ENVIRONMENTAL AFFAIRS DEPARTMENT
537 N. SPRUCE STREET
WINSTON-SALEM, N. C. 27101-1362

PERMIT TO CONSTRUCT/OPERATE
AIR QUALITY CONTROL
CLASS: TITLE V

PERMIT NUMBER	EFFECTIVE DATE	EXPIRATION DATE	RENEWAL DUE
00131-TV-15	October 14, 2010	October 2, 2013	January 2, 2013

Facility Name: **Hanes Dye And Finishing Company**
Mailing Address: **P.O. Box 202**
City, State, Zip: **Winston-Salem, NC 27102**

Facility Location: **600 Northwest Boulevard**
City: **Winston-Salem**

In accordance with the provisions set forth in the Forsyth County Air Quality Technical Code and Chapter 3 of the Forsyth County Code, "Air Quality Control", the facility identified above is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit", and to construct and operate, as outlined in Part II, "Air Quality Construction and Operation Permit", the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations contained within this permit. Additionally, any emissions activities determined from your air quality permit application as meeting the definition for insignificant activities contained in Rule 3Q .0503 have been listed for informational purposes as an "ATTACHMENT."

The permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete air quality permit application to the Forsyth County Environmental Affairs Department and received an Air Quality Permit, except as provided in this permit or in accordance with applicable provisions of the Forsyth County Air Quality Technical Code.

This permit supersedes all previous permits issued to the permittee by the Forsyth County Environmental Affairs Department.

Peter B. Lloyd, Ph.D., P.E., Program Manager
Compliance Assistance & Permitting Division

DATE:

Hanes Dye and Finishing Company
Air Quality Permit # 00131-TV-15
October 14, 2010

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PART I
AIR QUALITY OPERATING PERMIT

SECTION 1
FACILITY-WIDE PERMITTED EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

Emission Source ID #	Emission Source Description	Control Device ID #	Control Device Description
ES-B01	Babcock & Wilcox Boiler Model F-1212 firing coal with a maximum heat input of 47.5 MMBtu/hr	CD-1	Standard Havens Beta Mark III Pulse jet Fabric Filter
ES-B02	Babcock & Wilcox Boiler Model F-1212 firing coal with a maximum heat input of 47.5 MMBtu/hr		
ES-B03	Babcock & Wilcox Boiler Model FP-18-52 firing coal with a maximum heat input of 86.0 MMBtu/hr		
ES-F03	Tenter Frame #3 firing natural gas with a maximum heat input of 3.64 MMBtu/hr for the predryer, and 12.5 MMBtu/hr for the Frame	CD-6	New Balance Air Technologies Thermal Oxidizer (Model FB 9500H/40/40/IRI-CA) firing natural gas with a maximum heat input of 6.0 MMBtu/hr
ES-F04	Tenter Frame #4 firing natural gas with a maximum heat input of 3.64 MMBtu/hr for the predryer and 6.25 MMBtu/hr for the Frame	CD-8	New Balance Air Technologies Thermal Oxidizer (Model FB 7500/36/20/IRI) firing natural gas with a maximum heat input of 5.0 MMBtu/hr
ES-F08	Tenter Frame #8 firing natural gas with a maximum heat input of 2.4 MMBtu/hr for the predryer and 10.5 MMBtu/hr for the Frame	CD-5	Ducon Environmental Systems, Inc. Wet Electrostatic Precipitator (Model E-6-431)

Emission Source ID #	Emission Source Description	Control Device ID #	Control Device Description
ES-F11	Tenter Frame #11 firing natural gas with a maximum heat input of 1.20 MMBtu/hr for the predryer, and 9.35 MMBtu/hr for the Frame	CD-3	New Balance Technologies Thermal Oxidizer (Model FB 9500H/40/40/IRI-CA) firing natural gas with a maximum heat input of 6.0 MMBtu/hr
ES-F12	Tenter Frame #12 firing natural gas with a maximum heat input of 1.50 MMBtu/hr for the predryer, and 9.35 MMBtu/hr for the Frame	CD-2	New Balance Technologies Thermal Oxidizer (Model FB 9500H/40/40/IRI-CA) firing natural gas with a maximum heat input of 6.0 MMBtu/hr
ES-P03	Pad #3	None	None
ES-P04	Pad #4 firing natural gas in the predryer with a maximum heat input of 2.77 MMBtu/hr	None	None
ES-P05	Pad #5 firing natural gas in the predryer with a maximum heat input of 3.64 MMBtu/hr	None	None
ES-P06	Pad #6 firing natural gas with a maximum heat input of 1.86 MMBtu/hr for the singer	None	None
ES-WB01	Bleach Range #1 firing natural gas with a maximum heat input of 0.815 MMBtu/hr for the singer	None	None
ES-WB02	Bleach Range #2 firing natural gas with a maximum heat input of 1.86 MMBtu/hr for the singer	None	None
ES-WB03	Wide Bleach #3 firing natural gas in the singer with a maximum heat input of 2.42 MMBtu/hr	None	None

Emission Source ID #	Emission Source Description	Control Device ID #	Control Device Description
ES-SFP	Silt Fence Printing Operation including four continuous flexible web print machines each with one print station	None	None
ES-SC02*	One Schreiner Calender (#2) firing natural gas with a maximum heat input of 0.28 MMBtu/hr each	None	None
ES-FH01, ES-FH02, ES-FH07, and ES-FH15*	Four Fan Houses (#1, #2, #7, and #15) firing natural gas with maximum heat inputs of 0.55, 0.3, 0.55, and 0.3 MMBtu/hr respectively	None	None
ES-WH01, ES-WH02, and ES-WH03*	Three QuikWater Water Heaters (Model 8000-2M/900) (#1, #2, and #3) firing natural gas with a maximum heat input of 8.00MMBtu/hr each	None	None

*These emission sources are only subject to the Toxic Air Pollutant regulations found in Section 4 (**Local Only Enforcement**).

1.1 OPERATING CONDITIONS NOT COVERED UNDER THE PERMIT SHIELD

The following specific conditions have been revised or added to this permit following procedures other than the Significant Modification procedures in Section 3Q .0500 of the Forsyth County Air Quality Control Ordinance and Technical Code. As required under Rule 3Q .0512 *Permit Shield and Application Shield*, a permit shield is not provided for these new or revised permit requirements. During the next Significant Modification as defined in Rule 3Q .0516 or renewal of this permit, the Title V permit applications for the new and revised permit requirements listed below will also be processed according to the Significant Modification procedures and the a permit shield will be extended at that time.

Emission Source ID #	Emission Source Description	Unshielded Operating Condition(s)	Date of Modification
ES-B01, ES-B02, and ES-B03	Three Babcock & Wilcox Boilers firing coal with maximum heat inputs of 47.5 MMBtu/hr, 47.5 MMBtu/hr, and 86.0 MMBtu/hr	**3.1(A)(3)(b)(i)(A)** and **(4)(b)(iii)**	October 14, 2010
ES-F08	Tenter Frame #8 firing natural gas with a maximum heat input of 2.4 MMBtu/hr for the predryer and 10.5 MMBtu/hr for the Frame	**3.2(A)(4)(b)(i)(A)** and **(5)(b)(iii)**	

SECTION 2
FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 **General Provisions** [Subchapter 3A and Rule 3Q .0508(i)(16)]

A. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in Subchapters 3D and 3Q of the Forsyth County Air Quality Technical Code (FCAQTC).

B. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Subchapter 3A of the Forsyth County Air Quality Ordinance (FCAQO), including assessment of civil and/or criminal penalties. This permit is valid only for the specific processes and operations applied for and indicated in the air quality permit application. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

C. This permit is not a waiver of or approval of any other permits that may be required for other aspects of the facility which are not addressed in this permit.

D. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore. This permit does not allow the permittee to cause pollution in contravention of local laws or rules, unless specifically authorized by an order from the Director, or to cause pollution in contravention of state laws or rules.

E. Terms and conditions contained herein shall be enforceable by the Department, the U.S. EPA and citizens of the United States as defined in the federal Clean Air Act, except those identified as ***Locally Enforceable Only*** requirements which are enforceable by the Department.

F. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the applicable requirements.

G. In addition to the authority found in Rules 3D. 0501 and 3Q .0508(i)(16), any deviation from the monitoring provisions of this permit may result in a request by the Department to submit data on rates of emissions in order to demonstrate compliance with any applicable regulation.

2.2 **Permit Availability** [Rules 3Q .0507(k), .0508(i)(16), .0508(i)(9) and .0110]

The permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of the Department or the U.S. EPA upon request.

2.3 **Submissions** [Rules 3Q .0507(c), .0508(i)(16) and .0104]

All documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required to be sent to this department by this permit shall be submitted to the Forsyth County Environmental Affairs Department, 537 N. Spruce Street, Winston-Salem, NC 27101.

2.4 **Severability Clause** [Rule 3Q .0508(i)(2)]

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any specific circumstance, is challenged, the application of the provision in question to other circumstances, as well as the remainder of this permit's provisions, shall not be affected.

2.5 **Duty to Comply** [Rule 3Q .0508(i)(3)]

The permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2.6 **Need to Halt or Reduce Activity Not a Defense** [Rule 3Q .0508(i)(4)]

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 this permit.

2.7 **Permit Shield** [Rule 3Q .0512(a)]

A. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.

B. A permit shield shall not alter or affect:

1. the power of the Forsyth County Board of Commissioners, Director, or Governor under NCGS 143-215.3(a)(12) or the U.S. EPA under Section 303 of the federal Clean Air Act;
2. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
3. the applicable requirements under Title IV of the Clean Air Act; or
4. the ability of the Director or the U.S. EPA under Section 114 of the federal Clean Air Act to obtain information to determine compliance of the facility with its permit.

C. A permit shield shall not apply to any change made at a facility that does not require a permit or to any permit revision made under Rule 3Q .0523.

D. A permit shield shall not extend to minor permit modifications made under Rule 3Q .0515.

2.8 **Circumvention** [Rules 3D .0502 and 3Q .0508(i)(16)]

No person shall circumvent any permitted air pollution control device, or allow the emissions of regulated air pollutants without the applicable air pollution control device operating properly. Unless otherwise specified by this permit, no permitted emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

2.9 **Good Air Pollution Control Practice** [Rules 3D .0502 and 3Q .0508(i)(16)]

At all times, the equipment listed in *Section 1* shall be operated and maintained in a manner consistent with the design and emissions control as applied for in the application.

2.10 **Reporting Requirements for Excess Emissions and Permit Deviations** [Rules 3D .0535(f) and 3Q .0508(f)(2), 3Q .0508(i)(16) and 3Q .0508(g)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections 3D .0500, .0900, .1200 or .1400; or by a permit condition; or that exceeds a ***Locally Enforceable Only*** emission limit established in a permit issued under Section 3Q .0700. (*Note: This definition applies where the NSPS does not further define excess emissions for an affected NSPS emissions source.*)
"Deviation" - means any action or condition not in accordance with the terms and

conditions of this permit including those attributable to upset conditions.

A. Sources subject to Rules 3D .0524, .1110 or .1111
Excess Emissions and Permit Deviations

1. If the source specific NSPS (3D .0524) or NESHAP (3D .1110 or .1111) defines "excess emissions", these shall be reported as prescribed in 3D .0524, .1110 or .1111.

2. If the source specific NSPS (3D .0524) or NESHAP (3D .1110 or .1111) does NOT define "excess emissions", the permittee shall report excess emissions as deviations from permit requirements as prescribed in paragraph 3, below.

3. In addition to any specific NSPS or NESHAP reporting requirements the permittee shall upon becoming aware:

   a. report to the Department any deviations from permit requirements by the next business day, unless an alternative reporting schedule is specifically provided in the permit, and

   b. report in writing to the Department all deviations from permit requirements or any excess emissions within two business days, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such deviations and any corrective actions or preventative actions taken. Reports of all deviations from permit requirements shall be certified by a responsible official.

B. Sources NOT subject to Rules 3D .0524, 1110 or .1111
1. Excess Emissions Greater that Four Hours in Duration [3D .0535(f)]
The permittee shall report excess emissions greater than four hours in duration as prescribed in Rule 3D .0535(f) including, but not limited to the following:

   a. Notify the Department of any such occurrence by 9:00 a.m. Eastern time of the Department's next business day of becoming aware of the occurrence as described in Rule 3D .0535(f)(1);

   b. Notify the Department immediately when corrective measures have been accomplished; and

   c. Submit, if requested, to the Department within 15 days after the request, a written report as described in Rule 3D .0535(f)(3).

2. Excess Emissions Less than Four Hours in Duration and Deviations [3Q .0508(f)] The permittee shall report excess emissions less than four hours in duration and deviations from permit requirements as follows:

   a. Report to the Department any excess emissions less than four hours in duration and any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit; and

   b. Report in writing to the Department any excess emission less than four hours in duration or any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such excess emissions and deviations and any corrective actions or preventative actions taken. All reports of excess emissions and deviations from permit requirements shall be certified by a responsible official.

C. Other Requirements under Rule 3D .0535 (Rule 3D .0535(g) is ***Locally Enforceable Only***.)

The permittee shall comply with all other requirements contained in Rule 3D .0535.

2.11 **Emergency Provisions** <40 CFR 70.6(g)>

The permittee shall be subject to the following provision with regard to emergencies:

A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit 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 preventive maintenance, careless or improper operation, or operator error.

B. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in paragraph C below are met.

C. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

   1. an emergency occurred and that the permittee can identify the cause(s) of the

emergency;
2. the permitted facility was at the time being properly operated;
3. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the standards, or other requirements in the permit; and
4. the permittee submitted notice of the emergency to the Department within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, and steps taken to mitigate emissions, and corrective actions taken.

D. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

E. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

2.12 **Permit Fees** [Rules 3Q .0206(b), .0508(i)(10)) and .0519(a)(4)]

If, within 30 days after being billed, the permittee fails to pay an annual permit fee required under Subchapter 3Q .0200 of the FCAQTC, the Director may initiate action to terminate this permit under Rule 3Q .0519 of the FCAQTC.

2.13 **Annual Emission Inventory Requirements** [Rule 3Q .0207]

The permittee shall report to the Director by June 30th of each year the actual emissions of each air pollutant listed in Rule 3Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form(s) as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

2.14 **Compliance Certification** <40 CFR 70.6(c)> [Rules 3Q .0508(n) and .0508((i)(16))]

By December 1st unless another date is established by the Director, the permittee shall submit to the Department and the U.S. EPA **(U.S. EPA Region 4, Air Enforcement Section, Mail Code: 4APT-AEEB, 61 Forsyth Street, S.W., Atlanta, GA 30303)** a compliance certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the federal Clean Air Act. The 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 permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include at a minimum, the methods and means required under 40 CFR 70.6(a)(3). If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the federal Clean Air 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, based on the method or means designated in paragraph 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 under 40 CFR Part 64 occurred; and

D. such other facts as the permitting authority may require to determine the compliance status of the source.

2.15 **Retention of Records** [Rule 3Q .0508(f)]

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

2.16 **NESHAP - Recordkeeping Requirement for Applicability Determinations** <40 CFR 63.10(b)(3)> [Rule 3D .1111]

If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the permittee shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source. This record shall include all of the information required under 40 CFR 63.10(b)(3).

2.17 **Duty to Provide Information** [Rule 3Q .0508(i)(9))]

A. The permittee shall furnish to the Department, in a timely manner, any reasonable information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

B. The permittee shall furnish the Department copies of records required to be kept by the permit when such copies are requested by the Director.

2.18 **Duty to Supplement or Correct Application** [Rule 3Q .0507(f)]

The permittee, upon becoming aware that any relevant facts were omitted from the application or that incorrect information was submitted with the application, shall promptly submit such supplementary facts or corrected information to the Department. The permittee shall also provide additional information necessary to address any requirements that become applicable to the source after the date a complete application was submitted but prior to release of the draft permit.

2.19 **Certification by Responsible Official** [Rule 3Q .0520]

A responsible official (as defined in 40 CFR 70.2) shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete.

2.20 **Inspection and Entry** [Rule 3Q .0508(l)]

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Department to perform the following:

1. enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;

2. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;

3. inspect, at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices,

or operations regulated or required under the permit; and

4. sample or monitor substances or parameters, at reasonable times and using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

Nothing in this condition shall limit the ability of the U.S. EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

B. No person shall obstruct, hamper or interfere with any such authorized representative while in the process of carrying out his official duties.

2.21 **Averaging Times** <40 CFR 70.6(a)(3)> [Rule 3Q .0508(f)]

Unless otherwise specified in *Section 3* of this permit for a specific emission standard or limitation, the applicable averaging period for determining compliance with an emission standard or limitation during compliance testing shall be based on the applicable U.S. EPA reference test method.

2.22 **Compliance Testing** [Rule 3D .0501(b)]

When requested by the Department for determining compliance with emission control standards, means shall be provided by the owner to allow periodic sampling and measuring of emission rates, including necessary ports, scaffolding and power to operate sampling equipment; and upon the request of the Department, data on rates of emissions shall be supplied by the permittee.

2.23 **General Emissions Testing and Reporting Requirements** [Rule 3Q .0508(i)(16)]

When required to conduct emissions testing under the terms of the permit:

A. The permittee shall submit a sampling protocol to the Department at least 30 days prior to the scheduled test date.

B. The permittee shall notify the Department of the specific test dates at least 10 days prior to the scheduled test date in order to afford the Department the opportunity to have an observer on-site during the sampling program.

C. During all sampling periods, the permittee shall operate the emission source(s) under operating conditions approved by the Director or his delegate.

D. The permittee shall submit one copy of the test report to the Department. The test

report shall contain at a minimum the following information:

1. a certification of the test results by sampling team leader and facility representative;
2. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s) as appropriate;
3. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics as necessary;
4. all field, analytical and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
5. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
6. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.

E. The Department will review emission test results with respect to the specified testing objectives as proposed by the permittee and approved by the Department.

2.24 **Termination, Modification, and Revocation of the Permit** [Rule 3Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

A. the information contained in the application or presented in support thereof is determined to be incorrect;

B. the conditions under which the permit or permit renewal was granted have changed;

C. violations of conditions contained in the permit have occurred;

D. the permit holder fails to pay fees required under Section 3Q .0200 within 30 days after being billed;

E. the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:

1. to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;

2. to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;

3. to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or

4. to sample, at reasonable times and using reasonable safety practices, any emission sources at the facility;

F. the U.S. EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or

G. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

2.25 **Permit Reopenings, Modifications, Revocations and Reissuances, or Terminations** [Rule 3Q .0508(i)(5))]

The Director may reopen, modify, revoke and reissue, or terminate this permit for reasons specified in Rule 3Q .0517 or .0519. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition in this permit.

2.26 **Permit Renewal** [Rule 3Q .0508(e) and Rule 3Q .0513]

This permit is issued for a term not to exceed five years. Permits issued under Title IV of the Clean Air Act shall be issued for a fixed period of five years. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the permittee or applicant has complied with Rule 3Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

2.27 **Reopening for Cause** [Rules 3Q .0517 and .0508(g)]

This permit shall be reopened and revised in accordance with Rule 3Q .0517 prior to its expiration date, for any of the following reasons:

A. Additional applicable requirements become applicable to the facility with remaining permit term of three or more years.

B. Additional requirements, including excess emissions requirements, become

applicable to this source under Title IV of the Clean Air Act. Excess emissions offset plans for this source shall become part of this permit upon approval by the U.S. EPA.

C. The Director or the U.S. EPA finds that a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

D. The Director or the U.S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.28 **Construction and Operation Permits** [Sections 3Q .0100 and .0300]

A construction and operating permit shall be obtained by the permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification; in accordance with all applicable provisions of Sections 3Q .0100 and .0300.

2.29 **Permit Modifications** [Rules 3Q .0514, .0515, .0516, .0517, .0523 and .0524]

A. Permit modifications may be subject to the requirements of Rules 3Q .0514, .0515, .0516 and .0524.

B. Changes made pursuant to Rules 3Q .0523(a) and (b) do not require a permit modification.

C. The permittee shall submit an application for reopening for cause in accordance with Rule 3Q .0517 if notified by the Department.

D. To the extent that emissions trading is allowed under FCAQTC Subchapter 3D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to Rule 3Q .0523(c).

2.30 **Insignificant Activities** [Rules 3Q .0503 and .0508(i)(15)]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The permittee shall have available at the facility at all times and made available to an authorized representative of the Department upon request, documentation, including calculations if necessary, to demonstrate that an emission source or activity is

insignificant.

2.31 **Standard Application Form and Required Information** [Rules 3Q .0505 and .0507]

The permittee shall submit applications and required information in accordance with the provision of Rules 3Q .0505 and .0507.

2.32 **Property Rights** [Rule 3Q .0508(i)(8)]
This permit does not convey any property rights of any sort, or any exclusive privileges.

2.33 **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [Rule 3Q .0508(b)]

A. If the permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82 Subpart A, Appendices A and B, the permittee shall service, repair, and maintain such equipment according to the work practices and personnel certification requirements, and the permittee shall use certified recycling and recovery equipment specified in 40 CFR 82 Subpart F.

B. The permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82 Subpart F.

C. The permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the U.S. EPA or its designee as required.

2.34 **Prevention of Accidental Releases - Section 112(r)** [Rule 3Q .0508(h)]

If the permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the federal Clean Air Act, then the permittee is required to register this plan in accordance with 40 CFR Part 68.

2.35 **Title IV Allowances** [Rule 3Q .0508(i)(1)]

The facility's emissions are prohibited from exceeding any allowances that the facility lawfully holds under Title IV of the Clean Air Act. This permit shall not limit the number of allowances held by the permittee, but the permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

2.36 **Air Pollution Alert, Warning or Emergency** [Section 3D .0300]

Should the Director of the Department declare an Air Pollution Alert, Warning or Emergency, the permittee will be required to operate in accordance with the permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in Section 3D .0300.

2.37 **Registration of Air Pollution Sources** [Rule 3D .0202]

The Director of the Department may require the permittee to register a source of air pollution. If the permittee is required to register a source of air pollution, this registration and required information shall be in accordance with Rule 3D .0202(b).

2.38 **Ambient Air Quality Standards** [Rule 3D .0501(e)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in Rule 3D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

2.39 **Odor** [Rule 3D .0522] ***Locally Enforceable Only***

The permittee shall not cause or permit the emission of odors beyond the facility's property lines which are harmful, irritating or which unreasonably interfere with the use and enjoyment of any person's properties or living conditions, or any public properties or facilities. Such odors are prohibited by Rule 3D .0522. No violation shall be cited, provided that the best practical treatment, maintenance, and control of odor(s) currently available is used. This requirement does not apply to normal agricultural practices, nor to accidental emissions of odors which are not normally produced during routine operations and activities as determined by the Director.

2.40 **Fugitive Dust Control Requirement** [Rule 3D .0540]

The permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR 60, Appendix A), the owner or operator may be required to submit and

implement a fugitive dust control plan as described in 3D .0540(f).

National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP) General Conditions - [Rule 3D .1111]

Following are conditions found in the 40 CFR Part 63 NESHAP General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 63 except when otherwise specified in a particular subpart or in a relevant standard.

2.41 **NESHAP - General Provisions** <40 CFR 63 Subpart A> [Rule 3D .1111]

The permittee shall comply with all applicable requirements specified in the general provisions of the National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR 63 Subpart A) including but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications, construction, and reconstruction.

2.42 **NESHAP - Startup Shutdown and Malfunction Plan** <40 CFR 63.6(e)(3)> [Rule 3D .1111]

The permittee shall develop and implement a written startup, shutdown and malfunction plan in accordance with the requirements in 40 CFR 63.6(e)(3).

2.43 **NESHAP - Good Air Pollution Control Practice** <40 CFR 63.6(e) and 63.8(c)> [Rule 3D .1111]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions at least to the levels required by all relevant standards. The permittee also shall maintain and operate each continuous monitoring system (CMS) as specified in 40 CFR 63.8, or in a relevant standard, and in a manner consistent with good air pollution control practices. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required by 40 CFR 63.6(e)(3). Operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

2.44 **NESHAP - Circumvention** <40 CFR 63.4(b)> [Rule 3D .1111]

The permittee shall not build, erect, install, or use any article, machine, equipment or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere, the use of diluents to achieve compliance with a relevant standard for visible emissions, and the fragmentation of an operation such that the operation avoids regulation by a relevant standard.

2.45 **NESHAP - Maintain Records** <40 CFR 63.10(b)(2)> [Rule 3D .1111]

For affected sources, the permittee shall maintain relevant records of:

A. the occurrence and duration of each startup, shutdown, or malfunction of operation;
B. the occurrence and duration of each malfunction of the air pollution control equipment;
C. all maintenance performed on the air pollution control equipment;
D. actions taken during periods of startup, shutdown, and malfunction;
E. all information necessary to demonstrate compliance with the affected source's startup, shutdown, and malfunction plan when all actions taken are consistent with the procedures specified in the plan;
F. each period during which a CMS is malfunctioning or inoperative;
G. all required measurement needed to demonstrate compliance with a relevant standard;
H. all results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
I. all measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
J. all CMS calibration checks;
K. all adjustments and maintenance performed on CMS;
L. any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements if the source has been granted a waiver under 40 CFR 63.10(f);
M. all emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test if the source has been granted such permission under 40 CFR 63.8(f)(6); and
N. all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

2.46 **NESHAP - Files Available for Inspection** <40 CFR 63.10(b)(1)> [Rule 3D .1111]

The permittee shall maintain files of all information required by 40 CFR Part 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most

recent two years of data shall be retained on site. The remaining three years of data may be retained off site.

2.47 **NESHAP - Performance Testing Facilities Provided by Permittee** <40 CFR 63.7(d)> [Rule 3D .1111]

For any performance testing for each new source and, at the request of the Director, for each existing source, the permittee shall provide performance testing facilities as follows:

A. Sampling ports adequate for test methods applicable to the affected source. This includes:
   1. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
   2. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
B. Safe sampling platform(s).
C. Safe access to sampling platform(s).
D. Utilities for sampling and testing equipment.
E. Any other facilities that the Director deems necessary for safe and adequate testing of a source.
F. Unless otherwise specified in the applicable subpart, each performance test shall be conducted according to the requirements in 40 CFR 63.7.

Compliance Assurance Monitoring for Major Stationary Sources (CAM) General Conditions - [40 CFR Part 64]

Following are conditions based on the requirements found in 40 CFR Part 64. These conditions only apply to sources subject to the CAM requirements.

2.48 **CAM - Proper Maintenance** <40 CFR 64.7(b)> [Rule 3D .0614]

At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

2.49 **CAM - Continued Operation** <40 CFR 64.7(c)> [Rule 3D .0614]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring

malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

2.50 **CAM - Response to Excursions or Exceedances** <40 CFR 64.7(d)> [Rule 3D .0614]

Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designed condition, or below the applicable emissions limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. Based on the results of this determination, the Department may require the permittee to develop and implement a Quality Improvement Plan (QIP). The elements of a QIP are identified in 40 CFR 64.8(b).

2.51 **CAM - Documentation of Need for Improved Monitoring** <40 CFR 64.7(e)> [Rule 3D .0614]

After approval of the CAM plan, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited

to, reestablishing indicator ranges or designated conditions, modifying the frequency of conduction monitoring and collecting data, or the monitoring of additional parameters.

SECTION 3
SPECIFIC LIMITATIONS AND CONDITIONS

The emission source(s) and associated air pollution control device(s) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply:

3.1 ES-B01, Babcock & Wilcox Boiler, controlled by Fabric Filter CD-1; ES-B02, Babcock & Wilcox Boiler, controlled by Fabric Filter CD-1; and ES-B03, Babcock & Wilcox Boiler, controlled by Fabric Filter CD-1

The following provides a summary of the limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Applicable Standard	Applicable Regulation
Particulate Matter	0.28 lb/MMBtu	3D .0503
Sulfur Dioxide	2.3 lb SO_2/MMBtu	3D .0516
Visible Emissions	40 percent opacity	3D .0521(c)
Local Air Toxics	SEE SECTION 4 - 3D .1100 - CONTROL OF TOXIC AIR POLLUTANTS - LOCAL ENFORCEMENT ONLY	

A. Particulates from Fuel Burning Indirect Heat Exchangers [Rule 3D .0503]

1. **Standard** [Rule 3D .0503] - Emissions of particulate matter from the combustion of coal that are discharged from each of these sources into the atmosphere shall not exceed 0.28 lb/MMBtu.

2. **Testing** [Rule 3D .0501(b)] - If emissions testing is required by FCEAD or U.S. EPA, or the permittee submits emissions testing to the Department in support of a permit application, the permittee shall perform such testing in accordance with the appropriate U.S. EPA reference method(s) as approved by the FCEAD. The permittee may request approval from the FCEAD for an alternate test method or procedure in writing.

3. **Compliance Assurance Monitoring (CAM) and Recordkeeping** [Rules 3D .0614, 3Q

.0508(f) and 40 CFR Part 64] - In order to demonstrate compliance with the CAM plan for the fabric filter, the following monitoring and recordkeeping requirements apply:

(a) *Inspection and maintenance of control device*

(i) **Monitoring requirements** - Particulate matter emissions from each of these boilers shall be controlled by the fabric filter CD-1 during all periods of operation. To ensure that optimum control efficiency is maintained, the applicant shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. As a minimum, the inspection and maintenance requirement must include the following:

(A) an annual internal inspection of the fabric filters' structural integrity;
(B) a monthly visual inspection of the system ductwork, and material collection unit for leaks; and
(C) when an inspection reveals a problem, an investigation shall be initiated and maintenance activities, required to correct the problem, shall be scheduled and performed. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions.

An excursion is when improper maintenance results in the improper operation of the control device.

(ii) **Recordkeeping requirements** - The results of inspection and maintenance shall be recorded in a log on site and be made readily available upon request by an authorized representative of the Department. The log shall contain the following records:

(A) the date and time of actions recorded;
(B) the name(s) of the person(s) who performed activities;
(C) the results of each inspection; and
(D) the results of any maintenance performed on the fabric filter.

(b) *Visual Stack Observations*

(i) **Monitoring requirements** - The applicant shall perform visual stack observations. As a minimum, the visual stack observation program shall include the following:

(A) Visible emissions from each stack shall be monitored once per day for each plant operational day for the presence of visible emissions. The stack(s) shall be monitored for at least five seconds each. If a daily stack observation has not been performed but the observation data has been

conducted for greater than 95 percent of the operating days during the six-month reporting period it shall be considered an excursion.

(B) The presence of any visible emissions shall trigger an investigation to determine the cause and, if applicable, corrective action. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. Another visual observation shall be repeated as soon as practicable after the investigation and completion of any corrective action to verify that the visual emissions are no longer present. This second visual observation shall be conducted by personnel certified as a visual emissions evaluator and the observation shall follow the requirements of EPA Reference Method 9, except that the observations shall be made for no less than two six-minute periods. If visible emissions are present after the investigation and corrective action has been taken, the visible emissions shall be considered an excursion.

(ii) **Recordkeeping requirements** - The results of the visual stack observations shall be recorded in a log on site and be made readily available upon request by an authorized representative of the FCEAD or the U.S. EPA. The log shall contain the following records:

(A) the date and time of visual observation;
(B) the person(s) who performed the visual observation and for observations performed in accordance with EPA Reference Method 9, the certification date and number of the person performing the observation;
(C) the results of the visual observation (visible emissions present or absent, percent opacity for EPA Reference Method 9 observations); and
(D) if there are visible emissions, the results of the triggered investigation and a summary of any corrective action taken.

4. **Reporting** [Rule 3Q .0508(f)(1)]
The permittee shall submit the following reports:
(a) A summary report of the monitoring and recordkeeping requirements specified in condition **3.1(A)(3)**.
(b) A summary report of the compliance assurance monitoring required in permit conditions **3.1(A)(3)(a) and (b)** including, as a minimum:
(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with calibration checks, if applicable);

(iii) The total number of operating days and the number of days for which a visual stack observation was not made during the reporting period; and
(iv) A description of the actions taken to implement a QIP (if required by the Department) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

These reports shall be received by the Department by April 30th for the period October through March and by October 30th for the period April through September.

B. Sulfur Dioxide Emissions from Combustion Sources [Rule 3D .0516]

1. **Standard** [Rule 3D .0516] - Emissions of sulfur dioxide from each of these emission sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

2. **Testing** [Rule 3Q .0501(b)] - The permittee shall follow the testing requirements specified in condition **3.1(A)(2)**.

3. **Monitoring requirement** [Rules 3Q .0508(f), 3Q .0508(i)(16), and 3D .0501(c)(4)] -

   (a) The maximum sulfur content of any coal combusted in the boilers shall not exceed 1.5 percent by weight to ensure compliance with the limit in condition **3.1(B)(1)**.
   (b) The permittee shall monitor the sulfur content of the coal to be combusted by having the coal supplier analyze each shipment to determine the sulfur content in percent by weight in accordance with the following ASTM (American Society of Testing and Materials) methods:

   (i) sampling - ASTM Method D3345;
   (ii) preparation - ASTM Method D2013;
   (iii) gross caloric value (Btu) - ASTM Method D2015
   (iv) moisture content - ASTM Method D3173 or D5412;
   (v) sulfur content - ASTM Method D3177 or D4239.

4. **Recordkeeping requirement** [Rule 3Q .0508(f)(1)] - The permittee shall retain coal

analysis results obtained for each shipment of coal on site and they shall be made readily available to an authorized representative of the FCEAD or the U.S. EPA upon request.

5. **Reporting** [Rule 3Q .0508(f)(1)] - The permittee shall submit a summary report of the monitoring requirements specified in condition **3.1(B)(3)** to the Department by April 30th for the period October through March and October 30th for the period April through September.

C. Control of Visible Emissions [Rule 3D .0521(c)]

1. **Standard** [Rule 3D .0521(c)] - Visible emissions from the equipment listed above shall not be more than 40% opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40% opacity if:
   (a) No six-minute period exceeds 90% opacity;
   (b) No more than one six-minute period exceeds 40% opacity in any hour; and
   (c) No more than four six-minute periods exceed 40% opacity in any 24-hour period.

2. **Testing** [Rule 3Q .0501(b)] - The permittee shall follow the testing requirements specified in condition **3.1(A)(2)**.

3. **Monitoring, Recordkeeping, and Reporting Requirements** [Rule 3Q .0508(f)(1)] - The requirements in conditions **3.1(A)(3)(b) and 3.1(A)(4)** satisfy these requirements.

3.2 ES-F03, Tenter Frame #3, controlled by Thermal Oxidizer CD-6; ES-F04, Tenter Frame #4, controlled by Thermal Oxidizer CD-8; ES-F08, Tenter Frame #8, controlled by Wet ESP CD-5; ES-F11, Tenter Frame #11, controlled by Thermal Oxidizer CD-3; ES-F12, Tenter Frame #12, controlled by Thermal Oxidizer CD-2; ES-P03, Pad #3, Uncontrolled; ES-P04, Pad #4, Uncontrolled; ES-P05, Pad #5, Uncontrolled; ES-P06, Pad #6, Uncontrolled; ES-WB01, Wide Bleach Range #1, Uncontrolled; ES-WB02, Wide Bleach Range #2, Uncontrolled; and ES-WB03, Wide Bleach Range #3, Uncontrolled

The following provides a summary of the limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Applicable Standard	ES-#	Applicable Regulation
Particulate Matter*	$E = 4.10 \times P^{0.67}$ where: E = allowable emission rate for particulate matter in lb/hr P = process weight rate in tons/hr	ES-F03, ES-F04, ES-F08, ES-F11, ES-F12, ES-P04 through ES-P06, and ES-WB01 through ES-WB03	3D .0515
Sulfur Dioxide**	2.3 lb SO_2/MMBtu		3D .0516
Visible Emissions **for ES-F08 only**	20 percent opacity	ES-F08 (only predryer stack #93 and frame stack #97)	3D .0521(d)
	40 percent opacity	ES-F08 (all stacks except #93 and #97)	3D .0521(c)
Volatile Organic Compounds	44.81 tons per consecutive 12-month period	ES-F08	Rules 3D.0530 and 3Q .0317
Hazardous Air Pollutants	0.016 kg of organic HAP/kg of dyeing and finishing materials applied. **See permit condition 3.3 for requirements.**	ES-F03, ES-F04, ES-F08, ES-F11, ES-F12, and ES-P03 through	Rule 3D .1111 and 40 CFR 63.4290

Regulated Pollutant	Applicable Standard	ES-#	Applicable Regulation
		ES-P06	
Visible Emissions	SEE CONDITION 3.4 - 3D .0521 - CONTROL OF VISIBLE EMISSIONS FOR ALL TENTER FRAMES, EXCEPT ES-F08		
Local Air Toxics	SEE SECTION 4 - 3D .1100 - CONTROL OF TOXIC AIR POLLUTANTS - LOCAL ENFORCEMENT ONLY		

*3D .0515 - *Particulates from Miscellaneous Industrial Processes* apply to the direct-fired natural gas pre-dryers and singers associated with these emission units. Use of only natural gas on **ES-P04 through ES-P06 and ES-WB01 through ES-WB03** assures compliance with these standards. No monitoring, recordkeeping, or reporting is required to assure compliance. However, these sources are subject to the visible emissions standards in condition **3.4** and the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed for condition **2.13** entitled, *Annual Emission Inventory Requirements*.

3D .0516 - *Sulfur Dioxide Emissions from Combustion Sources* applies to the direct-fired natural gas burners, pre-dryers, and/or singers associated with these emission units. Use of only natural gas assures compliance with this standard. No monitoring, recordkeeping, or reporting is required to assure compliance. However, the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed for condition **2.13 entitled, *Annual Emission Inventory Requirements*.

A. Particulates from Miscellaneous Industrial Processes [Rule 3D .0515]

1. **Standard** [Rule 3D .0503] - Particulate matter emissions from the each of the emission sources listed above shall not exceed the allowable emissions rate calculated by the applicable formula in the above table. Accordingly, the potential emissions from each of these processes shall at no times exceed 20.1 lb/hr based on maximum production.

2. **Testing** [Rule 3D .0501(b)] - The permittee shall follow the testing requirements specified in condition **3.1(A)(2)**.

3. **Monitoring and Recordkeeping requirement for ES-F03, ES-F04, ES-11, and ES-F12** [Rule 3Q .0508(f)] - In order to demonstrate compliance with the particulate matter standard while using a control device, the following monitoring and recordkeeping requirements apply:

   (a) *Inspection and maintenance of control devices*

   (i) **Monitoring requirements** - Particulate matter emissions from ES-F03, ES-F04, ES-F11, and ES-F12 shall be controlled by their respective control device during all periods of operation. To ensure that optimum control efficiency is maintained, the permittee shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. As a minimum, the inspection and maintenance requirement must include the following:

(A) an annual internal inspection of each control device's structural integrity;
(B) a monthly visual inspection of the system ductwork, and material collection unit for leaks; and
(C) a monthly check of the thermal oxidizer operating temperature, set point temperature, and flame out alarm of the thermal oxidizers which control particulate emissions from ES-F03, ES-F04, ES-F11, and ES-F12

(ii) **Recordkeeping requirements** - The results of inspection and maintenance shall be recorded in a log on site and be made readily available upon request by an authorized representative of the FCEAD or the U.S. EPA. The log shall contain the following records:

(A) the date and time of actions recorded;
(B) the daily or monthly pollution equipment checklist as detailed in the permit application;
(C) the results of each inspection; and
(D) the results of any maintenance performed on any of the control devices.

4. **Compliance Assurance Monitoring (CAM) and Recordkeeping for ES-F08** [Rules 3D .0614, 3Q .0508(f) and 40 CFR Part 64] - In order to demonstrate compliance with the CAM plan for the wet electrostatic precipitator, the following monitoring and recordkeeping requirements apply:

(a) *Inspection and maintenance of control device*
(i) **Monitoring requirements** - Particulate matter emissions from ES-F08 shall be controlled by their respective control device during all periods of operation. To ensure that optimum control efficiency is maintained, the permittee shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. As a minimum, the inspection and maintenance requirement must include the following:

(A) an annual internal inspection of each control device's structural integrity;
(B) a monthly visual inspection of the system ductwork, and material collection unit for leaks; and
(C) when an inspection reveals a problem, an investigation shall be initiated and maintenance activities, required to correct the problem, shall be scheduled and performed. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions.

An excursion is when improper maintenance results in the improper operation of

the control device.

(ii) **Recordkeeping requirement** - The results of inspection and maintenance shall be recorded in a log on site and be made readily available upon request by an authorized representative of the FCEAD or the U.S. EPA. The log shall contain the following records:

(A) the date and time of actions recorded;
(B) the name(s) of the person(s) who performed activities;
(C) the results of each inspection; and
(D) the results of any maintenance performed on any of the control devices.

(b) *Visual Stack Observations*

(i) **Monitoring requirements** - The applicant shall perform visual stack observations on ES-F08. As a minimum, the visual stack observation program shall include the following:

(A) Visible emissions from each stack shall be monitored once per day for each plant operational day for the presence of visible emissions. The stack(s) shall be monitored for at least five seconds each. If a daily stack observation has not been performed but the observation data has been conducted for greater than 95 percent of the operating days during the six-month reporting period it shall be considered an excursion.

(B) The presence of any visible emissions shall trigger an investigation to determine the cause and, if applicable, corrective action. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. Another visual observation shall be repeated as soon as practicable after the investigation and completion of any corrective action to verify that the visual emissions are no longer present. This second visual observation shall be conducted by personnel certified as a visual emissions evaluator and the observation shall follow the requirements of EPA Reference Method 9, except that the observations shall be made for no less than two six-minute periods. If visible emissions are present after the investigation and corrective action has been taken, the visible emissions shall be considered an excursion.

(ii) **Recordkeeping requirements** - The results of the visual stack observations shall be recorded in a log on site and be made readily available upon request by an authorized representative of the FCEAD or the U.S. EPA. The log shall contain the following records:

(A) the date and time of visual observation;
(B) the person(s) who performed the visual observation and for observations performed in accordance with EPA Reference Method 9, the certification date and number of the person performing the observation;
(C) the results of the visual observation (visible emissions present or absent, percent opacity for EPA Reference Method 9 observations); and
(D) if there is are visible emissions, the results of the triggered investigation and a summary of any corrective action taken.

5. **Reporting requirement** [Rule 3Q .0508(f)(1)] - The permittee shall submit the following reports:

(a) A summary report of the monitoring and recordkeeping requirements specified in conditions **3.2(A)(3) and (4)**.
(b) A summary report of the compliance assurance monitoring required in permit conditions **3.2(A)(4)** including, as a minimum:
(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with calibration checks, if applicable);
(iii) The total number of operating days and the number of days for which a visual stack observation was not made during the reporting period; and
(iv) A description of the actions taken to implement a QIP (if required by the Department) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

These reports shall be received by the Department by April 30th for the period October through March and by October 30th for the period April through September.

B. Control of Visible Emissions - ES-F08 [Rule 3D .0521]

1. **20% opacity** [Rule 3D .0521(d)] - Visible emissions from the predryer stack #93 and frame stack #97 on Tenter Frame #8 shall not be more than 20% opacity when averaged

over a six-minute period. However, six-minute averaging periods may exceed 20% opacity if:

(a) No six-minute period exceeds 87% opacity;
(b) No more than one six-minute period exceeds 20% opacity in any hour; and
(c) No more than four six-minute periods exceed 20% opacity in any 24-hour period.

2. **40% opacity** [Rule 3D .0521(c)] - Visible emissions from all the stacks on Tenter Frame #8 (except #93 and #97) shall not be more than 40% opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40% opacity if:

(a) No six-minute period exceeds 90% opacity;
(b) No more than one six-minute period exceeds 40% opacity in any hour; and
(c) No more than four six-minute periods exceed 40% opacity in any 24-hour period.

3. **Testing** [Rule 3Q .0501(b)] - The permittee shall follow the testing requirements specified in condition **3.1(A)(2)**.

4. **Monitoring, Recordkeeping, and Reporting Requirements** [Rule 3Q .0508(f)(1)] - The requirements in conditions **3.2(A)(4)(b)** and **3.2(A)(5)** satisfy these requirements.

C. Prevention of Significant Deterioration (PSD) - ES-F08 [Rules 3D .0530 and 3Q .0317]
This emission source has federally enforceable limit applied to it in order to avoid the provisions of Rule 3D.0530. Should any of the following conditions be violated, this facility may become subject to this rule.

1. **Standard** [Rules 3D .0530 and 3Q .0317] - In order to avoid the applicability of 3D. 0530(g) for major sources and major modifications for Tenter Frame #8, volatile organic compound (VOC) emissions from Tenter Frame #8 shall not exceed 44.81 tons per 12-month period.

2. **Testing** [Rule 3D .0501(b)] - The permittee shall follow the testing requirements specified in condition **3.1(A)(2)**.

3. **Monitoring/recordkeeping** [Rules 3Q .0317(b) and 3Q .0508(f)(1)] - In order to demonstrate compliance with the emission limit the following monitoring and recordkeeping requirements apply:

(a) Determine and maintain records of the sum of the weight of all VOC containing materials and the weight of all solvents and other diluents that are applied at Tenter Frame #8.
(b) Maintain records of the VOC content of all materials used at Tenter Frame #8.

(c) The monthly total of VOC emissions from Tenter Frame #8 shall be calculated at the end of each month.
(d) The monthly total of VOC emissions from Tenter Frame #8 and the monthly-rolling 12-month total shall be recorded at the end of each month.

4. **Reporting** [Rule 3Q .0508(f)(1)] - VOC emissions from Tenter Frame #8 shall be reported semi-annually to the Department. The report shall include the total VOC emissions for each month and the monthly-rolling 12-month totals for each month. This report shall be submitted no later than August 30th for the period January through June, and no later than February 28th for the period July through December.

3.3 Hazardous Air Pollutants Requirements for ES-F03, ES-F04, ES-F08, ES-F11, ES-F12, and ES-P03 through ES-P06

A. National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles (Subpart OOOO) <40 CFR Part 63.4280 through 63.4371> [Rule 3D .1111]

The permittee shall comply with the applicable standards, provisions and requirements of Title 40 of the Code of Federal Regulations Part 63 Subpart OOOO "National Emission Standard for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles".

1. **Compliance Options** <40 CFR 63.4291(c)> [Rule 3D .1111] - The permittee may demonstrate compliance with Subpart OOOO using any of the compliance options listed in 40 CFR 63.4291(c) as long as the permittee satisfies all of the requirements applicable to the compliance option(s) used. The affected source at the facility consists of items in the dyeing and finishing subcategory of Subpart OOOO, as defined in 40 CFR 63.4282(d). This permit describes in detail the standards, provisions and requirements for the **emission rate without add-on controls option** which was identified by the permittee as the option chosen to comply with the regulations.

   The permittee may use different compliance options for different dyeing/finishing operations or at different times on the same dyeing/finishing operations. However, the permittee may not use different compliance options at the same time on the same dyeing/finishing operation. If the permittee switches between compliance options for any dyeing/finishing operation or group of operations, this switch must be documented as required by permit condition **3.3(A)(4)(c)**, and it must be reported in the next semiannual compliance report required in permit condition **3.3(A)(5)(a)(iii)(D)**.

2. **Standard: Emission Rate Without Add-On Controls Option** <40 CFR 63.4290, 63.4291(c)(2), 63.4331(b), and Table 1 to Subpart OOOO of Part 63> [Rule 3D .1111] - The permittee shall demonstrate that, based on the regulated materials applied in the dyeing and finishing operations, the organic HAP emission rate for the dyeing and finishing operations is less than or equal to 0.016 kg of organic HAP per kg of solids applied, calculated as a rolling 12-consecutive-month average emission rate.

   The permittee may use the **emission rate without add-on controls option** for any individual dyeing/finishing operation, for any group of dyeing/finishing operations in the affected source, or for dyeing/finishing operations as a group in the affected source.

   The permittee must meet all the requirements of permit condition **3.3(A)(3)** to demonstrate compliance with the applicable emission limit when using this option.

3. **Continuous Compliance Demonstration Requirements: Emission Rate Without Add-On Controls Option**. <40 CFR 63.4332> [Rule 3D .1111]
   When using the **emission rate without add-on controls option**, continuous compliance shall be demonstrated according to the applicable requirements in **paragraphs (a) through (e)** below.

   (a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, for dyeing/finishing operations, must be less than or equal to the applicable emission limit in permit condition **3.3(A)(2)**. Each month is a compliance period consisting of that month and the preceding 11 months. The calculations in permit condition **3.3(A)(3)(e)** must be performed on a monthly basis. <40 CFR 63.4332(a)> [Rule 3D .1111]

   (b) If the organic HAP emission rate for any compliance period exceeded the applicable emission limit in permit condition **3.3(A)(2)**, this is a deviation from the emission limitations for that compliance period and must be reported as specified in permit condition **3.3(A)(5)(a)(v)**. <40 CFR 63.4332(b)> [Rule 3D .1111]

   (c) As part of each semiannual compliance report required by permit condition **3.3(A)(5)(a)**, the permittee shall identify any dyeing/finishing operation for which the **emission rate without add-on controls option** was used. If there were no deviations from the applicable emission limit in permit condition **3.3(A)(2)**, a statement must be submitted indicating that, as appropriate, the dyeing/finishing operations were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was

less than or equal to the applicable emission limit. <40 CFR 63.4332(c)> [Rule 3D .1111]

(d) The permittee shall maintain records as specified in permit condition **3.3(A)(4)**. <40 CFR 63.4332(d)> [Rule 3D .1111]

(e) The permittee shall meet all the requirements of **paragraphs (i) through (v)** below to demonstrate compliance with the applicable emission limit in permit condition **3.3(A)(2)** for the dyeing/finishing operations using the **emission rate without add-on controls option**. When calculating the organic HAP emission rate according to this condition, do not include any dyeing and finishing materials applied on dyeing/finishing operations for which any of the other compliance options listed in 40 CFR 63.4291(c) is used. Use the procedures in **3.3(A)(3)** on each regulated material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. Water added in mixing at the affected source is not a regulated material and should not be included in the determination of the total mass of dyeing and finishing materials applied during the compliance period, using **Equation 3.3-2** of this section. <40 CFR 63.4282(d), 63.4331(b) and 63.4332(a)> [Rule 3D .1111]

(i) **Determine the mass fraction of organic HAP for each material**. <40 CFR 63.4331(b)(1) and 63.4321(e)(1)(iv)> [Rule 3D .1111] Determine the mass fraction of organic HAP for each dyeing and finishing material applied during the compliance period in accordance with the following information:

(A) *Information from the supplier or manufacturer of the material.* The permittee may rely on information other than that generated by the test methods specified in 40 CFR 63.4321(e)(1)(i) through (iii), such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. If there is a disagreement between such information and results of a test conducted according to 40 CFR 63.4321(e)(1)(i) through (iii) above on coating, thinning, or cleaning material, then the test method results will take precedence. Information from the supplier or manufacturer of the dyeing or finishing material is sufficient for determining the mass fraction of organic HAP.

(ii) **Determine the mass of each material**. <40 CFR 63.4331(b)(2)> [Rule 3D .1111] Determine the mass (kg) of each dyeing and finishing material applied during the compliance period by measurement or usage records.

(iii) **Calculate the mass of organic HAP emissions.** <40 CFR 63.4331(b)(3)> [Rule 3D .1111] The mass of organic HAP emissions is the combined mass of organic HAP contained in all dyeing and finishing materials applied during the compliance period minus the organic HAP in certain waste materials and wastewater streams. The permittee shall calculate the mass of organic HAP emissions using **Equation 3.3-1** below:

$$H_e = A - R_w - WW \qquad \text{(Equation 3.3-1)}$$

Where:

H_e = Mass of organic HAP emissions during the compliance period, kg.

A = Total mass of organic HAP in the dyeing and finishing materials applied during the compliance period, kg, as calculated in **Equation 3.3-1A** in **paragraph (iii)(A)**.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to **paragraph (iii)(B)**. (A value of zero may be assigned to R_w if it is decided not to use this allowance.)

WW = Total mass of organic HAP in wastewater discharged to a POTW or receiving onsite secondary treatment during the compliance period, kg, determined according to **paragraph (iii)(C)**. (A value of zero may be assigned to WW if it is decided not to use this allowance.)

(A) Calculate the kg organic HAP in the dyeing and finishing materials applied during the compliance period using **Equation 3.3-1A** below: <40 CFR 63.4331(b)(3)(i)> [Rule 3D .1111]

$$A = \sum_{i=1}^{m} \left(M_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Equation 3.3-1A)}$$

Where:

A = Total mass of organic HAP in the dyeing and finishing materials applied during the compliance period, kg.

$M_{c,i}$ = Total mass of dyeing or finishing material, i, applied during the compliance period, kg.

$W_{c,i}$ = Mass fraction of organic HAP in dyeing or finishing material, i, kg organic HAP per kg of material.

m = Number of dyeing and finishing materials applied during the compliance period.

(B) If the permittee chooses to account for the mass of organic HAP contained in the waste materials sent or designated for shipment to a hazardous waste TSDF in **Equation 3.3-1**, then it shall be determined as specified in 40 CFR 63.4331(b)(3)(ii). <40 CFR 63.4331(b)(3)(ii)> [Rule 3D .1111].

(C) If the permittee chooses to account for the mass of organic HAP contained in wastewater discharged to a POTW or treated onsite prior to discharge in **Equation 3.3-1**, then it shall be determined as specified in 40 CFR 63.4331(c). <40 CFR 63.4331(b)(3)(iii)> [Rule 3D .1111].

(iv) **Calculate the total mass of dyeing and finishing materials.** <40 CFR 63.4331(b)(4)> [Rule 3D .1111] Determine the total mass of dyeing and finishing materials applied, kg, which is the combined mass of all the dyeing and finishing materials applied during the compliance period, using **Equation 3.3-2** below:

$$M_t = \sum_{i=1}^{m} \left(M_{c,i} \right) \qquad \text{(Equation 3.3 - 2)}$$

Where:

M_t = Total mass of dyeing and finishing materials applied during the compliance period, kg.

$M_{c,i}$ = Mass of dyeing or finishing material, i, applied during the compliance period, kg.

m = Number of dyeing and finishing materials applied during the compliance period.

(v) **Calculate the organic HAP emission rate**, kg organic HAP emitted per kg dyeing and finishing material applied, using **Equation 3.11-3** below: <40 CFR 63.4331(a)(6)> [Rule 3D .1111]

$$H_{yr} = \frac{H_e}{M_t} \qquad \text{(Equation 3.3 - 3)}$$

Where

H_{yr} = Organic HAP emission rate for the compliance period, kg of organic HAP emitted per kg of dyeing and finishing materials.

H_e = Total mass organic HAP emissions during the compliance period, kg, as calculated by **Equation 3.3-1**.

M_t = Total mass of coating dyeing and finishing materials applied during the compliance period, kg, as calculated by **Equation 3.3-2**.

4. **Record Keeping Requirements: Emission Rate Without Add-On Controls Option**. <40 CFR 63.4312> [Rule 3D .1111]
The permittee shall collect and keep a record of the data and information specified in **paragraphs (a) through (h)** below. The permittee shall retain these records in accordance with the specifications described in **paragraph (i)** below. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that is submitted to comply with Subpart OOOO, and the documentation supporting each notification and report. <40 CFR 63.4312(a)> [Rule 3D .1111]

(b) A current copy of information provided by material suppliers or manufacturers, such as manufacturer's formulation data or test data used to determine the mass fraction of organic HAP for dyeing and finishing materials. If information is used that was provided by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. <40 CFR 63.4312(b)> [Rule 3D .1111]

(c) For each compliance period, a record of the dyeing/finishing operations on which each compliance option was used and the time periods (beginning and ending dates) each option was used. For each month, a record of all required calculations for the compliance option(s) used, as specified in **paragraph (i)** below. <40 CFR 63.4312(c)(2)> [Rule 3D .1111]

(i) For the **emission rate without add-on controls option**, a record of the calculation of the total mass of organic HAP emissions for the dyeing and finishing materials applied each compliance period using **Equations 3.3-1 and 3.3-1A** in permit condition **3.3(A)(3)**; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to permit condition **3.3(A)(3)(e)(iii)(B)**; and the mass of organic HAP contained in wastewater discharged to a POTW or treated onsite prior to discharge according to permit condition **3.3(A)(3)(e)(iii)(C)**; the calculation of the total mass of dyeing and finishing materials applied each compliance period using **Equation 3.3-2** in permit condition **3.3(A)(3)**; and the calculation of the organic HAP emission rate for each compliance period using **Equation 3.3-3** in permit condition **3.3(A)(3)**. <40 CFR 63.4312(c)(2)(ii)> [Rule 3D .1111]

(d) A record of the name and mass of each regulated material applied in the dyeing and finishing subcategory during each compliance period. <40 CFR 63.4312(d)> [Rule 3D .1111]

(e) A record of the mass fraction of organic HAP for each regulated material applied during each compliance period. <40 CFR 63.4312(e)> [Rule 3D .1111]

(f) If using an allowance in **Equation 3.3-1** in permit condition **3.3(A)(3)** for organic HAP contained in waste materials sent to, or designated for shipment to, a treatment, storage, and disposal facility (TSDF) according to permit condition 3**.3(A)(3)(e)(iii)(B)**, the permittee shall keep records of the information specified in 40 CFR 63.4312(g).

(g) If using an allowance in **Equation 3.3-1** in permit condition **3.3(A)(3)** for organic HAP contained in wastewater discharged to a POTW or treated onsite prior to discharge according to permit condition **3.3(A)(3)(e)(iii)(C)**, the permittee shall keep records of the information specified in 40 CFR 63.4312(h).

(h) The permittee shall keep records of the date, time, and duration of each deviation. <40 CFR 63.4312(i)> [Rule 3D .1111]

(i) The permittee shall maintain all records, described in **paragraphs (a) through (h)** above, in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. As specified in 40 CFR 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The records may be kept off site for the

remaining 3 years. <40 CFR 63.4313> [Rule 3D .1111]

5. **Reporting Requirements: Emission Rate Without Add-On Controls Option**. <40 CFR 63.4311> [Rule 3D .1111] - The permittee shall submit the reports specified in paragraphs **(a) through (c)**.

   (a) **Semiannual compliance reports.** <40 CFR 63.4311(a)> [Rule 3D .1111] The permittee shall submit semiannual compliance reports for each affected source according to the requirements of **paragraphs (i) through (iv)** below

      (i) **Dates:** <40 CFR 63.4311(a)(1)> [Rule 3D .1111] The permittee shall prepare and submit each semiannual compliance report according to the dates specified in **paragraphs (A) and (B)** below.

         (A) Each semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. <40 CFR 63.4311(a)(1)(ii)> [Rule 3D .1111]

         (B) Each semiannual compliance report must be postmarked or delivered to the Department no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. <40 CFR 63.4311(a)(1)(iii)> [Rule 3D .1111]

      (ii) **General requirements:** <40 CFR 63.4311(a)(3)> [Rule 3D .1111] The semiannual compliance report must contain the information specified in **paragraphs (A) through (E)** below, and the information specified in permit condition **3.3(A)(5)(iii) and (iv)**.

         (A) Company name and address. <40 CFR 63.4311(a)(3)(i)> [Rule 3D .1111]

         (B) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. <40 CFR 63.4311(a)(3)(ii)> [Rule 3D .1111]

         (C) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. <40 CFR 63.4311(a)(3)(iii)> [Rule 3D .1111]

         (D) Identification of the compliance option or options specified in permit condition **3.3(A)(1)** that were used on each dyeing/finishing operation during the reporting period. If compliance options were changed during the

reporting period, the permittee shall report the beginning and ending dates for each option used. <40 CFR 63.4311(a)(3)(iv)> [Rule 3D .1111]

(E) If the permittee used the **emission rate without add-on controls option,** for dyeing/finishing operations in permit condition **3.3(A)(1)**, the calculation results for each compliance period ending each month during the 6-month reporting period. <40 CFR 63.4311(a)(3)(v)> [Rule 3D .1111]

(iii) **No deviations:** <40 CFR 63.4311(a)(4)> [Rule 3D .1111] If there were no deviations from the operating limitations in permit condition **3.3(A)(2),** the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

(iv) **Deviations: Emission Rate Without Add-On Controls Option.** <40 CFR 63.4311(a)(6)> [Rule 3D .1111] If using the **emission rate without add-on controls option** in permit condition **3.3(A)(1)** and there was a deviation from the applicable emission limit in permit condition **3.3(A)(2)**, the semiannual compliance report shall contain the information in **paragraphs (A) through (C)** below.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in permit condition **3.3(A)(2)**. <40 CFR 63.4311(a)(6)(i)> [Rule 3D .1111]

(B) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for **Equations 3.3-1, 3.3-1A, 3.3-2, and 3.3-3** in permit condition **3.3(A)(3)** for dyeing/finishing operations; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to permit condition **3.3(A)(3)(e)(iii)(B),** and if applicable, the calculation used to determine the mass of organic HAP in wastewater streams according to permit condition **3.3(A)(3)(e)(iii)(C)**. Background data supporting these calculations (e.g., information provided by material suppliers or manufacturers, or test reports) does not need to be submitted. <40 CFR 63.4311(a)(6)(ii)> [Rule 3D .1111]

(C) A statement of the cause of each deviation. <40 CFR 63.4311(a)(6)(iii)> [Rule 3D .1111]

3.4 Control of Visible Emissions [Rule 3D .0521]

The following provides a summary of the limits and/or standards for the emission source(s) which do not specifically list an opacity standard above.

Regulated Pollutant	Applicable Standard	ES-#	Applicable Regulation
Visible Emissions	20 percent opacity	ES-F03 (only predryer stack #56), ES-F04 (only predryer stack #62A, washer dry cans stack #62B, and rubber belt dry cans stack #65A), ES-F12, ES-P03, ES-P04 (all stacks except #59), ES-P06 (only washers sky cans stack #70A and steamer stack #73), ES-WB01 (only separator cyclone stack #126, singer stack #127, steamer stacks #128 and 134, and washer stack #135), and ES-WB02, ES-WB03	3D .0521(d)
	40 percent opacity	ES-F03 (all stacks except #56), ES-F04 (all stacks except #62A, 62B, and #65A), ES-F11, ES-P04 (only dry cans stack #59), ES-P05, ES-P06 (all stacks except #70A and #73), and ES-WB01 (all stacks except #126, #127, #128, #134, and #135)	3D .0521(c)

A. Control of Visible Emissions [Rule 3D .0521]

1. **20% opacity** [Rule 3D .0521(d)] - Visible emissions from the equipment listed above which is subject to this rule shall not be more than 20% opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20% opacity if:

   (a) No six-minute period exceeds 87% opacity;
   (b) No more than one six-minute period exceeds 20% opacity in any hour; and
   (c) No more than four six-minute periods exceed 20% opacity in any 24-hour period.

2. **40% opacity** [Rule 3D .0521(c)] - Visible emissions from the equipment listed above which is subject to this rule shall not be more than 40% opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40% opacity if:

   (a) No six-minute period exceeds 90% opacity;

(b) No more than one six-minute period exceeds 40% opacity in any hour; and
(c) No more than four six-minute periods exceed 40% opacity in any 24-hour period.

3. **Monitoring/Recordkeeping** [Rule 3Q .0508(f)(1)] - The permittee shall make a daily observation of the stacks/vents venting emissions from these sources. The permittee should attempt to make this observation during a period when the plant is operating at an average or greater than average capacity. The permittee shall keep a log of these daily visible emission stack observations. The log shall contain the following information:

   (a) the date and time of visual observation;
   (b) the person(s) who performed visual the observation;
   (c) identification of stack(s) where visible emissions were occurring and whether the emissions are normal (otherwise, input a general overall statement or check that there were no problems noted on a plant-wide basis);
   (d) where abnormal emissions are observed, the operating conditions under which the visual observation was conducted; and
   (e) any actions taken to reduce the visible emissions.

   The visible emissions observation data must be available for at least 90 percent of the operating days at the facility during the six-month reporting period to ensure compliance with this requirement. If the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily check.

4. **Reporting requirement** [Rule 3D .0508(f)(1)] - The permittee shall submit a summary report of the monitoring requirements specified in condition **3.4(A)(3)** to the Department by April 30th for the period October through March and October 30th for the period April through September. This report shall contain the total number of operating days, the number of days for which a visible emission observation was not made during the reporting period, the dates when abnormal emissions were observed, and any corrective actions taken to reduce the visible emissions.

3.5 Work Practices for Sources of Volatile Organic Compounds [Rule 3D .0958]

The following provides a summary of the limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Applicable Standard	ES-#	Applicable Regulation
Volatile Organic Compound Emissions	Work Practice Standards	ES-F03, ES-F04, ES-F08, ES-F11, ES-F12, ES-P03 through ES-P06, ES-WB01 through ES-WB03, ES-SFP, and associated mixing areas: dye and finishing departments	3D .0958 (c) and (d)

A. Work Practices for Sources of Volatile Organic Compounds [Rule 3D .0958]

1. **Facility-wide work practice standards** [Rules 3D .0958(c) and 3Q .0508(i)(16)] - The owner or operator of any facility subject to this Rule shall:

   (a) store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
   (b) clean up spills as soon as possible following proper safety procedures,
   (c) store wipe rags in closed containers,
   (d) not clean sponges, fabric, wood, paper products, and other absorbent materials, unless volatile organic compound emissions are captured and controlled,
   (e) drain solvents used to clean supply lines and other coating equipment into containers designed for closure, and close containers immediately after each use,
   (f) clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container.

2. **Facility-wide work practice standards for parts cleaning** [Rules 3D .0958(d) and 3Q .0508(i)(16)] - When cleaning parts, the owner or operator of any facility subject to this Rule shall:

   (a) flush parts in the freeboard area,
   (b) take precautions to reduce the pooling of solvent on and in the parts,
   (c) tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
   (d) not fill cleaning machines above the fill line,
   (e) not agitate solvent to the point of causing splashing, unless volatile organic compound emissions are captured and controlled.

3. **Monitoring/Recordkeeping** [Rule 3Q .0508(f)(1)] - To ensure compliance with the work practice standards above the permittee shall perform weekly inspections at each affected emissions unit to verify compliance with the work practices and identify any deviations. The results of the inspections and any deviations shall be recorded in a log (written or electronic form) on site and be readily available upon request by an authorized representative of the FCEAD or U.S. EPA. The log shall contain the following records:

   (a) the date and time of each inspection
   (b) the results of each inspection
   (c) all deviations from required work practice standards and the corrective actions taken

4. **Reporting Requirements** [Rule 3D .0508(f)(1)] - The permittee shall submit a summary report of the monitoring requirements specified permit condition **3.5(A)(3)**, to the Department by April 30th for the period October through March, and no later than October 30th for the period April through September. This report shall contain the total number of weeks in which the work practice standards weekly check were not made during the reporting period and shall include a description of any corrective actions taken as a result of the inspections.

3.6 Limitation to Avoid Being Major For Hazardous Air Pollutants [Rule 3D .1111 and Rule 3Q .0317(a)(5)]

1. **Facility-wide Emissions Limitation to avoid being Major for Hazardous Air Pollutants** [Rule 3D .1111 and Rule 3Q .0317(a)(5)]
   In order to remain classified as an area source for hazardous air pollutants under Rule 3D .1111 and thereby avoid any of the regulatory requirements of any future NESHAP regulations, the facility-wide emissions shall be less than:
   (a) 10 tons per year of each hazardous air pollutant, and
   (b) 25 tons per year of all hazardous air pollutants combined.

2. **Monitoring/Recordkeeping** [Rule 3Q .0508(f) and 3Q .0317(b)]
   The permittee shall maintain records of:
   (a) the monthly emissions in tons of each hazardous air pollutant emitted from the Printing, Coating, and Dyeing of Fabrics and Other Textiles subject to 40 CFR Part 63, Subpart OOOO, calculated using the records required under condition **3.3(A)**
   (b) the monthly records of coal and natural gas usage at the facility,
   (c) the monthly emissions in tons of each hazardous air pollutant emitted from all combustion sources at the facility, calculated using the most current approved

emissions factors from AP-42: *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources,*

(d) the total monthly emissions in tons of each hazardous air pollutant emitted from the facility,
(e) the total monthly emissions in tons of the aggregate hazardous air pollutant emitted from the facility,
(f) the monthly-rolling 12-month total of each hazardous air pollutant emitted from the facility, and
(g) the monthly-rolling 12-month total of the aggregate hazardous air pollutant emitted from the facility.

3. **Reporting** [Rule 3Q .0508(f) and 3Q .0317(b)]
The permittee shall submit a semiannual report to the Department containing the following information:
(a) the monthly-rolling 12-month total of the hazardous air pollutant emitted in the greatest quantity from the facility for each month during the reporting period, and
(b) the monthly-rolling 12-month total of the aggregate hazardous air pollutant emitted from the facility for each month during the reporting period.

The report shall be received by the Department by August 30th for the previous months of January through June, and by February 28th for the previous months of July through December.

SECTION 4
CONTROL OF TOXIC AIR POLLUTANTS - LOCAL ENFORCEMENT ONLY

The entire facility is subject to Subchapter 3D .1100 of the FCAQTC. This section is subject to **local enforcement only**. All the emission sources in Section I and their associated air pollution control device(s) are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply.

4.1. Facility-Wide Toxic Air Pollutant Conditions

A. Permit Requirements for Toxic Air Pollutants and Control of Toxic Air Pollutants [Sections 3Q .0700 and 3D .1100]

1. **Air toxics - general** - Specification of a listed toxic air pollutant (TAP) in this permit does not excuse the permittee from complying with the requirements of Sections 3D .1100 and 3Q .0700 of the FCAQTC with regard to any other listed TAP emitted from the regulated facility, nor does this permit exempt the permittee from compliance with any future air toxics regulations promulgated pursuant to the requirements of the Clean Air Act. **[Sections 3D .1100 and 3Q .0700]**

2. **De minimis limits** - Total facility-wide emissions of the following pollutants shall not exceed their respective de minimis emissions limits as shown in Rule 3Q .0711 unless a modeling demonstration is first approved by this Department which shows that the emissions of the subject TAPs from the facility will not adversely affect human health. This demonstration shall be in accordance with the requirements set forth in Sections 3D .1100 and 3Q .0700 of the FCAQTC. This demonstration must be made with an up-to-date version of a U.S. EPA approved computer model or, upon approval by the Department, calculated using the results of a previous modeling analysis showing compliance with the acceptable ambient levels for the pollutants listed below: **[Section 3Q .0700]**

Pollutant	**Deminimis level**
1,3-Butadiene	12 lb/year
1,4-Dioxane	12 lb/day
Ethyl acetate	36 lb/hour
Methyl chloroform	250 lb/day and 64 lb/hour
Methylene chloride	1600 lb/year
Methyl ethyl ketone	78 lb/day and 22.4 lb/hour
Perchloroethylene	13,000 lb/yr
Styrene	2.7 lb/hour
Toluene	98 lb/day and 14.4 lb/hour
Xylene	57 lb/day and 16.4 lb/hour

3. **Dispersion modeling emission limits** - Combined emissions of the following TAPs from all sources not exempted by Rule 3Q .0702(a) and (b) at this facility shall not exceed the emission rates listed below. Dispersion modeling using (using SCREEN version 1.1, dated 88300), performed in April, 1993 and approved by the Department, demonstrated that the permitted emissions of the TAPs listed in the table below from this facility impacted the surrounding ambient air at levels below the acceptable ambient levels (AALs) specified in Rule 3D .1104 of the FCAQTC. The emission rates listed below shall be used as a basis for certifying that any future modifications or changes in the methods of operation will result in ambient impacts below these AALs. In no case shall actual emissions resulting from changes or modifications exceed any of the following

emission rates without first applying for and receiving a permit: **[Section 3D .1100]**

Pollutant	Maximum facility-wide emission rate
Beryllium	44.2 lb/year
Hexavalent chromium	5.39 E-3 lb/year
Cadmium	29.0 lb/year
Hydrogen fluoride	40.8 lb/24 hour
Manganese	2.62 lb/24 hour
Nickel	2.27 lb/24 hour

4. **Ambient Air Levels (AAL)** - The permittee shall maintain the emission levels of the modeled toxic air pollutants from processes at the facility below that which would cause the AAL to be exceeded. The permittee has elected to use actual emissions of toxic air pollutants from the processes and those that overlap with the combustion sources to demonstrate compliance with the following AAL's:

Pollutant	Ambient Air Level
Acetaldehyde	27 mg/m^3
Acetic acid	3.7 mg/m^3
Acrylonitrile	1.5×10^{-4} mg/m^3
Ammonia	2.7 mg/m^3
Arsenic	2.3×10^{-7} mg/m^3
Ethylene oxide	2.7×10^{-5} mg/m^3
Formaldehyde	0.15 mg/m^3
Hydrogen chloride	0.7 mg/m^3

5. **Stack data** [Rule 3Q .0308(a)(1)] - The TAP modeling demonstration performed by the permittee involved the merging of the stacks at the facility into six groups. The stacks shall be grouped as determined by the most recent air toxic modeling demonstration performed by the permittee and listed below:

   (a) Group 1 stacks = 8A, 24A, 39, 40, 41, 42, 44, 45, 55, 59, 59A, 59B, 60A, 61, 61A, 62, 62A, 62B, 63, 64, 64D, 65, 65A, 66, 67, 68, 68A, 70, 70A, 71, 73, 74, 75, 76, 98, 99, 100, 101, 105, 107, 108, 120, 123, 124, 125, 127, 127A, 128, 139, 141, and 142; and

   (b) Group 2 stacks = 43, 46A, 46B, 46C, 46D, 52, 54A, 54B, 54C, 56, 62A, 97, 106, and

119; and

(c) Group 3 stacks = 69, 78, 79, 80, 81, 82, 83, 92, 93, 94, 109, 109A, 110; and 111; and

(d) Group 4 stacks = 122, 131, 132, 133, 134, 135, 136, and 138A; and

(e) Group 5 stacks = 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 15A, 15B, 15C, 15D, 15E, 16A, 16B, 17, 17A, 18, 19, 20, 21, 22, 23, 24, 25, 30, 31, 33A, 33B, 34, 35, 36, 36A, 37, 38A, 38B, 38C, 86, and 88; and

(f) Group 6 stacks = 143, 144, 145, and 146.

The permittee must obtain approval from the Department prior to the modification of any stack or vent as it has been characterized in the most recent modeling analysis approved by the Department. The permittee must demonstrate that the modification will not cause or contribute to any significant ambient air concentration that may adversely affect human health as required in Section 3D.1100. Examples of what constitutes a modification in this condition are: reduction in stack heights, changes in stack diameter, reduction of the average stack exit velocity, reductions in the stack flow rates, or reductions in the average stack temperatures.

Note - any stack obstruction (ie. rain cap) or changes of the stack away from the vertical position would require a stack exit velocity factor of 0.01 m/s to determine the flow rate used for modeling purposes, regardless of the actual flow rate exiting the stack.

6. **Monitoring/Recordkeeping** [Rule 3D .1105(d) and (e)] - The permittee shall maintain actual usage and inventory records of all products and fuels used at the facility which contain toxic air pollutants listed in Section 3D .1100 of the FCAQTC. These records shall include a system for determining compliance with the emission rates specified in permit conditions **4.1(A)(2), (3), and (4)**. Copies of these records shall be retained by the permittee for a period of two years after the date on which the record was made.

7. **Reporting requirement** [Rule 3D .1105(c)] - The permittee shall submit a report of the total actual toxic air pollutant emissions from the entire facility as recorded in condition **4.1(A)(6)** on a semiannual basis. These records shall be submitted no later than August 30th for the period January through June, and no later than February 28th for the period July through December. This report shall also contain the SCREEN model results using actual emissions and as calculated by the equations below to verify compliance with the AAL for the toxic air pollutants listed:

For Acetaldehyde:

$27 \geq (19.5 * G1) + (18.2 * G2) + (18.9 * G3) + (1.0 * G4) + (11.0 * G5)$
where G1 through G5 represent the total Acetaldehyde emissions for each group of stacks.

For Acetic acid:

$3.7 \geq (14.3 * G1) + (8.2 * G2) + (12.0 * G3) + (3.5 * G4) + (6.1 * G5)$
where G1 through G5 represent the total Acetic acid emissions for each group of stacks.

For Acrylonitrile:

$1.50 * 10^{-4} \geq (0.7 * G1) + (0.7 * G2)$
where G1 and G2 represent the total Acrylonitrile emissions for each group of stacks.

For Ammonia:

$2.7 \geq (16.5 * G1) + (18.2 * G2) + (18.9 * G3) + (17.7 * G4) + (8.4 * G5)$
where G1 through G5 represent the total Ammonia emissions for each group of stacks.

For Arsenic:

$2.3 * 10^{-7} \geq (0.7 * G1) + (0.7 * G2) + (0.7 * G3) + (0.7 * G4) + (0.3 * G5) + (0.002 * G6)$
where G1 through G6 represent the total Arsenic emissions for each group of stacks.

For Ethylene oxide:

$2.7 * 10^{-5} \geq (0.6 * G1) + (0.7 * G2) + (0.7 * G3) + (1.0 * G4) + (0.4 * G5)$
where G1 through G5 represent the total Ethylene oxide emissions for each group of stacks.

For Formaldehyde:

$0.15 \geq (19.5 * G1) + (18.2 * G2) + (18.2 * G3) + (17.7 * G4) + (8.4 * G5) + (0.3 * G6)$
where G1 through G6 represent the total Formaldehyde emissions for each group of stacks.

For Hydrogen chloride:

$0.7 \geq (31.0 * G1) + 0.0806$

where G1 represents the total Hydrogen chloride emissions for each group of stacks and 0.0806 represents the maximum modeled concentrations of HCL from the boilers.