

PUBLIC NOTICE

The Kimberly-Clark Corporation has applied to the Division of Air Pollution Control for a significant modification to an existing major source operating permit subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. They seek to obtain a significant modification to a major source operating permit to modify the particulate emission compliance method for source 53-0093-13 (Towel Converting Operation #2), set an additional particulate emission limit for a part of that process, and allow an increase in the Volatile Organic Compound (VOC) limit for that process. The existing Title V operating permit subject to the modification is identified as follows: Division identification number 53-0093/572115. The process emission source affected by the modification is identified as follows: 53-0093-13 condition E11-1(SM1). This significant modification is conducted pursuant to subpart 1200-03-09-.02(11)(f)5(iv) of the Tennessee Air Pollution Control Regulations. Only the portions of the Title V permit affected by the significant modification are open to comment during the notice period.

The applicant is the Kimberly-Clark Corporation with a site address of 5600 Kimberly Way, Loudon, TN 37774. They have applied for a Significant Modification of their existing major source (Title V) operating permit #572115 for their Tissue and Towel Manufacturing Operation.

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:

Knoxville Environmental Field Office 3711 Middlebrook Pike Knoxville, TN 37921	and	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
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Electronic copies of the draft permits are available by accessing the TDEC internet site located at:

<http://www.tn.gov/environment/topic/ppo-air>

Questions concerning the source(s) may be addressed to Greg Forte at (615) 532-0548 or by e-mail at greg.forte@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 28, 2020. 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.

For the Loudon County "News-Herald" -- publish once on Wednesday, July 29, 2020

**STATE OF TENNESSEE
 AIR POLLUTION CONTROL BOARD
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 NASHVILLE, TENNESSEE 37243**



Significant Modification #1

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 Comprehensive Rules and Regulations (Tenn. Comp. R. & Regs.). 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: November 1, 2018

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Permit Number: 572115

Date of Significant Modification: TBD

Date Expires: October 31, 2023

Issued To:

Kimberly-Clark Corporation, Loudon Mill

Installation Address:

5600 Kimberly Way
 Loudon

Installation Description:

Tissue and Towel Manufacture from Dry Cellulose Pulp (Recycled Paper) Using Hydrapulpers

01: 75.2 MMBtu/hr Natural Gas Fired Boiler	08: Tissue Processing Line #3 (Hand Towel #1)	15: 90 Million Btu per hour low NOx boiler
02: Tissue Processing Line #1 (Bath Tissue #1)	11: Wastewater Treatment Operation	17: 62.3 MMBtu /hr (Natural Gas and No. 2 Fuel Oil Package Boiler)
03: Tissue Processing Line #2 (Bath Tissue #2)	12: Tissue Processing Line #4 (Hand Towel #2)	
04: Converting Operation #1 (Bath Tissue #1 and #2 and Hand Towel #1)	13: Converting Operation # 2 (Hand Towel #2)	

Emission Source Reference No.: 53-0093

Renewal Application Due Date: Between January 31, 2023, and April 30, 2023

Primary SIC: 2676

Information Relied Upon:

Application dated September 22, 2018
 Application for significant modification dated January 15, 2020

(continued on the next page)

 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

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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)(e)1(v)

A8(SM1). 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 (NO_x), 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)(e)1(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)1(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; and
- (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)3.(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. (SM1) 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:

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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 subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 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)

A19. 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. (SM1) 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 5 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. (SM1) 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 US EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303
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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 twenty-four (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 twenty (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 twenty (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 twenty (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 twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (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 twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-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. (SM1) 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 stock piles, 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 (5) minutes per hour or twenty (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 the TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. (SM1) 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 the 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 the 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 the TAPCR 1200-03-18-.24 for all emission sources subject to a requirement contained therein.

D14. Internal Combustion Engines.

- (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

53-0093	Facility Description:	Bath tissue and hand towel manufacturing from recycled cellulose using hydropulpers.
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Conditions E1 through E3-6 apply to all sources in Section E of this permit unless otherwise noted.

E1. (SM1) Fee payment**FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 53-0093**

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	308.86	AEAR	Includes all fee emissions.
PM₁₀	N/A	AEAR	N/A
SO₂	181.62	AEAR	
VOC	199.71	AEAR	Includes all fee emissions.
NO_x	93.31	AEAR	
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAPs WITHOUT A STANDARD)*			
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAPs WITH A STANDARD)**			
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	

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 **significant modification** issuance **began July 1, 2020 and ends June 30, 2021.** The next Annual Accounting Period begins **July 1, 2021** and ends **June 30, 2022** 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 an attachment 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, NO_x 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 NO_x** 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.(SM1) Reporting requirements.

- (a) **Semiannual reports.** Semiannual reports shall cover the six-month periods from April 1 to September 30 and October 1 to March 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 6-month period following the first report. The first semiannual report following issuance of this permit shall cover the following permits and reporting periods:

These semiannual reports shall include:

- (1) Any monitoring and recordkeeping required by conditions ***E4-3, E5-4, E5-5, E6-1, E6-2, E7-1, E7-2, E8-5, E10-5 and E11-1(SM1)*** of this permit. However, 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 condition ***E3-1 and E4-5*** of this permit if required. However, 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(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 April 1 to March 31 and shall be submitted within 60 days after the end of each 12-month period.

These certifications shall be submitted to:

TN APCD and EPA

**Division of Air Pollution Control
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921**

**and Air Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303**

or
APC.KnoxEFO@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)

- (c) **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

E2-1(SM1). Identification of Responsible Official and Technical Contact of the permitted facility:

a) The application that was utilized in the preparation of this permit is dated September 22, 2017, and signed by Mr. Euan Anderson, Mill Manager, who is the Responsible Official of the permitted facility. A letter dated January 25, 2019, designates Mr. Peter Kersten, Mill Manager, as the new Responsible Official of the permitted facility. If this person (Peter Kersten) terminates employment or is assigned different duties such and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the TAPCR., 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 thirty (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 September 22, 2017, and identifies Bryan Crawford as the Environmental Coordinator 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 thirty (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 September 22, 2017, and identifies Bryan Crawford as the billing 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 thirty (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.

TAPCR. 1200-03-09-.02(8)

E3. General permit conditions

E3-1. Except as otherwise noted in condition E4-5 of this permit, visible emissions from this facility shall not exceed 20% opacity except for one six-minute period per one (1) hour or more than twenty four (24) minutes in any twenty four (24) hours. 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-.03(6)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated September 11, 2013 that is enclosed as Attachment 1.

E3-2. For all emission sources that use opacity matrix decision trees (Attachment 1) to comply with any 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.

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

E3-3. In determining emissions for fuel burning natural gas and No. 2 oil, the following references shall be used. For natural gas emissions, EPA publication AP-42 entitled Natural Gas Combustion, Tables 1.4-1 and 1.4-2, revised in 1998, shall be used. Refer to Attachment #2. For No. 2 oil emissions, EPA publication AP-42 entitled Fuel Oil Combustion, Tables 1.3-1 and 1.3-3, revised in 2010, shall be used. Refer to Attachment #3. If values for any of the above emission factors are subsequently revised, the current AP-42 emission factors shall be used to calculate emissions, and the revised version shall be referenced when data is submitted.

TAPCR. 1200-03-10-.02(2)(a)

E3-4. Recordkeeping of VOCs for compliance purposes and recordkeeping of gaseous HAPs for fee purposes shall include the logs for this facility which contain the following information:

- (1) Emissions in tons of each Hazardous Air Pollutant.
- (2) Emissions in tons of all Hazardous Air Pollutants.
- (3) Emissions in tons of VOCs excluding exempt compounds as defined in 1200-03-18-.01(26) of Tennessee Air Pollution Control Regulations.

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

For weekly recordkeeping, all data, including results of all calculations, must be entered into the log no later than seven (7) days from the end of the week for which the data is required.

For daily recordkeeping, all data, including results of all calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

Logs of information in the formats required must be maintained at the source location and kept available for inspection by the Technical Secretary or representative. The logs are used to account for VOC, VOC HAP, and non-VOC HAP emissions from input material which release emissions in these categories. Records shall also be retained to verify the VOC and HAP content of each material. This may include MSDS, formulation data, or other documentation to establish the VOC and HAP content. These logs must be retained for a period of not less than five years.

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

- E3-5.** This facility has been reviewed by the Tennessee Division of Air Pollution Control and EPA with regard to applicability to 40 CFR Part 63, Subpart S, entitled “National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.” Under 63.440 (a) (3), this facility is classified as a secondary fiber processor and utilizes sodium hypochlorite as a bleaching agent. Under 63.445 (a) (3), only secondary fiber processors that use chlorine dioxide as a bleaching agent are subject to the requirements of the rule. Therefore, this facility is exempt from the above requirements of Subpart S. EPA officials from Region IV and MACT Headquarters concurred with the Division in this determination.
- E3-6.** The three circular roof vents (C1, C2, and C3) above the drum filters from source 53-0093-04 and the louvered side vent (V5) for source 53-0093-13 (estimated flow rate of 40,000 cfm) have been reviewed and are considered clean air ventilation vents and not emission points. Any TSP, if present, is considered negligible and thus are insignificant activities for these two sources.

TAPCR. 1200-03-09-.04(5)

- E3-7.** The permittee listed various insignificant and exempt activities in their Title V Application per TAPCR. 1200-03-09-.04(5). Additional insignificant activities may be added and operated at any time with the provision that a written notification shall be submitted to the Technical Secretary including an updated APC V.2 application form along with a truth, accuracy, and completeness statement signed by a responsible official.

Emergency engines and gas dispensing facilities may be deemed insignificant if they meet the definition in TAPCR. 1200-03-09-.04(2)(a). The engine and/or gas dispensing facility may be subject to a federal standard as identified in conditions D11, D12, D13 and/or D14.

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

- E3-8.** Due allowance for failure to monitor shall be made during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Technical Secretary, that the malfunction was unavoidable and is being repaired as expeditiously as practicable and that a log of all such malfunctions is being kept by the permittee, including time malfunction began, when it was detected, what was wrong, what was done to correct the malfunction, and when the malfunction was corrected.

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

- E3-9.** The permittee shall comply with all applicable federal and state regulations concerning the operation of this source. This includes but is not limited to, federal regulations published under 40 CFR part 63 for sources of hazardous air pollutants and 40 CFR part 60, New Source Performance Standards.

This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

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

E4. Emission Source

53-0093-01 Source Identification: 75.2 MMBtu/hr boiler. The boiler burns natural gas as the primary fuel, and #2 fuel oil is used as a backup fuel during periods of gas curtailment.

Conditions E4-1 through E4-4 apply to source 53-0093-01

E4-1. Particulate matter (measured as filterable particulate), emitted from this boiler shall not exceed 1.1 pounds per hour and 4.82 tons for all periods of 12 consecutive months. This value has been adjusted to reflect the most recent AP-42 emission factor at maximum boiler capacity.

TAPCR. 1200-03-06-.01(7), facility agreement dated August 27, 1997

Compliance Method: Compliance with the emission limit has been established by using the current AP-42 emission factor for No. 2 oil at a maximum sulfur content of 0.5% at maximum fire rate resulting in the worst case emissions. The current emission factor for filterable particulate from No. 2 oil for boilers with less than 100MM Btu/hr input capacity is 2 lb TSP/1,000 gal or .014286 lb TSP/MMBtu input. At capacity firing, this becomes 1.1 lb/hour. The following log shall be utilized for fee purposes to determine the monthly particulate emissions.

MONTHLY FUEL USAGE AND PARTICULATE EMISSIONS MONTH/YEAR _____

Amount of natural gas burned * (SCF)	Emission factor (1.9 lb filterable part. lb/10 ⁶ SCF)	Particulate Emissions from natural gas use (lb)	Amount of No. 2 oil used (gallons)	Particulate emissions factor for No. 2 oil (2 lb/1,000 gallons)	Particulate emissions from No. 2 oil use (lb)	Total particulate emitted (lb)	Total particulate emitted (tons)

E4-2. Sulfur dioxide emissions shall not exceed 38.13 lb/hr and 167.0 tons for all periods of 12 consecutive months. This value has been adjusted to reflect the most recent AP-42 emission factor at maximum boiler capacity.

TAPCR. 1200-03-14-.01(3), facility agreement dated August 27, 1997

Compliance Method: Compliance with the above emission limit has been established by using the current AP-42 factors for No. 2 oil at a maximum sulfur content of 0.5% at maximum firing rate resulting in worst case sulfur dioxide emissions. The current emission factor for SO₂ for No. 2 oil is 142(S)/1,000 gallons, where S is the sulfur content of the fuel (0.5% by weight). At 140,000 Btu/gal the emission rate is 0.507 lb SO₂/MMBtu. At capacity fire rate at 0.5% sulfur the SO₂ emissions are 38.13 lb/hr.

The following log shall be used to calculate the monthly SO₂ emissions for fee purposes only.

MONTHLY SO₂ EMISSIONS MONTH/YEAR _____

Amount of natural gas burned * (SCF)	SO ₂ Emission factor for natural gas (.6 lb SO ₂ /10 ⁶ SCF)	SO ₂ Emissions from natural gas use (lb)	Amt. of No. 2 oil used (gallons)	SO ₂ Emissions factor for No. 2 oil (142(S) lb/1000 gallons)	SO ₂ emissions from No. 2 use (lb)	Total SO ₂ emitted (lb)	Total SO ₂ emitted (tons)

E4-3. Only natural gas and #2 oil with a sulfur content equal to or less than 0.5% sulfur shall be used as fuel(s) for this source.

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

Compliance Method: Records of the sulfur content of each batch of purchased fuel oil shall be maintained at the facility. Acceptable records include vendor analysis, fuel oil specification sheets, MSDS sheets or similar data which explicitly list the sulfur content of the No. 2 oil. These records shall be submitted for each semiannual reporting period in which oil is burned in this boiler, in accordance with Condition E2(a)(1). If No. 2 oil is not burned during the semiannual reporting period, this shall be stated in the semiannual report.

E4-4. The following log shall be used to determine actual emissions for each fee accounting period. The current AP-42 emission factors for NO_x and VOC for No. 2 oil and natural gas shall be used to calculate monthly and annual emissions.

ACTUAL EMISSIONS FROM 75.2 MMBTU/HR BOILER

Month/year	Particulate Emissions (lb. per month)		SO ₂ Emission (lb. per month)		NO _x Emissions (lb. per month)		VOC Emissions (lb. per month)	
	Nat Gas	No. 2 Oil	Nat Gas	No. 2 Oil	Nat Gas	No. 2 Oil	Nat Gas	No. 2 Oil
July/year								
June/year								
Total pounds for 12 months								
Total tons for 12 months								

TAPCR. 1200-03-26-.02(9)(b)

E4-5. Visible emissions from this source shall not exceed 20% opacity as specified in Rule 1200-03-05-.01 of the TAPCR. (aggregate count). Visible emissions 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

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix amended September 11, 2013, which is enclosed as Attachment 1.

E5 **Emission Source**

53-0093-02 Source Identification: Tissue Processing Line #1 (Bath Tissue #1) – hydropulping of recycled fiber, cleaning/coarse screening/washing, bleaching towers, washing/cleaning/ fine screening/thickening, forming, drying, and reeling operations, 20 MMBtu/hr natural gas dryer. Associated emission points include Roof Vents (EF8, EF10, EF12, EF14, EF16, EF17, EF18, and EF31), Venturi Scrubber (S9), and Dryer Exhaust (S5).

Conditions E5-1 through E5-6 apply to source 53-0093-02

- E5-1.** Sulfur dioxide (SO₂) emitted from this source shall not exceed 0.05 pounds per hour and 0.2 ton for all periods of 12 consecutive months.
TAPCR. 1200-03-14-.03(5)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factors for natural gas at the maximum fire rate.
- E5-2.** Nitrogen oxides (NO_x) emitted from this source shall not exceed 2.0 pounds per hour and 8.8 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factors for natural gas at the maximum fire rate.
- E5-3.** Carbon monoxide (CO) emitted from this source shall not exceed 1.7 pounds per hour and 7.5 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 factors for natural gas at the maximum fire rate.
- E5-4.** Particulate matter (TSP) emitted from this source shall not exceed 4.0 pounds per hour and 17.5 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.01(5), based on the agreement letter dated June 3, 1999 from the permittee.
Compliance Method: Particulate compliance for this source was demonstrated from the source testing of both the uncontrolled roof vents and the venturi scrubber conducted in April and May of 1997 and December of 2002. Total particulate emissions including the venturi scrubber control were determined to be less than 4 lb/hr. This source shall not operate without the use of the air pollution control device. The permittee shall monitor the control device as follows:
- (a) A daily log of scrubber liquid flow rate shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. The permittee shall maintain a minimum scrubber flow rate (measured once per day) of 140 gallons per minute. Deviations from the minimum scrubber flow rate shall be corrected as expeditiously as possible and corrective actions shall be noted on the daily log. All deviations shall be reported in the semiannual report in accordance with Condition E2(a)(1).
- (b) A daily log of pressure drop across the venturi throat shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. The permittee shall maintain a minimum pressure drop across the venturi throat (measured once per day) of 7.0 inches of water. Deviations from the minimum venturi pressure drop shall be corrected as expeditiously as possible, and corrective actions shall be noted on the daily log. All deviations shall be reported in the semiannual report in accordance with Condition E2(a)(1).
- (c) Routine maintenance, as required to maintain the specified emission limits, shall be performed on the air pollution control device(s). Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records shall be retained for a period of not less than five (5) years. All maintenance activities (including maintenance that is in-process) shall be entered in the log no later than seven (7) days following the start of the maintenance.
- E5-5.** Volatile Organic Compounds (VOC) emitted from this source shall not exceed 5.8 tons per month and 69.6 tons for all periods of 12 consecutive months.

TAPCR. 1200-03-07-.07 (2) and TAPCR. 1200-03-10-.02(2)(a).

Compliance Method: Compliance shall be assured by keeping a monthly log of emissions from all VOC-containing materials, including process material, coatings, and fabric materials. VOC emissions from fuel burning shall also be included. The following logs shall be utilized to account for VOC and HAP emissions.

MONTHLY VOC/HAP EMISSIONS LOG FOR TISSUE PROCESSING LINE #1

(SOURCE 53-0093-02)

MONTH/YEAR: _____

Material Name	Usage (Pounds material per month)	VOC Content (Percent by Weight)	VOC Emissions (tons per month)	HAP 1 Content (percent * HAP 1 by weight)	HAP 1 Emissions (tons HAP 1 per month)	HAP 2 Content (percent HAP 2 by weight)	HAP 2 Emissions (tons HAP 2 per month)	Total HAP Emissions (Total tons of HAPs per month)
TOTALS:								

*User to add additional columns as necessary to accommodate the number of HAPs emitted from a given material.

VOC/HAP emissions, (tons/month) = (Material Usage (lb/month) x VOC/HAP Content (% Wt.))/2,000 pounds/ton

FUEL BURNING VOC EMISSIONS (SOURCE 53-0093-02)

MONTH/YEAR: _____

Natural Gas Usage (scf)	Emission factor for VOCs 5.5 lb of VOC /10 ⁶ scf	Monthly VOC emissions (lb)	Monthly VOC emissions (tons)

LOG FOR VOC EMISSIONS FOR COMPLIANCE PURPOSES

Month/Year	VOC emissions from material (tons)	VOC emissions from fuel burning (tons)	Total Monthly VOC emissions (tons)	VOC emissions per 12 consecutive months (tons)

LOG FOR HAP EMISSIONS FOR FEE ACCOUNTING PERIOD

Month/Year	HAP 1 emissions (tons) *	HAP 2 emissions (tons)	Total HAP emissions (tons)
July/year			
June/year			
TOTAL			

*User to add HAP emission columns as needed.

E5-6. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight. The results of these determinations shall be compiled in the following tabular format or an alternative format approved in writing by the Technical Secretary. This table, along with MSDS or other supporting documentation for each material

used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal) or weight percent of VOC
Material #1		
Material #2		
Etc.		

TAPCR. 1200-03-10-.02(2)(a).

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*User to add additional columns as necessary to accommodate the number of HAPs emitted from a given material.

$$\text{VOC/HAP emissions (tons/month)} = (\text{Material Usage (lb/month)} \times \text{VOC/HAP Content (\% Wt.)}) / 2,000 \text{ pounds/ton}$$

LOG FOR VOC EMISSIONS FOR COMPLIANCE PURPOSES

Month/Year	VOC emissions from material (tons)	VOC emissions from fuel burning (tons)	Total Monthly VOC emissions (tons)	VOC emissions per 12 consecutive months (tons)

LOG FOR HAP EMISSIONS FOR FEE ACCOUNTING PERIOD

Month/Year	HAP 1 emissions (tons) *	HAP 2 emissions (tons)	Total HAP emissions (tons)
July/year			
June/year			
TOTAL			

*User to add HAP emission columns as needed.

E6-3. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight.

The results of these determinations shall be compiled in the following tabular format or an alternative format approved in writing by the Technical Secretary. This table, along with MSDS or other supporting documentation for each material used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal) or weight percent of VOC
Material #1		
Material #2		
Etc.		

TAPCR. 1200-03-10-.02(2)(a).

E7 Emission Source

53-0093-04 Source Identification: Tissue Converting Operation #1 for Bath Tissue #1, Bath Tissue #2, and Hand Towel #1: tissue converting, coding and packaging operations with single emission point baghouse (S8) for particulate control.

Conditions E7-1 through E7-3 apply to source 53-0093-04.

E7-1. Particulate matter from this source shall not exceed 4 pounds per hour and 17.52 tons for all periods of 12 consecutive months. This also includes particulate emissions from Source 53-0093-13 routed to baghouse S8 unless emissions from source 13 are exhausting air through stacks S20 and/or S21.

TAPCR. 1200-03-07-.01(5), agreement letter dated June 11, 1998, from the permittee

Compliance Method: This source utilizes a baghouse to control particulate emissions. Particulate compliance is assured by stack testing conducted on April 30, 1997. Emission test results from Baghouse S8 revealed 0.3 lb/hr. Prorated to a maximum production rate, emissions are not expected to exceed 0.4 lb/hr.

The baghouse must operate when the equipment controlled by the baghouse is in operation. A minimum of 0.4 inches of water across the baghouse must be maintained while the process is in operation. Readings of pressure drop across the baghouse shall be performed at least once per day while the process is in operation and be recorded in a log.

Based on this determination, if values fall below the minimum acceptable value for the baghouse pressure drop, relevant comments and any action taken shall be noted by the recorder on the daily log. Such values shall be reported as deviations in the semiannual report.

A monthly log of maintenance, repair, baghouse readings, and relevant comments during readings shall be kept. The logs shall denote what maintenance and what repair was done, when it was done, by whom, and when problems were rectified showing date accomplished. Monthly log entries of readings and maintenance or a summary of such notations shall be included in each semiannual report in accordance with Condition E2 (a) (1).

E7-2. Volatile Organic Compounds (VOC) emitted from this source shall not exceed 2.0 tons during all periods of twelve consecutive months.

TAPCR. 1200-03-07-.07(2) and TAPCR. 1200-03-10-.02(2)(a).

Compliance Method: Compliance shall be assured by keeping a monthly log of emissions from all VOC-containing materials, including inks and adhesives. The following logs shall be used to account for VOC and HAP emissions.

Month/Year	Material ID	Usage (Pounds per month)	VOC Content by weight	VOC emissions (tons)	VOC emissions for 12 consecutive months (tons)	HAP 1 Content * (% by wt)	HAP 1 Emissions (tons per month)	HAP 2 Content (% by wt.)	HAP 2 Emissions (tons per month)

*User to add HAP emission columns as needed

LOG FOR HAP EMISSIONS FOR FEE ACCOUNTING PERIOD

Month/Year	HAP 1 emissions (tons) *	HAP 2 emissions (tons)	Total HAP emissions (tons)
July/Year			
June/Year			

*User to add HAP emissions columns as needed.

E7-3. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight.

The results of these determinations shall be compiled in the following tabular format or an alternative format approved in writing by the Technical Secretary. This table, along with MSDS or other supporting documentation for each material used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal) or weight percent of VOC
Material #1		
Material #2		
Etc.		

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E8 **Emission Source**

53-0093-08 Source Identification: Tissue Processing Line #3 for (Hand Towel #1) – Includes Tissue Processing Line #3 with cyclone trim separator, two (2) hydropulpers, cleaning/washing & thickening, bleach tower, forming, two (2) 20 MMBtu/hr natural gas fired air dryers. Associated Exhausts include Dyer Exhaust (S6), Bleach Tower (S18), and Roof Vents (HEF4, HEF5, HEF12, HEF13, HEF14, HEF15, HEF16, HEF17, HEF19, HEF25, HEF26, and HEF27).

Conditions E8-1 through E8-6 apply to source 53-0093-08.

- E8-1.** Sulfur dioxide (SO₂) emitted from this source shall not exceed 0.024 pound per hour and 0.1 ton for all periods of 12 consecutive months.
TAPCR. 1200-03-14-.03(5)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factor for natural gas at the maximum fire rate.
- E8-2.** Nitrogen oxides (NO_x) emitted from this source shall not exceed 5.6 pounds per hour and 24.5 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factor for natural gas at the maximum fire rate.
- E8-3.** Carbon monoxide (CO) emitted from this source shall not exceed 3.3 pounds per hour and 14.5 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factor for natural gas at the maximum fire rate.
- E8-4.** Particulate matter (TSP) emitted from this source shall not exceed 10.33 pounds per hour and 45.2 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.03(1)
Compliance Method: Particulate compliance for this source was demonstrated from the source testing conducted in April and May of 1997 and December of 2002. Total particulate emissions were determined to be less than 10.33 lb/hr. The natural gas dryer particulate emissions are from combustion products as the dryer is noncontact. Since there are no particulate control devices, no log keeping requirements are necessary for this source.
- E8-5.** Volatile Organic Compounds (VOC) emitted from this source shall not exceed 3.68 tons per month and 44.16 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2) and TAPCR. 1200-03-10-.02(2)(a).
Compliance Method: Compliance shall be assured by keeping a monthly log of emissions from all VOC-containing materials, including process material, coatings, fabric cleaners, and VOC from fuel burning. The following log shall be utilized to account for VOC and HAP emissions.

MONTHLY VOC/HAP EMISSIONS LOG TISSUE PROCESSING LINE #3

(SOURCE 53-0093-08)

MONTH/YEAR: _____

Material Name	Usage (Pounds material per month)	VOC Content (Percent by Weight)	VOC Emissions (tons per month)	HAP 1 Content (percent * HAP 1 by weight)	HAP 1 Emissions (tons HAP 1 per month)	HAP 2 Content (percent HAP 2 by weight)	HAP 2 Emissions (tons HAP 2 per month)	Total HAP Emissions (Total tons of HAPs per month)
TOTALS:								

*User to add additional columns as necessary to accommodate the number of HAPs.

VOC/HAP emissions (tons/month) = (Material Usage (lb/month) x VOC/HAP Content (% Wt.))/2,000 pounds/ton

FUEL BURNING VOC EMISSIONS (SOURCE 53-0093-08)

Natural Gas Usage (scf)	lbs VOC (5.5 lbs/10 ⁶ scf)	Monthly VOC emissions (lbs)	Monthly VOC emissions (tons)

LOG OF VOC EMISSIONS FOR COMPLIANCE PURPOSES

Month/Year	VOC emissions from material (tons)	VOC emissions from fuel burning (tons)	Total Monthly VOC emissions (tons)	VOC emissions per 12 consecutive months (tons)

LOG FOR HAP EMISSIONS FOR FEE ACCOUNTING PERIOD

Month/Year	HAP 1 emissions (tons) *	HAP 2 emissions (tons)	Total HAP emissions (tons)
July/year			
June/year			
TOTAL			

*User to add HAP emission columns as needed.

E8-6. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight.

The results of these determinations shall be compiled in the following tabular format or an alternative format approved in writing by the Technical Secretary. This table, along with MSDS or other supporting documentation for each material used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal) or weight percent of VOC
Material #1		
Material #2		
Etc.		

TAPCR. 1200-03-10-.02(2)(a).

DRAFT

E9 **Emission Source**

53-0093-11	Source Identification:	Wastewater Treatment Operations The facility eliminated the use of sodium hypochlorite solution in the recycled fiber bleaching process. Chloroform is no longer generated due the discontinued use of sodium hypochlorite.
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Conditions E9-1 applies to source 53-0093-11.

E9-1. The waste water treatment process has no requirement other than an annual certification that sodium hypochlorite is no longer used in the bleaching process.

TAPCR. 1200-03-09-.02(8)

Compliance Method: Compliance shall be assured by annual certification

DRAFT

E10 **Emission Source**

53-0093-12 Source Identification: Tissue Processing Line #4 for Hand Towel #2– washing, cleaning, screening, thickening, drying, and packaging operations. Process equipment includes hydropulper, dump chests, refiner, machine chests, head box forming and 2 tissue converting lines. Associated exhausts include Roof Vents V4 (EF1, EF2, EF3, EF4, EF5, EF6, EF7, EF8, and EF9), and 70 MMBtu/hr Dryer (S40) fired with natural gas. This processing line does not contain a bleaching system.

Conditions E10-1 through E10-6 apply to source 53-0093-12.

- E10-1.** Sulfur dioxide (SO₂) emitted from this fuel burning installation shall not exceed 0.05 pound per hour and 0.2 ton for all periods of 12 consecutive months.
TAPCR. 1200-03-14-.03(5)
Compliance Method: Compliance with this emission limitation has been established by using the current AP-42 emission factors for natural gas at the maximum fire rate.
- E10-2.** Nitrogen oxides (NO_x) emitted from this source shall not exceed 2.0 pounds per hour and 8.8 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the manufacturer's (North American Manufacturing Co.) guarantee of 28 lb of NO_x per 10⁶ scf of natural gas for a low NO_x burner. The guaranteed emission rate was stipulated in the May 19, 2000, application from the permittee.
- E10-3.** Carbon monoxide (CO) emitted from this source shall not exceed 2.5 pounds per hour and 11.0 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2)
Compliance Method: Compliance with this emission limitation has been established by using the manufacturer's (North American Manufacturing Co.) guarantee of 35.6 lb of CO per 10⁶ scf of natural gas. The guaranteed emission rate was stipulated in the May 19, 2000, application from the permittee.
- E10-4.** Particulate matter (TSP) emitted from this source shall not exceed 0.02 grains per dry standard cubic feet (21.71 lb/hr).
TAPCR. 1200-03-07-.04(1)
Compliance Method: Particulate compliance for this source was demonstrated from the source testing conducted in April and May of 1997 and December of 2002. Total particulate emissions were determined to be less than 21.71 lb/hr. The natural gas dryer particulate emissions are from combustion products as the dryer is noncontact. Since there are no particulate control devices, no log keeping requirements are necessary for this source.
- E10-5.** Volatile Organic Compounds (VOC) emitted from this source shall not exceed 1.78 tons per month and 21.4 tons for all periods of 12 consecutive months.
TAPCR. 1200-03-07-.07(2) and TAPCR. 1200-03-10-.02(2)(a).
Compliance Method: Compliance shall be assured by keeping a monthly log of material containing VOCs which include but are not limited to, process materials, coatings, and fabric cleaners. The following logs shall be used to account for VOC and HAP emissions.

MONTHLY VOC/HAP EMISSIONS LOG FOR TISSUE PROCESSING LINE #4 FROM MATERIAL USE

(SOURCE 53-0093-12)

MONTH/YEAR: _____

Material Name	Usage (Pounds material per month)	VOC Content (Percent by Weight)	VOC Emissions (tons per month)	HAP 1 Content (percent * HAP 1 by weight)	HAP 1 Emissions (tons HAP 1 per month)	HAP 2 Content (percent HAP 2 by weight)	HAP 2 Emissions (tons HAP 2 per month)	Total HAP Emissions (Total tons of HAPs per month)
	TOTALS:							

*User to add additional columns as necessary to accommodate the number of HAPs emitted from a given material.

VOC/HAP emissions, (tons/month) = (Material Usage (lb/month) x VOC/HAP Content (% Wt.))/2,000 pounds/ton

FUEL BURNING VOC EMISSIONS (SOURCE 53-0093-12).

Natural Gas Usage (scf)	lb VOC (5.5 lb/10 ⁶ scf)	Monthly VOC emissions (lb)	Monthly VOC emissions (tons)

LOG FOR VOC EMISSIONS FOR COMPLIANCE PURPOSES (SOURCE 53-0093-12)

Month/Year	VOC emissions from material (tons)	VOC emissions from fuel burning (tons)	Total Monthly VOC emissions (tons)	VOC emissions per 12 consecutive months (tons)

LOG FOR VOC EMISSIONS FOR COMPLIANCE PURPOSES (SOURCE 53-0093-12)

Month/Year	VOC emissions from material (tons)	VOC emissions from fuel burning (tons)	Total Monthly VOC emissions (tons)	VOC emissions per 12 consecutive months (tons)

LOG FOR HAP EMISSIONS FOR FEE ACCOUNTING PERIOD (SOURCE 53-0093-12)

Month/Year	HAP 1 emissions (tons) *	HAP 2 emissions (tons)	Total HAP emissions (tons)
July/year			
June/year			
TOTAL			

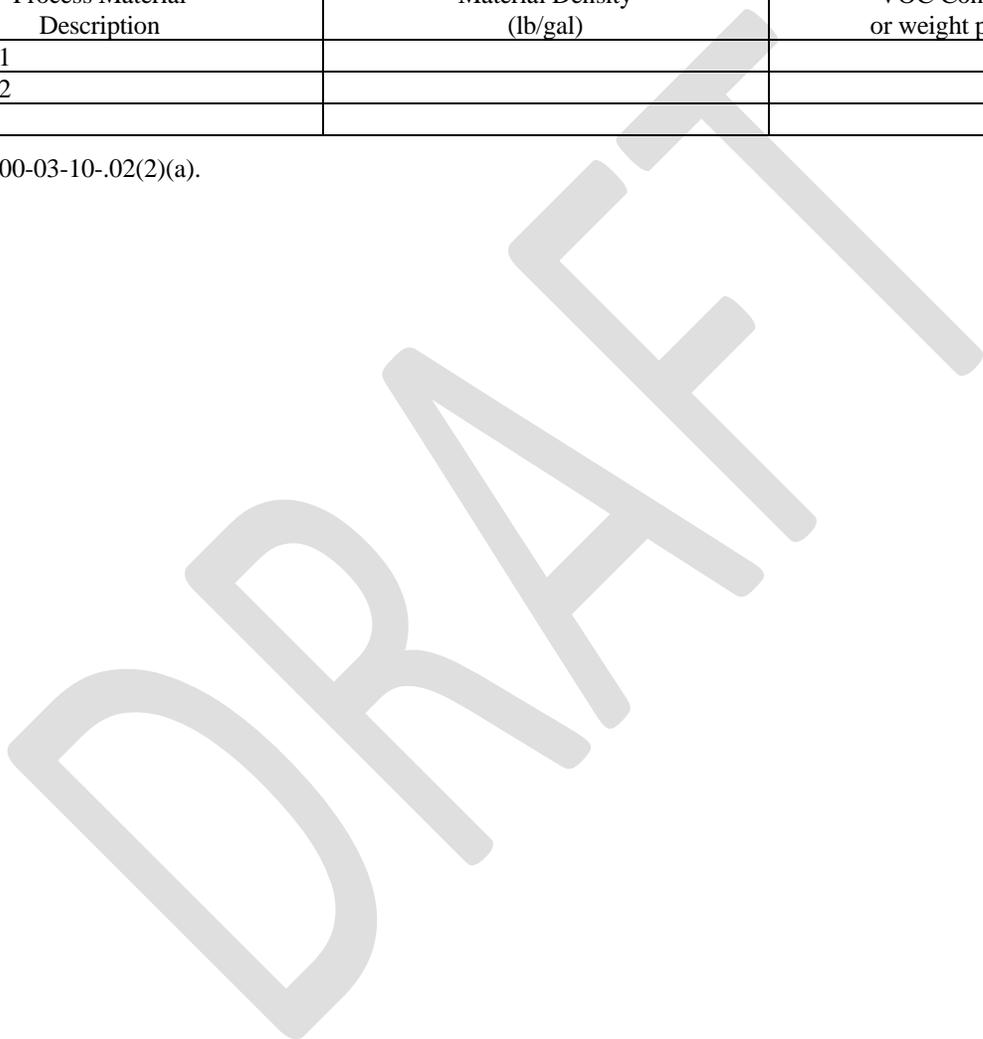
*User to add HAP emission columns as needed.

E10-6. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight. TAPCR. 1200-03-07-.07(2) and TAPCR. 1200-03-10-.02(2)(a).

The results of these determinations shall be compiled in the following tabular format or an alternative format approved in writing by the Technical Secretary. This table, along with MSDS or other supporting documentation for each material used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal) or weight percent VOC
Material #1		
Material #2		
etc.		

TAPCR. 1200-03-10-.02(2)(a).



E11 **Emission Source**

53-0093-13 Source Identification: Towel Converting Operation #2 (hand towel #2) for converting lines 1, 2, and 3 – Includes towel converting, coding and packaging operations with dust house stack ID# (S20) and venturi scrubber stack ID# (S21)

Condition E11-1 applies to source 53-0093-13.

E11-1. (SM1) **A.** Particulate matter (PM) emitted from the entire source shall not exceed 8.6 lb/hr and 37.7 tons for all periods of 12 consecutive months. Particulate matter emitted from the stack 21 portion of this source shall not exceed 0.7 lb/hr and 3.07 tons per all periods of 12 consecutive months.

TAPCR 1200-03-07-.01(5), the letter dated May 13, 2019, and the application May 15 2019

Compliance method: This source utilizes a dust house (S20) and venturi scrubber (S21) for process dust control and a separate dust system for HVAC recirculation (building) air. Building air dust collection is conveyed through the baghouse associated with Source 04. The associated process dust house returns 100 percent of the filtered air back into the converting operation or discharges to the atmosphere through stack S20. The associated venturi scrubber discharges to the atmosphere through stack S21. Particulate matter compliance is assured by:

a) Maintaining a minimum of 0.5 inches of water across the dust house (S20) while the process is in operation and discharging directly to the atmosphere. Readings of pressure drop across the dust house shall be performed at least once per day while the process is in operation, discharging directly to the atmosphere, and readings shall be recorded in a log. The permittee shall keep records when the process is not in operation and when the air emissions are returned back to the converting operation and effectively routed through source 04.

Based on this determination, if values fall below the minimum acceptable value for the dust house pressure drop, relevant comments and any action taken shall be noted by the recorder on the daily log. Such values shall be reported as deviations in the semiannual report.

A monthly log of maintenance, repair, dust house readings, dust house is not in operation, and relevant comments during readings shall be kept. The logs shall denote what maintenance and what repair was done, when it was done, by whom, and when problems were rectified showing date accomplished. Monthly log entries of readings and maintenance or a summary of such notations shall be included in each semiannual report.

b) Maintain the venturi scrubber (Stack 21) at a minimum flow rate of 160 gpm and a minimum pressure drop of 8.0 inches of water. Compliance with this limit shall be assured by daily inspection and recordkeeping in a log of scrubber operation, pressure drop and scrubbing liquid flow rate (gallons per minute) when this source is in operation. For daily logs, all data shall be recorded in the log within seven days of the end of the day for which the data is required. These records must be retained for a period of not less than five years.

B. Volatile Organic Compounds (VOC) emitted from this source shall not exceed 516 lbs. per month and 3.09 tons during all periods of twelve (12) consecutive months.

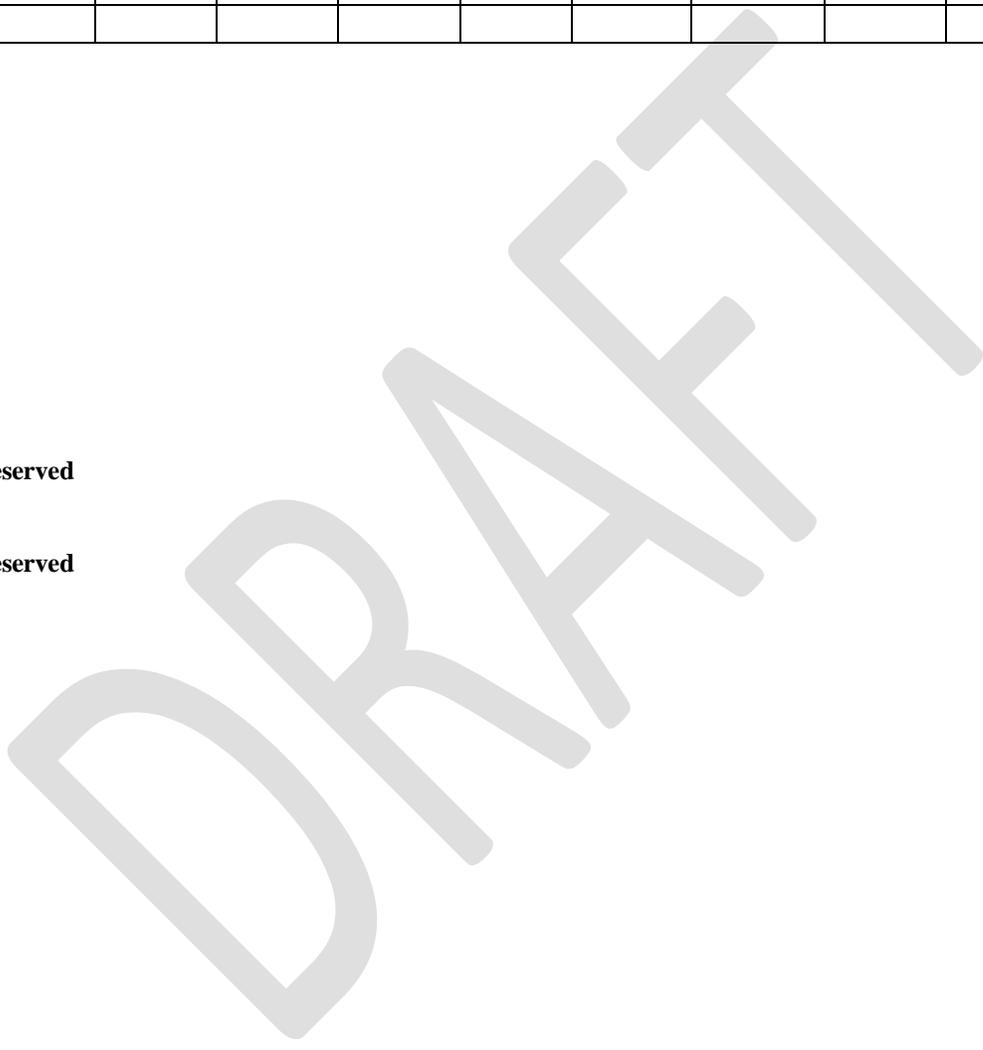
TAPCR 1200-03-07-.01(5), TAPCR 1200-03-10-.02(2)(a), the letter dated May 13, 2019, and the application dated May 15, 2019

Compliance Method: Compliance shall be assured by keeping a monthly log of emissions from all VOC-containing materials, including inks and adhesives. The following logs shall be used to account for VOC and Hazardous Air Pollutant (HAP) emissions.

Month/ Year	Material ID	Usage (Pounds per month)	VOC Content by weight (% by wt.)	VOC emissions (lb)	VOC emissions (tons)	VOC emissions for 12 consecutive months (tons)	HAP 1 Content * (% by wt)	HAP 1 Emissions (tons per month)	HAP 2 Content (% by wt.)	HAP 2 Emissions (tons per month)

E11-2. Reserved

E11-3. Reserved



E12 Emission Source

53-0093-17	Source Identification:	One 62.3 MMBtu/hr package boiler used to generate steam. The 62.3 MMBtu/hr boiler burns natural gas as the primary fuel, and #2 fuel oil is used as a backup fuel during periods of gas curtailment. The 62.3 MMBtu/hr boiler is subject to the requirements of 40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)
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Conditions E12-1 through E12-6 apply to source 53-0093-17.

E12-1. The stated design heat input capacity for the standby boiler (GB) is:

Boiler I.D.	Heat Input Capacity (MMBtu/hr)
GB	62.3

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

Compliance Method: This is the design capacity of the boiler. Compliance shall be assured by annual certification.

E12-2. Only natural gas or No. 2 fuel oil shall be used as fuel for the standby boiler (GB).

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

Compliance Method: Compliance shall be assured by annual certification.

E12-3. The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight.

Compliance Method: The permittee shall maintain records which verify the sulfur content of the fuel. These records shall consist of fuel analyses or vendor certification which specifies that all fuel oil sold to this company meets the above- indicated limit. These records shall include the name of the fuel oil supplier; a statement from the fuel oil supplier that the fuel oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and the sulfur content of the fuel oil. These records must be maintained on site and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.

TAPCR. 1200-03-07-.07(2), TAPCR. 1200-03-09-.03(8), 40 CFR §§60.42c(h) and 60.48c(e) and (f)(1)

E12-4. Emissions from the standby boiler (GB) shall not exceed the following:

Pollutant	Emission Rate (lb/hr)	Emission Rate (tons/year)
Particulate Matter	0.89	3.91
Sulfur Dioxide (SO ₂)	3.17	13.9
Carbon Monoxide (CO)	5.13	22.5
Volatile Organic Compounds (VOC)	0.34	1.47
Nitrogen Oxides (NO _x)	7.2	31.5

These emission limitations are established pursuant to Rules 1200-03-06-.01(7), and 1200-03-14-.01(3) of the TAPCR., EPA AP-42 emission factors, and the information contained in the agreement letter dated April 5, 2010. TAPCR. 1200-03-06-.01(7) and 1200-03-14-.01(3)

Compliance Method: Compliance with the above specified hourly emission limits is based upon the rated heat input capacity of this source, compliance with the 0.05 percent fuel oil sulfur content limit in Condition 4, and the emission factors for natural gas and No. 2 fuel oil combustion from EPA AP-42 found in the following equations. Compliance with the yearly allowable emission rates shall be assured by compliance with EPA emission factors. This source shall not operate unless the low-NOx burners are fully operational. Documentation from the manufacturer for this unit which specifies that these features are present and which also provides NOx emission factors shall be maintained onsite and shall be made available to the Technical Secretary or his representative upon request.

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

For fee purposes, emissions shall be calculated and maintained by keeping the following natural gas and No. 2 fuel oil combustion emission records. These records shall be used in the actual emissions analysis required by condition **E1** of this permit. They must be retained for a period of not less than five (5) years and shall be made available for review upon request of the Technical Secretary or his representative.

MONTHLY FUEL OIL COMBUSTION EMISSIONS RECORD FOR SOURCE 53-0093-17

MONTH/YEAR (Fee Accounting Period is July 1 thru June 30 of the following year)	No. 2 fuel oil Usage FOU) (gallons per month)
July/year	
Aug/year, etc	
June/year	
Total	FOU12

MONTHLY NATURAL GAS COMBUSTION EMISSIONS RECORD FOR SOURCE 53-0093-17

MONTH/YEAR (Fee Accounting Period is July 1 thru June 30 of the following year)	Natural Gas Consumption Per Month (MMSCF)
July/year	
Aug/year, etc	
June/year	
Total	NGC12

EQUATIONS FOR THE NO 2. FUEL OIL EMISSIONS RECORD CALCULATIONS FOR SOURCE 53-0093-17:

1. PM Emissions (tons PM per year)=(FOU12 in gal)(2.0 lbs PM/10³ gal)/(2,000 lb/ton)
 2. NO_x Emissions (tons NO_x per year)=(FOU12 in gal)(20.0 lbs NO_x/10³ gal)/(2,000 lb/ton)
 3. SO₂ Emissions (tons SO₂ per year)=(FOU12 in gal)(142 S lbs SO₂/10³ gal)/(2,000 lb/ton)
 4. VOC Emissions (tons VOC per year)=(FOU12 in gal)(0.252 lbs VOC/10³ gal)/(2,000 lb/ton)
- Where S= Sulfur content of 0.05 weight percent.

EQUATIONS FOR THE NATURAL GAS EMISSIONS RECORD CALCULATIONS FOR SOURCE 53-0093-17:

1. PM Emissions (tons PM per year)=(NGC12 in MMSCF)(7.6 lb/MMSCF)/(2,000 lb/ton)
2. NO_x Emissions (tons NO_x per year)=(NGC12 in MMSCF)(100 lb/MMSCF)/(2,000 lb/ton)
3. SO₂ Emissions (tons SO₂ per year)=(NGC12 in MMSCF)(0.6 lb/MMSCF)/(2,000 lb/ton)
4. VOC Emissions (tons VOC per year)=(NGC12 in MMSCF)(5.5 lb/MMSCF)/(2,000 lb/ton)

YEARLY COMBUSTION EMISSIONS RECORD FOR SOURCE 53-0093-17

YEAR (Fee Accounting Period is July 1 thru June 30 of the following year)	PM EMISSIONS (tons PM per year)	VOC EMISSIONS (tons VOC per year)	SO ₂ EMISSIONS (tons SO ₂ per year)	NO _x EMISSIONS (tons NO _x per year)

TAPCR. 1200-03-09-.02(11)(e)1.(iii), TAPCR. 1200-03-09-.03(8) 60.48c(g)

E12-5. Reserved

E12-6. Fugitive emissions from storage piles shall not exceed 5 percent opacity as determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A.

Compliance Method: The permittee shall conduct fugitive emissions readings as directed by the Technical Secretary.

TAPCR. 1200-03-08-.03

E13 **Emission Source**

53-0099-02	<u>Fuel Handling Enclosure</u>	This source was removed from service. 53-0099 was the Steam Plant (548499).
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DRAFT

E14 Emission Source

53-0093-15	Source Identification:	90 Million Btu per Hour Boiler with Low NO _x Technology, Designed to Burn Gas 1 Fuels (gas fired boiler) NSPS
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Conditions E14-1 through E14-11 apply to source 53-0093-15.

State Requirements

E14-1. The stated design heat input for this source is 90.0 million British Thermal Units per hour (MMBtu/hr). A construction permit or Title V minor modification must be obtained before exceeding this capacity.

TAPCR. 1200-03-09-.01(1)(d) and the application dated March 24, 2014

Compliance Method: The Technical Secretary may require the permittee to prove compliance with this Btu rating.

E14-2. Particulate matter (TSP) emitted from this source shall not exceed 0.18 pounds per million Btu of heat input (15.9 pounds per hour)

TAPCR. 1200-03-06-.02(2)

Compliance Method: Compliance with this requirement shall be assured by operating the boiler as designed, the design heat input and because the boiler is designated as noted in condition E14-9.

E14-3. Nitrogen oxides (NO_x) emitted from this source shall not exceed 4.50 pounds per hour based on a daily average.

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

Compliance Method: Compliance with this requirement shall be assured by operating the boiler as designed and by compliance with conditions E14-4 and E14-9.

E14-4(AA1). To control emissions of nitrogen oxides (NO_x) from boiler B-1, the permittee shall use only low-NO_x burners for this source.

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

Compliance Method: Compliance with this requirement shall be assured by installing and maintaining low NO_x technology for the boiler. The permittee shall retain copies of the manufacturer or vendor specifications for each burner subject to this condition. These specifications shall be kept at the source location and shall be made available for inspection by the Technical Secretary or his representative. The permittee shall be considered in compliance with this condition if the specifications for each burner indicate that NO_x emissions from fuel combustion are no greater than 50 pounds per million standard cubic feet of natural gas.

E14-5(AA1). Sulfur dioxide (SO₂) emitted from this source shall not exceed 0.05 pounds per hour based on a daily average.

TAPCR. 1200-03-14-.01(3) and the application dated March 24, 2014

Compliance Method: Compliance with this requirement shall be assured by operating the boiler as designed and complying with condition E14-9..

E14-6. Volatile organic compounds (VOC) emitted from this source shall not exceed 0.50 pounds per hour based on a daily average.

TAPCR. 1200-03-06-.03(2), construction permit 968550F

Compliance Method: Compliance with this requirement shall be assured by operating the boiler as designed and complying with condition E14-9.

E14-7(AA1). Carbon monoxide (CO) emitted from this source shall not exceed 7.56 pounds per hour based on a daily average.

TAPCR. 1200-03-06-.03(2), construction permit 968550F

Compliance Method: Compliance with this requirement shall be assured by operating the boiler as designed and complying with condition E14-9..

E14-8. The following annual emissions are based on a total of 8,760 hours of operation. These emission totals will be used to calculate annual emission fees:

Allowable Emissions for Fees (tons per year)				
PM	SO ₂	NO _x	VOC	CO
69.62	0.22	19.71	2.19	33.11

TAPCR. 1200-03-26-.02(6)

40 CFR Part 63 Subpart JJJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

E14-9. The type of boiler listed in paragraph (e) below is not subject to 40 CFR part 63 subpart JJJJJJ.

(e) A gas-fired boiler as defined in 40 CFR part 63 subpart JJJJJJ.

40 CFR §63.11195

40 CFR Part 60: Standards of Performance for New Stationary Sources (NSPS)

Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

E14-10. The affected facility to which 40 CFR part 60 subpart Dc applies is 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 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

40 CFR §60.40c

E14-11. The owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

As an alternative to meeting the requirements of the above paragraph, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

All records required under this condition shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

40 CFR §60.48c

END OF SIGNIFICANT MODIFICATION #1 TO PERMIT NUMBER: 572115

ATTACHMENT 1
OPACITY MATRIX DECISION TREE for
VISIBLE EMISSION EVALUATION METHODS using TVEE METHOD
2

and EPA METHOD 9

Dated June 18, 1996
Amended September 11, 2013

**Decision Tree PM for Opacity for
Sources Utilizing EPA Method 9***

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, NO_x, 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.

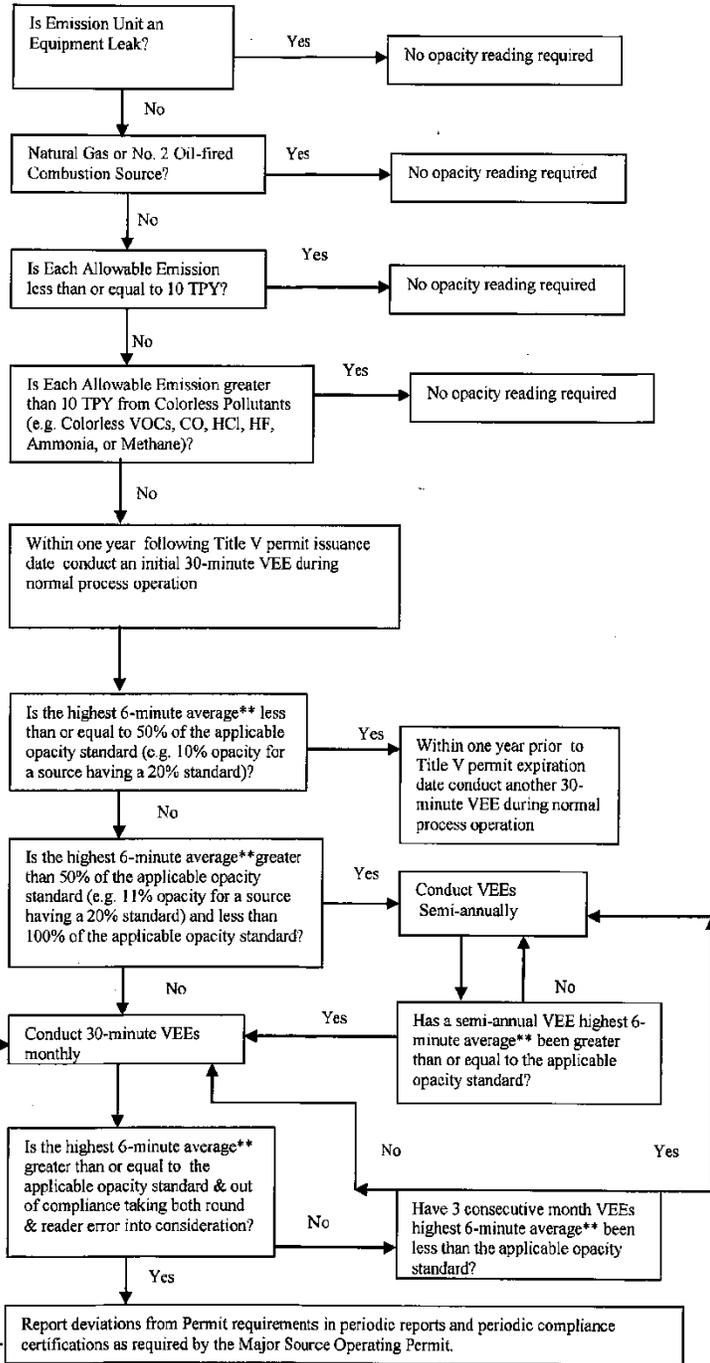
Reader Error
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards:
The TAPCD guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

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 Subject to Rule 1200-03-05-.01
Utilizing TVEE Method 2**

Notes:

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

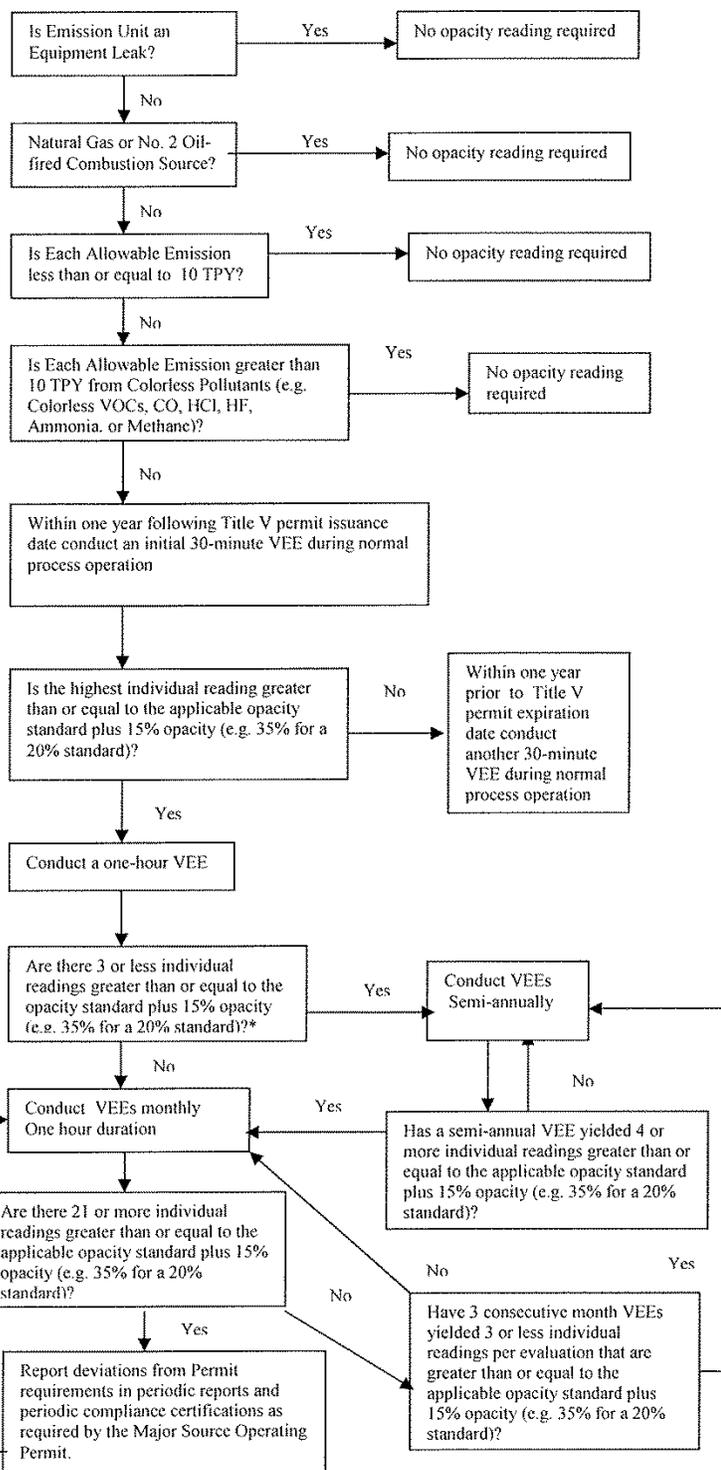
A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

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



ATTACHMENT 2
AP-42 Emission Factors from Natural Gas Combustion
Supplement to 5th Edition, Dated 3/98

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION^a

Combustor Type (MMBtu/hr Heat Input) [SCC]	NO _x ^b		CO	
	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01]				
Uncontrolled (Pre-NSPS) ^c	280	A	84	B
Uncontrolled (Post-NSPS) ^c	190	A	84	B
Controlled – Low NO _x burners	140	A	84	B
Controlled – Flue gas recirculation	100	D	84	B
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]				
Uncontrolled	100	B	84	B
Controlled – Low NO _x burners	50	D	84	B
Controlled – Low NO _x burners/Flue gas recirculation	32	C	84	B
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	A	24	C
Controlled – Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]				
Uncontrolled	94	B	40	B

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

^b Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_x emission factor. For tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO_x emission factor.

^c NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION^a

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	E
N ₂ O (Controlled-low-NO _x burner)	0.64	E
PM (Total) ^c	7.6	D
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	B
SO ₂ ^d	0.6	A
TOC	11	B
Methane	2.3	B
VOC	5.5	C

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.

^b Based on approximately 100% conversion of fuel carbon to CO₂. $CO_2[lb/10^6\ scf] = (3.67) (CON) (C)(D)$, where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10⁴ lb/10⁶ scf.

^c All PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensable PM. Condensable PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

^d Based on 100% conversion of fuel sulfur to SO₂.

Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

ATTACHMENT 3

AP-42 Emission Factors for Uncontrolled Fuel Oil Combustion
5th Edition, Corrected May 2010

Table 1.3-1. CRITERIA POLLUTANT EMISSION FACTORS FOR FUEL OIL COMBUSTION^a

Firing Configuration (SCC) ^a	SO ₂ ^b		SO ₃ ^c		NO _x ^d		CO ^e		Filterable PM ^f	
	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSIO N FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING
Boilers > 100 Million Btu/hr										
No. 6 oil fired, normal firing (1-01-004-01), (1-02-004-01), (1-03-004-01)	157S	A	5.7S	C	47	A	5	A	9.19(S)+3.22	A
No. 6 oil fired, normal firing, low NO _x burner (1-01-004-01), (1-02-004-01)	157S	A	5.7S	C	40	B	5	A	9.19(S)+3.22	A
No. 6 oil fired, tangential firing, (1-01-004-04)	157S	A	5.7S	C	32	A	5	A	9.19(S)+3.22	A
No. 6 oil fired, tangential firing, low NO _x burner (1-01-004-04)	157S	A	5.7S	C	26	E	5	A	9.19(S)+3.22	A
No. 5 oil fired, normal firing (1-01-004-05), (1-02-004-04)	157S	A	5.7S	C	47	B	5	A	10	B
No. 5 oil fired, tangential firing (1-01-004-06)	157S	A	5.7S	C	32	B	5	A	10	B
No. 4 oil fired, normal firing (1-01-005-04), (1-02-005-04)	150S	A	5.7S	C	47	B	5	A	7	B
No. 4 oil fired, tangential firing (1-01-005-05)	150S	A	5.7S	C	32	B	5	A	7	B
No. 2 oil fired (1-01-005-01), (1-02-005-01), (1-03-005-01)	142S ^h	A	5.7S	C	24	D	5	A	2	A
No.2 oil fired, LNB/FGR, (1-01-005-01), (1-02-005-01), (1-03-005-01)	142S ^h	A	5.7S	A	10	D	5	A	2	A

External Combustion Sources

Table 1.3-1. (cont.)

Firing Configuration (SCC) ^a	SO ₂ ^b		SO ₃ ^c		NO _x ^d		CO ^e		Filterable PM ^f	
	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING	Emission Factor (lb/10 ³ gal)	EMISSION FACTOR RATING
Boilers < 100 Million Btu/hr										
No. 6 oil fired (1-02-004-02/03) (1-03-004-02/03)	157S	A	2S	A	55	A	5	A	9.19(S)+3.22 ^g	B
No. 5 oil fired (1-03-004-04)	157S	A	2S	A	55	A	5	A	10 ^h	A
No. 4 oil fired (1-03-005-04)	150S	A	2S	A	20	A	5	A	7	B
Distillate oil fired (1-02-005-02/03) (1-03-005-02/03)	142S	A	2S	A	20	A	5	A	2	A
Residential furnace (A2104004/A2104011)	142S	A	2S	A	18	A	5	A	0.4 ⁱ	B

- a To convert from lb/103 gal to kg/103 L, multiply by 0.120. SCC = Source Classification Code.
- b References 1-2,6-9,14,56-60. S indicates that the weight % of sulfur in the oil should be multiplied by the value given. For example, if the fuel is 1% sulfur, then S = 1.
- c References 1-2,6-8,16,57-60. S indicates that the weight % of sulfur in the oil should be multiplied by the value given. For example, if the fuel is 1% sulfur, then S = 1.
- d References 6-7,15,19,22,56-62. Expressed as NO₂. Test results indicate that at least 95% by weight of NO_x is NO for all boiler types except residential furnaces, where about 75% is NO. For utility vertical fired boilers use 105 lb/103 gal at full load and normal (>15%) excess air. Nitrogen oxides emissions from residual oil combustion in industrial and commercial boilers are related to fuel nitrogen content, estimated by the following empirical relationship: lb NO₂/103 gal = 20.54 + 104.39(N), where N is the weight % of nitrogen in the oil. For example, if the fuel is 1% nitrogen, then N = 1.
- e References 6-8,14,17-19,56-61. CO emissions may increase by factors of 10 to 100 if the unit is improperly operated or not well maintained.
- f References 6-8,10,13-15,56-60,62-63. Filterable PM is that particulate collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train. Particulate emission factors for residual oil combustion are, on average, a function of fuel oil sulfur content where S is the weight % of sulfur in oil. For example, if fuel oil is 1% sulfur, then S = 1.
- g Based on data from new burner designs. Pre-1970's burner designs may emit filterable PM as high as 3.0 lb/103 gal.
- h The SO₂ emission factor for both no. 2 oil fired and for no. 2 oil fired with LNB/FGR, is 142S, not 157S. Errata dated April 28, 2000. Section corrected May 2010.
- i The PM factors for No.6 and No. 5 fuel were reversed. Errata dated April 28, 2000. Section corrected May 2010.

Table 1.3-3. EMISSION FACTORS FOR TOTAL ORGANIC COMPOUNDS (TOC), METHANE, AND NONMETHANE TOC (NMTOC) FROM UNCONTROLLED FUEL OIL COMBUSTION^a

EMISSION FACTOR RATING: A

Firing Configuration (SCC)	TOC ^b Emission Factor (lb/10 ³ gal)	Methane ^b Emission Factor (lb/10 ³ gal)	NMTOC ^b Emission Factor (lb/10 ³ gal)
Utility boilers			
No. 6 oil fired, normal firing (1-01-004-01)	1.04	0.28	0.76
No. 6 oil fired, tangential firing (1-01-004-04)	1.04	0.28	0.76
No. 5 oil fired, normal firing (1-01-004-05)	1.04	0.28	0.76
No. 5 oil fired, tangential firing (1-01-004-06)	1.04	0.28	0.76
No. 4 oil fired, normal firing (1-01-005-04)	1.04	0.28	0.76
No. 4 oil fired, tangential firing (1-01-005-05)	1.04	0.28	0.76
Industrial boilers			
No. 6 oil fired (1-02-004-01/02/03)	1.28	1.00	0.28
No. 5 oil fired (1-02-004-04)	1.28	1.00	0.28
Distillate oil fired (1-02-005-01/02/03)	0.252	0.052	0.2
No. 4 oil fired (1-02-005-04)	0.252	0.052	0.2
Commercial/institutional/residential combustors			
No. 6 oil fired (1-03-004-01/02/03)	1.605	0.475	1.13
No. 5 oil fired (1-03-004-04)	1.605	0.475	1.13
Distillate oil fired (1-03-005-01/02/03)	0.556	0.216	0.34
No. 4 oil fired (1-03-005-04)	0.556	0.216	0.34
Residential furnace (A2104004/A2104011)	2.493	1.78	0.713

^a To convert from lb/10³ gal to kg/10³ L, multiply by 0.12. SCC = Source Classification Code.

^b References 29-32. Volatile organic compound emissions can increase by several orders of magnitude if the boiler is improperly operated or is not well maintained.

ATTACHMENT 4

Excerpts from Agreement Letter

May 13, 2019

State of 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

RE: *Kimberly-Clark Corporation – Loudon Mill, Tennessee
Title V Operating Permit No. 572115
Construction Permit Application for Installation of a New Converting Line*

Dear Sir or Madam:

Kimberly-Clark Corporation (KCC) owns and operates the Loudon facility in Loudon County, Tennessee (TN). The Loudon Mill operates under a Title V operating permit (Permit Number 572115) issued by the Tennessee Department of Environment and Conservation (TDEC) on November 1, 2018. The Loudon Mill is presently permitted as a major source with respect to the Prevention of Significant Deterioration (PSD) permitting program as the allowable permitted emissions of at least one regulated pollutant exceed the applicable PSD major source threshold. Therefore, this application presents an analysis confirming that PSD permitting is not required per a project emission increase assessment (calculations included in Attachment 1), includes the necessary Tennessee Title V Construction Permit application forms (Attachment 2), and a detailed regulatory review.

PROPOSED PROJECT DESCRIPTION

KCC is submitting this construction permit application to install a new hand towel converting line at its Loudon Mill. The facility currently operates multiple converting lines, presently incorporated in the operating permit as Converting Operation No. 1 and Converting Operation No. 2 (Emission Source IDs 53-0093-04 and 53-0093-13, respectively). Converting lines utilize large parent tissue rolls produced on the various tissue manufacturing lines at the Loudon facility and processes the product into consumer ready hand towels (rolls and folded) and toilet paper rolls. The Loudon tissue lines presently manufacture more tissue than the existing converting operations can process, therefore a portion of the manufactured parent tissue rolls are shipped off-site for converting.

To eliminate the need for off-site converting, the facility plans to install a new hand towel converting line (hereafter referenced as HRT2) to be included within the existing Converting Operation No. 2 (Emission Source ID 53-0093-13), which presently includes two existing towel converting lines (encompassing the converting, coding and packaging operations). The new converting line HRT2 will have potential throughput of [REDACTED]

[REDACTED]
[REDACTED] HRT2 will convert base sheet from Tissue Machine No. 4 (Emission Source ID 53-0093-12) or Tissue Machine No. 3 (Emission Source ID 53-0093-08). Building interior dust accumulation will be minimized for worker hygiene and safety through vacuum pickup hoods that will route collected air through a new wet venturi scrubber system that will be installed as part of the proposed project. The scrubber system is designed to handle

20,000 standard cubic feet per minute (scfm) of inlet air and will replace the existing baghouse associated with stack S21 (designed to handle 17,400 scfm of inlet air) in the Converting Operation No. 2 area. In addition, process air (trim conveyance air) from existing converting lines currently routed to the existing baghouse associated with stack S20 will be re-routed to the new scrubber system as well. Dust collection for existing converting lines will remain routed to the existing baghouse associated with stack S20. Attachment 3 presents an updated process flow diagram for Converting Operation No. 2 (Emission Source ID 53-0093-13) following the proposed project.

The proposed project will only impact the converting capacity of the facility and will not result in an increase in tissue production from the existing tissue machines. KCC is proposing to start construction in August 2019 and start operation in January 2020.

EMISSIONS ESTIMATION AND PROPOSED EMISSION LIMITS

Particulate matter (PM), particulate matter less than 10 microns in aerodynamic diameter (PM₁₀), and particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}) will be emitted from the new converting process and emissions will be minimized by the proposed wet scrubber. Volatile organic compounds (VOC) and hazardous air pollutants (HAP) will be emitted through the use of a small amount of chemicals on the new converting line.

For purposes of the PSD emission increase assessment, HRT2 is a new converting line that includes a new control device. For simplicity, the potential emissions for PM, PM₁₀, and PM_{2.5} are based on the design parameters for the new venturi scrubber control device, presuming 8,760 hours of operation per year. VOC emission increases are based on the maximum anticipated chemical usages for the new converting line, HRT2. Detailed emission calculations are presented in Attachment 1 and described in the following sections.

Particulate Emissions

KCC is proposing a 0.0041 grain per standard cubic feet (gr/scf) PM limit on the proposed new scrubber, stack 21 (i.e. 0.70 lb/hr and 3.07 tons per year). KCC reviewed testing information from a venturi scrubber operating at KCC's Beech Island facility and emission estimates from the proposed scrubber manufacturer to derive a proposed limitation that presents reasonable compliance assurance. KCC will comply with the proposed PM limit by operating the proposed venturi scrubber properly. KCC will keep records of daily scrubber liquid flow rate, daily pressure drop across the venturi throat and routine maintenance similar to other scrubbers operated at the facility to demonstrate compliance. Note that KCC will continue to comply with the PM emission limit of 8.6 pounds per hour (lb/hr) and 37.7 tons per year (tpy) on the entire Converting Operation #2 (Emission Source ID 53-0093-13) per Permit Condition E11-1 and is not requesting an alteration in this existing allowable emission.

VOC and HAP Emissions

Anticipated VOC and HAP emissions increases from the proposed converting line HRT2 are estimated based on maximum anticipated chemical usage and VOC/HAP content. Anticipated increases based on maximum anticipated chemical usage for HRT2 are 2.09 tpy. KCC requests to increase the existing VOC limit on towel Converting Operation #2 (Emission Source ID 53-0093-13) codified in Permit Condition E11-2 from 167 lbs per month to 516 lbs per month (1 tpy to 3.09 tpy). KCC will comply with the limit by continuing to keep a monthly log of VOC-containing materials and calculate VOC emissions monthly.

ATTACHMENT 5
APC 36 Fee Selection form



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
 Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

TITLE V FEE SELECTION

Type or print and submit to the email address above.

FACILITY INFORMATION

1. Organization's legal name and SOS control number [as registered with the TN Secretary of State (SOS)]

2. Site name (if different from legal name)

3. Site address (St./Rd./Hwy.)

County name

City

Zip code

4. Emission source reference number

5. Title V permit number

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.

Source ID	Pollutant	Allowable or Actual Emissions	If allowable emissions: Specify condition number and limit.
			If actual emissions: Describe calculation method and provide example. Provide condition number that specifies method, if applicable.



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
 Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

8. (Continued)

Source ID	Pollutant	Allowable or Actual Emissions	If allowable emissions: Specify condition number and limit.
			If actual emissions: Describe calculation method and provide example. Provide condition number that specifies method, if applicable.

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

Significant Modification #1
TITLE V PERMIT STATEMENT

Facility Name:	Kimberly-Clark Corporation, Loudon Mill
City:	Loudon
County:	Loudon

Date Application Received:	September 23, 2016
Date Application Deemed Complete:	September 22, 2017

*- date when GHG emissions estimate was received

Emission Source Reference No.:	53-0093
Permit No.:	572115

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 Comprehensive Rules and Regulations (Tenn, Comp, R. & Regs.) 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 Kimberly-Clark Corporation, Loudon Mill 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. Kimberly-Clark Corporation, Loudon Mill operates a Tissue and Towel Manufacturing facility.

Emission Source Number	Description
53-0093-01:	75.2 MMBtu/hr Natural Gas Fired Boiler
53-0093-02:	Tissue Processing Line #1 (Bath Tissue #1)
53-0093-03:	Tissue Processing Line #2 (Bath Tissue #2)
53-0093-04:	Converting Operation #1 (Bath Tissue #1 and #2 and Hand Towel #1)
53-0093-08:	Tissue Processing Line #3 (Hand Towel #1):
53-0093-11:	Wastewater Treatment Operation
53-0093-12:	Tissue Processing Line #4 (Hand Towel #2)
53-0093-13:	Converting Operation # 2 (Hand Towel #2)
53-0093-17:	62.3 MMBtu /hr (Natural Gas and No. 2 Fuel Oil Package Boiler)
53-0093-15:	90 Million Btu per hour low NOx boiler

B. Facility Classification.

1. Area is designated as attainment for ozone.
2. Company is located within 50 miles of a ***Class I area***.

C. Regulatory Status.

1. **PSD/NSR.** This facility is a major source under PSD.
2. **Title V Major Source Status by Pollutant.**

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status? (Major Source or Non-Major Source)
PM	YES	Major
PM ₁₀	YES	Non-Major
SO ₂	YES	Non-Major
VOC	YES	Major
NO _x	YES	Major
CO	YES	Major
GHG (CO _{2e})*	YES	Major
Individual HAP	YES	Non-Major
Total HAPs	YES	Non-Major

* Greenhouse gases (GHG)

3. **MACT Standards.** This source is *not* major for HAPs.

4. **Program Applicability.** Are the following programs applicable to the facility?

- PSD: (yes)
 NESHAP: (no)
 NSPS: (yes)

D. Permitting Activities since Previous Permit Issuance.

None.

E. Permit Changes.

The previous permit combined previously issued operating permits 557885 (Tissue and Towel Manufacturing facility) and 548499 (Steam Plant), and construction permit 963480P (Section E13) into a single operating permit. Permit conditions associated with propane throughout the permit were removed because the Mill no longer has the capability to burn propane from stationary sources. Steam Plant (source 53-0099-01) was modified. Oil Boiler 1 and Oil Boiler 2 along with all associated permit conditions were removed from permit 548499. The new Natural Gas (No.2 Oil backup) Boiler replaces the No.2 fuel oil-fired package boilers at the steam plant. See Attachment A.

II. Compliance Information.

A. Compliance Status.

Is the source currently in compliance with all applicable requirements? (*yes*)

Are there any applicable requirements that will become effective during the permit term? (*no*)

III. Other Requirements.

A. Emissions Trading. The source is not involved in an emission trading program.

B. Acid Rain Requirements. This source is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases. Not Applicable

IV. Public Participation Procedures.

A. Notification of this draft permit was mailed to the following environmental agencies:

1. U.S. EPA, Region IV
2. North Carolina, DENR
3. Knox County Department of Air Pollution Control
4. Cherokee Nation Eastern Band

V. Changes occurring with Significant Modification 1

The purpose of Significant Modification #1 to Permit 572115 is to implement the changes from Construction Permit 976912 for source 53-0093-13 Towel Converting Operation #2. The following changes were made.

Condition A8 concerning fees was updated

Slight wording change to A12.

Revise A20 to require annual certification that they are complying with their risk management plan if they are required to have one.

Condition B6 was revised for new EPA address

Condition D7 was updated to delete "oil"

Condition D9 was updated concerning asbestos

Condition E1 was updated to include new format, and associated APC 36 Fee Selection form is added as Attachment 5

Condition E2 was updated to reflect new format and different reporting requirements

Condition E2-1 includes the responsible official's Title

References to "Tenn. Comp. R. and Regs." replaced with "TAPCR"

At E11-1 of the previous permit the total allowable PM limits remain the same but new limits are established for the Stack 21 portion of this source, which is a subset of the source PM emission limits. Also the control system parameters were modified. PM is now limited by condition E11-1 (SM1) A. of the Significant Modification.

At E11-2 of the previous permit the VOC limit of “167 lbs. per month and 1.0 tons during all periods of twelve consecutive months” is changed to “516 lbs. per month and 3.09 tons during all periods of 12 consecutive months, and VOC is now limited at condition E11-1. (SM2) B. of the Significant Modification

E11-2 and E11-3 are now ‘reserved’ as the emission limits and any required recordkeeping are included at E11-1

Attachment 4 (excerpts from agreement letters) is added to include a reference to the new requested limit for PM implemented at condition S13-4A of 976912 and now as found in condition E11-1A: “Particulate matter emitted from the stack 21 portion of this source shall not exceed 0.7 lb/hr and 3.07 tons per all periods of 12 consecutive months.”

Attachment 5 is the new APC 36 Fee Selection form

Table of Allowable Emissions for Kimberly Clark ID 53-0093 Permit 572115 with changes for Source 53-0093-13 established by 976912

Permit Allowable Emission Rate												
row(s) 1 - 12 of 12												
	Point #	Point Description	Status	PM	SO2	CO	VOC	NOX	HAPS	EX	MISC	PB
	<u>00</u>	Entire Source	Active									
	<u>01</u>	75.2 million Btu per hour boiler	Active	4.82	167.00							
	<u>02</u>	Tissue Processing Line #1 (Bath Tissue #1)	Active	17.50	0.20	7.50	69.60	8.80				
	<u>03</u>	Tissue Processing Line #2 (Bath Tissue #2)	Active	17.50			55.80					
	<u>04</u>	Tissue Converting Operation #1 for Bath Tissue #1, Bath Tissue #2, and Hand Towel #1	Active	17.52			2.00					
	<u>08</u>	Tissue Processing Line #3 for (Hand Towel #1)	Active	45.20	0.10	14.50	44.16	24.50				
	<u>11</u>	Wastewater Treatment Operations	Active									
	<u>12</u>	Tissue Processing Line #4 for Hand Towel #2	Active	95.09	0.20	11.00	21.40	8.80				
	<u>13</u>	Towel Converting Operation #2 (hand towel #2) for converting lines 1 and 2	Active	37.70			3.09					
	<u>15</u>	90 Million Btu per Hour Boiler with Low NOx Technology fired by natural gas	Active	69.62	0.22	33.11	2.19	19.71				
	<u>17</u>	One standby 62.3 MMBtu/hr package boiler, previous point number 53-0099-01	Active	3.91	13.90	22.50	1.47	31.50				
	<u>18</u>	535 Hp No 2 Diesel Emergency Engine Generator	Active									
Report Total:				308.86	181.62	88.61	199.71	93.31				
row(s) 1 - 12 of 12												

Statement of Basis for 53-0093

Attachment A: Changes to Title V Operating Permit 563319 since Previous Renewal

The purpose of this attachment is to address the changes made to this facility since issuance of Title V Operating Permit 563319. Specific changes are addressed in the following tables:

Permit Modification	Issue Date	Condition or Section	Modification
Title V Renewal Permit 563319	March 26, 2012	B5	Condition B5(d) was revised to add the underlined language: (d) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether <u>compliance during the period was continuous or intermittent</u> . 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
		C1	Condition C1 was revised to add the underlined language: <u>Operational flexibility changes.</u> 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) <u>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.</u> (f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6. (g) <u>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.</u>
		C2	Condition C2(b) was revised to add the underlined language: (b) The written notification must <u>be signed by a facility Title V responsible official and include the following:</u> <ol style="list-style-type: none"> 1. brief description of the change within the permitted facility; 2. specifies the date on which the change will occur; 3. declares <u>and quantifies where possible</u> any change in emissions; 4. declares any permit term or condition that is no longer applicable as a result of the change; and 5. <u>declares the requested change is not a Title I modification and will not exceed allowable emissions under the permit.</u>
		D8	Condition D8 was revised. D8. <u>Open burning.</u> The permittee shall comply with the TAPCR 1200-03-04 for all open burning activities at the facility.
	March 26, 2012	Section E	Updated facility description to combine two sources 53-0093 and 53-0099 into one renewal permit.

Permit Modification	Issue Date	Condition or Section	Modification
Title V Renewal Permit 563319		E1	Updated fee emissions
		E2-1	Updated semiannual reporting requirements
		E2-1(b)	Condition E2-1(b)(4) was revised to add the underlined language: (4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, <u>including whether compliance during the period was continuous or intermittent. The certification shall be</u> based on the method or means designated in E2-1(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
		E3	Conditions in this section were renumbered due to the deletion of the former general conditions and the addition of new ones.
		E3-1	Moved to section 4, renumbered as condition E4-5
		E3-2	Updated visible emissions condition
		E3-3	Former condition E3-3 removed because propane is no longer used
		E3-4	Updated recordkeeping requirements
		E3-7	Former condition E3-7 removed because propane is no longer used. Replaced with Boiler MACT requirements.
		E4-3	Updated fuel requirements
		E5-4	Updated compliance method
		E6-1	Updated compliance method for dust collector system (baghouse).
		E7-1	Updated manufacturer recommended parametric monitoring requirements for the baghouse (0.4 inches)
		E8-4	Updated PM compliance method
		E8-5	Updated VOC compliance method. Condition is revised to reflect changes in operation (a new bleaching process)
		E10-4	Updated compliance method
E12	Conditions E12-1 through E12-19 for Steam Plant were added to the permit.		
E13	Conditions E13-1 and E13-2 for Fuel Handling Enclosure were added to the permit.		
Administrative Amendment #1	August 31, 2012	Cover Page	Updated Responsible Official.
		E3-6	Updated as follows: “The three circular roof vents (C1, C2, and C3) above the drum filters from source 53-0093-04 and the louvered side vent (V5)...”
		Section E4	Updated source description for 53-0093-01 to indicate that natural gas is the primary fuel for the boiler and that #2 fuel oil is used as a backup fuel during periods of gas curtailment.
		Section E8	Deleted cyclone (S16) from source description.

Permit Modification	Issue Date	Condition or Section	Modification
Administrative Amendment #1	August 31, 2012	Section E12	Updated source description for 53-0099-01 to indicate that natural gas is the primary fuel for the 62.3 MMBtu/hr boiler and that #2 fuel oil is used as a backup fuel during periods of gas curtailment. Added NSPS Dc applicability for the 62.3 MMBtu/hr boiler (Conditions E12-4 and E12-7). Added the following language (underlined red font) to Condition E12-4: Compliance Method: The permittee shall maintain records which verify the sulfur content of the fuel. These records shall consist of fuel analyses or vendor certification which specifies that all fuel oil sold to this company meets the above- indicated limit. <u>These records shall include the name of the fuel oil supplier; a statement from the fuel oil supplier that the fuel oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and the sulfur content of the fuel oil.</u> These records must be maintained on site and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years.
		E12-17	Changed in-stack carbon monoxide monitoring system requirements from Performance Specification 3 to Performance Specification 4.
Minor Modification #1	December 23, 2014	E12-12	Adding the following statement to this permit condition E12-12: Semiannual quality assurance audits are not required if the source is not operated during the period.
		E12-19	Adding the following statement to this permit condition E12-19: Annual relative accuracy audits are not required if the source is not operated during the period.
Minor Modification #2	January 4, 2018	A8	Updated the fee payment language
		B5	Updated the requirement for annual compliance certifications
		B6	Updated the addresses for submittals
		B10	Marked reserved due to the elimination of the rule
		D9	Corrected the rule citation
		E1	Updated the fee language and the allowable emissions table
		E2	Updated the record keeping and submittal requirements
		E3-1	Removed the visible requirement for the wood and paper sludge boiler
		E4-5	Updated the opacity matrix to the current version (September 11, 2013).
		E7-1	Added some exhaust language from construction permit 972621
		E11-1	Made the changes from construction permit 972621
		E12	Removed all of the requirements that were related to the wood and paper sludge boiler, which was removed from service
		E13	Removed all of the requirements due to the wood and paper sludge boiler's material handling removal from service
E14	Added the new boiler's requirements from construction permit 968550F except 40 CFR part 63 subpart DDDDD, subpart DDDDD was misapplied. The facility is an area source of HAPs and is not subject to 40 CFR part 63 subpart JJJJJ due to the fact that it is a natural gas fired boiler.		
EPA Comments: None			Email dated December 14, 2017

Statement of Basis Continued for 53-0093

Attachment B: Changes to Title V Operating Permit 572115 since Minor Modification #2 to 563319

Permit Renewal	Issue Date	Condition or Section	Change
Title V Renewal Permit 572115	November 1, 2018	Cover page	Changed source number 53-0099-01 to 53-0093-15
		Attachments	Removed AP-42 emission factors for wood waste combustion, removed CAM plan for wood fired boiler
		Section A through D	Updated the regulation citations throughout. Added conditions D11, D12, D13, and D14.
		E1	Updated allowable emissions table and fee language..
		E2	Added language for the new reporting periods for this permit..
		E2-1	Updated dates for the renewal application and added paragraph c.
		E3-7	Removed previous condition regarding notice of applicability to 40 CFR part 63 subpart DDDDD.
		E3	Added conditions E3-7, E3-8, and E3-9.
		E5-5, E6-2	Removed the reference to chloroform and the table for chloroform emissions.
		E9-1	The facility is required to certify annually that they did not use sodium hypochlorite.
		E12	Changed the source number to 53-0093-17, Renumbered the conditions because of the removal of the wood boiler.
		E14-3	Changed the compliance method.
		E14-8	Relabeled the table as allowables and corrected the values.
		E7-1	Changed S20 and S21 to and/or
		E11-1	Changed S20 and S21 to and/or
		E12-5	Marked reserved because the visible standard is included in E3-1.
Public Notice Date:		September 12, 2018	
Public Hearing Date:		A hearing was not requested and the Division did not receive any comments.	
EPA Comments:		EPA Region 4 did not target the permit for review. Email dated September 26, 2018.	
Other Comments:			
Permit Modification	Issue Date		
Administrative Amendment	December 11, 2018	E14-4	Corrected compliance method language
		E14-5 & E-14-7	Corrected the reference of the compliance method.
Administrative Amendment	March 27, 2019	E2-1	Change in Responsible Official

From: [Air Pollution Control](#)
To: [APC Permitting](#)
Subject: FW: Kimberly-Clark Corporation Facility ID 53-0093 Construction Permit 976912 Startup Notification/Operating Permit App
Date: Thursday, January 16, 2020 8:24:56 AM
Attachments: [53-0093 - KCC CPN 976912 Start Notice&Application.pdf](#)
[image001.png](#)

From: _Lou, Environmental [mailto:Environmental.Lou@kcc.com]
Sent: Wednesday, January 15, 2020 6:22 PM
To: Air.Pollution Control
Cc: Crawford, Bryan K; Jeff Kent
Subject: [EXTERNAL] Kimberly-Clark Corporation Facility ID 53-0093 Construction Permit 976912 Startup Notification/Operating Permit App

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****

Please reference attached source startup notification and associated operating permit modification application. Should there be any questions regarding the attached, please contact Bryan Crawford at 865-988-7138 or bcrawford@kcc.com.

Regards,

Kimberly-Clark Professional, Loudon Mill
Environmental, Health, and Safety
o. 865-988-7000/ f. 920-969-5000
Environmental.Lou@kcc.com

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SUSTAINABILITY
2022**

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Kimberly-Clark

Loudon Mill
KC Professional®

Via Electronic Mail

January 15, 2020

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

**RE: Kimberly-Clark Loudon Mill Steam Plant
Emission Source Reference No. (ESRN) 53-0093
Construction Permit No. 976912 Startup Certification
Title V Operating Permit No. 572115 Operating Permit Application**

Dear Sir or Madam;

Kimberly-Clark Corporation (K-C) hereby respectfully submits the required startup certification for Construction Permit No. 976912. The recently installed HRT2 Converting Line was placed into service for the production of product for sale/inventory on December 17, 2019.

In addition to the required startup notification, please find attached the required Title V Operating Permit Application forms requesting modification of the mill's Title V Operating Permit (No. 572115) to add the newly installed HRT2 Converting Line and associated trim conveying system wet venturi scrubber.

Should the Division require any additional information or if there are any questions regarding the attached, please contact Bryan Crawford, Environmental Leader, at 865-988-7138 or bcrawford@kcc.com.

Sincerely,



Peter Kersten
Mill Manager

Enclosures

cc: TDEC Knoxville Field Office Div. of Air Pollution Control
TDEC Chattanooga Field Office Div. of Air Pollution Control

ATTACHMENT 2 – TITLE V OPERATING PERMIT MODIFICATION APPLICATION



**TITLE V PERMIT APPLICATION
 INDEX OF AIR POLLUTION PERMIT APPLICATION FORMS**

Section 1: Identification and Diagrams	
This application contains the following forms:	APC Form 1, Facility Identification
	APC Form 2, Operations and Flow Diagrams

Section 2: Emission Source Description Forms		
		Total number of this form
This application contains the following forms (one form for each incinerator, printing operation, fuel burning installation, etc.):	APC Form 3, Stack Identification	3
	APC Form 4, Fuel Burning Non-Process Equipment	0
	APC Form 5, Stationary Gas Turbines or Internal Combustion Engines	0
	APC Form 6, Storage Tanks	0
	APC Form 7, Incinerators	0
	APC Form 8, Printing Operations	0
	APC Form 9, Painting and Coating Operations	0
	APC Form 10, Miscellaneous Processes	1
	APC Form 33, Stage I and Stage II Vapor Recovery Equipment	0
APC Form 34, Open Burning	0	

Section 3: Air Pollution Control System Forms		
		Total number of this form
This application contains the following forms (one form for each control system in use at the facility):	APC Form 11, Control Equipment - Miscellaneous	0
	APC Form 13, Adsorbers	0
	APC Form 14, Catalytic or Thermal Oxidation Equipment	0
	APC Form 15, Cyclones/Settling Chambers	0
	APC Form 17, Wet Collection Systems	1
	APC Form 18, Baghouse/Fabric Filters	1

(OVER)

Section 4: Compliance Demonstration Forms

		Total number of this form
This application contains the following forms (one form for each incinerator, printing operation, fuel burning installation, etc.):	APC Form 19, Compliance Certification - Monitoring and Reporting - Description of Methods for Determining Compliance	2
	APC Form 20, Continuous Emissions Monitoring	0
	APC Form 21, Portable Monitors	0
	APC Form 22, Control System Parameters or Operating Parameters of a Process	2
	APC Form 23, Monitoring Maintenance Procedures	0
	APC Form 24, Stack Testing	0
	APC Form 25, Fuel Sampling and Analysis	0
	APC Form 26, Record Keeping	1
	APC Form 27, Other Methods	2
	APC Form 28, Emissions from Process Emissions Sources / Fuel Burning Installations / Incinerators	0
	APC Form 29, Emissions Summary for the Facility or for the Source Contained in This Application	1
	APC Form 30, Current Emissions Requirements and Status	1
	APC Form 31, Compliance Plan and Compliance Certification	1
APC Form 32, Air Monitoring Network	0	

Section 5: Statement of Completeness and Certification of Compliance

I have reviewed this application in its entirety and to the best of my knowledge, and based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete. I have provided all the information that is necessary for compliance purposes and this application consists of 18 pages and they are numbered from page 1 to 18. The status of this facility's compliance with all applicable air pollution control requirements, including the enhanced monitoring and compliance certification requirements of the Federal Clean Air Act, is reported in this application along with the methods to be used for compliance demonstration.

Name and Title of Responsible Official

Telephone Number with Area Code

Peter Kersten, Mill Manager

865-988-7000

Signature of Responsible Official

Date of Application



FOR PK

1/15/2020

(For definition of responsible official, see instructions for APC Form 1)



**TITLE V PERMIT APPLICATION
 FACILITY IDENTIFICATION**

SITE INFORMATION			
1. Organization's legal name Kimberly-Clark Corporation		For APC Use Only	APC company point no.
2. Site name (if different from legal name) Kimberly-Clark Corporation, Loudon Mill			APC Log/Permit no.
3. Site address (St./Rd./Hwy.) 5600 Kimberly Way		NAICS or SIC Code 322121	
City or distance to nearest town Loudon		Zip code 37774	County name Loudon
4. Site location (in Lat./Long)	Latitude 35.767614	Longitude -84.329665	
CONTACT INFORMATION (RESPONSIBLE OFFICIAL)			
5. Responsible official contact Peter Kersten, Mill Manager		Phone number with area code 865-988-7000	
6. Mailing address (St./Rd./Hwy.) 5600 Kimberly Way		Fax number with area code 865-988-7012	
City Loudon	State TN	Zip code 37774	Email address peter.kersten@kcc.com
CONTACT INFORMATION (TECHNICAL)			
7. Principal technical contact Bryan Crawford, Environmental Leader		Phone number with area code 865-988-7138	
8. Mailing address (St./Rd./Hwy.) 5600 Kimberly Way		Fax number with area code 865-988-7012	
City Loudon	State TN	Zip code 37774	Email address bcrawford@kcc.com
CONTACT INFORMATION (BILLING)			
11. Billing contact Bryan Crawford, Environmental Leader		Phone number with area code 865-988-7138	
12. Mailing address (St./Rd./Hwy.) 5600 Kimberly Way		Fax number with area code 865-988-7012	
City Loudon	State TN	Zip code 37774	Email address bcrawford@kcc.com
TYPE OF PERMIT REQUESTED			
13. Permit requested for:			
Initial application to operate :		Minor permit modification :	
<input type="checkbox"/>		<input type="checkbox"/>	
Permit renewal to operate :		Significant modification :	
<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Administrative permit amendment :		Construction permit :	
<input type="checkbox"/>		<input type="checkbox"/>	

(OVER)

HAZARDOUS AIR POLLUTANTS, DESIGNATIONS, AND OTHER PERMITS ASSOCIATED WITH FACILITY

14. Is this facility subject to the provisions governing prevention of accidental releases of hazardous air contaminants contained in Chapter 1200-03-32 of the Tennessee Air Pollution Control regulations? Yes No

If the answer is Yes, are you in compliance with the provisions of Chapter 1200-03-32 of the Tennessee Air Pollution Control regulations? Yes No

15. If facility is located in an area designated as "Non-Attainment" or "Additional Control", indicate the pollutant(s) for the designation.

n/a

16. List all valid Air Pollution permits issued to the sources contained in this application [identify all permits with most recent permit numbers and emission source reference numbers listed on the permit(s)].

Title V Operating Permit No. 572115

17. Page number :

1

Revision number:

N/A

Date of revision:

N/A



TITLE V PERMIT APPLICATION OPERATIONS AND FLOW DIAGRAMS

1. Please list, identify, and describe briefly process emission sources, fuel burning installations, and incinerators that are contained in this application. Please attach a flow diagram for this application.

53-0093-13 Towel Converting Operation #2

2. List all insignificant activities which are exempted because of size or production rate and cite the applicable regulations.

N/A

3. Are there any storage piles?

YES _____ NO

4. List the states that are within 50 miles of your facility.

N/A

5. Page number:

2

Revision Number:

N/A

Date of Revision:

N/A



**TITLE V PERMIT APPLICATION
 STACK IDENTIFICATION**

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:
 Kimberly-Clark Corporation, Loudon Mill

2. Emission source (identify):
 53-0093-13 Towel Converting Operation #2

STACK DESCRIPTION

3. Stack ID (or flow diagram point identification):
 S20

4. Stack height above grade in feet:
 ~35 feet

5. Velocity (data at exit conditions):
 59.3 _____ (Actual feet per second)

6. Inside dimensions at outlet in feet:
 5.8 feet x 3.2 feet

7. Exhaust flowrate at exit conditions (ACFM):
 66,000

8. Flow rate at standard conditions (DSCFM):
 66,000

9. Exhaust temperature:
 70 _____ Degrees Fahrenheit (°F)

10. Moisture content (data at exit conditions):
 Ambien _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)

11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):
 70 _____ (°F)

12. If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO₂, NO_x, etc.)?
 N/A

Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.

BYPASS STACK DESCRIPTION

13. Do you have a bypass stack?
 _____ Yes No

If yes, describe the conditions which require its use & complete APC form 4 for the bypass stack. Please identify the stack number(s) of flow diagram point number(s) exhausting through this bypass stack.

14. Page number: 3 Revision Number: N/A Date of Revision: N/A



**TITLE V PERMIT APPLICATION
 STACK IDENTIFICATION**

GENERAL IDENTIFICATION AND DESCRIPTION

1. **Facility name:**
 Kimberly-Clark Corporation, Loudon Mill

2. **Emission source (identify):**
 53-0093-13 Towel Converting Operation #2

STACK DESCRIPTION

3. **Stack ID (or flow diagram point identification):**
 S21 (Venturi Wet Scrubber)

4. **Stack height above grade in feet:**
 30 feet, 11 inches

5. **Velocity (data at exit conditions):**
 39 _____ (Actual feet per second)

6. **Inside dimensions at outlet in feet:**
 3.3 feet

7. **Exhaust flowrate at exit conditions (ACFM):**
 20,000

8. **Flow rate at standard conditions (DSCFM):**

9. **Exhaust temperature:**
 _____ Degrees Fahrenheit (°F)

10. **Moisture content (data at exit conditions):**
 1.6 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)

11. **Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):**
 N/A _____ (°F)

12. **If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO₂, NO_x, etc.)?**
 N/A

Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.

BYPASS STACK DESCRIPTION

13. **Do you have a bypass stack?**
 _____ Yes No

If yes, describe the conditions which require its use & complete APC form 4 for the bypass stack. Please identify the stack number(s) of flow diagram point number(s) exhausting through this bypass stack.

14. **Page number:** 4 **Revision Number:** N/A **Date of Revision:** N/A



**TITLE V PERMIT APPLICATION
 STACK IDENTIFICATION**

GENERAL IDENTIFICATION AND DESCRIPTION

1. **Facility name:**
 Kimberly-Clark Corporation, Loudon Mill

2. **Emission source (identify):**
 53-0093-13 Towel Converting Operation #2

STACK DESCRIPTION

3. **Stack ID (or flow diagram point identification):**
 V5 (Air Handling Unit Louvered Vents, Insign. Clean Air Vents)

4. **Stack height above grade in feet:**
 30

5. **Velocity (data at exit conditions):**
 26 _____ (Actual feet per second)

6. **Inside dimensions at outlet in feet:**
 7 (equivalent diameter)

7. **Exhaust flowrate at exit conditions (ACFM):**
 60,000

8. **Flow rate at standard conditions (DSCFM):**

9. **Exhaust temperature:**
 70 - 90 _____ Degrees Fahrenheit (°F)

10. **Moisture content (data at exit conditions):**
 5 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)

11. **Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):**
 N/A _____ (°F)

12. **If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO₂, NO_x, etc.)?**
 N/A

Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.

BYPASS STACK DESCRIPTION

13. **Do you have a bypass stack?**
 _____ Yes No

If yes, describe the conditions which require its use & complete APC form 4 for the bypass stack. Please identify the stack number(s) of flow diagram point number(s) exhausting through this bypass stack.

14. **Page number:** 5 **Revision Number:** N/A **Date of Revision:** N/A



**TITLE V PERMIT APPLICATION
 MISCELLANEOUS PROCESSES**

GENERAL IDENTIFICATION AND DESCRIPTION

1. **Facility name:**
 Kimberly-Clark Corporation, Loudon Mill

2. **Process emission source (identify):**
 53-0093-13 Towel Converting Operating #2

3. **Stack ID or flow diagram point identification (s):**
 V5, S20, S21

4. **Year of construction or last modification:**
 V5 - 2001, S20 - 2017 (last mod.), S21 - 2019

If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form.

5. **Normal operating schedule:** 24 Hrs./Day 7 Days/Wk. 365 Days/Yr.

6. **Location of this process emission source in UTM coordinates:** UTM Vertical: 3961505.12 UTMHorizontal: 741238.85

7. **Describe this process (Please attach a flow diagram of this process) and check one of the following:**
 Batch Continuous

PROCESS MATERIAL INPUT AND OUTPUT

8. List the types and amounts of raw materials input to this process:

Material	Storage/Material handling process	Average usage (units)	Maximum usage (units)
Tissue (Rolled)	Roll Storage, Manually Conveyed (Lift Trucks, etc.)	7.40 tons/hr	7.40 tons/hr
CO1 Additives (various)	Bulk, Non-Bulk Storage, Metering Pumps	84.4 lb/hr	84.4 lb/hr

9. List the types and amounts of primary products produced by this process:

Material	Storage/Material handling process	Average usage (units)	Maximum usage (units)
Converted Towels	Finished Product Cases, Lift Trucks, Conveyors	7.40 tons/hr	7.40 tons/hr

10. Process fuel usage:

Type of fuel	Max heat input (10 ⁶ BTU/Hr.)	Average usage (units)	Maximum usage (units)
N/A			

11. List any solvents, cleaners, etc., associated with this process:
 N/A

If the emissions and/or operations of this process are monitored for compliance, please attach the appropriate Compliance Demonstration form.

12. Describe any fugitive emissions associated with this process, such as outdoor storage piles, open conveyors, open air sand blasting, material handling operations, etc. (please attach a separate sheet if necessary).
 N/A

13. Page number: 6 Revision Number: N/A Date of Revision: N/A



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - WET COLLECTION SYSTEMS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Emission source (identify): 53-0093-13 Converting Operation #2	
3. Stack ID or flow diagram point identification (s): S21 Wet Venturi Scrubber		
WET COLLECTION SYSTEM DESCRIPTION		
4. Describe the device in use. List the key operation parameters of this device and their normal operating range. BRUNN Model SR6020 Pass Through Venturi Scrubber. Maximum air flow rate 25,000 cfm. Venturi water feed 160 gpm at 5 psig.		
5. Manufacturer and model number (if available): BRUNN SR6020	6. Year of installation: 2019	
7. List of pollutant (s) to be controlled and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
PM	97-98%	OEM
8. Discuss how collected material and effluent is handled for reuse or disposal. Scrubber water is routed/reused by Source 53-0093-12 and eventually routes to the onsite wastewater treatment operation.		
9. Scrubbing medium (water, sodium hydroxide slurry, etc.): Recycled process water		
10. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
11. Page number: 7	Revision Number: N/A	Date of Revision: N/A



**TITLE V PERMIT APPLICATION
 CONTROL EQUIPMENT - BAGHOUSES/FABRIC FILTERS**

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Emission source (identify): Source 53-0093-13 Towel Converting Operation #2	
3. Stack ID or flow diagram point identification (s): S20		
BAGHOUSE/FABRIC FILTER DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range. Camfil Farr, Model No. GS108, S/N 101315, Fabric Filter Baghouse, 66,000 cfm Design Air Flow at 14 inches w.g.: 1.75:1 Air-To-Cloth Ratio, 99% Removal Efficiency (0.5 Microns and Larger). Unit was installed in 2001 when the Towel Converting Operation #2 was originally permitted. The original installation/operation returned 100% of the clean air back into the building. Baghouse can now discharge to the atmosphere.		
5. Manufacturer and model number (if available): Camfil-Farr, GS108	6. Year of installation: 2001	
7. List of pollutant(s) to be controlled and the expected control efficiency for each pollutant (see instructions).		
Pollutant	Efficiency (%)	Source of data
PM	99%	OEM (Project Records)
8. Discuss how collected material is handled for reuse or disposal. Captured dust is conveyed into a hopper and conveyed to roll-off dumpsters for disposal or vacuumed (vacuum truck) by a contractor for disposal.		
9. If the bags are coated, specify the material used for coating and frequency of coating No special coatings		
10. Does the baghouse collect asbestos containing material? If "Yes", provide data as outlined in Item 10, Instructions for this form.		
Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
11. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
12. Page number: 8	Revision Number: N/A	Date of Revision: N/A



**TITLE V PERMIT APPLICATION
 COMPLIANCE CERTIFICATION - MONITORING AND REPORTING
 DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE**

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill
2. Process emission source, fuel burning installation, or incinerator (identify): 53-0093-13 Towel Converting Operation #2
3. Stack ID or flow diagram point identification(s): S20

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s)
 - Continuous Emission Monitoring (CEM) - APC 20
Pollutant(s): _____
 - Emission Monitoring Using Portable Monitors - APC 21
Pollutant(s): _____
 - Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
Pollutant(s): PM
 - Monitoring Maintenance Procedures - APC 23
Pollutant(s): _____
 - Stack Testing - APC 24
Pollutant(s): _____
 - Fuel Sampling & Analysis (FSA) - APC 25
Pollutant(s): _____
 - Recordkeeping - APC 26
Pollutant(s): VOC, PM
 - Other (please describe) - APC 27
Pollutant(s): PM (opacity)

5. Compliance certification reports will be submitted to the Division according to the following schedule:
 Start date: In accordance with existing Title V Operating Permit Reporting Schedule
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:
 Start date: In accordance with existing Title V Operating Permit Schedule
 And every 180 days thereafter.

7. Page number: 9 Revision number: N/A Date of revision: N/A



**TITLE V PERMIT APPLICATION
 COMPLIANCE CERTIFICATION - MONITORING AND REPORTING
 DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE**

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill
2. Process emission source, fuel burning installation, or incinerator (identify): 53-0093-13 Towel Converting Operation #2
3. Stack ID or flow diagram point identification(s): S21 (Wet Venturi Scrubber)

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s)
 - Continuous Emission Monitoring (CEM) - APC 20
Pollutant(s): _____
 - Emission Monitoring Using Portable Monitors - APC 21
Pollutant(s): _____
 - Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
Pollutant(s): PM
 - Monitoring Maintenance Procedures - APC 23
Pollutant(s): _____
 - Stack Testing - APC 24
Pollutant(s): _____
 - Fuel Sampling & Analysis (FSA) - APC 25
Pollutant(s): _____
 - Recordkeeping - APC 26
Pollutant(s): VOC, PM
 - Other (please describe) - APC 27
Pollutant(s): PM (opacity)

5. Compliance certification reports will be submitted to the Division according to the following schedule:
 Start date: In accordance with existing Title V Operating Permit Schedule (Startup 12/16/19)
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:
 Start date: In accordance with existing Title V Operating Permit Schedule
 And every 180 days thereafter.

7. Page number: 10 Revision number: N/A Date of revision: N/A



**TITLE V PERMIT APPLICATION - COMPLIANCE DEMONSTRATION BY
 MONITORING CONTROL SYSTEM PARAMETERS OR OPERATING PARAMETERS OF A PROCESS**

The monitoring of a control system parameter or a process parameter shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value and the emission rate of a particular pollutant is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Stack ID or flow diagram point identification(s) S20
3. Emission source: 53-0093-13 Towel Converting Operating #2	

MONITORING DESCRIPTION

4. Pollutant(s) being monitored: PM
5. Description of the method of monitoring and establishment of correlation between the parameter value and the emission rate of a particular pollutant: Daily baghouse operating differential pressure monitored when the source is in operation and exhausting to the atmosphere. The manufacturer recommends a minimum operating pressure drop of 0.5 inches of water.

6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Daily baghouse operating differential pressure monitor when source in operation and exhausting to atmosphere

7. Page number: 11	Revision number: N/A	Date of revision: N/A
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**TITLE V PERMIT APPLICATION - COMPLIANCE DEMONSTRATION BY
 MONITORING CONTROL SYSTEM PARAMETERS OR OPERATING PARAMETERS OF A PROCESS**

The monitoring of a control system parameter or a process parameter shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value and the emission rate of a particular pollutant is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Stack ID or flow diagram point identification(s) S21 (Wet Venturi Scrubber)
3. Emission source: 53-0093-13 Towel Converting Operating #2	

MONITORING DESCRIPTION

4. Pollutant(s) being monitored: PM
5. Description of the method of monitoring and establishment of correlation between the parameter value and the emission rate of a particular pollutant: <p>Particulate compliance is assured by testing data obtained from a similar converting process at Kimberly-Clark Corporation's Beech Island mill located in South Carolina. Test was conducted on November 19 - 21, 2013. Uncontrolled particulate emissions from the new scrubber are estimated to be 0.70 lb/hour based on testing data. The source utilizes a venturi scrubber to control particulate emissions and shall not operate without said control .</p> <p>Compliance with the permitted particulate limit shall be assured by maintaining a daily log of scrubber readings including scrubber liquid flow rate, pressure drop across venturi throat, pertinent log notes and maintenance records. Scrubber flow rate shall be determined at least daily in gallons per minute. The flow rate for the scrubber shall not fall below 160 gallons per minute. Pressure drop shall be determined at least daily in inches of water column across the venturi throat. The pressure drop shall not fall below 8 inches of water.</p> <p>Based on these determinations, if the values fall below the minimum acceptable values for scrubber flow rate and pressure drop, corrective actions shall be taken and recorded on the daily log. Such values shall be reported as deviations in the semiannual report.</p> <p>A monthly log of maintenance, repair, scrubber readings, and relevant comments during readings shall be kept. The logs shall denote what maintenance and what repair was done, when it was done, by whom and when problems were rectified showing date accomplished.</p>

6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Daily pressure drop and scrubber liquid flow rate
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7. Page number: 12	Revision number: N/A	Date of revision: N/A
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**TITLE V PERMIT APPLICATION
 COMPLIANCE DEMONSTRATION BY RECORDKEEPING**

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Stack ID or flow diagram point identification(s): V5, S20, S21
3. Emission source (identify): 53-0093-13 Towel Converting Operation #2	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOC/HAP, PM
5. Material or parameter being monitored and recorded: Chemical additive consumption, baghouse operating differential pressure, scrubber flow rate and pressure drop.
6. Method of monitoring and recording: VOC/HAP: Monthly consumption log of VOC/HAP-containing chemical additives Calculation: VOC/HAP tons/month - Material usage lbs/month x VOC/HAP Content (wt%)/2,000 lbs/ton PM: S20 Daily baghouse operating differential pressure when the source is in operation and exhausting to the atmosphere, records of maintenance. A monthly log maintenance, repairs, pressure drop readings, and relative comments will be maintained. S21 Operating scrubber in accordance with permitted conditions to assure compliance with PM limits. Daily/monthly logs are maintained as required (liquid flow rate, pressure drop across the venturi throat, maintenance records, and pertinent comments).

7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly VOC/HAP calculations; daily recordkeeping of operating parameters; monthly maintenance log

8. Page number: 13	Revision number: N/A	Date of revision: N/A
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State of 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
 Telephone: (615) 532-0554



**TITLE V PERMIT APPLICATION
 COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)**

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Stack ID or flow diagram point identification(s): S20	
3. Emission source (identify): 53-0093-13 Towel Converting Operation #2		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: Visible Emissions (PM)		
5. Description of the method of monitoring: Opacity Matrix Decision Tree for TVEE		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): In accordance with the current Title V Operating Permit reporting requirements/TVEE Matrix Decision Tree		
7. Page number: 14	Revision number: N/A	Date of revision: N/A



**TITLE V PERMIT APPLICATION
 COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)**

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Stack ID or flow diagram point identification(s): S21	
3. Emission source (identify): 53-0093-13 Towel Converting Operation #2		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: Visible Emissions (PM)		
5. Description of the method of monitoring: Opacity Matrix Decision Tree for TVEE		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): In accordance with the current Title V Operating Permit reporting requirements/TVEE Matrix Decision Tree		
7. Page number: 15	Revision number: N/A	Date of revision: N/A



**TITLE V PERMIT APPLICATION
 EMISSION SUMMARY FOR THE FACILITY OR FOR THE
 SOURCES CONTAINED IN THIS APPLICATION**

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill

EMISSIONS SUMMARY TABLE – CRITERIA AND SELECTED POLLUTANTS

2. Complete the following emissions summary for regulated air pollutants at this facility or for the sources contained in this application.

Air Pollutant	Summary of Maximum Allowable Emissions		Summary of Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour- Item 4, APC 28)	Tons per Year	Reserved for State use (Pounds per Hour- Item 4, APC 28)
Particulate Matter (TSP)	37.7		< 37.7	
Sulfur Dioxide				
Volatile Organic Compounds	3.09		< 3.09	
Carbon Monoxide				
Lead				
Nitrogen Oxides				
Total Reduced Sulfur				
Mercury				
Asbestos				
Beryllium				
Vinyl Chlorides				
Fluorides				
Gaseous Fluorides				
Greenhouse Gases in CO ₂ Equivalent				

(Continued on next page)



**TITLE V PERMIT APPLICATION
 CURRENT EMISSIONS REQUIREMENTS AND STATUS**

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Kimberly-Clark Corporation, Loudon Mill	2. Emission source number 53-0093-13
3. Describe the process emission source / fuel burning installation / incinerator. Towel Converting Operation #2	

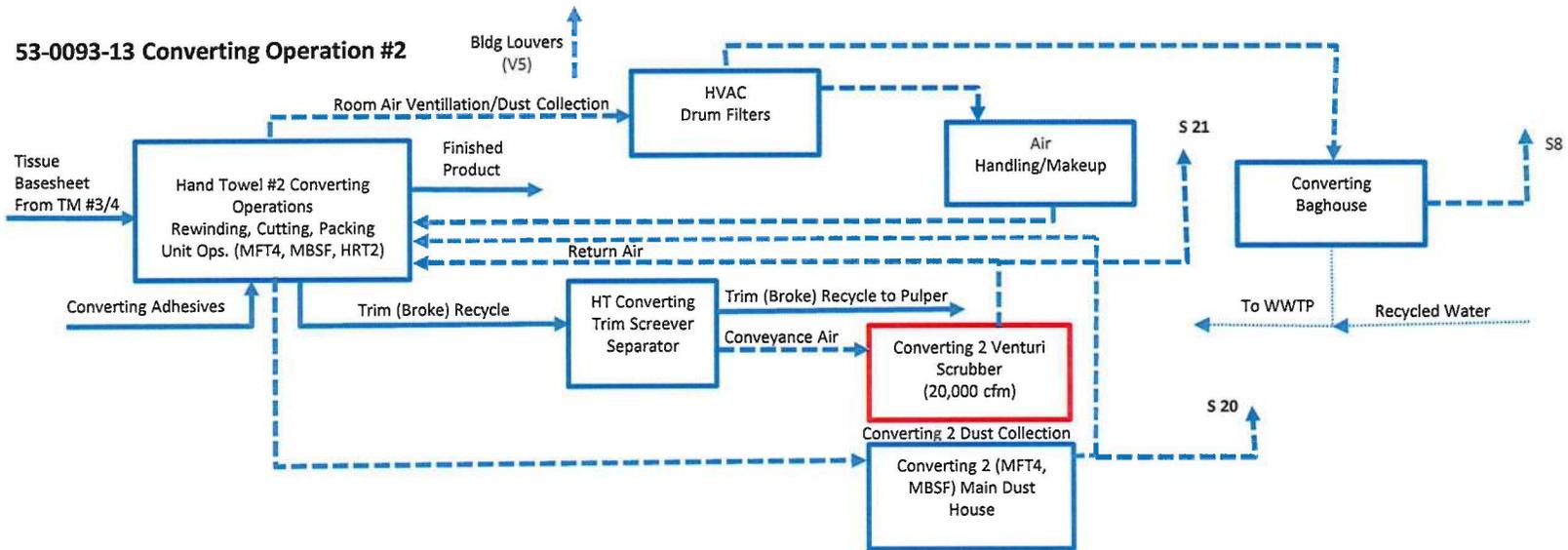
EMISSIONS AND REQUIREMENTS

4. Identify if only a part of the source is subject to this requirement	5. Pollutant	6. Applicable requirement(s): TN Air Pollution Control Regulations, 40 CFR, permit restrictions, air quality based standards	7. Limitation	8. Maximum actual emissions	9. Compliance status (In/Out)
N/A	PM	1200-03-07-.03(1)	37.7 tpy	< 37.7 tpy	In
N/A	PM	1200-03-07-.03(1)	8.6 lb/hr	< 8.6 lb/hr	In
N/A	VOC*	N/A	3.09 tpy	< 3.09 tpy	In
S20	PM	1200-03-05-.01	Opacity < 20%	< 20%	In
*VOC includes the	additional	HRT2 equipment/process (2.09 tpy)	and existing	equipment (1 tpy).	

10. Other applicable requirements (new requirements that apply to this source during the term of this permit)					
S21	PM**	PSD Avoidance Limit	3.07 tpy	< 3.07 tpy	In
**Limit applies to	filterable PM	total PM10 and PM2.5.			

11. Page number: 17	Revision number: N/A	Date of revision: N/A
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Loudon Manufacturing Mill
Towel Converting Operation #2 - Post HRT2 Project
53-0093-13



Note: New HRT2 equipment incorporated into Hand Towel Converting Operation #2

ATTACHMENT 3 – REGULATORY APPLICABILITY

Regulation	Specific Section	Requirement	Compliance Method
NSPS	40 CFR 60 1200-03-16	New, modified, or reconstructed sources must control emissions to the level achievable by the best-demonstrated technology as specified.	NSPS not applicable
NESHAPs	40 CFR 63	Applicable to source categories that emit HAP. Must comply with maximum achievable control technology (MACT) determination for particular sources/ source categories.	NESHAP not applicable
Visible Emissions	1200-03-05	Limits opacity from any air contaminant source to less than 20%, except for 5-minute period in any hour or 20-minute period in 24-hours.	Proper installation, operation, and on-going parametric monitoring of air pollution control devices.
Process Emissions Standards	1200-03-07	Process equipment PM standard $E = 3.59 \times p^{0.62}$ Where: E = Particulate emissions in pounds/hr p = Process weight rate in tons/hr	Proper installation, operation, and on-going parametric monitoring of air pollution control devices. PM emissions < Process weight rate rule
VOCs	1200-03-18-.14	Emissions standards and requirements for certain sources of VOC – Paper coating operations	Not applicable, Source is not considered a paper coating operation
VOCs	1200-03-18-.79	Applicable to facilities located in Davidson, Rutherford, Shelby, Sumner, Williamson, or Wilson Counties emitting or having the potential to emit 100 tons or more VOC per calendar year.	Not applicable, Source is located in Loudon County
Visibility Protection	1200-03-23	Applicable to major sources/ modifications triggering PSD	Not applicable, PSD not triggered

ATTACHMENT 4 – EMISSION CALCULATIONS

KCC Loudon Mill
Detailed Emissions Calculation

Table 1. Maximum Anticipated PM Emissions from the Proposed New Scrubber

Control Device	Flow Rate ¹ (scfm)	Controlled PM Emission Factor ² (gr/scf)	Maximum Anticipated PM Emissions ² (lb/hr)	(tpy)
Venturi Scrubber	20,000	0.0041	0.70	3.07

1. Per manufacture specs.

2. Proposed PM limit is conservatively estimated based on uncontrolled emissions, which are based on an emission factor derived using November 19-21, 2013 stack testing at Kimberly-Clark's Beech Island facility, South Carolina (SC) for a multifolder processing a lighter, and therefore duster tissue product.

Table 2. Maximum Anticipated VOC Emissions from New Converting Line HRT2

Chemical Name	Maximum Anticipated Usage (lb/yr)	VOC (w/w%)	HAP w/w% (w/w%)	Methanol (w/w%)	Vinyl Acetate (w/w%)
Additive 1	182,182	0.50%	0.00%	0.00%	0.00%
Additive 2	264,634	1.00%	1.00%	1.00%	0.00%
Additive 3	93,479	0.67%	0.00%	0.00%	0.00%
Additive 4	73,000	0.00%	1.00%	0.00%	1.00%
Total Emissions (lb/hr)¹		0.48	0.39	0.30	0.08
Total Emissions (tpy)²		2.09	1.69	1.32	0.37

1. Total Emissions (lb/hr) = Sumproduct of maximum anticipated usage (lb/yr) and VOC/HAP content (w/w%) / 8,760 hrs/yr

2. Total Emissions (tpy) = Sumproduct of maximum anticipated usage (lb/yr) and VOC/HAP content (w/w%) / 2,000 lbs/ton

KCC Loudon Mill
Detailed Emissions Calculation

Table 3. Associated Steam Demand

Parameters	Units	Value
Associated Steam Demand Increase	lb/hr	150
Steam to Energy ¹	Btu/lb	1,000
Associated Energy Demand Increase ²	MMBtu/hr	0.25
Natural Gas Heating Value	Btu/scf	1,020
No. 2 Fuel Oil Heating Value	MMBtu/Mgal	140

1. Based on engineering estimation.

2. Associated Energy Demand (MMBtu/hr) = Associated Steam Demand Increase (lb/hr) * Steam to Energy (Btu/lb) * 1MMBtu/ 1,000,000 Btu
Assumes 60% boiler efficiency

Table 4. Emissions Increase from Combustion

Pollutant	Emission Unit 15 Emission Factor ¹ Natural Gas ³		Emission Unit 17 Emission Factor ² Natural Gas ³ No. 2 Oil ^{4,5}				Worst Case Emission Factor ⁶ (lb/MMBtu)	Associated Emissions Increase ⁷	
	(lb/MMscf)	(lb/MMBtu)	(lb/MMscf)	(lb/MMBtu)	(lb/Mgal)	(lb/MMBtu)		(lb/hr)	(tpy)
NO _x	50.00	4.90E-02	100.00	9.80E-02	20.00	0.14	0.14	3.57E-02	0.16
CO	84.00	8.24E-02	84.00	8.24E-02	5.00	3.57E-02	8.24E-02	2.06E-02	9.02E-02
SO ₂	0.60	5.88E-04	0.60	5.88E-04	7.10	5.07E-02	5.07E-02	1.27E-02	5.55E-02
Filterable PM	1.90	1.86E-03	1.90	1.86E-03	2.00	1.43E-02	1.43E-02	3.57E-03	1.56E-02
Total PM ₁₀ ⁸	7.60	7.45E-03	7.60	7.45E-03	3.30	2.36E-02	2.36E-02	5.89E-03	2.58E-02
Total PM _{2.5} ⁸	7.60	7.45E-03	7.60	7.45E-03	3.30	2.36E-02	2.36E-02	5.89E-03	2.58E-02
VOC	5.50	5.39E-03	5.50	5.39E-03	0.20	1.43E-03	5.39E-03	1.35E-03	5.90E-03
Lead	5.00E-04	4.90E-07	5.00E-04	4.90E-07	--	9.00E-06	9.00E-06	2.25E-06	9.86E-06
<i>GHGs</i>									
CO ₂	120,000	117.65	120,000	117.65	22,300	159.29	N/A	N/A	N/A
CH ₄	2.30	2.25E-03	2.30	2.25E-03	5.20E-02	3.71E-04	N/A	N/A	N/A
N ₂ O	2.20	2.16E-03	2.20	2.16E-03	0.26	1.86E-03	N/A	N/A	N/A
GHGs (CO ₂ e) ⁹	120,713	118.35	120,713	118.35	22,379	159.85	159.85	39.96	175.03

1. Emission Unit 15 is 90 MMBtu/hr low NO_x boiler (Gas fired boiler).

2. Emission Unit 17 is 62.3 MMBtu/hr (Natural Gas and No. 2 Fuel Oil Package Boiler)

3. Emission factors based on AP-42, Chapter 1.4, "Natural Gas Combustion," Tables 1.4-1 and 1.4-2 (July 1998).

Emission factor (lb/MMBtu) = Emission factor (lb/MMscf) / Natural Gas Heating Value (Btu/scf)

4. Emission factors based on AP-42, Chapter 1.3, "Fuel Oil Combustion," Tables 1.3-1, 1.3-2, 1.3-3, 1.3-8, 1.3-10 and 1.3-12 (May 2010).

Emission factor (lb/MMBtu) = Emission factor (lb/Mgal) / No. Fuel Oil Heating Value (MMBtu/Mgal)

5. The AP-42 SO₂ emission factor includes an "S" term. "S" indicates that the given emission factor should be multiplied by the weight % of sulfur in the oil. Permit condition E12-3 limits the sulfur content of no. 2 fuel oil to 0.05 percent by weight.

6. Based on worst case emissions factors from source 15 and 17.

7. Associated Emissions Increase (lb/hr) = Associated Energy Demand Increase (MMBtu/hr) * Worst Case Emission Factor (lb/MMBtu)

Associated Emissions Increase (tpy) = Associated Emissions Increase (lb/hr) × 8,760 hr/yr × (1 ton/2,000 lb).

8. AP-42, Chapter 1.4, Table 1.4-2 states that all PM is less than 1 micrometer, hence Total PM = Total PM₁₀ = Total PM_{2.5}

9. Emissions for Greenhouse Gases (GHGs) are denoted as CO₂ equivalent (CO₂e), which is the sumproduct of each GHG and its respective global warming potentials (GWP) for a 100 year time horizon. GWPs were determined using 40 CFR 98 Mandatory Greenhouse Gas Reporting, Subpart A, Table A-1.

CO ₂	1
CH ₄	25
N ₂ O	298

KCC Loudon Mill
Detailed Emissions Calculation

Table 5. Project Net Emissions Increase Analysis (tpy)

Pollutant	New Unit Maximum Anticipated Emissions¹ (tpy)	Associated Units Emissions Increase (tpy)²	Project Net Emissions Increases (tpy)³	PSD SER Thresholds (tpy)	Percent of SER (%)	PSD Permitting Triggered?
NO _x	--	0.16	0.16	40	0.4%	No
CO	--	0.09	0.09	100	0.1%	No
SO ₂	--	0.06	0.06	40	0.1%	No
Filterable PM	3.07	0.02	3.09	25	12.3%	No
Total PM ₁₀	3.07	0.03	3.10	15	20.6%	No
Total PM _{2.5}	3.07	0.03	3.10	10	31.0%	No
VOC	2.09	0.01	2.10	40	5.2%	No
Lead	--	9.86E-06	9.86E-06	0.6	0.0%	No
GHGs (CO ₂ e) ⁴	--	175.03	175.03	75,000	0.2%	No

1. Maximum Anticipated per Table 1 and Table 2.

2. Associated units emissions increase per Table 4.

3. Project Net Emissions Increases = New Unit Maximum Anticipated Emissions + Associated Units Emissions Increase

4. For PSD permitting for GHG to be triggered, PSD must be triggered for another regulated pollutant first.