30 days prior to conducting the performance tests required by this condition, the Technical Secretary shall be given notice of the test date (see address for the Compliance Validation section in Condition E2-1(g)) in order to afford an opportunity to have an observer present.

(c) Performance tests shall consist of no fewer than three hours of observations (30 six-minute averages, reported as an average of three one-hour blocks consisting of ten six-minute average opacity values).

(d) Records of the visible emissions evaluations must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative. These records must be retained for a period of not less than five years.

40 CFR §§60.11(b), 60.2250, and 60.2260

Compliance Method: Performance tests shall be reported in accordance with Condition E2-1(g).

E14-5. Fuel Limitations (40 CFR 60 Subpart CCCC)

The permittee shall only burn the following materials: 100% clean lumber, 100% wood waste, or 100% mixture of only clean lumber, wood waste and/or yard waste.

Clean lumber shall mean wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber shall not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol or creosote.

Wood waste shall mean untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include yard waste (grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands; construction, renovation, or demolition wastes; or clean lumber.

Yard waste shall mean grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. They come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include clean lumber or construction, renovation, and demolition wastes

40 CFR §60.2265 and §60.2977

Compliance Method: Compliance with this condition shall be assured by compliance with Condition E14-1.
E14-6. NSPS General Provisions

The permittee shall comply with the applicable General Provisions of 40 CFR 60 Subpart A, as indicated in Table E14-6.

<table>
<thead>
<tr>
<th>Rule Citation</th>
<th>Subject</th>
<th>Applies to Subpart CCCC?</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.1</td>
<td>General applicability of the General Provisions</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.2</td>
<td>Definitions</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.3</td>
<td>Units and abbreviations</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.4</td>
<td>Address</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.5</td>
<td>Determination of construction or modification</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.6</td>
<td>Review of plans</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.7</td>
<td>Notification and Recordkeeping</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.8</td>
<td>Performance tests</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.9</td>
<td>Availability of information</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.10</td>
<td>State Authority</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.11</td>
<td>Compliance with standards and maintenance requirements</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.12</td>
<td>Circumvention</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.13</td>
<td>Monitoring requirements</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.14</td>
<td>Modification</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.15</td>
<td>Reconstruction</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.16</td>
<td>Priority list</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.17</td>
<td>Incorporations by reference</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.18</td>
<td>General control device requirements</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.19</td>
<td>General notification and reporting requirements</td>
<td>Yes</td>
</tr>
</tbody>
</table>

40 CFR §60.1(a)

Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

E14-7. Nonroad engine

The diesel engine associated with this unit is considered a nonroad engine and is exempt from stationary source regulations as long as the engine does not remain at the same location for more than 12-consecutive months.

TAPCR 1200-03-09-.03(8), 40 CFR §1068.30

Compliance Method: The permittee must maintain records that demonstrate the engine continues to meet the definition of a nonroad engine. Examples of acceptable records include indications of the date(s) on which the engine was moved within the site, and/or removed from and returned to the site in order to demonstrate that the engine continues to meet the definition of a nonroad engine.
Excavation and Hauling of Coal Combustion Residuals (CCR) from Ash Pond Complex to New South Rail Loop Landfill: TVA proposes to construct a new lined landfill (South Rail Loop Landfill) for long-term storage of CCR at the Gallatin Fossil Plant. TVA expects to haul 1.2 million cubic yards (1.2 million tons) per year of CCR material from the existing 435-acre Ash Pond Complex (TVA designated emission point 63) to the new South Rail Loop landfill (~100 acres, TVA designated emission point 64).

CCR will be excavated by constructing dewatering channels to dry the material and using excavators and dozers to stockpile the material in an open storage pile area. CCR excavated from the Ash Pond Complex is saturated, and emissions from the handling equipment are negligible due to the high moisture content. The total open storage pile disturbed area for drying CCR material is 10 acres and will dry stockpiled CCR to ~25% moisture for hauling (up to three weeks drying time).

Articulated trucks will haul CCR to the new South Rail Loop landfill on paved roads (one-way haul distance of 1.5 miles) and unpaved roads (one-way haul distance of 0.1 miles). Material unloaded at the landfill will be spread and compacted using dozers and compactor rollers. Wet suppression (95% control efficiency) will be used to control particulate emission on all paved and unpaved ash haul roads.

Conditions E15-1 through E15-5 apply to 83-0025-28

E15-1. Production Limitation(s)

(a) Standard Operating Scenario: Except as otherwise allowed in Condition E15-1(b), the amount of coal combustion residuals (CCR) transported to the landfill shall not exceed 1,200,000 tons during any period of 12 consecutive months.

(b) Alternate Operating Scenario: If the permittee elects to comply with the alternate operating scenario, the amount of CCR transported to the landfill shall not exceed 2,000,000 tons during any period of 12 consecutive months.

Compliance Method (Standard Operating Scenario): Monthly records shall be maintained of the amount of CCR transported to the South Rail Loop Landfill. These records must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

Compliance Method (Alternate Operating Scenario): Compliance shall be assured as follows:

(a) The permittee shall provide a written notification to the Technical Secretary of the intent to use the alternate operating scenario at least 30 days prior to the change. The notification shall be submitted to the following address:

Tennessee Dept. of Environment and Conservation Division of Air Pollution Control Permitting Program William R. Snodgrass TN Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243

E-mail Submittal (Adobe PDF): Air.Pollution.Control@TN.gov

(b) If the permittee elects to use the alternate operating scenario, a vacuum truck shall be used as needed to reduce emissions from paved haul roads. Use of the vacuum truck shall commence on the first day of the month in which the alternate operating scenario is used.

The permittee shall maintain the following daily records (an alternative format that provides the same required information may be used):
**Table E15-1(b): Vacuum Truck Record**

<table>
<thead>
<tr>
<th>Date</th>
<th>Vacuum Truck Used (Y/N)*</th>
<th>Start Time</th>
<th>Stop Time</th>
<th>Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For days on which the vacuum truck is not used, indicate the reason (e.g., measurable precipitation within the last 24 hours).

These records must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

(c) Monthly records shall be maintained of the amount of CCR transported to the South Rail Loop Landfill. These records must be maintained at the source location and kept available for inspection by the Technical Secretary or an authorized representative.

(d) Following implementation of the alternate operating scenario, the permittee may return to use of the standard operating scenario. The permittee shall provide a written notification to the Technical Secretary of the intent to use the standard operating scenario at least 30 days prior to the change. The notification shall be submitted to the address specified in paragraph (a) of this compliance method. The permittee shall continue to use the vacuum truck, as specified in paragraph (b) of this compliance method, until the first day of the month following resumption of the standard operating scenario.

**E15-2. Emission Limitations**

The permittee shall comply with the following emission limits:

(a) PM emitted from this source shall not exceed 41.3 pounds per hour (one-hour average).

(b) Annual emissions of PM, PM$_{10}$, and PM$_{2.5}$ shall not exceed the limits in **Table E15-2(b)**. The permittee has agreed to these limits to avoid PSD review.

**Table E15-2(b): Particulate Emission Limits**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Allowable Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>24.6</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>8.75</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>2.24</td>
</tr>
</tbody>
</table>

TAPCR 1200-03-07-.01(5), agreement letter dated July 29, 2020 (Attachment 8), Condition S1-4 of construction permit 978223 (PSD avoidance)

Compliance method: Compliance with this condition shall be assured by compliance with **Conditions D7, E2-11, E15-1**, and **E15-3**.

**E15-3.** Visible emissions from roads and parking areas shall not exhibit greater than 10% opacity as determined by Tennessee Visible Emission Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and August 24, 1984.

TAPCR 1200-03-05-.03(6), Conditions G2 and S1-5 of construction permit 978223

Compliance Method: Compliance with this condition shall be assured by the procedures of the Opacity Matrix Decision Tree for Visible Emission Evaluation, amended September 11, 2013 (Attachment 1).

**E15-4.** Roller compaction shall be used as needed to control fugitive dust emissions from the CCR landfill and storage pile.

TAPCR 1200-03-09-.03(8), Condition S1-5 of construction permit 978223
Compliance Method: Compliance shall be assured by annual certification, as required in Condition E2-1(b).

E15-5. Startup of CCR Landfill

Startup of this emission source may not commence prior to the completion of site clearing and removal of the air curtain incinerator (83-0025-27) from the site. The permittee shall provide a written notification to the Technical Secretary of the removal of source 83-0025-27 and startup of source 83-0025-28 no later than 30 days following each change. The notification shall be submitted to the address provided in Condition E15-1(a).

TAPCR 1200-03-09-.03(8), Condition S1-6 of construction permit 978223

END OF PERMIT NUMBER 578731
ATTACHMENT 1

OPACITY MATRIX DECISION TREE FOR VISIBLE EMISSION EVALUATION BY TVEE METHODS 1 AND 2 AND EPA METHOD 9
AMENDED SEPTEMBER 11, 2013
Decision Tree PM for Opacity from Nontraditional Sources (Roads and Parking Areas) Utilizing TVEE Method 1

Notes:
The use of Tennessee Visible Emission Evaluation (TVEE) Method 1 is only applicable where the use of the method is specified as a permit condition.

PM = Periodic Monitoring required by 1200-03-09-.02(11)(c)(1)(iii).

This Decision Tree outlines the criteria by which major sources can meet the PM requirements of Title V for demonstrating compliance with the visible emissions standard for nontraditional sources (roads and parking areas). It is not intended to determine compliance requirements for EPA’s Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Visible Emissions Evaluations (VEEs) are to be conducted utilizing TVEE Method 1. The observer must be properly certified according to criteria specified in TVEE Method 1 to conduct Method 1 evaluations.

Initial observations are to be repeated within 90 days of startup of a modified source if a new construction permit is issued for modification of the source.

A VEE conducted by TDAPC personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error
For TVEE Method 1, the TDAPC declares non-compliance when the highest two-minute average exceeds the standard plus 10% opacity for sources having this standard applied prior to August 24, 1984 or 8.8% for sources having this standard applied on or after August 24, 1984.

Dated June 18, 1996
Amended September 11, 2013

Within one year following Title V permit issuance date conduct an initial 30-Minute VEE during normal operation

Is the Highest 2-minute average less than 5% opacity?

Yes

No

Is the Highest 2-minute average greater than 5% opacity and less than 10% opacity?

Yes

No

Conduct VEEs Semiannually

Has a Semiannual VEE highest 2-minute average been equal to or greater than 10% opacity?

Yes

No

Conduct 30-minute VEEs Monthly

Is the highest 2-Minute Average Greater than or equal to the 10% opacity standard and out of compliance taking both round and reader error into consideration?

Yes

No

Report Deviations from Permit Requirements in Periodic Reports and Periodic Compliance Certifications as Required by the Major Source Operating Permit.

Within one year prior to Title V permit expiration date conduct another 30-minute VEE during normal process operation

Have 3 Consecutive Months Highest 2-minute averages been less than 10% opacity?
Decision Tree PM for Opacity for Sources Subject to Rule 1200-03-05-.01 Utilizing TVEE Method 2

Is Emission Unit an Equipment Leak?

Yes \(\rightarrow\) No opacity reading required

No

Natural Gas or No. 2 Oil-fired Combustion Source?

Yes \(\rightarrow\) No opacity reading required

No

Is Each Allowable Emission less than or equal to 10 TPY?

Yes \(\rightarrow\) No opacity reading required

No

Is Each Allowable Emission greater than 10 TPY from Colorless Pollutants (e.g. Colorless VOCs, CO, HCl, HF, Ammonia, or Methane)?

Yes \(\rightarrow\) No opacity reading required

No

Within one year following Title V permit issuance date conduct an initial 30-minute VEE during normal process operation

Is the highest individual reading greater than or equal to the applicable opacity standard plus 15% opacity (e.g. 35% for a 20% standard)?

Yes \(\rightarrow\) Conduct a one-hour VEE

No

Are there 3 or less individual readings greater than or equal to the opacity standard plus 15% opacity (e.g. 35% for a 20% standard)?

Yes \(\rightarrow\) Conduct VEEs Semi-annually

No

Conduct VEEs monthly One hour duration

Are there 21 or more individual readings greater than or equal to the applicable opacity standard plus 15% opacity (e.g. 35% for a 20% standard)?

Yes \(\rightarrow\) Have a semi-annual VEE yielded 4 or more individual readings greater than or equal to the applicable opacity standard plus 15% opacity (e.g. 35% for a 20% standard)?

No \(\rightarrow\) Has a semi-annual VEE yielded 4 or more individual readings greater than or equal to the applicable opacity standard plus 15% opacity (e.g. 35% for a 20% standard)?

Yes \(\rightarrow\) Report deviations from Permit requirements in periodic reports and periodic compliance certifications as required by the Major Source Operating Permit.

Note: A company could mutually agree to have all of its sources regulated by EPA Method 9. Caution: Agreement to use Method 9 could potentially place some sources in non-compliance with visible emission standards. Please be sure before you agree.

Dated June 18, 1996
Amended September 11, 2013

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standard in Rule 1200-03-05-.01. It is not intended to determine compliance requirements for EPA’s Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PMT required.

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing Tennessee Visible Emission Evaluation Method 2. The observer must be properly certified according to the criteria specified in EPA Method 9 to conduct TVEE Method 2 evaluations.

Typical Pollutants

Particulates, VOC, CO, SO₂, NOₓ, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

TVEE Method 2: The TAPCD declares non-compliance when 21 observations are read at the standard plus 15% opacity (e.g. 35% for a 20% standard).

*The rationale for this is the fact that Rule 1200-03-05-.01 allows for an exemption of 5 minutes (20 readings) per hour and up to 20 minutes (80 readings) per day. With 4 or more excessive individual readings per hour the possibility of a daily exceedance exists.

Note: A company could mutually agree to have all of its sources regulated by EPA Method 9. Caution: Agreement to use Method 9 could potentially place some sources in non-compliance with visible emission standards. Please be sure before you agree.

Dated June 18, 1996
Amended September 11, 2013

66
Notes:

PM = Periodic Monitoring required by 1200-03-09-02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA’s Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants
Particulates, VOC, CO, SO₂, NOₓ, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996
Amended September 11, 2013

---

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Is Emission Unit an Equipment Leak?
Yes No

Natural Gas or No. 2 Oil-fired Combustion Source?

Is Each Allowable Emission less than or equal to 10 TPY?

Is Each Allowable Emission greater than 10 TPY from Colorless Pollutants (e.g. Colorless VOCs, CO, HCl, HF, Ammonia, or Methane)?

Within one year following Title V permit issuance date conduct an initial 30-minute VEE during normal process operation

Is the highest 6-minute average** less than or equal to 50% of the applicable opacity standard (e.g. 10% opacity for a source having a 20% standard)?

Is the highest 6-minute average** greater than 50% of the applicable opacity standard (e.g. 11% opacity for a source having a 20% standard) and less than 100% of the applicable opacity standard?

Within one year prior to Title V permit expiration date conduct another 30-minute VEE during normal process operation

Conduct VEEs Semi-annually

Has a semi-annual VEE highest 6-minute average** been greater than or equal to the applicable opacity standard?

Yes

Have 3 consecutive month VEEs highest 6-minute average** been less than the applicable opacity standard?

Yes

Conduct 30-minute VEEs monthly

Is the highest 6-minute average** greater than or equal to the applicable opacity standard & out of compliance taking both round & reader error into consideration?

Yes

Report deviations from Permit requirements in periodic reports and periodic compliance certifications as required by the Major Source Operating Permit.

---

Dated June 18, 1996
Amended September 11, 2013
ATTACHMENT 2

LETTERS FROM U.S. EPA REGION 4 AND TVA CONCERNING ALTERNATIVE TESTING AND MONITORING, 40 CFR 60 SUBPART GG
Mr. Jeryl W. Stewart  
Compliance Validation Program  
Tennessee Division of Air Pollution Control  
9th Floor, L & C Annex  
401 Church St.  
Nashville, Tennessee 37243-1531

SUBJECT: Alternative Monitoring Proposals for Tennessee Valley Authority (TVA) for Electric Utility Gas Turbines at the TVA Gallatin and Johnsonville Facilities

Dear Mr. Stewart:

This letter is in response to your March 31, 1999, request for approval of alternative monitoring proposals for Tennessee Valley Authority's (TVA's) Gallatin and Johnsonville facilities. TVA will operate eight (four at each installation) natural gas-fired combustion turbines subject to 40 C.F.R. Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. Region 4 has concluded that the use of acid rain nitrogen oxides (NOx) continuous emission monitoring systems (CEMS) for demonstrating compliance is acceptable. Region 4 has also concluded that the use of sulfur content data supplied by the natural gas supplier is acceptable. Additionally, it is acceptable to sample the natural gas from a sampling station upstream of each turbine installation and for a single sample to suffice for the multiple turbines at each of the two installations. Finally, Region 4 has concluded the proposed reduction in sulfur monitoring to a semiannual basis is not acceptable at this time. Described in the last paragraph of this letter is a gradual reduction in monitoring frequency consistent with national guidance and previous Region 4 determinations.

Under the provisions for 40 C.F.R. 60.334(c)(1), the operating parameters used to identify NOx excess emissions for Subpart GG turbines are water-to-fuel injection rates and fuel nitrogen content. As an alternative to monitoring NOx excess emissions using these parameters, TVA is proposing to use a NOx CEMS that is certified for measuring NOx emissions under 40 C.F.R. Part 75. Based upon a determination issued by the Environmental Protection Agency (EPA) on March 12, 1993, NOx CEMS can be used to monitor excess emissions from Subpart GG turbines if a number of conditions specified in the determination are met. This determination has been enclosed for your convenience.

According to 40 C.F.R. 60.334(b)(2), owners and operators of stationary gas turbines subject to Subpart GG are required to monitor fuel nitrogen and sulfur content on a daily basis if a company does not have intermediate bulk storage for its fuel. 40 C.F.R. 60.334(b)(2) also contains provisions allowing owners and operators of turbines that do not have intermediate bulk storage to monitor only at intervals.
storage for their fuel to request approval of custom fuel monitoring schedules that require less frequent monitoring of fuel nitrogen and sulfur content.

TVA has requested three separate deviations from the fuel sulfur content monitoring procedures set forth in 40 C.F.R. 60.334. First, TVA proposes to utilize the fuel sulfur content data provided by the natural gas supplier in lieu of directly sampling each shipment of fuel. This is acceptable to Region 4, provided the supplier agrees to comply with the test method requirements of 40 C.F.R. 60.335(d). Second, TVA proposes that a single sulfur content analysis suffice for each turbine installation, provided it is conducted upstream of each turbine installation and downstream of any new gas entry into the pipeline. This proposal is acceptable to Region 4, as it is consistent with previous determinations regarding the use of fuel sulfur content analyses from a single site for multiple turbines.

Finally, TVA requests that sulfur monitoring be conducted twice a year for natural gas. Under EPA guidance issued August 14, 1987, an alternative to daily sulfur monitoring is described as a three stage process under which owners and operators of natural gas fired turbines can obtain approval to conduct sampling on a semiannual basis. In the first step of this process the sulfur content of the fuel must be monitored twice a month for at least six months. If the results of this bimonthly monitoring verify compliance with the applicable sulfur limit and indicate little variability in the sulfur content of the fuel, the fuel sampling and analysis frequency can be reduced from a bimonthly to a quarterly basis. If six quarters of fuel monitoring data verify compliance with the applicable sulfur standard and indicate little variability in the sulfur content of the fuel, the sampling and analysis frequency can be reduced to a semiannual basis. Unless TVA provides historical data on fuel sulfur content in order to justify deviating from the approach described in the 1987 custom fuel monitoring policy, it will be necessary for the company to conduct the bimonthly and quarterly sampling required by this policy as prerequisite to approval of a semiannual sampling frequency.

If you have any questions about the determination provided in this letter, please contact Ms. Katy R. Forney of my staff at 404-562-9130.

Sincerely,

[Signature]
R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

Enclosure
4APT-ARB

Mr. Jeryl W. Stewart
Compliance Validation Program
Department of Environment and Conservation
Division of Air Pollution Control
9th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243-1531

SUBJ: Alternative Monitoring and Testing Proposals for Combustion Turbines Located at the
Tennessee Valley Authority Gallatin and Johnsonville Facilities

Dear Mr. Stewart:

Thank you for your March 13, 2000, letter requesting a determination regarding several
alternative monitoring and testing proposals that the Tennessee Valley Authority (TVA)
submitted for four new combustion turbines (CTs) that will be installed at the Gallatin Facility and
for eight new CTs that will be installed at the Johnsonville Facility. These CTs will be subject to
sulfur dioxide (SO₂) and nitrogen oxides (NOₓ) emission limits under 40 C.F.R. Part 60, Subpart
GG (Standards of Performance for Stationary Gas Turbines). In addition, they will be subject to
NOₓ emission limits under the terms of a Prevention of Significant Deterioration (PSD) permit
issued by your agency and acid rain monitoring requirements for SO₂ and NOₓ pursuant to 40
C.F.R. Part 75. The alternative monitoring and testing proposals from TVA are summarized
along with our comments in the remainder of this letter.

SO₂ custom fuel monitoring

Since TVA will not have intermediate bulk storage for the natural gas burned in the CTs at
the Gallatin and Johnsonville Facilities, 40 C.F.R. §60.334(b)(2) would require that the company
collect gas samples on a daily basis and analyze them for sulfur content. Under the terms of a
custom fuel monitoring policy issued by the U.S. Environmental Protection Agency (EPA)
Headquarters on August 14, 1987, the sulfur monitoring frequency for pipeline quality natural gas
can be reduced from a daily to a semiannual basis. In order to qualify for this reduction,
companies must conduct sampling twice a month for six months followed by quarterly sampling
for six quarters and demonstrate that the sulfur content of the samples is well below the applicable
standard with low variability. TVA asked that it be allowed to use a semiannual sampling
frequency immediately upon the startup of the CTs at the Gallatin and Johnsonville Facilities, and
in a July 8, 1999, letter to you we indicated that TVA would have to provide historical data on
the sulfur content of the natural gas from its fuel supplier(s) in order to justify an immediate
reduction the sulfur monitoring frequency for natural gas burned in the CTs at the Gallatin and
Johnsonville Facilities.

Based upon data provided by TVA in a February 22, 2000, letter that was enclosed with
your request, it will be acceptable for the company to use a semiannual sulfur monitoring
frequency for natural gas immediately upon startup at the Gallatin and Johnsonville Facilities. The
data for Gallatin were for 35 samples collected between January 1998 and January 1999, and the
data for Johnsonville were for 22 samples collected between January 1995 and September 1999.
In all cases, the sulfur content of the samples analyzed was either at or below the method
detection limit of 0.0001 weight percent. This concentration is three order of magnitude below
the applicable standard of 0.8 weight percent in 40 C.F.R. §60.333(b), and the results confirm low
variability in the sulfur concentration of the gas supplied to TVA. On this basis, semiannual
monitoring for sulfur content in the gas used to fire the CTs at the Gallatin and Johnsonville
Facilities will be adequate.

Use of NO\textsubscript{x} monitor data for initial performance test

TVA made two different proposals involving NO\textsubscript{x} emission testing that must be conducted
in order to demonstrate compliance with both Subpart GG and PSD limits. One proposal is to
drop the requirement to sample at four different load points across the CTs’ operating ranges, and
the other one is to demonstrate compliance using data from certified continuous emission
monitoring systems (CEMS) that will be installed on the units. Based upon the fact that NO\textsubscript{x}
CEMS will be installed and certified on the CTs at Gallatin and Johnsonville, conducting the initial
performance test at four different operating rates will not be necessary, and using the CEMS to
direct the initial performance test would be acceptable under certain conditions.

TVA cited the fact that NO\textsubscript{x} emissions at the Gallatin and Johnsonville Facilities will not
be controlled using water injection as the basis for dropping the requirement to test at four
operation loads, but this fact does not by itself constitute a basis for allowing the company to
direct the initial performance test at fewer than four loads. The basis for this position is that, in
addition to providing data to develop a water-to-fuel injection ratio curve for excess emission
monitoring purposes, conducting a four-load test also provides assurance that a turbine is capable
of complying with the applicable NO\textsubscript{x} limit across the unit’s entire operating range. This
assurance is important because EPA generally requires that performance testing be conducted
under “worst case” conditions, and Region 4 experience has been that predicting the operating
load that represents worst case conditions for stationary gas turbines is difficult. In TVA’s case,
however, the CEMS installed and certified on its CTs will provide credible evidence of
compliance even after the initial performance test has been completed. Therefore, conducting the
initial performance test at multiple loads will not be necessary.

Using the certified NO\textsubscript{x} CEMS to conduct the initial performance test would be acceptable
provided that TVA completes certification testing which verifies that its CEMS sampling probes are located in representative locations and conducts pre- and post-test calibration checks of the CEMS in accordance with the provisions in EPA Method 20. If the CEMS are calibrated properly before and after each test run, using the CEMS to conduct the NOx performance test would constitute a Method 20 alternative only to the extent that sampling would be conducted at a single point, rather than at eight points selected based upon the results of a pre-test traverse. In order to be certified under the acid rain rule, the CEMS must pass a relative accuracy test audit (RATA), and passing the RATA provides justification for single point sampling by demonstrating that the CEMS probe is located at points where the pollutant and diluent gas concentrations are representative of the average concentrations in the stack.

One issue that was not addressed in the TVA proposal was the number and duration of test runs that would be conducted with the CEMS. In order to ensure that representative results are obtained, we recommend that compliance be determined on the basis of at least three hours of CEMS data for each of the CTs at the Gallatin and Johnsonville Facilities. These data could be collected over three one-periods or they could be collected using shorter test periods similar to the 21-minute test runs conducted during a RATA. Regardless of the number of test runs conducted, however, a calibration check conducted in accordance with Section 6.2.3 of Method 20 must be performed on the CEMS following each run.

**Fuel oil nitrogen content monitoring**

TVA asked that the requirement in 40 C.F.R. §60.334(b) to monitor the nitrogen content of the fuel oil burned in its CTs be waived. Under Subpart GG, the two operating parameters used to track NOx excess are water-to-fuel injection rates and fuel nitrogen content. Baseline values for both parameters are established during an initial performance test, and 40 C.F.R. §60.334(e)(1) defines how excess emissions are identified in terms of these parameters. TVA will be installing, certifying, operating, and maintaining NOx CEMS on its CTs in order to comply with requirements under 40 C.F.R. Part 75 and will also be using these CEMS to track excess emissions under Subpart GG. Since TVA will be monitoring NOx excess emissions directly using its CEMS, monitoring the nitrogen content of the oil burned in the CTs is unnecessary, and the waiver requested by the company is acceptable.

**Correcting NOx data to International Standard Organization (ISO) conditions**

The enclosed March 12, 1993, EPA determination summarizes requirements for CEMS that are used for NOx excess emission monitoring under Subpart GG, and one of these requirements is that the CEMS be capable of calculating emissions corrected to 15 percent oxygen and ISO standard day conditions (288 Kelvin, 60 percent relative humidity, and 101.3 kilopascals pressure). In several recent determinations, Region 4 has indicated that making the ISO correction on a continuous basis is not necessary for turbines that are subject to PSD NOx limits that are substantially more stringent than those under Subpart GG. In these determinations, Region 4 has indicated, however, that records of the ambient temperature and humidity data used
to correct the results to ISO conditions must be maintained so that results can be calculated in terms of the standard in Subpart GG whenever requested by the EPA or a state or local air pollution control agency.

In addition to requesting that a correction to ISO day conditions not be required for its CTs, TVA requested that the requirement to maintain records of the ambient data used to make the ISO correction also be waived. The justification provided for this proposal was that the PSD NO\textsubscript{x} limits for its CTs (15 parts per million for gas and 42 parts per million for oil) are so far below the standard in Subpart GG (75 parts per million) that NSPS compliance will be assured even if the ISO correction is not made. Although we have determined that it will not be necessary for TVA’s CEMS to correct results to ISO conditions on a continuous basis, there is not enough information at this time to justify waiving the requirement to keep records of the ambient data used to make the ISO correction.

One basis for our conclusion that there is not enough information to justify waiving the requirement to keep records of the ambient data used to make the ISO correction is that, even though TVA’s PSD limits are tighter than the corresponding NSPS limit, this assures compliance with Subpart GG only to the extent that the company remains in compliance with the PSD limits. If the company does ever violate either of its PSD limits, there would be a point at which it would be necessary to correct results to ISO conditions in order to verify NSPS compliance. A second basis for our conclusion that there is not enough information to justify waiving the requirement to keep records of the ambient data used to make the ISO correction is that the averaging time for the PSD limit (30 days) is substantially longer than the averaging time of the NSPS limit (one hour). Because of this difference in averaging times, meeting the long-term PSD limit does not necessarily assure compliance with the short-term ISO-corrected NSPS limit. Therefore, a waiver of the requirement to maintain records of the ambient data used to make the ISO correction cannot be granted at this time. We would, however, be willing to reconsider this issue at a later date if TVA collects at least one year of operating data verifying that emissions from its CTs are always well below the applicable ISO-corrected NSPS limits based upon a one-hour average.

**Fuel oil sulfur monitoring**

According to 40 C.F.R. §60.334(b)(1) the sulfur content of fuel held in a bulk storage tank must be determined each time fuel is transferred to the tank from any other source. At the Gallatin and Johnsonville Facilities, the amount of sampling that would have to be conducted in order to comply with this requirement would be limited since oil is transferred into the storage tanks at both facilities from barges. At another facility where TVA plans to install CTs, oil will be delivered in tanker trucks, and using the procedures in 40 C.F.R. §60.334(b)(1) to monitor the sulfur content of the oil at this facility would be burdensome because TVA would have to collect and analyze a sample after each tanker truck delivery. Therefore, TVA has proposed to use vendor analyses, rather than onsite sampling to monitor the sulfur content of the oil burned at the facility.
Provided that all of the oil delivered to the facility in question meets the sulfur content limit of 0.8 weight percent promulgated at 40 C.F.R. §60.333(b), TVA’s proposal for monitoring the sulfur content of the oil used to fire the CTs at this facility will be acceptable. The basis for this determination is that if all of the oil delivered to the facility has a sulfur content of less than 0.8 weight percent, the oil contained in the storage tank and used to fire the CTs will meet the applicable standard by default. If the sulfur content of any oil delivered to the facility exceeds the applicable standard, it would be necessary to collect and analyze samples from the storage tank to ensure that the average sulfur content of the oil burned is less than 0.8 weight percent. This issue is not expected to be a concern at the facility in question, however, because the American Society for Testing and Materials limit on the sulfur content of distillate oil (0.5 weight percent) is well below the standard in Subpart GG.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,

R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

Enclosure

(1) March 12, 1993, EPA policy on the use of CEMS for excess emission monitoring under Subpart GG
June 27, 2000

Mr. Barry Stephens, P.E., Director
Division of Air Pollution Control
Tennessee Department of Environment
and Conservation
9th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243

Dear Mr. Stephens:

TENNESSEE VALLEY AUTHORITY (TVA) - GALLATIN, JOHNSONVILLE AND LAGOON CREEK COMBUSTION TURBINES - CONSTRUCTION PERMIT NOs 950852F, 950853F AND 952409F - TESTING AND MONITORING REQUIREMENTS

This letter confirms TVA’s understanding of the exceptions and alternatives from 40CFR, Part 60, Subpart GG which we have been granted and contains an additional request. All previous requests and the additional request are addressed in EPA’s general guidance on “Approval of Routine Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated Under New Source Performance Standards” contained in a letter from Doug Neeley of Region IV to you on May 26, 2000. It is our understanding that the alternatives shown below are acceptable:

1. Fuel monitoring for nitrogen content will not be required for either gas or oil since the units will have NOx continuous emissions monitors (CEMs).
2. Based on the historical data we previously submitted, we will use a semiannual monitoring frequency for natural gas sulfur content immediately upon startup of the units. Since the gas suppliers already monitor according to EPA’s custom fuel monitoring schedule, their analyses may be used to demonstrate compliance with the semiannual monitoring requirement. Their monitoring takes place upstream of the units and is downstream of any point at which additional gas enters the pipeline.
3. NOx CEMs will be used in lieu of the operating parameter monitoring specified in Subpart GG.
Mr. Barry Stephens  
Page 2  
June 27, 2000  

4. CEMs data will not be corrected to ISO conditions. EPA requires that records be maintained of the data necessary for an ISO correction (ambient temperature, ambient humidity and atmospheric pressure).  
5. NOx performance testing at different loads will not be performed since the units are monitored by CEMs.  
6. Vendor analysis will be used to verify the sulfur content of the No. 2 fuel oil at Lagoon Creek since this facility will be served by tanker trucks. This is in lieu of site sampling of individual trucks.  

In addition to the alternatives previously addressed as shown above, TVA also requests:  

1. That initial NOx performance testing be approved using the data collected during the relative accuracy test audits required under 40 CFR Part 75 in lieu of EPA Method 20.  
2. Clarification of the recordkeeping requirements for data necessary for ISO corrections (see item 4 above). Will the records of this data maintained by the nearest first order weather station operated by the National Weather Service satisfy this requirement? For Gallatin and Johnsonville, this would be Nashville. For Lagoon Creek, it would be Memphis.  

We appreciate your previous and current assistance on these issues. If you have any questions or comments, please call Steven Strunk at (423) 751-2808.  

Janet K. Watts  
Manager of Environmental Affairs  
5D Lookout Place
ATTACHMENT 3
NONAPPLICABLE REQUIREMENTS
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Rule</th>
<th>Title/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visible Emission Regulations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-05</td>
<td>1200-03-05-06</td>
<td>Large Wood-Fired Fuel Burning Equipment</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td></td>
<td>1200-03-05-08</td>
<td>Titanium Dioxide (TiO₂) Manufacturing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-05-09</td>
<td>Kraft Mill Recovery Furnaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-05-11</td>
<td>Soda Recovery Boilers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-05-12</td>
<td>Coke Battery Underfire (combustion) Stacks</td>
<td></td>
</tr>
<tr>
<td><strong>Non-Process Emission Standards</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-06</td>
<td>1200-03-06-05</td>
<td>Wood-Fired Fuel Burning Equipment</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td></td>
<td>1200-03-06-06</td>
<td>Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999</td>
<td></td>
</tr>
<tr>
<td><strong>Process Emission Standards</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-07-08</td>
<td>Specific Process Emission Standards</td>
<td>No affected units on site.</td>
<td></td>
</tr>
<tr>
<td>1200-03-07-09</td>
<td>Sulfuric Acid Mist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-07-11</td>
<td>Carbon Monoxide, Electric Arc Furnaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-07-12</td>
<td>Carbon Monoxide, Catalytic Cracking Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fugitive Dust</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-08</td>
<td>1200-03-08-02</td>
<td>Special Additional Control Area Fugitive Dust Requirements</td>
<td>This facility is not located in a particulate Additional Control Area.</td>
</tr>
<tr>
<td><strong>Hazardous Air Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-11</td>
<td>1200-03-11-02</td>
<td>Asbestos</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td></td>
<td>1200-03-11-03</td>
<td>Beryllium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-04</td>
<td>Mercury</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-05</td>
<td>Vinyl Chloride</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-06</td>
<td>Equipment Leaks (Fugitive Emission Sources)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-07</td>
<td>Equipment Leaks (Fugitive Emission Sources) of Benzene</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-08</td>
<td>Reserved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-09</td>
<td>Inorganic Arsenic Emissions from Glass Manufacturing Plants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-10</td>
<td>Inorganic Arsenic Emissions from Primary Copper Smelters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200-03-11-11</td>
<td>Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities</td>
<td></td>
</tr>
<tr>
<td><strong>Control of Sulfur Dioxide Emissions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-14</td>
<td>1200-03-14-03</td>
<td>Process Emission Standards</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td><strong>New Source Performance Standards</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200-03-16</td>
<td>1200-03-16-01</td>
<td>General Provisions</td>
<td>TAPCR 1200-03-16 is not included in Tennessee’s State Implementation Plan. Applicable rules in this chapter are State-only regulations.</td>
</tr>
<tr>
<td></td>
<td>1200-03-16-02</td>
<td>Fossil Fuel-Fired Steam Generating Units for Which Construction is Commenced After April 3, 1972</td>
<td>Applies to units constructed after April 3, 1972. Boilers 1 through 4 were constructed prior to April 3, 1972. No affected units at this facility.</td>
</tr>
<tr>
<td></td>
<td>1200-03-16-03</td>
<td>Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978</td>
<td>Applies to units constructed after September 18, 1978. Construction commenced on units at this facility between 1956 and 1959. No affected units at this facility.</td>
</tr>
<tr>
<td></td>
<td>1200-03-16-04</td>
<td>Incinerators</td>
<td>No affected units on site.</td>
</tr>
</tbody>
</table>
# Tennessee Air Pollution Control Regulations (Division 1200-03)
## Nonapplicable Requirements

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Rule</th>
<th>Title/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.01</td>
<td>Definitions</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.03</td>
<td>Compliance Certification, Recordkeeping, and Reporting Requirements for Coating and Printing Sources</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.04</td>
<td>Compliance Certification, Recordkeeping, and Reporting Requirements for Non-coating and Non-printing Sources</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.06</td>
<td>Handling, Storage, and Disposal of Volatile Organic Compounds (VOC)</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.07</td>
<td>Source-specific Compliance Schedules</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.20</td>
<td>Coating of Miscellaneous Metal Parts</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.29</td>
<td>Petroleum Liquid Storage in Fixed Roof Tanks</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.31</td>
<td>Solvent Metal Cleaning</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.79</td>
<td>Other Facilities That Emit Volatile Organic Compounds (VOC's)</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.80</td>
<td>Test Methods and Compliance Procedures: General Provisions</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.83</td>
<td>Test Methods and Compliance Procedures: Emission Capture and Destruction or Removal Efficiency and Monitoring Requirements</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.84</td>
<td>Test Methods and Compliance Procedures: Determining the Destruction or Removal Efficiency of a Control Device</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.86</td>
<td>Performance Specifications for Continuous Emissions Monitoring of Total Hydrocarbons</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.87</td>
<td>Quality Control Procedures for Continuous Emissions Monitoring Systems (CEMS)</td>
<td></td>
</tr>
<tr>
<td>1200-03-18</td>
<td>1200-03-18-.28</td>
<td>Petroleum Liquid Storage in External Floating Roof Tanks</td>
<td>The light-off oil system consists of three No. 2 oil storage tanks (5,000,000 gallons each) used to supply light-off fuel for auxiliary boiler and turbines. There are two diesel storage tanks (12,000 gallons each) located next to the break building. These tanks would be exempt from 1200-03-18-.28 because the maximum true vapor pressure of No. 2 oil would be less than 1.5 psi (see AP-42 table 7.1-2).</td>
</tr>
<tr>
<td>1200-03-19</td>
<td>All</td>
<td>Establishes that the purpose of this Chapter is to establish specific emission standards for existing air contaminant sources located in or significantly impacting upon an additional control area.</td>
<td>Does not apply in Sumner County</td>
</tr>
<tr>
<td>1200-03-22</td>
<td>1200-03-22-.03</td>
<td>Specific Emission Standard for Existing Sources of Lead</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-25</td>
<td>All</td>
<td>Compliance requirements for infectious waste incinerators.</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-27</td>
<td>1200-03-27-.04</td>
<td>Standards for Cement Kilns</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-27</td>
<td>1200-03-27-.07</td>
<td>Voluntary NO\textsubscript{X} Emissions Reduction Program</td>
<td>Does not apply to sources subject to the NO\textsubscript{X} SIP Call.</td>
</tr>
<tr>
<td>1200-03-27</td>
<td>1200-03-27-.09</td>
<td>Compliance Plans for NO\textsubscript{X} Emissions from Stationary Internal Combustion (IC) Engines</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>1200-03-29</td>
<td>1200-03-29-.01 through 1200-03-29-.10</td>
<td>Requirements for light-duty motor vehicle inspection and maintenance.</td>
<td>Does not apply to stationary sources.</td>
</tr>
</tbody>
</table>
### Tennessee Air Pollution Control Regulations (Division 1200-03)
#### Nonapplicable Requirements

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Rule</th>
<th>Title/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200-03-34</td>
<td>1200-03-34-.01</td>
<td>Conformity of Transportation Plans, Programs, and Projects</td>
<td>Does not apply to stationary sources.</td>
</tr>
<tr>
<td>1200-03-36</td>
<td>All</td>
<td>Prohibits any person from tampering with a motor vehicle or motor vehicle engine that is in compliance with Federal motor vehicle standards.</td>
<td>Does not apply to stationary sources.</td>
</tr>
</tbody>
</table>

### Code of Federal Regulations (CFR) Title 40
#### Nonapplicable Requirements

<table>
<thead>
<tr>
<th>Part</th>
<th>Subpart</th>
<th>Title/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>B through QQ, SS through FFF</td>
<td>Approval and promulgation of implementation plans</td>
<td>These subparts do not apply to facilities in Tennessee</td>
</tr>
<tr>
<td>58</td>
<td>C through G</td>
<td>Ambient air quality surveillance (monitoring program requirements, networks, reporting)</td>
<td>These requirements apply to monitoring programs operated by air pollution control agencies.</td>
</tr>
<tr>
<td>60</td>
<td>Cb through Cf</td>
<td>Emission guidelines and compliance times for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>D</td>
<td>Fossil-Fired Steam Generators</td>
<td>Subpart D applies to each steam generating unit for which construction, modification, or reconstruction is commenced after August 17, 1971. These units were constructed between 1956 and 1959. No affected units at this facility.</td>
</tr>
<tr>
<td>60</td>
<td>Da</td>
<td>Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978</td>
<td>These units were constructed between 1956 and 1959. No affected units at this facility.</td>
</tr>
<tr>
<td>60</td>
<td>Dc</td>
<td>Small Industrial-Commercial-Institutional Steam Generating Units</td>
<td>Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. The auxiliary boiler was constructed in 1954.</td>
</tr>
<tr>
<td>60</td>
<td>E through Ja</td>
<td>Standards of performance for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>K</td>
<td>Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978</td>
<td>Subpart K does not apply to No. 2 oil storage vessels.</td>
</tr>
<tr>
<td>60</td>
<td>Ka</td>
<td>Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984</td>
<td>Subpart Ka does not apply to No. 2 oil storage vessels.</td>
</tr>
<tr>
<td>60</td>
<td>Kb</td>
<td>Storage Vessels for Volatile Organic Liquids for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984</td>
<td>Pursuant to §60.110(b), Subpart Kb does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kPa. No. 2 oil vapor pressure is less than 3.5 kPa.</td>
</tr>
<tr>
<td>60</td>
<td>L through X, Z, AA through EE, HH through XX, AAA through NNN, PPP through XXX, AAAA through BBBB</td>
<td>Standards of performance for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>Part</td>
<td>Subpart</td>
<td>Title/Description</td>
<td>Comments</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>60</td>
<td>CCCC</td>
<td>Standards of performance for commercial and industrial solid waste incineration units</td>
<td>The requirements of Subpart CCCC and of any state plan established pursuant to Subpart DDDD would not apply to the combustion of traditional fuels, including cellulosic biomass, clean cellulosic biomass, and used oil that meets the requirements of 40 CFR §279.11 (see §241.2).</td>
</tr>
<tr>
<td>60</td>
<td>DDDD</td>
<td>Emission guidelines and compliance times for commercial and industrial solid waste incineration units</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>EEEE through HHHH</td>
<td>Standards of performance for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>JJJJ</td>
<td>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>KKKK</td>
<td>Standards of Performance for Stationary Combustion Turbines</td>
<td>Pursuant to §60.4305(a), Subpart KKKK applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>LLLL through QQQQ</td>
<td>Standards of performance for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>60</td>
<td>TTTT</td>
<td>Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units</td>
<td>The units at this facility did not commence construction after January 8, 2014 and did not commence modification or reconstruction after June 18, 2014.</td>
</tr>
<tr>
<td>60</td>
<td>UUUUu/a</td>
<td>Emission Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units</td>
<td>Rule vacated 2021</td>
</tr>
<tr>
<td>61</td>
<td>B through L, N through Y, BB through FF</td>
<td>National Emission Standards for Hazardous Air Pollutants</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>62</td>
<td>B through Z, AA through QQ, SS through ZZ, AAA through DDD</td>
<td>Approval and promulgation of state plans</td>
<td>These requirements do not apply in Tennessee</td>
</tr>
<tr>
<td>62</td>
<td>RR</td>
<td>Approval and promulgation of state plans – Tennessee</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>62</td>
<td>FFF through HHH, JJ through LLL</td>
<td>Federal plan requirements for specific source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>62</td>
<td>III</td>
<td>Federal plan requirements for commercial and industrial solid waste incineration units</td>
<td>Subpart III would not apply to the combustion of traditional fuels, including cellulosic biomass, clean cellulosic biomass, and used oil that meets the requirements of 40 CFR §279.11 (see §241.2).</td>
</tr>
<tr>
<td>63</td>
<td>F through Y, AA through NN, XX, YY</td>
<td>National emission standards for hazardous air pollutants for source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>63</td>
<td>OO through WW</td>
<td>National emission standards for tanks, containers, surface impoundments, individual drain systems, closed vent systems, equipment leaks, oil-water separators</td>
<td>Do not apply unless specifically referenced by another subpart of 40 CFR parts 60, 61, or 63.</td>
</tr>
<tr>
<td>63</td>
<td>CCC, DDD, GGG through XXX</td>
<td>National emission standards for hazardous air pollutants for source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>63</td>
<td>EEE</td>
<td>National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors</td>
<td>This facility does not combust hazardous waste</td>
</tr>
<tr>
<td>63</td>
<td>AAAA through XXXX</td>
<td>National emission standards for hazardous air pollutants for source categories</td>
<td>No affected units on site.</td>
</tr>
</tbody>
</table>
# Code of Federal Regulations (CFR) Title 40
## Nonapplicable Requirements

<table>
<thead>
<tr>
<th>Part</th>
<th>Subpart</th>
<th>Title/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>AAAAAA through CCCCCC, EEEEE through TTTTTT, wwwwww through zzzzz</td>
<td>National emission standards for hazardous air pollutants for source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>63</td>
<td>BBBBBBB, CCCCCC</td>
<td>National emission standards for hazardous air pollutants for source categories</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>63</td>
<td>DDDDDD through HHHHHHH</td>
<td>National emission standards for hazardous air pollutants for area sources</td>
<td>Does not apply to major sources</td>
</tr>
<tr>
<td>64</td>
<td>All</td>
<td>Compliance Assurance Monitoring</td>
<td>PM and SO\textsubscript{2} emissions are exempt per §64.2(b)(1)(i) (emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act). \SO\textsubscript{2} and NO\textsubscript{x} emissions are exempt per §64.2(b)(1)(iv) (emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources).</td>
</tr>
<tr>
<td>67</td>
<td>All</td>
<td>EPA approval of State noncompliance penalty program</td>
<td>Applies to States. Does not apply directly to a regulated entity.</td>
</tr>
<tr>
<td>71</td>
<td>All</td>
<td>Federal Operating Permit Programs</td>
<td>State program applies</td>
</tr>
<tr>
<td>79, 80</td>
<td>All</td>
<td>Registration of Fuels and Fuel Additives</td>
<td>This facility is not a fuel manufacturer</td>
</tr>
<tr>
<td>81</td>
<td>All</td>
<td>Designation of areas for air quality planning</td>
<td>Part 81 does not directly apply to a regulated entity.</td>
</tr>
<tr>
<td>82</td>
<td>All</td>
<td>Protection of Stratospheric Ozone</td>
<td>No affected units on site.</td>
</tr>
<tr>
<td>85 through 95</td>
<td>All</td>
<td>Mobile sources</td>
<td>CAA Title II does not apply</td>
</tr>
<tr>
<td>96</td>
<td>A through I, AA through II, AAA through III</td>
<td>NO\textsubscript{x} Budget Trading Program, CAIR trading programs</td>
<td>EPA has ceased implementation and enforcement of these trading programs. TAPCR 1200-03-27-.12 (NO\textsubscript{x} SIP Call Requirements for Stationary Boilers and Combustion Turbines) applies to 82-0018-17, and compliance with that rule fulfills the facility's obligations under the NO\textsubscript{x} SIP Call.</td>
</tr>
<tr>
<td>97</td>
<td>A through J, AA through II, AAA through III</td>
<td>Federal NO\textsubscript{x} Budget Trading Program, Federal CAIR trading programs</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>BBBBBB</td>
<td>CSAPR NO\textsubscript{x} Ozone Season Group 1 Trading Program</td>
<td>Group 2 program applies</td>
</tr>
<tr>
<td>97</td>
<td>DDDDDD</td>
<td>CSAPR SO\textsubscript{2} Group 2 Trading Program</td>
<td>Group 1 program applies</td>
</tr>
<tr>
<td>97</td>
<td>FFFFFF</td>
<td>Texas SO\textsubscript{2} Trading Program</td>
<td>Not applicable to Tennessee.</td>
</tr>
<tr>
<td>97</td>
<td>GGGGGG</td>
<td>CSAPR NO\textsubscript{x} Ozone Season Group 3 Trading Program</td>
<td>Group 2 program applies</td>
</tr>
</tbody>
</table>
ATTACHMENT 4
CROSS-STATE AIR POLLUTION RULE REQUIREMENTS
Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the CSAPR NOX Annual Trading Program, CSAPR NOX Ozone Season Trading Programs (Group 1 and Group 2), and CSAPR SO2 Group 1 Trading Program.

<table>
<thead>
<tr>
<th>Unit ID:</th>
<th>Parameter</th>
<th>CEMS requirements pursuant to 40 CFR part 75, Subparts B (SO2 monitoring) and H (NOX monitoring)</th>
<th>Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR 75, Appendix D</th>
<th>Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR 75, Appendix E</th>
<th>Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to §75.19</th>
<th>EPA-approved alternative monitoring system requirements pursuant to 40 CFR 75 Subpart E</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO2</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOX</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Input</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§97.430 through 97.435" CSAPR NOX Annual Trading Program), §§97.530 through 97.535 (CSAPR NOX Ozone Season Group 1 Trading Program), and §§97.630 through 97.635 (CSAPR SO2 Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with §§75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA’s website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR 75 Subpart E and §75.66 and §97.435, §97.535, and §97.635, as applicable. The Administrator’s response approving or disapproving any petition for an alternative monitoring system is available on the EPA’s website at http://www.epa.gov/airmarkets/emissions/petitions.html.

4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§97.430 through 97.434, §§97.530 through 97.534, or §§97.630 through 97.634 must submit to the Administrator a petition requesting approval of the alternative in accordance with §75.66 and §97.435, §97.535, and §97.635, as applicable. The Administrator’s response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA’s website at http://www.epa.gov/airmarkets/emissions/petitions.html.

5. The descriptions of monitoring applicable to the unit included above meet the requirements of §§97.430 through 97.434, §§97.530 through 97.534, and §§97.630 through 97.634, as applicable, and minor permit modification procedures, in accordance with §70.7(e)(2)(i)(B) or §71.7(e)(1)(i)(B), may be used to add to or change this unit’s monitoring system description.

CSAPR NOX Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and
(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO\textsubscript{X} Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO\textsubscript{X} Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO\textsubscript{X} emissions requirements.

(1) CSAPR NO\textsubscript{X} Annual emissions limitation.

(i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO\textsubscript{X} Annual source and each CSAPR NO\textsubscript{X} Annual unit at the source shall hold, in the source’s compliance account, CSAPR NO\textsubscript{X} Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO\textsubscript{X} emissions for such control period from all CSAPR NO\textsubscript{X} Annual units at the source.

(ii) If total NO\textsubscript{X} emissions during a control period in a given year from the CSAPR NO\textsubscript{X} Annual units at a CSAPR NO\textsubscript{X} Annual source are in excess of the CSAPR NO\textsubscript{X} Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each CSAPR NO\textsubscript{X} Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAAA and the Clean Air Act.

(B) The owners and operators of the source and each CSAPR NO\textsubscript{X} Annual unit at the source shall hold the CSAPR NO\textsubscript{X} Annual allowances required for deduction under 40 CFR 97.424(d); and

(2) CSAPR NO\textsubscript{X} Annual assurance provisions.

(i) If total NO\textsubscript{X} emissions during a control period in a given year from all CSAPR NO\textsubscript{X} Annual units at CSAPR NO\textsubscript{X} Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NO\textsubscript{X} emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO\textsubscript{X} Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative’s share of such NO\textsubscript{X} emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative’s share of such NO\textsubscript{X} emissions exceeds the respective common designated representative’s assurance level; and (B) The amount by which total NO\textsubscript{X} emissions from all CSAPR NO\textsubscript{X} Annual units at CSAPR NO\textsubscript{X} Annual sources in the state for such control period exceed the state assurance level.

(ii) The owners and operators shall hold the CSAPR NO\textsubscript{X} Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NO\textsubscript{X} emissions from all CSAPR NO\textsubscript{X} Annual units at CSAPR NO\textsubscript{X} Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO\textsubscript{X} emissions exceed the sum, for such control period, of the state NO\textsubscript{X} Annual trading budget under 40 CFR 97.410(a) and the state’s variability limit under 40 CFR 97.410(b).
(iv) It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO\textsubscript{X} emissions from all CSAPR NO\textsubscript{X} Annual units at CSAPR NO\textsubscript{X} Annual sources in the State during a control period exceed the state assurance level or if a common designated representative’s share of total NO\textsubscript{X} emissions from the CSAPR NO\textsubscript{X} Annual units at CSAPR NO\textsubscript{X} Annual sources in the state during a control period exceeds the common designated representative’s assurance level.

(v) To the extent the owners and operators fail to hold CSAPR NO\textsubscript{X} Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each CSAPR NO\textsubscript{X} Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

(i) A CSAPR NO\textsubscript{X} Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(ii) A CSAPR NO\textsubscript{X} Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i) A CSAPR NO\textsubscript{X} Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO\textsubscript{X} Annual allowance that was allocated for such control period or a control period in a prior year.

(ii) A CSAPR NO\textsubscript{X} Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO\textsubscript{X} Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each CSAPR NO\textsubscript{X} Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

(6) Limited authorization. A CSAPR NO\textsubscript{X} Annual allowance is a limited authorization to emit one ton of NO\textsubscript{X} during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the CSAPR NO\textsubscript{X} Annual Trading Program; and

(ii) Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A CSAPR NO\textsubscript{X} Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO\textsubscript{X} Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75,
subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

   (i) The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NOX Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.

   (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.

   (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NOX Annual Trading Program.

(2) The designated representative of a CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall make all submissions required under the CSAPR NOX Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the CSAPR NOX Annual Trading Program that applies to a CSAPR NOX Annual source or the designated representative of a CSAPR NOX Annual source shall also apply to the owners and operators of such source and of the CSAPR NOX Annual units at the source.

(2) Any provision of the CSAPR NOX Annual Trading Program that applies to a CSAPR NOX Annual unit or the designated representative of a CSAPR NOX Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the CSAPR NOX Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOX Annual source or CSAPR NOX Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR NOX Ozone Season Group 1 Trading Program Requirements (40 CFR §97.506)

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each CSAPR NOX Ozone Season Group 1 source and each CSAPR NOX Ozone Season Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
(2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of CSAPR NO\textsubscript{X} Ozone Season Group 1 allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the CSAPR NO\textsubscript{X} Ozone Season Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO\textsubscript{x} emissions requirements.

(1) CSAPR NO\textsubscript{X} Ozone Season Group 1 emissions limitation.

(i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO\textsubscript{X} Ozone Season Group 1 source and each CSAPR NO\textsubscript{X} Ozone Season Group 1 unit at the source shall hold, in the source's compliance account, CSAPR NO\textsubscript{X} Ozone Season Group 1 allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO\textsubscript{X} emissions for such control period from all CSAPR NO\textsubscript{X} Ozone Season Group 1 units at the source.

(ii) If total NO\textsubscript{X} emissions during a control period in a given year from the CSAPR NO\textsubscript{X} Ozone Season Group 1 units at a CSAPR NO\textsubscript{X} Ozone Season Group 1 source are in excess of the CSAPR NO\textsubscript{X} Ozone Season Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each CSAPR NO\textsubscript{X} Ozone Season Group 1 unit at the source shall hold the CSAPR NO\textsubscript{X} Ozone Season Group 1 allowances required for deduction under 40 CFR 97.524(d); and

(B) The owners and operators of the source and each CSAPR NO\textsubscript{X} Ozone Season Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) CSAPR NO\textsubscript{X} Ozone Season Group 1 assurance provisions.

(i) If total NO\textsubscript{X} emissions during a control period in a given year from all CSAPR NO\textsubscript{X} Ozone Season Group 1 units at CSAPR NO\textsubscript{X} Ozone Season Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NO\textsubscript{X} emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO\textsubscript{X} Ozone Season Group 1 allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A) The quotient of the amount by which the common designated representative’s share of such NO\textsubscript{X} emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative’s share of such NO\textsubscript{X} emissions exceeds the respective common designated representative’s assurance level; and

(B) The amount by which total NO\textsubscript{X} emissions from all CSAPR NO\textsubscript{X} Ozone Season Group 1 units at CSAPR NO\textsubscript{X} Ozone Season Group 1 sources in the state for such control period exceed the state assurance level.

(ii) The owners and operators shall hold the CSAPR NO\textsubscript{X} Ozone Season Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NO\textsubscript{X} emissions from all CSAPR NO\textsubscript{X} Ozone Season Group 1 units at CSAPR NO\textsubscript{X} Ozone Season Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total NO\textsubscript{X} emissions exceed
the sum, for such control period, of the State NOX Ozone Season Group 1 trading budget under 40 CFR 97.510(a) and
the state’s variability limit under 40 CFR 97.510(b).

(iv) It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NOX emissions from all
CSAPR NOX Ozone Season Group 1 units at CSAPR NOX Ozone Season Group 1 sources in the state during a control
period exceed the state assurance level or if a common designated representative’s share of total NOX emissions from
the CSAPR NOX Ozone Season Group 1 units at CSAPR NOX Ozone Season Group 1 sources in the state during a
control period exceeds the common designated representative’s assurance level.

(v) To the extent the owners and operators fail to hold CSAPR NOX Ozone Season Group 1 allowances for a control period
in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed
under the Clean Air Act; and

(B) Each CSAPR NOX Ozone Season Group 1 allowance that the owners and operators fail to hold for such control
period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall
constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance periods.

(i) A CSAPR NOX Ozone Season Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the
control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification
requirements under 40 CFR 97.530(b) and for each control period thereafter.

(ii) A CSAPR NOX Ozone Season Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the
control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification
requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i) A CSAPR NOX Ozone Season Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i)
above for a control period in a given year must be a CSAPR NOX Ozone Season Group 1 allowance that was allocated
for such control period or a control period in a prior year.

(ii) A CSAPR NOX Ozone Season Group 1 allowance held for compliance with the requirements under paragraphs
(c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NOX Ozone Season
Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the
immediately following year.

(5) Allowance Management System requirements. Each CSAPR NOX Ozone Season Group 1 allowance shall be held in, deducted
from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97,
subpart BBBBB.

(6) Limited authorization. A CSAPR NOX Ozone Season Group 1 allowance is a limited authorization to emit one ton of NOX
during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the CSAPR NOX Ozone Season Group 1 Trading Program;
and

(ii) Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to
terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or
appropriate to implement any provision of the Clean Air Act.

(7) Property right. A CSAPR NOX Ozone Season Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.
(1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Ozone Season Group 1 allowances in accordance with 40 CFR part 97, subpart BBBBB.

(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each CSAPR NOX Ozone Season Group 1 source and each CSAPR NOX Ozone Season Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

   (i) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each CSAPR NOX Ozone Season Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.

   (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.

   (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NOX Ozone Season Group 1 Trading Program.

(2) The designated representative of a CSAPR NOX Ozone Season Group 1 source and each CSAPR NOX Ozone Season Group 1 unit at the source shall make all submissions required under the CSAPR NOX Ozone Season Group 1 Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a Title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the CSAPR NOX Ozone Season Group 1 Trading Program that applies to a CSAPR NOX Ozone Season Group 1 source or the designated representative of a CSAPR NOX Ozone Season Group 1 source shall also apply to the owners and operators of such source and of the CSAPR NOX Ozone Season Group 1 units at the source.

(2) Any provision of the CSAPR NOX Ozone Season Group 1 Trading Program that applies to a CSAPR NOX Ozone Season Group 1 unit or the designated representative of a CSAPR NOX Ozone Season Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the CSAPR NOX Ozone Season Group 1 Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOX Ozone Season Group 1 source or CSAPR NOX Ozone Season Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

**CSAPR SO2 Group 1 Trading Program requirements (40 CFR 97.606)**

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.
Title V Operating Permit 578731

The owners and operators, and the designated representative, of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO2 emissions requirements.

(1) CSAPR SO2 Group 1 emissions limitation.

(i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO2 emissions for such control period from all CSAPR SO2 Group 1 units at the source.

(ii) If total SO2 emissions during a control period in a given year from the CSAPR SO2 Group 1 units at a CSAPR SO2 Group 1 source are in excess of the CSAPR SO2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each CSAPR SO2 Group 1 unit at the source shall hold the CSAPR SO2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B) The owners and operators of the source and each CSAPR SO2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) CSAPR SO2 Group 1 assurance provisions.

(i) If total SO2 emissions during a control period in a given year from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such SO2 emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—

(A) The quotient of the amount by which the common designated representative’s share of such SO2 emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative’s share of such SO2 emissions exceeds the respective common designated representative’s assurance level; and

(B) The amount by which total SO2 emissions from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state for such control period exceed the state assurance level.
(ii) The owners and operators shall hold the CSAPR SO\textsubscript{2} Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total SO\textsubscript{2} emissions from all CSAPR SO\textsubscript{2} Group 1 units at CSAPR SO\textsubscript{2} Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO\textsubscript{2} emissions exceed the sum, for such control period, of the state SO\textsubscript{2} Group 1 trading budget under 40 CFR 97.610(a) and the state’s variability limit under 40 CFR 97.610(b).

(iv) It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO\textsubscript{2} emissions from all CSAPR SO\textsubscript{2} Group 1 units at CSAPR SO\textsubscript{2} Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative’s share of total SO\textsubscript{2} emissions from the CSAPR SO\textsubscript{2} Group 1 units at CSAPR SO\textsubscript{2} Group 1 sources in the state during a control period exceeds the common designated representative’s assurance level.

(v) To the extent the owners and operators fail to hold CSAPR SO\textsubscript{2} Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each CSAPR SO\textsubscript{2} Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.

(i) A CSAPR SO\textsubscript{2} Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit’s monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(ii) A CSAPR SO\textsubscript{2} Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit’s monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i) A CSAPR SO\textsubscript{2} Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO\textsubscript{2} Group 1 allowance that was allocated for such control period or a control period in a prior year.

(ii) A CSAPR SO\textsubscript{2} Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO\textsubscript{2} Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each CSAPR SO\textsubscript{2} Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.

(6) Limited authorization. A CSAPR SO\textsubscript{2} Group 1 allowance is a limited authorization to emit one ton of SO\textsubscript{2} during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the CSAPR SO\textsubscript{2} Group 1 Trading Program; and

(ii) Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
(7) Property right. A CSAPR SO2 Group 1 allowance does not constitute a property right.

(d) **Title V permit revision requirements.**

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCC.

(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(c)(2)(i)(B) or 71.7(c)(1)(i)(B).

(e) **Additional recordkeeping and reporting requirements.**

(1) Unless otherwise provided, the owners and operators of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

   (i) The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

   (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCC.

   (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO2 Group 1 Trading Program.

(2) The designated representative of a CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall make all submissions required under the CSAPR SO2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) **Liability.**

(1) Any provision of the CSAPR SO2 Group 1 Trading Program that applies to a CSAPR SO2 Group 1 source or the designated representative of a CSAPR SO2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO2 Group 1 units at the source.

(2) Any provision of the CSAPR SO2 Group 1 Trading Program that applies to a CSAPR SO2 Group 1 unit or the designated representative of a CSAPR SO2 Group 1 unit shall also apply to the owners and operators of such unit.

(g) **Effect on other authorities.** No provision of the CSAPR SO2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO2 Group 1 source or CSAPR SO2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

**CSAPR NOx Ozone Season Group 2 Trading Program Requirements (40 CFR §97.806)**

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.
(1) The owners and operators, and the designated representative, of each CSAPR NO\textsubscript{X} Ozone Season Group 2 source and each CSAPR NO\textsubscript{X} Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.830 through 97.835.

(2) The emissions data determined in accordance with §§97.830 through 97.835 shall be used to calculate allocations of CSAPR NO\textsubscript{X} Ozone Season Group 2 allowances under §§97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO\textsubscript{X} Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO\textsubscript{X} emissions requirements—

(1) CSAPR NO\textsubscript{X} Ozone Season Group 2 emissions limitation.

   (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO\textsubscript{X} Ozone Season Group 2 source and each CSAPR NO\textsubscript{X} Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO\textsubscript{X} Ozone Season Group 2 allowances available for deduction for such control period under §97.824(a) in an amount not less than the tons of total NO\textsubscript{X} emissions for such control period from all CSAPR NO\textsubscript{X} Ozone Season Group 2 units at the source.

   (ii) If total NO\textsubscript{X} emissions during a control period in a given year from the CSAPR NO\textsubscript{X} Ozone Season Group 2 units at a CSAPR NO\textsubscript{X} Ozone Season Group 2 source are in excess of the CSAPR NO\textsubscript{X} Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

      (A) The owners and operators of the source and each CSAPR NO\textsubscript{X} Ozone Season Group 2 unit at the source shall hold the CSAPR NO\textsubscript{X} Ozone Season Group 2 allowances required for deduction under §97.824(d); and

      (B) The owners and operators of the source and each CSAPR NO\textsubscript{X} Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) CSAPR NO\textsubscript{X} Ozone Season Group 2 assurance provisions.

   (i) If total NO\textsubscript{X} emissions during a control period in a given year from all base CSAPR NO\textsubscript{X} Ozone Season Group 2 units at base CSAPR NO\textsubscript{X} Ozone Season Group 2 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO\textsubscript{X} emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO\textsubscript{X} Ozone Season Group 2 allowances available for deduction for such control period under §97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.825(b), of multiplying—

      (A) The quotient of the amount by which the common designated representative's share of such NO\textsubscript{X} emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO\textsubscript{X} emissions exceeds the respective common designated representative's assurance level; and
(B) The amount by which total NOX emissions from all base CSAPR NOX Ozone Season Group 2 units at base CSAPR NOX Ozone Season Group 2 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the CSAPR NOX Ozone Season Group 2 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period.

(iii) Total NOX emissions from all base CSAPR NOX Ozone Season Group 2 units at base CSAPR NOX Ozone Season Group 2 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NOX emissions exceed the sum, for such control period, of the State NOX Ozone Season Group 2 trading budget under §97.810(a) and the State's variability limit under §97.810(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NOX emissions from all base CSAPR NOX Ozone Season Group 2 units at base CSAPR NOX Ozone Season Group 2 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NOX emissions from the base CSAPR NOX Ozone Season Group 2 units at base CSAPR NOX Ozone Season Group 2 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold CSAPR NOX Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each CSAPR NOX Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods.

(i) A CSAPR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter.

(ii) A base CSAPR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter.

(4) Vintage of CSAPR NOx Ozone Season Group 2 allowances held for compliance.

(i) A CSAPR NOx Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NOx Ozone Season Group 2 allowance that was allocated or auctioned for such control period or a control period in a prior year.

(ii) A CSAPR NOx Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NOx Ozone Season Group 2 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each CSAPR NOx Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.
Limited authorization. A CSAPR NOX Ozone Season Group 2 allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the CSAPR NOX Ozone Season Group 2 Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

Property right. A CSAPR NOX Ozone Season Group 2 allowance does not constitute a property right.

Title V permit requirements.

No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Ozone Season Group 2 allowances in accordance with this subpart.

A description of whether a unit is required to monitor and report NOX emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.830 through 97.835 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

Additional recordkeeping and reporting requirements.

Unless otherwise provided, the owners and operators of each CSAPR NOX Ozone Season Group 2 source and each CSAPR NOX Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under §97.816 for the designated representative for the source and each CSAPR NOX Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.816 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NOX Ozone Season Group 2 Trading Program.

The designated representative of a CSAPR NOX Ozone Season Group 2 source and each CSAPR NOX Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NOX Ozone Season Group 2 Trading Program, except as provided in §97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

Liability.

Any provision of the CSAPR NOX Ozone Season Group 2 Trading Program that applies to a CSAPR NOX Ozone Season Group 2 source or the designated representative of a CSAPR NOX Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NOX Ozone Season Group 2 units at the source.
(2) Any provision of the CSAPR NO\textsubscript{X} Ozone Season Group 2 Trading Program that applies to a CSAPR NO\textsubscript{X} Ozone Season Group 2 unit or the designated representative of a CSAPR NO\textsubscript{X} Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the CSAPR NO\textsubscript{X} Ozone Season Group 2 Trading Program or exemption under §97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO\textsubscript{X} Ozone Season Group 2 source or CSAPR NO\textsubscript{X} Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.
ATTACHMENT 5
CONSENT DEGREE REPORTING REQUIREMENTS
I. Annual Reporting Requirements: On April 30 of each calendar year, TVA shall submit annual reports to EPA, the States, and the Citizen Plaintiffs electronically as required by Section III.I of the Consent Decree (Periodic Reporting). EPA, the States, and the Citizen Plaintiffs reserve the right to request such information in hard copy. Reports shall be submitted each year until conditional termination of enforcement, as provided in paragraph 214 of the Consent Decree. In such annual reports, TVA shall include the following information:

A. System-Wide Annual Tonnage Limitations for NOx and SO2:

(1) The total actual annual tons of the pollutant emitted from each Unit or, for Units sharing a common stack, the total actual annual tons of the pollutant emitted from each combined stack, within the TVA System and any New CC/CT Units during the prior calendar year;

(2) The total actual annual tons of the pollutant emitted from the TVA System and any New CC/CT Units during the prior calendar year;

(3) The difference, if any, between the System-Wide Annual Tonnage Limitation for the pollutant in that calendar year and the amount reported in subparagraph (2); and

(4) For each pollutant,

(a) The annual average emission rate, expressed as lb/MMBtu, for each Unit within the TVA System and any New CC/CT Units in the prior calendar year; and

(b) The annual average emission rate, expressed as lb/MMBtu, for the entire TVA System and any New CC/CT Units during the prior calendar year.

Data submitted pursuant to this subsection shall be based upon CEMS pursuant to Paragraphs 81 and 97 of the Consent Decree.

(5) If TVA was subject to an adjusted System-Wide Annual Tonnage Limitation specified in Paragraphs 68 and 83 of the Consent Decree in the calendar year covered by the annual report, it shall report the following:

(a) The Units at which the adjusted System-Wide Annual Tonnage Limitations in Paragraphs 68 and 83 of the Consent Decree apply; and

(b) The adjusted aggregate System-Wide Annual Tonnage Limitation.

B. Continuous Operation of Pollution Control Technology or Combustion Controls:

TVA shall report the date that it commenced Continuous Operation of each SCR, FGD, PM Control Device, SNCR, LNB, OFA, and SOFA that TVA is required to Continuously Operate pursuant to this Consent Decree in the calendar year covered by the annual report.

TVA shall report, for any SCR, FGD, PM Control Device, SNCR, LNB, OFA, and SOFA that TVA is required to Continuously Operate during the calendar year covered by the annual report, the duration of any period during which that pollution control technology or combustion control did not Continuously Operate, including the specific dates and times that such pollution control technology or combustion control did not operate, the reason why TVA did not Continuously Operate such pollution control technology or combustion control, and the measures taken to reduce emissions of the pollutant controlled by such pollution control technology or combustion control.

TVA shall include a statement in each annual report describing the actions it took to optimize the PM Control Devices as required by Paragraph 98 of the Consent Decree in the relevant calendar year.

C. Installation of NOx, SO2, and PM Control Devices:

TVA shall report on the progress of construction (including upgrades) of SCRs and FGDs (and new PM Control Devices, if any) required by this Consent Decree including:
If construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year;

If construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status (e.g. foundations completed, absorber installation proceeding, all material on-site, new stack erection completed, etc.);

A list of all permits needed to construct and operate the device, the date TVA applied for such permits, and the status of the permit applications; and

Once construction is complete, the dates the equipment was placed in service and any performance/emissions testing that was performed during the prior calendar year. For purposes of the FGD upgrade at Paradise Units 1 and 2, TVA shall demonstrate, with supporting documentation, that the construction activities performed to upgrade the FGDs at Paradise Units 1 and 2 were designed to upgrade the FGDs to a 93% removal efficiency.

**D. Unit Retirements:** Beginning on April 30 of the year following TVA’s obligation pursuant to this Consent Decree to Retire a TVA System Unit, and continuing annually thereafter until all TVA System Units required to be Retired have been Retired, TVA shall report the date it Retired such Unit and a description of the actions TVA took to Retire such Unit within the meaning of Paragraph 51 of the Consent Decree.

**E. Repower to Renewable Biomass:** If TVA elects the Repower to Renewable Biomass option for a TVA System Unit, in the next annual report following such election, and continuing annually thereafter, TVA shall report on the progress of its efforts to Repower such TVA System Unit including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status; (3) a list of all permits needed to construct and operate the Repowered Unit, the date TVA applies for such permits, and the status of the permit applications; and (4) once construction is complete, the dates the Repowered Unit was placed in service and any performance/emissions testing that was performed during the prior calendar year.

**F. PM Emission Control Optimization Study:** Beginning on April 30 of the year following TVA’s obligation to implement the EPA-approved recommendations required by Paragraph 99 of the Consent Decree, TVA shall include a statement describing how it maintained each PM Control Device in accordance with the EPA-approved PM emission control optimization study.

**G. Reporting Requirements for NOx and SO2 Allowances:**

(1) **Reporting Requirements for NOx and SO2 Surrendered Allowances:** TVA shall report the number of NOx and SO2 Allowances that were allocated to it under any programs and the number of NOx and SO2 Allowances surrendered pursuant to Paragraphs 75 and 91 of the Consent Decree for the prior calendar year. TVA shall include the mathematical basis supporting its calculation of NOx and SO2 Allowances surrendered.

(2) **Reporting Requirements for NOx and SO2 Super-Compliance Allowances:** TVA shall report any Super-Compliance NOx or SO2 Allowances that it generated as provided in Paragraphs 78 and 94 of the Consent Decree for the prior calendar year. TVA shall include the mathematical basis supporting its calculation of Super-Compliance NOx or SO2 Allowances. TVA shall also specifically identify the amount, if any, of Super-Compliance NOx and SO2 Allowances that TVA generated from retiring a TVA System Unit that TVA did not utilize for purposes of Paragraph 117 of the Consent Decree (New CC/CT Units).

**H. New CC/CT Units:** TVA shall report all information necessary to determine compliance with Paragraphs 117-119 of the Consent Decree. In particular, TVA shall report whether it has applied for a minor NSR permit as described in
Subparagraphs 117.b and 119.c of the Consent Decree to construct a New CC/CT Unit, and shall confirm that it timely provided a copy of the permit application to EPA, the States, and the Citizen Plaintiffs as required by Subparagraph 117.c and Paragraph 155 of the Consent Decree. TVA shall report the amount of emission reductions of NO\textsubscript{X} and the amount of emission reductions of SO\textsubscript{2} resulting from Retiring a TVA System Unit that TVA utilized as netting credits as provided in Paragraph 117. TVA shall report the amount of emission reductions of Greenhouse Gases resulting from Retiring a TVA System Unit that TVA utilized as netting credits as provided in Paragraph 119. TVA shall describe how the emissions decreases on which it is relying in order to construct a New CC/CT Unit as provided in Paragraph 117 and 119 are both contemporaneous and otherwise creditable within the meaning of the Clean Air Act and the applicable SIP. In making these demonstrations, TVA shall provide unit-by-unit explanations and calculations. TVA shall include a description of the emission limitations determined by the relevant permitting authority as described in Subparagraph 117.b, and how such emission limitations are consistent with this Consent Decree and Appendix B. TVA shall provide all relevant information, including an appropriate mathematical calculation, to demonstrate that any emission decrease upon which it relied for purposes of Paragraph 117 was not used to generate a Super-Compliance NO\textsubscript{X} or SO\textsubscript{2} Allowance in the calendar year in which TVA relies upon such emission reduction and all calendar years thereafter. TVA shall provide all information necessary to determine compliance with the conditions established in Paragraphs 119.b-119.c.

I. **NO\textsubscript{X}, SO\textsubscript{2}, and PM CEMS Malfunction, Repair, or Maintenance:** TVA shall report all periods when a CEMS required by this Consent Decree was not operating, including periods of monitor malfunction, repair, or maintenance in the prior calendar year.

J. **PM CEMS Data:** In an electronic, spreadsheet format, TVA shall submit the data recorded by the PM CEMS, expressed in lb/MMBtu, on a three-hour (3-hour) rolling average basis and a twenty-four-hour (24-hour) rolling average basis, and shall include identification of each 3-hour average and 24-hour average above the 0.030 lb/MMBtu PM Emission Rate for Bull Run Unit 1, Colbert Unit 5, and Kingston Units 1-9, for the prior calendar year. If TVA locates a PM CEMS at another Unit in the TVA System pursuant to Paragraph 110 of the Consent Decree, and such Unit is also subject to a PM Emission Rate pursuant to Paragraph 100 of the Consent Decree, TVA shall also include identification of each 3-hour average exceedance for such Unit.

K. **Reserved.**

L. **PM Stack Tests & PM Emission Rates:** TVA shall submit the complete report for the stack tests performed pursuant to Paragraphs 101 and 102 of the Consent Decree in the prior calendar year. TVA shall describe at which TVA System Units, if any, TVA did not perform a stack test in the relevant calendar year. TVA shall separately identify the stack test reports for the TVA System Units subject to a PM Emission Rate under this Consent Decree.

M. **Environmental Mitigation Projects:** TVA shall report funds disbursed to the States pursuant to Paragraphs 122-124 and 126 of the Consent Decree in the prior calendar year.

N. **Reserved.**

O. **Emission Reductions Greater than those Required Under the Consent Decree:** TVA shall report whether, in the relevant calendar year, it claimed to have achieved emission reductions at a particular TVA System Unit that are greater than those emission reductions required under this Consent Decree for the particular TVA System Unit as provided in Paragraph 116 of the Consent Decree. If TVA did not claim to have achieved emission reductions at a particular TVA System Unit that are greater than those emission reductions required under this Consent Decree, it shall so state. If TVA did, for any purpose, claim to achieve emission reductions at a particular TVA System Unit that are greater than those required under this Consent Decree for that particular TVA System Unit, TVA shall include a description of how it achieved such emission reductions, including a mathematical calculation in support of the claimed emission reductions, an explanation of how such emission reductions are greater than those required under this Consent Decree, and the manner in which such emission reductions were either relied upon or used for purposes of permitting actions, non-permitting actions, or otherwise.

II. **Deviation Reports:** TVA shall report all deviations from the requirements of the Consent Decree that occur during the calendar year covered by the annual report, identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause of any corrective actions taken for each deviation, if necessary, and the date that the deviation was initially reported under Paragraph 156 of the Consent Decree.
III. Submission Pending Review: In each annual report, TVA shall include a list of all plans or submissions made pursuant to this Consent Decree during the calendar year covered by the annual report and all prior calendar years since the Consent Decree Obligation Date, the date(s) such plans or submissions were submitted to EPA for review or approval, and shall identify which, if any, are still pending review and approval by EPA upon the date of the submission of the annual report.

IV. Other Information Necessary to Determine Compliance: To the extent that information not expressly identified herein is necessary to determine TVA’s compliance with the requirements of this Consent Decree for the calendar year covered by the annual report, and such information has not otherwise been submitted, TVA shall provide such information as part of the annual report required pursuant to Section III.I (Periodic Reporting) of the Consent Decree and TVA shall provide such other information that is deemed necessary by EPA in consultation with the States.

V. Information Previously Submitted under Title V Permitting Requirements: In any periodic progress report submitted pursuant to the Consent Decree, TVA may incorporate by reference information previously submitted under its Title IV or Title V permitting requirements, provided that TVA attaches the Title IV and/or Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title IV and/or Title V permit report that are responsive to the information required in the periodic progress report.
ATTACHMENT 6
SUMMARY OF ACID RAIN PROGRAM MONITORING REQUIREMENTS
<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Rule Citation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opacity</td>
<td>40 CFR §75.10(a)(4); TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Install, certify, operate, and maintain continuous opacity monitor with automated data acquisition and handling system.</td>
</tr>
<tr>
<td>Opacity</td>
<td>40 CFR §75.21(b); 40 CFR Part 60 Appendix B – Performance Specification 1; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Specifications and test procedures for opacity continuous emission monitoring systems.</td>
</tr>
<tr>
<td>Opacity</td>
<td>40 CFR §75.65; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Report excess emissions of opacity to state/local air pollution control agency in specified format.</td>
</tr>
<tr>
<td>SO₂</td>
<td>40 CFR §75.10(a)(1); TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Install, certify, operate, and maintain continuous SO₂ monitor with automated data acquisition and handling system.</td>
</tr>
<tr>
<td>NOₓ</td>
<td>40 CFR §75.10(a)(2); TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Install, certify, operate, and maintain in accordance with all requirements a NOx continuous emission monitoring system with automated data acquisition and handling system.</td>
</tr>
<tr>
<td>CO₂</td>
<td>40 CFR §75.10(a)(3)(i); TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Install, certify, operate, and maintain in accordance with all requirements a CO₂ continuous emission monitoring system with automated data acquisition and handling system for measuring and recording CO₂ concentration, volumetric gas flow, and CO₂ mass emissions.</td>
</tr>
<tr>
<td>Opacity, SO₂, NOₓ, CO₂, Flow, and Diluent Gas Monitor</td>
<td>40 CFR §75.20(c); 40 CFR Part 75 Appendix A; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Certification Procedures and Specification and Testing Procedures.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.21(a); 40 CFR Part 75 Appendix B; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Quality assurance and quality control requirements and procedures.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.56(a); TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Certification, quality assurance and quality control record provisions: Record the applicable information for each certified monitor or monitoring system.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.61; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Notification of certification and recertification test dates - Notification not later than 45 days prior to initial certification testing and not later than 7 days prior to recertification testing.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.62; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Monitoring Plan - Submit monitoring plan containing information specified in §75.53 45 days prior to the certification test.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.63; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Certification or recertification application – Submit request containing specified information within 45 days after completing the certification test in the format specified.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.64; TAPCR 1200-03-30-.01(6)(b)1</td>
<td>Quarterly reports - Electronically report specified data and information quarterly including required compliance certification.</td>
</tr>
<tr>
<td></td>
<td>40 CFR §75.54; TAPCR 1200-03-30-.01(6)(b)1 and 1200-03-30-.01(6)(f)</td>
<td>General Recordkeeping Provisions - Record all specified data and information and maintain a file of all measurements, data, reports, and other required information for 5 years from the date of each record.</td>
</tr>
</tbody>
</table>
ATTACHMENT 7

OPTIONAL SO₂ EMISSIONS DATA PROTOCOL FOR GAS-FIRED AND OIL-FIRED UNITS
40 CFR Part 75, Appendix D: Optional SO₂ Emissions Data Protocol for Gas-fired and Oil-fired Units

2.3.1 Pipeline Natural Gas Combustion

The owner or operator may determine the SO₂ mass emissions from the combustion of a fuel that meets the definition of pipeline natural gas, in §72.2 of this chapter, using the procedures of this section.

2.3.1.1 SO₂ Emission Rate

For a fuel that meets the definition of pipeline natural gas under §72.2 of this chapter, the owner or operator may determine the SO₂ mass emissions using either a default SO₂ emission rate of 0.0006 lb/MMBtu and the procedures of this section, the procedures in section 2.3.2 for natural gas, or the procedures of section 2.3.3 for any gaseous fuel. For each affected unit using the default rate of 0.0006 lb/MMBtu, the owner or operator must document that the fuel combusted is actually pipeline natural gas, using the procedures in section 2.3.1.4 of this appendix.

2.3.1.2 Hourly Heat Input Rate

Calculate hourly heat input rate, in MMBtu/hr, for a unit combusting pipeline natural gas, using the procedures of section 3.4.1 of this appendix. Use the measured fuel flow rate from section 2.1 of this appendix and the gross calorific value from section 2.3.4.1 of this appendix in the calculations.

2.3.1.3 SO₂ Hourly Mass Emission Rate and Hourly Mass Emissions

For pipeline natural gas combustion, calculate the SO₂ mass emission rate, in lb/hr, using Equation D–5 in section 3.3.2 of this appendix (when the default SO₂ emission rate is used) or Equation D–4 (if daily or hourly fuel sampling is used). Then, use the calculated SO₂ mass emission rate and the unit operating time to determine the hourly SO₂ mass emissions from pipeline natural gas combustion, in pounds, using Equation D–12 in section 3.5.1 of this appendix.

2.3.1.4 Documentation that a Fuel is Pipeline Natural Gas

(a) A fuel may initially qualify as pipeline natural gas, if information is provided in the monitoring plan required under §75.53, demonstrating that the definition of pipeline natural gas in §72.2 of this chapter has been met. The information must demonstrate that the fuel meets either the percent methane or GCV requirement and has a total sulfur content of 0.5 grains/100scf or less. The demonstration must be made using one of the following sources of information:

1. The gas quality characteristics specified by a purchase contract, tariff sheet, or by a pipeline transportation contract; or

2. Historical fuel sampling data for the previous 12 months, documenting the total sulfur content of the fuel and the GCV and/or percentage by volume of methane. The results of all sample analyses obtained by or provided to the owner or operator in the previous 12 months shall be used in the demonstration, and each sample result must meet the definition of pipeline natural gas in §72.2 of this chapter; or

3. If the requirements of paragraphs (a)(1) and (a)(2) of this section cannot be met, a fuel may initially qualify as pipeline natural gas if at least one representative sample of the fuel is obtained and analyzed for total sulfur content and for either the gross calorific value (GCV) or percent methane, and the results of the sample analysis show that the fuel meets the definition of pipeline natural gas in §72.2 of this chapter. Use the sampling methods specified in sections 2.3.3.1.2 and 2.3.4 of this appendix. The required fuel sample may be obtained and analyzed by the owner or operator, by an independent laboratory, or by the fuel supplier. If multiple samples are taken, each sample must meet the definition of pipeline natural gas in §72.2 of this chapter.

(b) If the results of the fuel sampling under paragraph (a)(2) or (a)(3) of this section show that the fuel does not meet the definition of pipeline natural gas in §72.2 of this chapter, but those results are believed to be anomalous, the owner or operator may document the reasons for believing this in the monitoring plan for the unit and may immediately perform additional sampling. In such cases, a minimum of three additional samples must be obtained and analyzed, and the results of each sample analysis must meet the definition of pipeline natural gas.
(c) If several affected units are supplied by a common source of gaseous fuel, a single sampling result may be applied to all of the units and it is not necessary to obtain a separate sample for each unit, provided that the composition of the fuel is not altered by blending or mixing it with other gaseous fuel(s) when it is transported from the sampling location to the affected units. For the purposes of this paragraph, the term “other gaseous fuel(s)” excludes compounds such as mercaptans when they are added in trace quantities for safety reasons.

(d) If the results of fuel sampling and analysis under paragraph (a)(2), (a)(3), or (b) of this section show that the fuel does not qualify as pipeline natural gas, proceed as follows:

(1) If the fuel still qualifies as natural gas under section 2.3.2.4 of this appendix, re-classify the fuel as natural gas and determine the appropriate default SO₂ emission rate for the fuel, according to section 2.3.2.1.1 of this appendix; or

(2) If the fuel does not qualify either as pipeline natural gas or natural gas, re-classify the fuel as “other gaseous fuel” and implement the procedures of section 2.3.3 of this appendix, within 180 days of the end of the quarter in which the disqualifying sample was taken. In addition, the owner or operator shall use Equation D–1h in this appendix to calculate a default SO₂ emission rate for the fuel, based on the results of the sample analysis that exceeded 20 grains/100 scf of total sulfur, and shall use that default emission rate to report SO₂ mass emissions under this part until section 2.3.3 of this appendix has been fully implemented.

(e) If a fuel qualifies as pipeline natural gas based on the specifications in a fuel contract or tariff sheet, no additional, on-going sampling of the fuel's total sulfur content is required, provided that the contract or tariff sheet is current, valid and representative of the fuel combusted in the unit. If the fuel qualifies as pipeline natural gas based on fuel sampling and analysis, on-going sampling of the fuel's sulfur content is required annually and whenever the fuel supply source changes. For the purposes of this paragraph, (e), sampling “annually” means that at least one sample is taken in each calendar year. The effective date of the annual total sulfur sampling requirement is January 1, 2003.

(f) Ongoing sampling of the GCV of the pipeline natural gas is required under section 2.3.4.1 of this appendix.

(g) For units that are required to monitor and report NOₓ mass emissions and heat input under subpart H of this part, but which are not affected units under the Acid Rain Program, the owner or operator is exempted from the requirements in paragraphs (a) and (e) of this section to document the total sulfur content of the pipeline natural gas.
ATTACHMENT 8
AGREEMENT LETTERS
March 22, 1996

Mr. John W. Walton, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
Ninth Floor, L&G Annex
401 Church Street
Nashville, Tennessee 37243

Dear Mr. Walton:

TENNESSEE VALLEY AUTHORITY (TVA) - GALLATIN FOSSIL PLANT (GAF) - BARGE UNLOADING AND ASSOCIATED FUEL HANDLING SYSTEM

TVA requests, in accordance with the Tennessee Air Pollution Control Regulation 1200-3-7-.01(5), the following permit condition limiting particulate emissions from the subject source. This condition, in conjunction with the 3 tons per year the division is crediting for the shutdown of the temporary barge unloader, ensures that the particulate emissions increase from this source will not exceed 15 tons per year.

Particulate emissions from this source shall not exceed 7.5 pounds/hour, 24-hour average (midnight to midnight), and 18 tons/year. Based on emission equations/factors found at EPA AP-42, "Compilation of Air Pollutant Emission Factors," 4th Edition, 1985, compliance with this condition shall be demonstrated by the following:

(a) A maximum of 1400 tons/hour, 24-hour average (midnight to midnight) and 4,780,000 tons of material per year shall be handled by this source;

(b) The main crusher shall be enclosed; and

(c) 24-hour averages shall include hours in which the source is not actively operating.

These limitations are established pursuant to Rule 1200-3-7-.01(5) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated March 22, 1996, from the permittee.
Mr. John W. Walton  
Page 2  
March 22, 1996

To avoid confusion with existing fuel-handling equipment, the conveyor from the new barge unloader to the new crusher should be identified as BC-3, and the conveyor from the new crusher to existing transfer Station D should be identified as BC-4.

If you have any questions or comments concerning this request, please call Steven Strunk at (423) 751-2808.

[Signature]

Janet K. Watts  
Manager of Environmental Affairs  
5D Lookout Place
September 2, 1999

Ms. Tracy R. Carter, Director
Tennessee Department of Environment and Conservation
9th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243

Dear Ms. Carter:

TENNESSEE VALLEY AUTHORITY - JOHNSONVILLE FOSSIL PLANT (JOF)
AND GALLATIN FOSSIL PLANT (GAF) - REQUESTS FOR EMISSION
LIMITATIONS AND TO EXPEDITE PERMIT ISSUANCE FOR GAS HEATERS

The Tennessee Valley Authority requests that the construction permits for the subject sources be issued prior to completion of the thirty-day public comment period. In order to expedite the issuance of these permits, the Tennessee Valley Authority waives the right to appeal the conditions of the permits. TVA understands that the Division of Air Pollution Control reserves the right to reopen and issue or revoke the permits if pertinent and reasonable comments are received which cause the review of the permits to be necessary.

TVA also requests that SO₂ and particulate emissions be limited to one ton per year per pollutant at each site.

Receipt of the construction permit for the heaters is critical so that natural gas may be burned in the combustion turbines at these sites during the winter peaking season. TVA appreciates the division’s efforts to issue these permits as expeditiously as possible.
Ms. Tracy Carter  
Page 2  
September 2, 1999

If you have any questions, please call Steven Strunk at (423) 751-2808.

Janet K. Watts  
Manager of Environmental Affairs  
5D Lookout Place
TVA

Tennessee Valley Authority, 1499 Steam Plant Road, Gallatin, Tennessee 37066

June 23, 2016

Ms. Michelle Owenby, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass TN Tower
312 Rosa L Parks Avenue, 15th Floor
Nashville, Tennessee 37243

Dear Ms. Owenby:

TENNESSEE VALLEY AUTHORITY (TVA) – GALLATIN FOSSIL PLANT (GAF) – SOURCE NUMBER: 83-0025 – REVISION TO REQUESTED SO₂ LIMIT

On December 28, 2015, TVA submitted an application for a construction permit proposing an SO₂ emission limit of 2,238 lbs/hr (30-day rolling average) for GAF Units 1-4. This limit was based on TVA’s 1-hour SO₂ NAAQS modeling and an analysis of emissions data variability. After reviewing the modeling approach submitted with the application, the Division and the U.S. EPA requested changes to the approach, including:

- Use of GEP stack height instead of actual stack height
- Use of a different ambient monitoring location to determine background concentration
- A more conservative allocation of emissions among the four units
- Additional modeling analysis at lower unit loads.

The report describing the revised modeling analysis and results was submitted to the Division via email on June 23. Based on these results TVA proposes an SO₂ emission limit for total mass emitted from GAF Units 1-4 of 1,971 lbs/hr based on a 30-operating-day-rolling average, excluding emissions during startup, shutdown and malfunction. Compliance will be demonstrated by the continuous emissions monitoring systems for SO₂ currently required under the GAF Title V permit.

If you have any questions, please contact Tom Waddell in Chattanooga at 423-751-2005.

Sincerely,

[Signature]

Clay C. Cherry
Plant Manager
Gallatin Fossil Plant
TVA

Tennessee Valley Authority, 1499 Steam Plant Road, Gallatin, Tennessee 37065

Sent Via Electronic Transmittal

July 14, 2020

Ms. Michelle W. Owenby, Director (air.pollution.control@tn.gov)
Division of Air Pollution Control
Tennessee Department of Environment and Conservation (TDEC)
William R. Snodgrass Tennessee Tower
312 Rosa L Parks Avenue, 15th Floor
Nashville, Tennessee 37243

Dear Ms. Owenby:

TENNESSEE VALLEY AUTHORITY (TVA) – GALLATIN FOSSIL PLANT (GAF) (83-0025) – TITLE V PERMIT NUMBER 561209 – REVISED CONSTRUCTION PERMIT APPLICATION FOR AIR CURTAIN INCINERATOR

Per Division request, please find enclosed a revision to the construction permit application originally submitted on April 13, 2020, for a new air curtain incinerator at GAF. This revision provides additional information regarding the estimated Nitrogen Oxides (NOx) and Sulfur Dioxide (SO2) emissions from the Air Curtain Incinerator. In addition, TVA agrees to the proposed annual throughput limitation of 17,600 tons per year of woody debris in order to limit the Particulate Matter 2.5 emissions to under 10 tons per year, as shown in the application.

If you have questions, please contact Wil T. Ross at (423) 751-3505 or via email at wrross@tva.gov.

I, the undersigned, am a responsible official as defined in TAPCR 1200-03-09-02(11)(b)(21), for the Title V source for which this document is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate and complete.

Sincerely,

[Signature]

William T. Patterson
Plant Manager
Gallatin Fossil Plant

Enclosure
Sent Via Electronic Transmittal

July 29, 2020

Ms. Michelle W. Owenby, Director (air.pollution.control@tn.gov)
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L Parks Avenue, 15th Floor
Nashville, Tennessee 37243

Dear Ms. Owenby:

TENNESSEE VALLEY AUTHORITY (TVA) – GALLATIN FOSSIL PLANT (GAF) (83-0025) – TITLE V PERMIT NUMBER 561209 – LETTER OF AGREEMENT REGARDING EMISSION LIMITS FOR SOUTH RAIL LOOP (SRL) LANDFILL CONSTRUCTION PERMIT 978223

As referenced within the SRL Landfill Construction Permit application, submitted on April 17, 2020, TVA is notifying the Division that we agree to limit the annual emissions of Particulate Matter (PM) of the SRL Landfill to the values shown enclosed in Table S1-4B. Compliance with these emission limits will be demonstrated by adhering to all applicable requirements contained within the permit itself.

If you have questions, please contact Will T. Ross at (423) 751-3505 or via email at wtross@tva.gov.

I, the undersigned, am a responsible official as defined in TAPCR 1200-03-09-02(11)(b)(21), for the Title V source for which this document is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate and complete.

Sincerely,

[Signature]

William T. Patterson
Plant Manager
Gallatin Fossil Plant

Enclosure
ATTACHMENT 9

EPA DETERMINATION LETTER DATED MAY 15, 2017
Mr. James P. Johnston, P.E.
Deputy Director
Tennessee Division Air Pollution Control
Tennessee Dept. of Environment and Conservation
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

Dear Mr. Johnston:

This letter responds to your rule clarification request letter of December 23, 2016, concerning language in 40 CFR Part 60, Subpart DDDD – Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste (CISWI) Incineration Units. Your request concerns an air curtain incinerator (ACI), as an affected facility, which burns only clean lumber and is located at the MTD Consumer Products facility in Martin, Tennessee. More specifically, your request references opacity limits provided in 40 C.F.R § 60.2860 (What are the emission limitations for air curtain incinerators?): in paragraph (a), an opacity limit of 10% or less (in most circumstances); and in paragraph (b), an exception allowing 35% opacity or less during the startup period that is within the first 30 minutes of operation.

Your question to the EPA is, essentially: Does the EPA consider “startup” for an ACI to occur only once per day during the initial charging of the ACI, or does the EPA consider each time period when additional material is charged after the material in the ACI has substantially combusted to constitute a separate “startup period”?

In answering your question, two definitions in 40 C.F.R. § 60.2875 are relevant. “Startup period” means “the period of time between the activation of the system and the first charge to the unit.” “Shutdown” means “the period of time after all waste has been combusted in the primary chamber.” There is no qualifying language at 40 C.F.R. § 60.2860 pertaining to the above definitions for “startup period” and “shutdown;” therefore the EPA employs a plain reading of these definitions with respect to the combustion of solid waste in an air curtain incinerator - to have a “startup period” which “activates and first charges the unit,” the unit must be in a shutdown condition immediately prior to the startup.

Therefore, the EPA believes that a source may avail itself of the standard at 40 C.F.R. § 60.2860(b) (allowing up to 35% opacity during the first 30 minutes of operation) more than once per day only if the ACI’s operation met the definition of “shutdown” prior to each instance of a “startup period that is within the first 30 minutes of operation.” The source would have to demonstrate that all waste has been combusted in the primary chamber between a down or idle time and the next charge to the system. There could not be another “startup period” without a shutdown of the ACI occurring first.
Where a shutdown and a subsequent startup period have occurred, this fact should be documented by the source and visually confirmed by the state inspector when possible. Keep in mind that the phrase “substantially combusted” used by the Tennessee Department of Environment and Conservation in the above question is not defined and is potentially very different than what the definition of “shutdown” requires (namely, “all waste has been combusted”). The EPA believes that if a shutdown is not established, then the source is bound by the 10% opacity limit in 40 C.F.R. § 60.2860(a) and the combustion would be viewed as ongoing or continuing.

In summary, the EPA believes the exception in 40 C.F.R. § 60.2860(b) allowing up to 35% opacity is afforded to a source within its first 30 minutes of operation only and is predicated on a defined shutdown of the ACI first in order for the subsequent startup to be viewed as a “startup period.” This response was coordinated with the Office of Air Quality Planning and Standards and the Office of Enforcement and Compliance Assurance. If you have any further questions or concerns, please contact Mr. Mark Bloeth at (404) 562-9013.

Sincerely,

Carol S. Kemker
Beverly H. Banister
Director
Air, Pesticides and Toxics Management Division
ATTACHMENT 10

WATERING TRUCK ROUTES
Gallatin Water Truck Route

November 5, 2021

1:18,056

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

© 2021 Microsoft Corporation © 2021 Map © CNES (2021) Distribution Airbus DS
ATTACHMENT 11
ACID RAIN PERMIT
STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

PHASE II ACID RAIN PERMIT
This permit fulfills the requirements of the federal regulations promulgated at 40 CFR Parts 72, 73, 75, 76, 77, and 78. This permit is issued in accordance with the applicable provisions of Tennessee Air Pollution Control Regulations (TAPCR) 1200-03-30. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Issue Date: April 12, 2021
Expiration Date: April 11, 2026

Issued By:
Tennessee Air Pollution Control Board
Tennessee Department of Environment and Conservation

Issued To:
Tennessee Valley Authority
Gallatin Fossil Plant

Installation Address:
1499 Steam Plant Road
Gallatin

Emission Source Reference Number: 83-0025
ORIS/Facility Code: 3403

Acid Rain Permit Contents:

1. Statement of Basis.
2. SO₂ allowances allocated under this permit and NOₓ requirements for each affected unit.
3. Standard Requirements (40 CFR §72.9 and TAPCR 1200-3-30-.01(6)).
4. Comments, notes, and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
5. The permit application and NOₓ compliance plan submitted for this source, as corrected by the Tennessee Department of Environment and Conservation. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.
6. Summary of previous actions and present action.

______________________________
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS
1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Tennessee Code Annotated 68-201-105 and 4-5-202 and Titles IV and V of the Clean Air Act, the Tennessee Air Pollution Control Board and Tennessee Department of Environment and Conservation issue this permit pursuant to TAPCR 1200-03-30 and 1200-03-09-.02(11) and 40 CFR Part 76.

2. SO₂ Allowance Allocations and NOₓ Requirements for each affected unit

<table>
<thead>
<tr>
<th>Unit</th>
<th>SO₂ allowances under Tables 2, 3, or 4 of 40 CFR Part 73</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>NOₓ limit</td>
<td>7,618</td>
<td>7,618</td>
<td>7,618</td>
<td>7,618</td>
<td>7,618</td>
</tr>
</tbody>
</table>

Pursuant to 40 CFR Part 76, the Tennessee Department of Environment and Conservation approves the NOₓ emissions averaging plan for this unit dated April 5, 2019. This unit’s NOₓ emissions shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.29 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 3,581,403 MMBtu.

The actual Btu-weighted annual average NOₓ emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOₓ emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR §76.5, §76.6, or §76.7, except that for any early election units, the applicable emissions limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Kentucky Department for Environmental Protection has also approved the averaging plan.

In addition to the described NOₓ compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOₓ compliance plan and requirements covering excess emissions.

<table>
<thead>
<tr>
<th>Unit</th>
<th>SO₂ allowances under Tables 2, 3, or 4 of 40 CFR Part 73</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2</td>
<td>NOₓ limit</td>
<td>7,476</td>
<td>7,476</td>
<td>7,476</td>
<td>7,476</td>
<td>7,476</td>
</tr>
</tbody>
</table>

Pursuant to 40 CFR Part 76, the Tennessee Department of Environment and Conservation approves the NOₓ emissions averaging plan for this unit dated April 5, 2019. This unit’s NOₓ emissions shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.29 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 3,999,690 MMBtu.

The actual Btu-weighted annual average NOₓ emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOₓ emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR §76.5, §76.6, or §76.7, except that for any early election units, the applicable emissions limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Kentucky Department for Environmental Protection has also approved the averaging plan.

In addition to the described NOₓ compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOₓ compliance plan and requirements covering excess emissions.
Pursuant to 40 CFR Part 76, the Tennessee Department of Environment and Conservation approves the NO\textsubscript{X} emissions averaging plan for this unit dated April 5, 2019. This unit’s NO\textsubscript{X} emissions shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.29 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 4,612,994 MMBtu.

The actual Btu-weighted annual average NO\textsubscript{X} emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO\textsubscript{X} emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR §76.5, §76.6, or §76.7, except that for any early election units, the applicable emissions limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Kentucky Department for Environmental Protection has also approved the averaging plan.

In addition to the described NO\textsubscript{X} compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO\textsubscript{X} compliance plan and requirements covering excess emissions.

Pursuant to 40 CFR Part 76, the Tennessee Department of Environment and Conservation approves the NO\textsubscript{X} emissions averaging plan for this unit dated April 5, 2019. This unit’s NO\textsubscript{X} emissions shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.29 lb/MMBtu. In addition, this unit shall not have an annual heat input less than 5,673,282 MMBtu.

The actual Btu-weighted annual average NO\textsubscript{X} emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO\textsubscript{X} emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR §76.5, §76.6, or §76.7, except that for any early election units, the applicable emissions limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Kentucky Department for Environmental Protection has also approved the averaging plan.

In addition to the described NO\textsubscript{X} compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO\textsubscript{X} compliance plan and requirements covering excess emissions. 

These new units are not eligible for an SO\textsubscript{2} allowance allocation under 40 CFR part 73, but the source must comply with all of the standard requirements and special provisions stated in the Phase II permit application. The source must hold sufficient allowances to cover SO\textsubscript{2} emissions.

**SO\textsubscript{2} allowances under Tables 2, 3, or 4 of 40 CFR Part 73**

<table>
<thead>
<tr>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,649</td>
<td>8,649</td>
<td>8,649</td>
<td>8,649</td>
<td>8,649</td>
</tr>
</tbody>
</table>

**SO\textsubscript{2} allowances, under Tables 2, 3, or 4 of 40 CFR part 73.**

<table>
<thead>
<tr>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,183</td>
<td>9,183</td>
<td>9,183</td>
<td>9,183</td>
<td>9,183</td>
</tr>
</tbody>
</table>

**40 CFR Part 76 not applicable to unit. Natural gas / fuel oil fired unit.**
3. **Standard Requirements (40 CFR §72.9 and TAPCR 1200-03-30-.01(6))**: Included with permit application (see Attachment).

4. **Comments, Notes, and Justifications**: Affected units are four coal fired boilers and four new natural gas / fuel oil fired simple cycle combustion turbines. Four existing natural gas/ no. 2 fuel oil fired simple cycle combustion turbines are not affected units.

5. **Permit Application and NOx Compliance Plan**: Attached.

6. **Summary of Previous Actions and Present Action**:

   Previous Actions:

   1. Draft permit, including SO\textsubscript{2} compliance plan, issued for public comment: **August 5, 1997**
   2. SO\textsubscript{2} portion of permit finalized and issued: **November 10, 1997**
   3. Permit revised to include a draft NO\textsubscript{X} Emissions Early Election Compliance Plan for Units 1, 2, 3, and 4, issued for public comment on the NO\textsubscript{X} portion only: **October 8, 1998**
   4. NO\textsubscript{X} portion of permit finalized and issued: **April 1, 1999**
   5. Permit, revised (1) to include a revised draft NO\textsubscript{X} Averaging Plan for Units 1, 2, 3, and 4, and (2) add SO\textsubscript{2} compliance plan for new CT Units GCT5-GCT8, issued for public comment (NO\textsubscript{X} portion only for Units 1-4): **February 20, 2001**
   6. Permit, including revised NO\textsubscript{X} Averaging Plan for Units 1-4 and SO\textsubscript{2} Compliance Plan for new CT Units, finalized and issued: **May 14, 2001**
   7. Draft renewal permit 863258 issued for public comment: **February 12, 2016**
   8. Renewal permit 863258 finalized and issued: **June 30, 2016**

   Present Action:

   9. Draft renewal permit 877420 issued for public comment: **February 5, 2021**
   10. Renewal permit 877420 finalized and issued: **April 12, 2021**
Attachment:
Acid Rain Permit Application and NO\textsubscript{X} Compliance Plan
ATTACHMENT 12

TITLE V FEE SELECTION FORM APC 36 (CN-1583)
TITLE V FEE SELECTION

Type or print and submit to the email address above.

### FACILITY INFORMATION

<table>
<thead>
<tr>
<th>1. Organization’s legal name and SOS control number</th>
<th>[as registered with the TN Secretary of State (SOS)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Site name (if different from legal name)</td>
<td></td>
</tr>
<tr>
<td>3. Site address (St./Rd./Hwy.)</td>
<td>County name</td>
</tr>
<tr>
<td></td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>Zip code</td>
</tr>
<tr>
<td>4. Emission source reference number</td>
<td>5. Title V permit number</td>
</tr>
</tbody>
</table>

### FEE SELECTION

This fee selection is effective beginning January 1, __________. When approved, this selection will be effective until a new Fee Selection form is submitted. Fee Selection forms must be submitted on or before December 31 of the annual accounting period.

**6. Payment Schedule (choose one):**

- Calendar Year Basis (January 1 – December 31) ☐
- Fiscal Year Basis (July 1 – June 30) ☐

**7. Payment Basis (choose one):**

- Actual Emissions Basis ☐
- Allowable Emissions Basis ☐
- Combination of Actual and Allowable Emissions Basis ☐

**8. If Payment Basis is “Actual Emissions” or “Combination of Actual and Allowable Emissions”, complete the following table for each permitted source and each pollutant for which fees are due for that source. See instructions for further details.**

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Pollutant</th>
<th>Allowable or Actual Emissions</th>
<th>If allowable emissions: Specify condition number and limit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>If actual emissions: Describe calculation method and provide example. Provide condition number that specifies method, if applicable.</td>
</tr>
</tbody>
</table>
8. (Continued)

<table>
<thead>
<tr>
<th>Source ID</th>
<th>Pollutant</th>
<th>Allowable or Actual Emissions</th>
<th>If allowable emissions: Specify condition number and limit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>If actual emissions: Describe calculation method and provide example. Provide condition number that specifies method, if applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| CONTACT INFORMATION (BILLING) |

9. Billing contact | Phone number with area code
Mailing address (St./Rd./Hwy.) | Fax number with area code
City | State | Zip code | Email address

| SIGNATURE BY RESPONSIBLE OFFICIAL |

Based upon information and belief formed after reasonable inquiry, I, as the responsible person of the above mentioned facility, certify that the information contained in the submittal is accurate and true to the best of my knowledge. As specified in TCA Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

10. Signature | Date
Signer’s name (type or print) | Title | Phone number with area code
<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Tennessee Valley Authority - Gallatin Fossil Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>City:</td>
<td>Gallatin</td>
</tr>
<tr>
<td>County:</td>
<td>Sumner</td>
</tr>
<tr>
<td>Date Application Received:</td>
<td>December 10, 2020</td>
</tr>
<tr>
<td>Date Application Deemed Complete:</td>
<td>December 10, 2020</td>
</tr>
<tr>
<td>Emission Source Reference No.:</td>
<td>83-0025</td>
</tr>
<tr>
<td>Permit No.:</td>
<td>578731</td>
</tr>
</tbody>
</table>

**INTRODUCTION**

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Tennessee Valley Authority - Gallatin Fossil Plant and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

**Acronyms**

- **PSD** - Prevention of Significant Deterioration
- **NESHAP** - National Emission Standards for Hazardous Air Pollutants
- **NSPS** - New Source Performance Standards
- **MACT** - Maximum Achievable Control Technology
- **NSR** - New Source Review
I. Identification Information

A. Source Description

<table>
<thead>
<tr>
<th>Emission Source Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>83-0025-01-04</td>
<td>Coal Fired Boilers</td>
</tr>
<tr>
<td>83-0025-05-08</td>
<td>Gas Fired Combustion Turbines</td>
</tr>
<tr>
<td>83-0025-10</td>
<td>Coal Handling Facility - Barge Unloading</td>
</tr>
<tr>
<td>83-0025-11</td>
<td>Coal Handling Facility - Rail Car Unloading</td>
</tr>
<tr>
<td>83-0025-12</td>
<td>Dry Fly Ash Handling Storage Silo</td>
</tr>
<tr>
<td>83-0025-13</td>
<td>Railcar Thawer</td>
</tr>
<tr>
<td>83-0025-14</td>
<td>Gas Fired Combustion Turbines</td>
</tr>
<tr>
<td>83-0025-15</td>
<td>Gas-Fired Heater</td>
</tr>
<tr>
<td>83-0025-16</td>
<td>Auxiliary Boiler</td>
</tr>
<tr>
<td>83-0025-19</td>
<td>Control Units Materials Handling operations</td>
</tr>
<tr>
<td>83-0025-20</td>
<td>Coal Combustion Products (CCP) Landfill</td>
</tr>
<tr>
<td>83-0025-23</td>
<td>Coal Screening</td>
</tr>
<tr>
<td>83-0025-27</td>
<td>Air Curtain Incinerator</td>
</tr>
<tr>
<td>83-0025-28</td>
<td>South Rail Loop Landfill</td>
</tr>
</tbody>
</table>

B. Facility Classification

1. Non-Attainment Area Location: Area is designated as an attainment area for all criteria pollutants.
2. Company is located in a Class II area.

C. Regulatory Status

1. PSD/NSR – this facility is an existing major source for PSD purposes.
2. Title V Major Source Status by Pollutant

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Is the pollutant emitted?</th>
<th>If emitted, what is the facility’s status? (Major Source or Non-Major Source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>VOC</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>CO</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>Individual HAP</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
<tr>
<td>CO$_{2e}$</td>
<td>Yes</td>
<td>Major Source</td>
</tr>
</tbody>
</table>

3. MACT Standards for Sources contained in this Title V Application: This facility is a major source for HAPs. The following MACT Standards apply:

<table>
<thead>
<tr>
<th>40 CFR 63 Subpart YYYY</th>
<th>National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines $^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 CFR 63 Subpart DDDDD</td>
<td>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</td>
</tr>
</tbody>
</table>

$^1$ Pursuant to 40 CFR §63.6909(b)(4), existing stationary combustion turbines (commenced construction or reconstruction on or before January 14, 2003) do not have to meet the requirements of 40 CFR 63 Subparts YYYY or A. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.
4. Program Applicability: Are the following programs applicable to the facility?

PSD: Yes
NESHAP: 40 CFR 61 – No
         40 CFR 63 – Yes (YYYY, DDDDD, UUUUU)
NSPS: Yes (Y, GG, CCCC)

II. Compliance Information

Is the facility currently in compliance with all applicable requirements? Yes
Are there any applicable requirements that will become effective during the permit term? Yes (changes in MATS reporting)

III. Other Requirements

A. Emissions Trading: The facility is involved in emission trading programs (Acid Rain and CSAPR).
B. Acid Rain Requirements: This facility is subject to the requirements in Title IV of the Clean Air Act.
C. Prevention of Accidental Releases (TAPCR 1200-03-32): This facility is subject to TAPCR 1200-03-32

IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA Region 4
2. Kentucky Department for Environmental Protection
3. Nashville Davidson County Metropolitan Health Department
## General Information

<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Tennessee Valley Authority - Gallatin Fossil Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>City:</td>
<td>Gallatin</td>
</tr>
<tr>
<td>County:</td>
<td>Sumner</td>
</tr>
</tbody>
</table>

| Date Application Received: | December 10, 2020 |
| Date Application Deemed Complete: | December 10, 2020 |

| Emission Source Reference No.: | 83-0025 |
| Permit No.: | 578731 |

| Date of Public Notice | ************* |
| Date of Public Hearing | ************* |

## For Public Hearing (If Applicable)

| Hearing Officer: | ************* |
| Division of Air Pollution Control Representatives: | ************* |
| Other Divisions: | ************* |
| Public: | ************* |

## Comment Summary

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The public notice for this permit will be placed on the APC PPO website. Any comments received during the comment period will be noted here.</td>
<td></td>
</tr>
</tbody>
</table>
### 83-0025, Changes Made in Title V Renewal Permit 578731 (Pending)

<table>
<thead>
<tr>
<th>Condition or Section</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>All sections</td>
<td>Updated numbering conventions (e. g., changed “five (5) minutes” to “5 minutes” and “twenty-four (24) hours” to “24 hours”).</td>
</tr>
<tr>
<td>A19, A20</td>
<td>Updated numbering by deleting reserved condition (A19 from the old permit).</td>
</tr>
<tr>
<td>B6</td>
<td>Updated address for submittal of annual compliance certification to U. S. EPA.</td>
</tr>
<tr>
<td>D8</td>
<td>No changes to standard language.  TVA submitted open burning of brush and wood products as an emission source in the application.  The Division reviewed TVA’s application and calculated potential emissions from open burning (excluding burning permitted in the air curtain destructor, 83-0025-27) to be less than 5 tons/year.</td>
</tr>
<tr>
<td>E1, Attachment 11</td>
<td>Updated fee emissions, annual accounting period dates, and standard language.  Removed specific calculation requirements for actual emissions analyses (TAPCR 1200-03-26 no longer requires specific calculation methods to be listed in the permit).  Added Title V fee selection form as Attachment 11.</td>
</tr>
<tr>
<td>E2-1</td>
<td>Updated reporting requirements.  Added transition language between permits 561209 and 578731.  Deleted compliance validation reports for CEMS and COMS (Condition E2-1(a) of permit 561209).  Added records retention in E2-1(c).  Added Boiler MACT reporting in E2-1(d).  Added MATS reporting in E2-1(e).  Moved NSPS GG reporting to E2-1(f).  Added CISWI reporting (visible emissions for the air curtain destructor) to E2-1(g).  Added NSPS Y reporting to E2-1(h).  Added consent decree reporting to E2-1(i).</td>
</tr>
<tr>
<td>E2-3</td>
<td>Deleted the general condition establishing 20% opacity limits, fugitive emissions requirements, and visible emissions from roads and parking areas.  These conditions are included in general permit requirements (Section D) or in the source-specific conditions.  Added language stating that the permit may be reopened if monitoring required by the opacity matrices (Attachment 1) is insufficient to determine compliance.  Added a requirement to perform semiannual monitoring for fugitive emissions.</td>
</tr>
<tr>
<td>E2-6 (permit 561209)</td>
<td>Deleted the general condition establishing MATS applicability.  MATS requirements were moved to Section E3.</td>
</tr>
<tr>
<td>E2-6</td>
<td>Added the following requirement: “Unless otherwise specified in this permit, the averaging time for an emission standard shall be the same time period as that of the compliance test method approved by the Technical Secretary.”</td>
</tr>
<tr>
<td>E2-7</td>
<td>Updated Responsible Official.</td>
</tr>
<tr>
<td>E2-8, Attachment 3</td>
<td>Added language identifying nonapplicable requirements.</td>
</tr>
<tr>
<td>E2-9 (permit 561209)</td>
<td>Deleted Boiler MACT general requirements (Boiler MACT requirements are addressed in source-specific conditions.</td>
</tr>
<tr>
<td>E2-10 (permit 561209)</td>
<td>Moved VOC/NOx reporting requirements to E2-1(j).</td>
</tr>
<tr>
<td>E2-9, Attachment 6</td>
<td>Updated Acid Rain program requirements to add general monitoring and reporting.  Removed requirement to submit annual certification report, which is no longer applicable.</td>
</tr>
<tr>
<td>E2-10</td>
<td>Added state-only requirement for emission inventory submittal.</td>
</tr>
<tr>
<td>E2-11</td>
<td>Added requirement for monitoring of watering truck routes.</td>
</tr>
<tr>
<td>E2-13, E9-18 (permit 561209)</td>
<td>Moved MACT YYYY from source-specific conditions to general conditions (used a single condition to address both 83-0025-14 and 83-025-15).</td>
</tr>
<tr>
<td>E3-1</td>
<td>Updated compliance method to reference MATS recordkeeping.</td>
</tr>
<tr>
<td>E3-2</td>
<td>Removed language allowing combustion of off-spec oil, nonhazardous solvents, and oil-contaminated soil and absorbent material.  Updated recordkeeping requirements for used oil to reference 40 CFR 279.</td>
</tr>
<tr>
<td>E3-3</td>
<td>Added compliance method (cross-reference to E3-1).</td>
</tr>
<tr>
<td>E3-4, E3-8</td>
<td>Decreased allowable PM emission rate from 0.100 lb/MMBtu to 0.030 lb/MMBtu to match consent decree allowable.  Removed CAM requirements from the compliance method.  PM emissions are exempt per §64.2(b)(1) (emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act).  Moved COMS requirements from E3-8 (opacity) to E3-4 (COMS are used as an indicator for PM emissions).</td>
</tr>
<tr>
<td>E3-5, E5-1, E5-2, E10-2, E10-3, E14-1, E14-2, E15-2, Attachment 8</td>
<td>Added copies of agreement letters.</td>
</tr>
<tr>
<td>E3-7</td>
<td>Added address for submittal of QA reports for the SO2 and NOx CEMS.</td>
</tr>
</tbody>
</table>

Title V Permit Statement – TVA Gallatin Fossil Plant (83-0025)
Page 5 of 8
<table>
<thead>
<tr>
<th>Condition or Section</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3-9</td>
<td>Added compliance method (maintain records of all startups and shutdowns).</td>
</tr>
<tr>
<td>E3-10</td>
<td>Added compliance method (report in accordance with E3-13).</td>
</tr>
<tr>
<td>E3-11</td>
<td>Added address for submittal of QA reports for the COMS.</td>
</tr>
<tr>
<td>E3-12</td>
<td>Added compliance method (report in accordance with E3-13).</td>
</tr>
<tr>
<td>E3-13</td>
<td>Added compliance method (report in accordance with E2-1).</td>
</tr>
<tr>
<td>E3-14, Attachment 4</td>
<td>Deleted old Transport Rule requirements and updated with CSAPR requirements.</td>
</tr>
<tr>
<td>E3-17 (permit 561209), E3-15</td>
<td>Moved for numbering consistency with other TVA permits.</td>
</tr>
<tr>
<td>E3-16 (permit 561209)</td>
<td>Deleted old cross-reference to construction permit 966537 (installation of SO₂ and NOₓ controls).</td>
</tr>
<tr>
<td>E3-17</td>
<td>Added MATS requirements (40 CFR 63 Subpart UUUUU).</td>
</tr>
<tr>
<td>E4-1 (permit 561209)</td>
<td>Condition deleted – this was a description of the emission source that did not establish any applicable requirements.</td>
</tr>
<tr>
<td>E4-1</td>
<td>Updated PM allowable emission rate from “0.100 lb/MMBtu” to “0.1 lb/MMBtu” (the limit in the underlying requirement was one significant figure). Added an averaging period (daily average).</td>
</tr>
<tr>
<td>E4-2, E4-3</td>
<td>Updated the compliance methods to state that compliance is assured by fuel usage restrictions and associated recordkeeping.</td>
</tr>
</tbody>
</table>
| E4-8                 | No changes – this entry describes the basis for Condition E4-8 in more detail.  
                      The original RACT was established in 1993 and limited output during the ozone season while burning #2 oil. The 1998 PSD application stated that the combustion turbines were initially designed to burn either natural gas or #2 oil, but gas nozzles were not installed in the combustor sections of the units because the site had not natural gas delivery capability. The application stated that EPA had previously addressed a similar issue (EPA Detroit Edison decision) and had determined that the addition of natural gas burners to an existing dual-fuel boiler would not be a physical or operational change subject to BACT (air quality analyses, additional impacts analyses, and Class I impact analyses were still required). |
| E4-9                 | Updated the language of this condition to more closely match the underlying applicable requirement (TAPCR 1200-03-02-.01(1)(aa2)(iii)).  
                      Original language: “Alternate fuels may be used after assurance of compliance to the Technical Secretary with the applicable particulate and sulfur dioxide emission standards.”  
                      Revised language: “The use of an alternative fuel shall not be considered a change in the method of operation if the source is designed to accommodate such alternative fuel and the permittee demonstrates that the alternative fuel will assure compliance with the applicable PM, SO₂, and opacity standards.” |
| E4-10                | Added a determination of non-applicability for 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines). This source was constructed in 1975 and has not been modified as defined by §60.14. The source was modified in 1998 to allow natural gas combustion (the turbines were permitted to burn gas but were equipped to burn only #2 oil) and to increase the allowable output during the ozone season from 40,500 MWh between April 1 and October 31 to 162,000 MWh. The source was subject to PSD based on an increase in potential emissions (actual to potential test), but hourly emissions did not increase. Thus, the turbines did not become subject to NSPS GG in 1998. |
| Section E5, Section E6 (permit 561209) | Emission sources 83-0025-10 and 11 were combined into section E5. These sources were addressed as a single source in the application dated December 10, 2020. |
| E5-2, E5-3 (permit 561209) | Updated PM emission limit to state that E5-2 only applies to the new barge unloader, coal crusher, and conveying system (the updated requirement matches the corresponding agreement letter). Moved Condition E5-3 of the old permit (wet suppression use) to the compliance method. Updated the compliance method to use wet suppression as needed when using the pan scrapers (moved from Condition E6-2 of permit 561209). |
### 83-0025, Changes Made in Title V Renewal Permit 578731 (Pending)

<table>
<thead>
<tr>
<th>Condition or Section</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>E5-3, E5-4 (permit 561209), E5-5 (permit 561209)</td>
<td>Updated NSPS Y requirements and combined visible emissions limit into Subpart Y.</td>
</tr>
<tr>
<td>E6-1 (permit 561209)</td>
<td>Deleted in renewal. This condition is a source description that does not establish an applicable requirement.</td>
</tr>
<tr>
<td>E6-2 (permit 561209)</td>
<td>Deleted in renewal. This condition is a duplicate of Condition D7(b).</td>
</tr>
<tr>
<td>E6-1</td>
<td>Replaced statement of design capacity with an input limit and compliance method.</td>
</tr>
<tr>
<td>E6-2</td>
<td>Updated the compliance method for PM allowable emissions (fabric filter inspection/maintenance) to use language from APC’s permitting guidance. The compliance method used for this condition is not typical for baghouses &gt; 2,000 ACFM, which typically require daily pressure drop monitoring. The compliance method used here is for smaller baghouses (&lt; 2,000 ACFM) and the inspection frequency is adjusted from weekly to semiannual. Pressure drop monitoring and weekly inspections are not necessary for this source because the dry fly ash storage silo is not being operated (fly ash is captured by the baghouses associated with the dry scrubber).</td>
</tr>
<tr>
<td>Section E7</td>
<td>Reviewed Boiler MACT applicability for source 83-0025-13. Subpart DDDDD does not apply to the railcar thawer because the item being heated is the rail car metal structure itself to melt any ice which may be causing coal to adhere to the metal (heat is transferred indirectly to ice, which is not a process material).</td>
</tr>
<tr>
<td>E8-1 (permit 561209)</td>
<td>Deleted in renewal. This condition is a source description that does not establish an applicable requirement.</td>
</tr>
<tr>
<td>E7-1 and E7-2</td>
<td>Updated PM and SO₂ emission limits to state that compliance is based on a 24-hour average.</td>
</tr>
<tr>
<td>E7-3</td>
<td>Added compliance method (keep monthly records of fuel usage).</td>
</tr>
<tr>
<td>E9-1 (permit 561209)</td>
<td>Deleted in renewal. This condition is a source description that does not establish an applicable requirement.</td>
</tr>
<tr>
<td>E8-1, E8-3, E8-5, E8-7, E8-8, E8-9, E8-10</td>
<td>Updated underlying applicable requirements to indicate that these are PSD limits.</td>
</tr>
<tr>
<td>E8-2</td>
<td>Updated alternative fuel condition to more closely match the regulatory language.</td>
</tr>
<tr>
<td>E8-3</td>
<td>Updated natural gas limit to state that compliance is based on a 12 consecutive month total.</td>
</tr>
<tr>
<td>E8-6</td>
<td>Added PM emission limit for the natural gas heaters.</td>
</tr>
<tr>
<td>E8-13</td>
<td>Updated NSPS GG requirements to add specific applicability determinations.</td>
</tr>
<tr>
<td>E9-17 (permit 561209)</td>
<td>Deleted in renewal. NSPS reporting requirements are included with E8-13.</td>
</tr>
<tr>
<td>E8-17</td>
<td>Updated MACT DDDDD requirements to add specific applicability determinations.</td>
</tr>
<tr>
<td>E8-18</td>
<td>Added CO, VOC, and NOₓ emission limits for NGH1 and NGH2.</td>
</tr>
<tr>
<td>E10-1 (permit 561209)</td>
<td>Deleted in renewal. This condition is a source description that does not establish an applicable requirement.</td>
</tr>
<tr>
<td>E9-1, E9-2, E9-3</td>
<td>Added compliance method (recordkeeping of fuel usage required by E9-4).</td>
</tr>
<tr>
<td>E9-5</td>
<td>Updated visible emissions limit to match regulatory language (visible emissions from this source shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period).</td>
</tr>
<tr>
<td>E9-6</td>
<td>Added specific applicability determinations for MACT DDDDD (Boiler MACT was listed as an applicable requirement, but specific applicability determinations were not included in the previous permit).</td>
</tr>
<tr>
<td>E9-7</td>
<td>Added CO, VOC, and NOₓ emission limits for NGH3. Limits are based on a calendar year basis to match the established limit for natural gas usage.</td>
</tr>
<tr>
<td>E11-1 (permit 561209)</td>
<td>Deleted in renewal. This condition is a source description that does not establish an applicable requirement.</td>
</tr>
<tr>
<td>Condition or Section</td>
<td>Change</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E10-2</td>
<td>Added compliance method (recordkeeping of fuel usage required by E10-4).</td>
</tr>
<tr>
<td>E10-3</td>
<td>Updated visible emissions limit to clearly state that compliance is based on aggregate count.</td>
</tr>
<tr>
<td>E11-5 and E11-6</td>
<td>Combined two conditions into E10-4.</td>
</tr>
<tr>
<td>E11-5 and E11-6 (permit 561209)</td>
<td>Combined two conditions into E10-4.</td>
</tr>
<tr>
<td>E10-5</td>
<td>Added MACT DDDDD requirements. The previous permit indicated that Subpart DDDDD does not apply to 83-0025-16 because the boiler provides general plant heating (comfort heating).</td>
</tr>
<tr>
<td>E11-1, E12-1</td>
<td>Added a requirement to comply with the fugitive emissions requirements in E2-3.</td>
</tr>
<tr>
<td>E12-2</td>
<td>No changes to existing requirement. The permit writer reviewed potential emissions associated with this project and confirmed that the limit was not established to avoid PSD review.</td>
</tr>
<tr>
<td>E13-1</td>
<td>Added compliance method (annual certification).</td>
</tr>
<tr>
<td>Section E12</td>
<td>Added emission limits and compliance requirements for 83-0025-27 (air curtain incinerator).</td>
</tr>
<tr>
<td>Section E13</td>
<td>Added emission limits and compliance requirements for 83-0025-28 (south rail loop landfill).</td>
</tr>
</tbody>
</table>