County of Forsyth

PUBLIC NOTICE OF INTENT TO ISSUE A TITLE V AIR QUALITY PERMIT

FORSYTH COUNTY
OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION
WINSTON-SALEM, NORTH CAROLINA

September 25, 2017

Notice is hereby given by the Forsyth County Office of Environmental Assistance and Protection (EAP) of an opportunity for the public to review and comment on a draft Title V air quality permit for:

Ardagh Metal Beverage USA, Inc.
Winston-Salem, NC
Permit #00682-TV-18

This facility had applied for renewal of its Title Air Quality operation permit. The draft permit meets the Title V requirements as specified in FCAQTC Section 3Q .0500.

EPA will process this draft permit as a proposed permit and perform its 45-day review provided by Rule 3Q .0522 *Review by EPA and Affected States* concurrently with the public notice period. If public comments are received that result in a change to the permit, EPA's 45-day review period will cease to be performed concurrently with the public notice period. The deadline for citizen's petitions to the EPA Administrator will be determined based on EPA's 45-day review period beginning after the public comment period has ended. The status regarding EPA's 45-day review of this project and the deadline for citizen's petitions can be found at the following website address:

https://www.epa.gov/caa-permitting/north-carolina-proposed-title-v-permits

The EAP will issue a final Air Quality Permit, in accordance with the conditions of the draft/proposed Air Quality Permit, unless there are public comments which result in a different decision or significant change in the permit.

A copy of the draft permit and statement of basis is available at the EAP's website:

http://www.forsyth.cc/EAP/public_notices.aspx

Additional information regarding the draft permit may be obtained from the Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120; telephone (336) 703-2440. The public may submit written comments on these proceedings to the address above or by e-mail to lloydpb@forsyth.cc on or before October 25, 2017, the close of the public comment period.

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

OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

FORSYTH COUNTY GOVERNMENT CENTER
201 N. CHESTNUT STREET
WINSTON-SALEM, N. C. 27101-4120

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

PERMIT NUMBER	EFFECTIVE DATE	EXPIRATION DATE	RENEWAL DUE
00682-TV-18	DATE, 2017	November 14, 2022	February 14, 2022

Facility Name: **Ardagh Metal Beverage USA, Inc.**
Mailing Address: **8770 Bryn Mawr Avenue**
City, State, Zip: **Chicago, Illinois 60631-3655**

Facility Location: **4000 Old Milwaukee Lane**
City: **Winston-Salem, NC**

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 Office of Environmental Assistance and Protection 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 Office of Environmental Assistance and Protection.

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

DATE:

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-21 through ES-24, ES-26, ES-43 and ES-45	Seven can printers (1,200 cans per minute capacity each except for ES-23 and ES-24 (Lines 3 & 4 Printers) which each have a capacity of 1,610 cans per minute, ES-22 (Line 2 Printer) which has a capacity of 1,225 cans per minute, and ES-43 (Line 6 Printer) which has a capacity of 1,575 cans per minute.	None	None
ES-06 through ES-11, and ES-44	Seven printer ovens each fired with natural gas with a maximum heat input rate of 4.2 million Btu per hour for ES-06, ES-07, ES-10, and ES-11, and 2.15 million Btu per hour for ES-08 and ES-09, and 3.3 million Btu per hour for ES-44	None	None
ES-18	Inside Spray machines: Line 1 (eight spray nozzles) Line 2 (eight spray nozzles)	None	None
ES-19	Inside Spray machines: Line 3 (twelve spray nozzles) Line 4 (twelve spray nozzles)	None	None
ES-20	Inside Spray machines: Line 5A (eight spray nozzles) and 5B (four spray nozzles)	None	None
ES-46	Inside Spray machines: Line 6 (twelve spray nozzles)	None	None
ES-12 and ES-14	Two inside bake ovens each fired with natural gas with a maximum heat input rate of 5.4 million Btu per hour each	None	None
ES-13 and ES-47	Two inside bake ovens each fired with natural gas with a maximum heat input rate of 4.5 million Btu per hour for Lines 3 and 4 and 6.0 million Btu per hour for Line 6	CD-48	Regenerative thermal oxidizer fired with natural gas with a maximum heat input rate of 2.3 million Btu per hour or to atmosphere
ES-F	Clean up solvent usage	None	None

Emission Source ID #	Emission Source Description	Control Device ID#	Control Device Description
ES-41 and ES-42	Two Kewanee model H3W-400-G02 boilers fired with natural gas and/or propane with a maximum heat input rate of 18.740 million Btu per hour each	None	None

SECTION 2 FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 General Provisions [Sections 3-0100, 0200 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 Sections 3-0100 and 0200 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 this Office.

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 this Office, 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 this Office.

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 this Office, unless the source is exempted by rule. This Office 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 this Office 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 this Office 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 office by this permit shall be submitted to the Forsyth County Office of Environmental Assistance and Protection, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

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

b. Notify this Office immediately when corrective measures have been accomplished; and

c. Submit, if requested, to this Office 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 this Office 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 this Office 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 this Office 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 March 1st unless another date is established by the Director, the permittee shall submit to this Office 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 this Office, 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 this Office with 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 this Office. 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 this Office 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 .2602(e)]

When requested by this Office for determining compliance with emission control standards, the permittee shall provide sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure; scaffolding and safe access to the sample and data collection locations; and light, electricity, and other utilities required for sample and data collection.

2.23 General Emissions Testing and Reporting Requirements [Rules 3D .2602 and 3Q .0508(i)(16)]

Testing shall be conducted in accordance with FCAQTC Section 3D .2600 except as may be otherwise required in FCAQTC Rules 3D .0524, 3D .0912, 3D .1110, 3D .1111, 3D .1415 or a permit condition specific to the emissions source. Requests to use an alternative test method or procedure must be made in writing at least 45 days prior to the test and approved by this Office. Alternatives to test methods or procedures specified for emissions sources subject to test requirements under 40 CFR 60, 40 CFR 61 or 40 CFR 63, may require approval by the U.S. EPA. When required to conduct emissions testing under the terms of the permit:

A. The permittee shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved prior to air pollution testing. Emission testing protocols must be submitted at least 45 days before conducting the test for pre-approval prior to testing if requested by the permittee.

B. The permittee shall notify this Office of the specific test dates at least 10 days prior to the scheduled test date in order to afford this Office 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 that best fulfill the purpose of the test and are approved by the Director or his delegate.

D. The permittee shall submit one copy of the test report to this Office not later than 30 days after sample collection. The permittee may request an extension to submit the final test report if the extension request is a result of actions beyond the control of the permittee. 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 expressed in the same units as the emission limits given in the rule for which compliance is being determined 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. This Office will review emission test results with respect to the specified testing objectives as proposed by the permittee and approved by this Office.

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 this Office.

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 this Office 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 this Office 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 this Office 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).

New Source Performance Standards (NSPS) General Conditions - [Rule 3D .0524]

Following are conditions found in the 40 CFR Part 60 NSPS General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 60 except when otherwise specified in a particular subpart or in a relevant standard.

2.41 NSPS - General Provisions <40 CFR 60 Subpart A> [Rule 3D .0524]

The permittee shall comply with all applicable requirements specified in the general provisions of the New Source Performance Standards (40 CFR 60 Subpart A) including but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications and reconstruction.

2.42 NSPS - Good Air Pollution Control Practice <40 CFR 60.11(d)> [Rule 3D .0524]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control

practice for minimizing emissions.

2.43 NSPS - Circumvention <40 CFR 60.12> [Rule 3D .0524]

Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard under 40 CFR 60. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

2.44 NSPS - Maintain Records - Startup/Shutdown/Malfunction <40 CFR 60.7(b)> [Rule 3D .0524]

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

2.45 NSPS - Files Available for Inspection <40 CFR 60.7(f)> [Rule 3D .0524]

The permittee shall maintain a file of all measurements, including, if applicable, performance test measurements and all other information required in 40 CFR 60. This file shall be kept in a permanent form suitable for inspection and shall be retained at least two years following the date of such measurements, maintenance, reports, and records.

2.46 NSPS - Performance Testing Facilities Provided by Permittee <40 CFR 60.8(e)> [Rule 3D .0524]

For any performance testing, the permittee shall provide, or cause to be provided, performance testing facilities as follows:

A. Sampling ports adequate for the applicable test methods. 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) with safe access.

C. Utilities for sampling and testing equipment.

D. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard.

For purposes of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

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.

2.47 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.

2.48 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.

2.49 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, this Office 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).

2.50 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 this Office 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 SEVEN CAN PRINTERS (ID Nos. ES-21 through 24, 26, 43, and 45), Exhausting to Atmosphere, SEVEN PRINTER OVENS (ID Nos. ES-06 through 11, and 44), Exhausting to Atmosphere FOUR GROUPS OF INSIDE SPRAY MACHINES (ID Nos. ES-18 through 20, and ES-46), Exhausting to Atmosphere, TWO INSIDE BAKE OVENS (ID Nos. ES-12 and 14), Exhausting to Atmosphere, TWO INSIDE BAKE OVENS (ID Nos. ES-13 and 47), Exhausting to a REGENERATIVE THERMAL OXIDIZER (ID No. CD-48) OR to Atmosphere, and ASSOCIATED CLEAN UP SOLVENT USAGE (ID No. ES-F), Fugitive Emissions

Table 3.1: Summary of emission Limits, Standards, and Other Applicable Requirements.

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
VOC	4.5 pounds VOC per gallon solids delivered	ES-21, ES-22, ES-26, and ES-45 (can printers and overvarnish operation)	Rules 3D .0918(c)(1) and 3D .0958(f)
VOC	9.8 pounds VOC per gallon solids delivered	ES-18 through ES-20 (inside spray machines) and ES-21, ES-22, ES-26, and ES-45 (can printers exterior end operation)	Rules 3D .0918(c)(2) and 3D .0958(f)
VOC	3.84 pounds VOC per gallon of coating solids	ES-08, ES-09, ES-23, ES-24, ES-43, and ES-44 (Lines 3, 4, and 6 can printer and oven overvarnish and clear base coating operation)	Rule 3D .0524 and 40 CFR 60.492(b) and 3D .0918[1]
VOC	7.43 pounds of VOC per gallon of coating solids	ES-46 and ES-47 (Line 6 inside spray coating operation and inside bake oven) and ES-18 (Line 2 inside spray coating operation)	Rule 3D .0524 and 40 CFR 60.492(c)and 3D .0918[1]

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
VOC	535.2 tons per consecutive 12 months	ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers), ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	185.9 tons per consecutive 12 months	ES-26, ES-43, and ES-45 (can printers), ES-10, ES-11, and ES-44 (printer ovens), ES-20 and ES-46 (inside spray machines), ES-14 and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	103.4 tons per consecutive 12 months	ES-43, ES-44, ES-46, ES-47 (Line 6 equipment), and ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	Associated work practice standards	ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers), ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rule 3D .0958(c) and (d)
Particulate Matter	$E = 4.10xP^{0.67}$; where: E = allowable emission rate in pounds per hour, P = process rate in tons per hour	ES-18 through ES-20, and ES-46 (inside spray machines), ES-06 through ES-11, and ES-44 (printer ovens)** ES-12 through ES-14, and ES-47 (inside bake ovens)** CD-48 (regenerative thermal oxidizer)**	Rule 3D .0515

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
*Sulfur Dioxide	2.3 pounds per million Btu	ES-06 through ES-11, and ES-44 (printer ovens), ES-12 through ES-14, and ES-47 (inside bake ovens), CD-48 (regenerative thermal oxidizer)	Rule 3D .0516
Visible Emissions	20% Opacity	ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens) CD-48 (regenerative thermal oxidizer)	Rule 3D .0521(d) (see condition 3.3(B) for requirements)

[1] ES-18 (Line 2 inside spray coating operation), ES-43, ES-44, ES-46, and ES-47 are also subject to Rule 3D .0918. Compliance is assured by meeting the more stringent NSPS standards.

*3D .0516 - *Sulfur Dioxide Emissions from Combustion Sources* applies to the direct-fired natural gas burners associated with the affected units. Use of only natural gas assures compliance with this standard. No monitoring, recordkeeping, or reporting is required to assure compliance.

**3D .0515 – *Particulate Emissions from Miscellaneous Industrial Processes* applies to the natural gas direct-fired ovens. Use of only natural gas assures compliance with this standard. No monitoring, recordkeeping, or reporting is required to assure compliance.

A. Can Coating [Rule 3D .0918]

ES-21, ES-22, ES-26, and ES-45 (can printers and overvarnish operation)
ES-18 through ES-20 (inside spray machines), and
ES-21, ES-22, ES-26, and ES-45 (can printers exterior end operation)

1. **Standard** [Rules 3D .0918(c)(1) & (2) and 3D .0958(f)]
   a) Emissions of volatile organic compounds (VOCs) from ES-21, ES-22, ES-26, and ES-45 (can printers and overvarnish operation) shall not exceed 4.5 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator.
   b) Emissions of volatile organic compounds (VOCs) from ES-18 through ES-20 (inside spray machines), ES-21, ES-22, ES-26, and ES-45 (can printers exterior end operation) shall not exceed 9.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator.

2. **Testing** [Rule 3D .0501(b)]
   If emissions testing is required by this Office or U.S. EPA, or the permittee submits emissions testing to the Division in support of a permit application, the permittee shall

perform such testing in accordance with the appropriate EPA reference method(s) as approved by this Office. The permittee may request approval from this Office for an alternate test method or procedure in writing.

3. **Monitoring and Recordkeeping** [Rules 3D .0605 and 3Q .0508(f)]
The permittee shall maintain records of all coatings used in the affected sources. At a minimum, the records shall contain:

a) the density of each coating in lb/gal,
b) the percentage by weight of the volatile organic compound portion for each coating,
c) the amount and percentage by weight of each volatile organic compound constituent of diluents added to each coating, if any, and
d) the percentage by volume of solids for each coating.

These records shall be maintained at the facility and readily available for inspection for a period of not less than five (5) years.

4. **Reporting** [Rule 3Q .0508(f)]
All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report.

B. New Source Performance Standards [Rule 3D .0524 and 40 CFR 60.490 through 60.496]

ES-23, ES-24, ES-08, and ES-09 (Lines 3 and 4 can printers and ovens overvarnish and clear base coating operation,
ES-43 and ES-44 (Line 6 can printer and oven overvarnish and clear base coating operation),
ES-46 and ES-47 (Line 6 inside spray coating operation and inside bake oven), and
ES-18 (Line 2 inside spray coating operation)

1. **Standard** [Rule 3D .0524 and 40 CFR 60.492(b) and (c)]
a) Emissions of volatile organic compounds (VOCs) from ES-23, ES-24, ES-08, ES-09, ES-43, and ES-44 (Lines 3, 4, and 6 can printer and oven overvarnish operation) shall not exceed the volume-weighted calendar-month average emissions of 3.84 pounds of volatile organic compounds per gallon of solids.
b) Emissions of volatile organic compounds (VOCs) from ES-46 and ES-47 (Line 6 inside spray coating operation and inside bake oven) and ES-18 (Line 2 inside spray coating operation) shall not exceed the volume-weighted calendar-month average emissions of 7.43 pounds of volatile organic compounds per gallon of solids.

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

3. **Monitoring and Recordkeeping** [Rules 3D .0605 and 3Q .0508(f)]
The permittee shall maintain records of all coatings used in the affected sources. At a minimum, the records shall contain:

a) the density of each coating in lb/gal,
b) the percentage by weight of the volatile organic compound portion for each coating,
c) the amount and percentage by weight of each volatile organic compound constituent of diluents added to each coating, if any, and
d) the percentage by volume of solids for each coating.

These records shall be maintained at the facility and readily available for inspection for a period of not less than two (2) years.

4. **Reporting** [Rule 3Q .0508(f)]
All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report.

C. Prevention of Significant Deterioration (PSD Avoidance), Facility-wide [Rule 3Q .0317(a)(1)]

ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers),
ES-06 through ES-11, and ES-44 (printer ovens),
ES-18 through ES-20, and ES-46 (inside spray machines),
ES-12 through ES-14, and ES-47 (inside bake ovens), and
ES-F (clean up solvent usage)

1. **Standard** [Rule 3Q .0317(a)(1)]
In order to avoid the applicability of 3D .0530(g) for major sources and major modifications for the inside spray machines (ID Nos. ES-18, ES-19, and ES-20) installed in 1991, volatile organic compound emissions from the sources listed above combined shall not exceed **535.2 tons per consecutive 12 months**.

2. **Testing** [Rules 3Q .0317(b) and .0508(f)]
The permittee shall follow the testing requirements specified in permit condition **3.1.A.2** for these sources.

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

a) The permittee shall maintain monthly records of the VOC usage in the affected facilities.
b) The permittee shall record the monthly VOC emissions in tons/month and the 12 month rolling total of VOC emissions in tons per year at the end of each month.

4. **Reporting** [Rules 3Q .0317(b) and .0508(f)]
   a) VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling total of VOC emissions for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.
   b) All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report

D. Prevention of Significant Deterioration (PSD Avoidance), Lines 5 and 6 [Rule 3Q .0317(a)(1)]

ES-26, ES-43, and ES-45 (can printers),
ES-10, ES-11, and ES-44 (printer ovens),
ES-20 and ES-46 (inside spray machines),
ES-14, and ES-47 (inside bake ovens), and
ES-F (clean up solvent usage)

1. **Standard** [Rule 3Q .0317(a)(1)]
   In order to avoid the applicability of 3D .0530(g) for major sources and major modifications for the Line 5/6 printers (ID Nos. ES-26 & 43) installed in 2000, VOC emissions from the sources listed above combined shall not exceed **185.9 tons per consecutive 12 months**.

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

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

   a) The permittee shall maintain monthly records of the VOC usage in the affected facilities.
   b) The permittee shall record the monthly VOC emissions in tons/month and the 12 month rolling totals in tons per year at the end of each month.

4. **Reporting** [Rules 3Q .0317(b) and .0508(f)]
   a) VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling totals for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.
   b) All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this

Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report.

E. Prevention of Significant Deterioration (PSD Avoidance), Line 6 [Rule 3Q .0317(a)(1)]

ES-43 (can printer),
ES-44 (printer ovens),
ES-46 (inside spray machines),
ES-47 (inside bake ovens), and
ES-F (clean up solvent usage)

1. **Standard** [Rule 3Q .0317(a)(1)]
In order to avoid the applicability of 3D .0530(g) for major sources and major modifications for the Line 6 equipment listed above, VOC emissions from the sources listed above combined shall not exceed **103.4 tons per consecutive 12 months**. The permittee shall demonstrate compliance
with this PSD avoidance limit through the use of the following equation:

$$E_{VOC} = \sum_{n=1}^{12} \frac{[(A)+(B)+(1-Ox/100)(C)+(D)]}{2000\ lbs/ton}$$

where,

E_{VOC}	=	monthly rolling 12-month total emissions (in tons) of volatile organic compounds;
A	=	the monthly amount of VOC emissions from the uncontrolled equipment on Line 6 (ES-43, ES-44, and ES-46);
B	=	the monthly amount uncontrolled VOC emissions from the inside bake oven (ES-47) on Line 6;
Ox	=	the overall control efficiency (%) of the regenerative thermal oxidizer (CD-48) based on the most recent performance test;
C	=	the monthly amount of VOC emissions from inside bake oven (ES-47) on Line 6 routed through the regenerative thermal oxidizer (CD-48);
D	=	the monthly amount VOC emissions from the clean up solvent usage on Line 6 (ES-F); and
n	=	the month (1...12).

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

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

   a) The permittee shall maintain monthly records of the VOC usage in the affected facilities as identified in the equation in condition **3.1(E)(1)** above.
   b) The permittee shall record the monthly VOC emissions in tons/month and the 12 month rolling totals in tons per year at the end of each month using the equation in condition **3.1(E)(1)** above.

4. **Compliance Assurance Monitoring and Recordkeeping for CD-48** [Rules 3D .0614, 3Q .0508(f), and 40 CFR Part 64]
   In order to demonstrate compliance with the CAM plan for the regenerative thermal oxidizer (CD-48), the following monitoring and recordkeeping requirements apply:
   a) The regenerative thermal oxidizer control temperature shall be continuously monitored to ensure the combustion chamber temperature is maintained at a minimum of 1400 degrees F to ensure minimum destruction efficiency for the unit. The combustion chamber temperature shall be recorded at least four times equally spaced over an hour. The temperature shall be monitored by a device accurate to within ± 1.0% or ± 10 degrees F, whichever is greater.
   b) The permittee shall perform annual preventative maintenance including the replacement of the thermocouple. The permittee shall record the results of all the inspection, calibration and maintenance activities in a log on site and have it available for inspection by this Office. The log shall include the date, inspector's name, and any corrective action taken as a result of the inspection and/or calibration.
   c) The permittee shall record the number of hours the emissions are routed to the regenerative thermal oxidizer for each operational day.
   d) The permittee shall continuously monitor the flow at the fan inlet to the regenerative thermal oxidizer

5. **Reporting** [Rules 3D .0614, 3Q .0317(b), .0508(f), and 40 CFR Part 64]
   The permittee shall submit the following reports:

   a) VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling totals for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.
   b) All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report.
   c) A summary report of the compliance assurance monitoring required in condition **3.1(E)(4)** above 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); and
iii) A description of the actions taken to implement a QIP (if required by this Office) 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.

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

ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers),
ES-06 through ES-11, and ES-44 (printer ovens),
ES-18 through ES-20, and ES-46 (inside spray machines),
ES-12 through ES-14, and ES- 47 (inside bake ovens), and
ES-F (clean up solvent usage)

1. **Facility-wide work practice standards** [Rule 3D .0958(c)] - 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** [Rule 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** [Rules 3D .0605 and 3Q .0508(f)] - 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 FCOEAP 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)] - The permittee shall submit a summary report of the monitoring requirements specified in permit condition **3.1(F)(3)**, to this Office by July 30th for the period January through June, and no later than January 30th for the period July through December. This report shall contain the total number of weeks in which the work practice standards weekly check were not made during the reporting period.

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

ES-18 through ES-20 and ES-46 (inside spray machines)

1. **Emission Limit** [Rule 3D .0515]
   Emissions of particulate matter from the sources listed in (E) above shall not exceed an allowable emission rate as calculated by the following equation:

   $E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
   P = process weight in tons per hour

   Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

2. **Emission Limit** [Rule 3D .0515]
   Based on maximum production capacities and Rule 3D .0515, the particulate emission rate from each inside spray machine line, except ES-18 (Line 2), ES-19, and ES-46, shall at no time exceed 4.55 pounds per hour. The particulate emission rate from ES-18 (Line 2) shall at no time exceed 4.50 pounds per hour, the particulate emission rate from ES-46 shall at no time exceed 5.33 pounds per hour, and the particulate emission rate from ES-19 shall at no time exceed 5.40 pounds per hour.

3. **Testing** [Rule 3D .0501(b)]
   The permittee shall follow the testing requirements specified in permit condition **3.1.A.2** for these sources. Excess visible emissions shall be grounds for this Office to require testing from these sources using appropriate U.S. EPA reference test methods for particulate matter as approved by this Office.

4. **Monitoring, Recordkeeping, and Reporting Requirements** [Rules 3D .0605 and 3Q .0508(f)]
   There are no controls devices on ES-18 through ES-20, and ES-46 and engineering calculations demonstrate compliance with the allowable limit in permit condition **3.1(G)(1)**. Therefore, no monitoring, recordkeeping, or reporting is required to assure compliance.

H. Permit Shield from Applicable Requirement for the Inside Spray Machines [Rule 3Q .0512(a)]

ES-18 through ES-20 (inside spray machines)

The inside spray machines ES-18 (except for Line 2), ES-19, and ES-20 shall not be subject to 40 CFR 60.490 "Standards of Performance for the Beverage Can Surface Coating Industry" unless and until the inside spray machines are modified under 40 CFR 60.14, reconstructed under 40 CFR 60.15, or replaced. This determination is based on information provided by the permittee demonstrating the addition of spray guns to the sources in 1991 did not result in an increase in the emission rate (expressed as kg/hr) of VOC to the atmosphere and was not a modification under 40 CFR 60.14.

I. Permit Shield from Applicable Requirement for the Modification of Line 5 [Rule 3Q .0512(a)]

ES-26 and ES-45 (can printers)

Line 5 can printers (ID No. ES-26 and ES-45) shall not be subject to 40 CFR 60.490 "Standards of Performance for the Beverage Can Surface Coating Industry" unless and until the Line 5 printers are modified under 40 CFR 60.14, reconstructed under 40 CFR 60.15, or replaced.

This determination is based on the complete permit application provided by the permittee on February 2, 2000 for the addition of an 8 color printer to Line 5. This Office has determined that the addition of the printer to Line 5 (ES-45) does not constitute a modification under 40 CFR 60.14.

3.2 TWO NATURAL GAS/PROPANE-FIRED BOILERS (ID Nos. ES-41 and ES-42)

Table 3.2: Summary of Emission Limits, Standards, and Other Applicable requirements.

Regulated Pollutant	Applicable Standard	Applicable Regulation
Particulate Matter	0.383 pounds per million Btu	Rule 3D .0503
Sulfur Dioxide	2.3 pounds per million Btu	Rule 3D .0516
Visible emissions	20 % opacity	Rule 3D .0521(d) (see condition 3.3(B) for requirements)

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

1. **Standard** [Rule 3D .0503]
   Emissions of particulate matter from the combustion of natural gas or propane that are discharged from this source into the atmosphere shall not exceed 0.383 pounds per million Btu heat input.

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

3. **Monitoring, Recordkeeping, and Reporting** [Rules 3D .0605 and 3Q .0508(f)]
   No monitoring, recordkeeping, or reporting is required to demonstrate compliance with Rule 3D .0503 for the firing of natural gas or propane in this source.

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

1. **Standard** [Rule 3D .0516]
   Emissions of sulfur dioxide from this source 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 permit condition **3.1(A)(2)** for these sources.

3. **Monitoring, Recordkeeping, and Reporting** [Rules 3D .0605 and 3Q .0508(f)]
   No monitoring, recordkeeping, or reporting is required to demonstrate compliance with Rule 3D .0516 for the firing of natural gas or propane in this source.

3.3 GENERAL FACILITY-WIDE EMISSION SOURCE CONDITIONS

A. **Air Toxics** [Sections 3D .1100 and 3Q .0700] ***Locally Enforceable Only***

1. **Air toxics - general** [Sections 3D .1100 and 3Q .0700]
   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.

2. **Dispersion modeling emission limits** [Section 3D .1100]
   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 AERMOD (Lakes Environmental AERMOD View model version 5.6), performed in September, 2007 and approved by this Office, 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:

Pollutant	Maximum facility-wide emission rate
formaldehyde (50-00-0)	2.63 lb/hr

3. **Stack data** [Rules 3Q .0703(14), .0706, and .0308(a)(1)]
   The permittee must obtain approval from this Office prior to the modification of any stack or vent identified in the September, 2007 modeling analysis which was used to calculate the TAP emission rates listed in permit condition **3.3(A)(2).** 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 include:

   a) reduction in stack heights,
   b) change in stack diameter,
   c) reduction of the average stack exit velocity,
   d) reduction in stack flow rate,
   e) addition of stack obstructions (e.g. rain caps),
   f) redirection or reorientation of stack emissions, or
   g) reduction in average stack temperatures.

4. **Air toxic pollutant recordkeeping** [Rules 3D .0605, 3D .1105, and 3Q .0308(a)(1)
   The permittee shall maintain updated records of production rates, throughputs, material usage, and other process operational information as is necessary to determine

compliance with the emission rates specified in permit conditions **3.3(A)(2)**. At a minimum these records shall include data sufficient to calculate monthly averaged emission rates (in pounds per hour of emission source operation) for TAPs with 1-hour or 24-hour emission limits and yearly emission rates (in pounds per calendar year) for TAPs with annual emission limits.

Copies of these records shall be retained by the permittee for a period of three years after the date on which the record was made.

If requested by an agent of this Office, the permittee shall readily supply copies of these records at the time of the inspection. Likewise, the permittee shall submit copies of the records upon request by this Office.

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

ES-06 through ES-11, and ES-44 (printer ovens),
ES-18 through ES-20, and ES-46 (inside spray machines),
ES-12 through ES-14, and ES-47 (inside bake ovens),
CD-48 (regenerative thermal oxidizer)
ES-40, ES-41, and ES-42 (boilers)

1. **Standard** [Rule 3D .0521(d)]
   Visible emissions from the sources above established after July 1, 1971 shall not exceed 20% opacity when averaged over a six-minute period except that six-minute periods averaging not more than 87% opacity may occur not more than once in any hour nor more than four times in any 24-hour period.

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

3. **Monitoring and Recordkeeping** [Rules 3Q .0317(b) and .0508(f)]
   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 daily log of this daily visible emission stack observation. The log shall contain the following:

   a) the date and time of visual observation,
   b) the person(s) who performed visual observation,
   c) identification of stack(s) where visible emissions were occurring (note color, duration, density (heavy or light)), 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.

This log shall be retained for at least 5 years from the event recorded and shall be made readily available upon request by an authorized representative of this Office or the U.S. EPA.

4. **Reporting** [Rule 3D .0508(f)]
   All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the permittee shall make this statement in the report.

PART II
AIR QUALITY CONSTRUCTION PERMIT

The permittee is hereby authorized to construct air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, of this permit, in accordance with the associated air quality permit application(s) received, including all plans, specifications, previous applications, and other supporting data, all of which are filed with the Forsyth County Office of Environmental Assistance and Protection (FCOEAP) and are incorporated in Part II of this Air Quality Permit.

SECTION 1
PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

This permit modification is for the following projects:

Line 6 Modification Project - The facility has requested that Line 6 be modified to allow for the printing and coating of variable can sizes (8 oz, 12 oz, 16 oz and 24 oz) versus the current 24 ounce can size. Line 6 currently has the ability to run 12 ounce, 24 ounce and other can sizes. This is accomplished by changing the tooling needed to "draw and iron" the cans in the can making process, raising or lowering the can conveyors, as well as, moving spray nozzles on the inside spray machines to accommodate different can heights.

SECTION 2
GENERAL CONDITIONS

This section describes terms and conditions applicable to the construction of the air emission source(s) and associated air pollution control device(s) listed in Section 1. Unless otherwise specified herein all references to the permit in this section apply only to Part II of the permit.

A. **General Provisions**

1. This permit is nontransferable by the permittee. Future owners and operators must obtain a new air quality permit from the FCOEAP.
2. This issuance of this permit in no way absolves the permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the issuance date of this permit.
3. A violation of any term or condition of Part II of this permit shall subject the permittee to enforcement pursuant to Forsyth County Air Quality Control Ordinance and Technical Code, including assessment of civil and/or criminal penalties.

B. **Submissions (REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, AND REQUESTS FOR RENEWAL)**

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the FCEAD.

C. **Part II Renewal Request**

The permittee shall request renewal of the emission source(s) and associated air pollution control device(s) listed in Section 1 at the same time as specified in Part I, Section 2.24 of this permit.

D. **Annual Fee Payment**

The permittee shall pay all fees in accordance with Forsyth County Air Quality Control Ordinance and Technical Code Subchapter 3Q .0200 and in conjunction with Part I, Section 2.12 of this permit.

E. **Reporting Requirements**

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Director:
1. changes in the information submitted in the application;
2. changes that modify equipment or processes; or
3. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the FCOEAP to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

F. **Termination, Modification, and Revocation of the Permit**

The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred; or
4. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Forsyth county Air Quality control Ordinance and Technical Code.

G. **Inspection and Entry**

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the FCOEAP, or an authorized representative to perform the following:

1. enter 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 are required to be kept under the 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, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

SECTION 3
SPECIFIC LIMITATIONS AND CONDITIONS

3.1 **Line 6 Modification Project** - The facility has requested that Line 6 be modified to allow for the printing and coating of variable can sizes (8 oz, 12 oz, 16 oz and 24 oz) versus the current 24 ounce can size. Line 6 currently has the ability to run 12 ounce, 24 ounce and other can sizes. This is accomplished by changing the tooling needed to "draw and iron" the cans in the can making process, raising or lowering the can conveyors, as well as, moving spray nozzles on the inside spray machines to accommodate different can heights.

(a) **Operation** - This permit, **00682-TV-18**, authorizes the operation of Line 6 to print and coat cans of variable sizes (8 oz, 12 oz, 16 oz and 24 oz) as detailed in the permit modification application. **[Rule 3Q .0304(i)]**

(b) **30-day notification from start-up** - The permittee shall notify this Office of the actual start-up date of the completed project within 30 days after such date. This notification is to enable this Office to plan an inspection to verify compliance with any applicable standards. **[Rule 3A .0103(a)(5)]**

(c) **Commencement of construction -** If construction/modification of the project has not commenced by March 1, 2019 (18 months after issuance of 00682-TV-17), or if construction activities lapse for a period of 18 months after construction has commenced, the permittee shall reapply to this Office and obtain a permit to construct before commencing or resuming construction.
[Rule 3Q .0308(a)]

FORSYTH COUNTY OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

TV RENEWAL - COMPLIANCE CERTIFICATION REVIEW

Applicant:	**Site Location:**		**New Permit No.**
Ardagh Metal Beverage USA, Inc.	4000 Old Milwaukee Lane		00682-TV-18
Technical Contact:	**Phone:**	**Responsible Official:**	**Title:**
Jim Antia	(773) 399-3198	Mike Wells	Environment, Health & Safety Manager
Agency Reviewer:	**Signature:**	**Date:**	
Jeffrey Ebbitt			
Agency Q/A Manager:	**Signature:**	**Date:**	**Primary/Secondary SIC Codes**
			3411 – Metal Cans

Date Application Dated:	**Date Application Received:**
February 2, 2017	February 6, 2017 (Application Tracking No.1226)

I. FACILITY DESCRIPTION

Ardagh Metal Beverage USA, Inc. (Ardagh) produces two-piece aluminum beverage cans. The Standard Industrial Classification number is 3411 (Metal Cans). Cans bottoms are formed from aluminum stock, washed, and coated at the facility in a continuous operation. Can tops are not manufactured at this facility. No air emissions are produced in the formation process and only minor emissions, <1 ton per year (tpy), of hazardous air pollutants (HAPs) are emitted from the water based washing process. The waste water produced in the washing operation is treated on site before it is discharged to the local POTW.

The final steps in the process are necking, flanging, leak testing, and packaging which do not produce air emissions.

Ardagh is a major source with respect to Title V because the potential (and actual) emissions of volatile organic compounds (VOC) from the facility are greater than 100 tons per year. The facility is a minor source with regard to HAP emissions as they are less than 10 tons per year for each individual HAP and less than 25 tons per year for total combined HAPs.

II. STATEMENT OF COMPLIANCE

The Office has reviewed the compliance status of this facility. Based on a review of the application and knowledge of this facility through compliance inspections, the facility was in compliance with all applicable requirements. The applicant has certified that the facility will be in compliance with all applicable requirements at the time of permit issuance and will continue to comply with these requirements. The applicant has also certified that the facility will be in compliance with all subsequent applicable requirements taking effect during the term of this permit and will meet such requirements on a timely basis.

III. SUMMARY OF EMISSION SOURCES AND CONTROL DEVICES

The following table identifies all emission sources and associated control devices for which the Renewal Title V Operating Permit is issued.

Emission Source ID #	**Emission Source Description**	**Control Device ID#**	**Control Device Description**
ES-21 through ES-24, ES-26, ES-43 and ES-45	Seven can printers (1,200 cans per minute capacity each except for ES-43 (Line 6 Printer) which has a capacity of 1,575 cans per minute, ES-22 (Line 2 Printer) which has a capacity of 1,225 cans per minute.	None	None
ES-06 through ES-11, and ES-44	Seven printer ovens each fired with natural gas with a maximum heat input rate of 4.2 million Btu per hour for ES-06 through ES-11 and 3.3 million Btu per hour for ES-44	None	None
ES-18	Inside Spray machines: Line 1 (eight spray nozzles) Line 2 (eight spray nozzles)	None	None
ES-19	Inside Spray machines: Line 3 (ten spray nozzles) Line 4 (ten spray nozzles)	None	None
ES-20	Inside Spray machines: Line 5A and Line 5B (eight spray nozzles)	None	None
ES-46	Inside Spray machines: Line 6 (twelve spray nozzles)	None	None
ES-12 and	Two inside bake ovens each	None	None

Emission Source ID #	Emission Source Description	Control Device ID#	Control Device Description
ES-14	fired with natural gas with a maximum heat input rate of 5.4 million Btu per hour each		
ES-13 and ES-47	Two inside bake ovens each fired with natural gas with a maximum heat input rate of 4.5 million Btu per hour for Lines 3 and 4 and 6.0 million Btu per hour for Line 6	CD-48	Regenerative thermal oxidizer fired with natural gas with a maximum heat input rate of 2.3 million Btu per hour or Atmosphere
ES-F	Clean up solvent usage	None	None
ES-41 and ES-42	Two Kewanee model H3W-400-G02 boilers fired with natural gas and/or propane with a maximum heat input rate of 18.740 million Btu per hour each	None	None

IV. EMISSION SOURCE-BY-SOURCE EVALUATION

1.0 ES-21 through ES-24, ES-26, ES-43, and ES-45, Seven Can Printers, Uncontrolled; ES-6 through ES-11 and ES-44, Seven Printer Ovens, Uncontrolled; ES-18 through ES-20, and ES-46, Four Inside Spray Machines, Uncontrolled; ES-12 and ES-14, Two Inside Bake Ovens, Uncontrolled; ES-13 and ES-47, Two Inside Bake Ovens, Controlled by Regenerative Thermal Oxidizer (CD-48); and ES-F, Clean up solvent usage, Uncontrolled fugitive emissions

The facility has seven production lines identified as Lines 1, 2, 3, 4, 5a, 5b, and 6. Each line is made up of a can printer, a printer oven, inside spray machines, and the inside bake ovens. Lines 1 and 2 share inside spray machines and an inside bake oven, Lines 3 and 4 share inside spray machines and an inside bake oven with exhaust to a regenerative thermal oxidizer or atmosphere, Lines 5a and 5b share inside spray machines and an inside bake oven, and Line 6 has its own inside spray machines and an inside bake oven with exhaust to a regenerative thermal oxidizer or atmosphere. The can printer (ES-45) on Line 5b is a change over printer and only one printer (either ES-26 or ES-45) can operate at a time on Line 5.

The can coating process includes printing and overvarnish application as well as bottom and

inside coating operations. The printing process is an offset lithographic operation using ink pastes to produce the designs required by customers. The inks contain minor amounts of VOCs and HAPs. The printed designs are roll coated with a clear overvarnish containing VOC and HAP. A protective coating containing VOC and HAP is also applied to the bottoms of the cans using a roll coat operation. The printed and coated cans are then conveyed through natural gas-fired dryers. The natural gas-fired dryers are relatively small sources of criteria pollutants (particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), VOC, and a small amount of HAPs. Next, the inside surfaces of the cans are sprayed with a protective coating which is cured as the cans are conveyed through another set of natural gas-fired dryers. The inside coating contains VOC, HAP and PM, and the natural gas-fired dryers are minor sources of criteria pollutants and a small amount of HAPs.

The clean up solvent usage is a grouping of all the clean up solvents used at the facility. It is a fugitive source of VOC emissions and is only subject to the PSD avoidance conditions and the VOC work practices.

1.1 Applicable Regulatory Requirements

The following provides a summary of the limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Table IV-1.1: Summary of Emission Limits, Standards and other Applicable Requirements.

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
VOC	4.5 pounds VOC per gallon solids delivered	ES-21 through ES-24, ES-26, and ES-45 (can printers and overvarnish operation)	Rule 3D .0918(c)(1)
VOC	9.8 pounds VOC per gallon solids delivered	ES-18 through ES-20 (inside spray machines) and ES-21 through ES-24, ES-26, and ES-45 (can printers exterior end operation)	Rule 3D .0918(c)(2)
VOC	3.84 pounds VOC per gallon of coating solids	ES-43 and ES-44 (Line 6 can printer and oven overvarnish and clear base coating operation)	Rule 3D .0524 and 40 CFR 60.492(b) and Rule 3D .0918(c)(1)[1]
VOC	7.43 pounds of VOC per gallon of coating solids	ES-46 and ES-47 (Line 6 inside spray coating operation and bake oven) and ES-18 (Line 2 inside spray coating operation)	Rule 3D .0524 and 40 CFR 60.492(c) and Rule 3D .0918(c)(2)[1]

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
VOC	535.2 tons per consecutive 12 months	ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers), ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	185.9 tons per consecutive 12 months	ES-26, ES-43, and ES-45 (can printers), ES-10, ES-11, and ES-44 (printer ovens), ES-20 and ES-46 (inside spray machines), ES-14 and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	103.4 tons per consecutive 12 months	ES-43, ES-44, ES-46, ES-47 (Line 6 equipment), and ES-F (clean up solvent usage)	Rule 3Q .0317(a)(1)
VOC	Associated work practice standards	ES-21 through ES-24, ES-26, ES-43, and ES-45 (can printers), ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens), ES-F (clean up solvent usage)	Rules 3D .0958(c) and (d)
Particulate Matter	$E = 4.10xP^{0.67}$; where: E = allowable emission rate in pounds per hour, P = process rate in tons per hour	ES-18 through ES-20, and ES-46 (inside spray machines), ES-06 through ES-11, and ES-44 (printer ovens)** ES-12 through ES-14, and ES-47 (inside bake ovens)** CD-48 (regenerative thermal oxidizer)**	Rule 3D .0515
*Sulfur Dioxide	2.3 pounds per million Btu	ES-06 through ES-11, and ES-44 (printer ovens), ES-12 through ES-14, and ES-47 (inside bake ovens), CD-48 (regenerative thermal oxidizer)	Rule 3D .0516

Regulated Pollutant	Applicable Standard		Applicable Regulation
	Specific Limit	Specific Unit	
Visible Emissions	20% Opacity	ES-06 through ES-11, and ES-44 (printer ovens), ES-18 through ES-20, and ES-46 (inside spray machines), ES-12 through ES-14, and ES-47 (inside bake ovens) CD-48 (regenerative thermal oxidizer)	Rule 3D 0521(d)

[1]ES-18 (Line 2 inside spray coating operation), ES-43, ES-44, ES-46, and ES-47 are also subject to Rule 3D .0918. Compliance is assured by meeting the more stringent NSPS standards.

*3D .0516 - *Sulfur Dioxide Emissions from Combustion Sources* applies to the direct-fired natural gas printer ovens, inside bake ovens, and the regenerative thermal oxidizer 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 applicant shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed for the *Annual Emission Inventory Requirements*.

**3D .0515 - *Particulate Emissions from Miscellaneous Industrial Processes* applies to the direct-fired natural gas printer ovens, inside bake ovens, and the regenerative thermal oxidizer as applicable for 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 applicant shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed for the *Annual Emission Inventory Requirements*.

1.1.1 3D .0918(c)(1) and (2) and 3D .0958(f) - "Can Coating" (Lines 1, 2, 3, 4, 5a, and 5b equipment)

The applicant has previously elected to comply with the applicable reasonably available control technology (RACT) standard, Rule 3D .0918 for these emission sources. The applicant previously complied with Rule 3D .0518 (now repealed) by means of Rule 3D .0918 requirements. Rule 3D .0958(f) states that the facility must continue to comply with Rule 3D .0918 barring a special determination by the Director.

Rule 3D .0918 requires that coatings used at the facility not exceed 4.5 pounds of VOC per gallon of solids delivered to the coating applicator for the overvarnish operations and 9.8 pounds of VOC per gallon of solids delivered to the coating applicator for the bottom (i.e. exterior end) and inside coatings. Based on previous inspections and the current application, the coatings used at the facility comply with these standards. The coatings used are low solvent water-based coatings. Current coatings used and their associated processes at the time of application submittal are as follows:

		lbs VOC/gal solids delivered	
Coating	**Application Process**	**actual**	**standard**
PPG2709803	Overvarnish	3.0	4.5
PPG9203802	Overvarnish	2.8	4.5
PPGCC3625XLV	Overvarnish	2.9	4.5
PPG3655	Bottom Varnish	2.9	4.5
PPG3766806	Bottom Varnish	2.9	4.5
Valspar 20Q53AP	Inside Spray	6.8	9.8
PPG2012820	Inside Spray	6.1	9.8

The RACT rule does not impose a standard for the lithographic inks used in the printing operation. The VOC emissions associated with the lithographic inks, however, are considered regulated under Rule 3D .0918 since the printing is an integral part of the can coating process. However, current and previous reviews of the inks applied at the facility have shown them to be very small contributors to overall VOC emissions. In addition, in the Supplementary Information of the NSPS Subpart WW it states that the application of ink/lithography is excluded from the regulations in the Subpart because emissions from this operation are insignificant.

1.1.2 3D .0524 - "New Source Performance Standards" (ES-18 Line 2 Inside Spray Machines and Line 6 equipment)

This rule authorizes this Office to administer and enforce the federal new source performance standards (NSPS) promulgated in 40 CFR Part 60. This rule only applies to the inside spray machines (ES-18) on Line 2 and all the equipment on Line 6. The standards are found in NSPS Subpart WW entitled "Standards of Performance for the Beverage Can Surface Coating Industry" and included in permit condition **3.1(B)**.

40 CFR 60.492(b) states that no owner or operator shall discharge or cause the discharge of VOC emissions to the atmosphere that exceed the volume-weighted calendar-month average emissions of 3.84 pounds of VOC per gallon of coating solids from each two-piece can clear base coating operation and from each overvarnish coating operation. 40 CFR 60.492(c) states that no owner or operator shall discharge or cause the discharge of VOC emissions to the atmosphere that exceed the volume-weighted calendar-month average emissions of 7.43 pounds of VOC per gallon of coating solids from each two-piece can inside spray coating operation. The applicant will comply with these limits through the use of purchased coatings whose pounds of VOC per gallon of coating solids are below the standards. The coatings used at the facility are listed above in Section 1.1.1 and demonstrate compliance with the NSPS limits. All of the coatings at the facility are applied "as purchased" without the addition of any other solvents. The use of these coatings demonstrates compliance with these standards. The Supplementary Information to NSPS Subpart WW states "[i]f each coating used at an affected facility during a calendar month has a VOC content equal to or less than the emission limitations prescribed in the standards, and no VOC solvents are added during distribution and application of the coatings, the affected facility is in compliance and calculation of the volume-weighted average VOC content is not required." The permit requires the facility to keep records of the coatings used and any additions to them as purchased before they are applied.

1.1.3 3Q .0317(a)(1) - "Avoidance Conditions for Prevention of Significant Deterioration" (Facility-wide limit of 535.2 tons per year)

Facility-wide PSD Limit

In order to avoid new source review under the Prevention of Significant Deterioration (PSD) program for the addition of dual gun spray machines on the interior can coating spray banks in 1991, the facility requested a limit of **535.2 tons/year**. This limit was established based on the actual VOC emissions from the facility before the modification (408 tpy) plus a contemporaneous VOC emissions credit of 87.7 tons per year and a less than significant increase of 39.5 tons per year. The contemporaneous VOC emissions credit resulted from the voluntary shutdown of end line systems at the facility completed in 1990. Previous records and reports submitted to this Office have demonstrated compliance with this limit and the facility is expected to continue to operate in compliance with this limit.

1.1.4 3Q .0317(a)(1) - "Avoidance Conditions for Prevention of Significant Deterioration" (Lines 5 and 6 limit of 185.9 tons per year)

Year 2000 Lines 5 and 6 PSD Limit Review [(ES-26 & 43 (can printers), ES 11 & 44 (printer ovens), ES-20 (inside spray machines), ES-14 (inside bake oven), ES-F (clean up solvent usage)]

In 2000, the facility replaced an older four-color lithographic press on Line 5 with an eight-color press. The ink application process associated with the new line offered no potential for an increase in emissions based on the limitations imposed by maximum production rates. The modification was made to allow the flexibility of eight-color application of ink to beverage cans as opposed to the previous four-color limitation. The upstream can formation process capacity, which regulated the number of cans that could be processed by the new equipment, was not changed as a result of the modification. However, a limit to avoid PSD review was required due to a possible increase in utilization of this line which could have resulted in a significant increase in actual VOC emissions. Previous records and reports submitted to this Office have demonstrated compliance with this limit and the facility is expected to continue to operate in compliance with this limit.

A new limit of **185.9 tons per year** of VOC emissions was established to allow for Lines 5 and 6 to avoid a PSD Review. This limit was established using the actual VOC emissions from Lines 5 and 6, based on calendar years 1996-97 production data, plus a "less than significant" increase of 39.5 tons per year per PSD requirements. The actual emissions from Lines 5 and 6 were based on calendar years 1996-97 production data because the applicant demonstrated that these years were more representative of normal source operation due to curtailed production in subsequent years.

The curtailment in production was a direct result of the shutdown of the Stroh Brewery facility in Winston-Salem, one of Ardagh's largest customers. This Office reviewed emissions data for calendar years 1996 and 1997 and agreed that the data are more representative of normal operation. Existing reporting requirements were extended to the equipment being modified to ensure compliance with PSD limitations on VOC emissions.

NOTE: In 2002 the applicant submitted an application to install a new Changeover Printer

(ES-45) and reactivate an existing Pin Oven (ES-10). [Note: The Pin Oven (ES-10) associated with Line 5 was left in place, but non-operational, following a major modification under permit 00682-TV-3]

The application was evaluated for PSD considerations to determine if the current VOC limit for Lines 5 and 6 required adjustment. Actual emissions, as determined by the applicant for calendar years 1996 and 1997, for Line 5 and 6 were 146.4 tons/year + 40.0 tons per year (significant increase under PSD) = 186.4 tons/year. Given that the actual emissions, plus the 40 ton per year PSD significance level, were above the permitted VOC emissions cap of 185.9 tons per year, the current cap remained in place and the change was processed as a 502(b)(10) change.

1.1.5 3Q .0317(a)(1) - "Avoidance Conditions for Prevention of Significant Deterioration" (Line 6 limit of 103.4 tons per year)

An application for modification of Line 6 was submitted by the applicant in 2007. The applicant provided calculations of VOC emissions comparing the two-year actual average emissions from Line 6 for calendar year's 2003 and 2004 to the potential VOC emissions from this modification. These two-year actual average VOC emissions were 68.56 tons. The facility provided calculations of the projected VOC emissions from the modified equipment on Line 6 and they amount to 39.98 tons. These projected emissions totals include the use of a regenerative thermal oxidizer to control emissions from the new inside bake oven (ES-47). The applicant performed an emissions test on the control device in May, 2009 and the overall capture and control efficiency of the unit is 87.2%.

The increase in VOC emissions as a result of the modification is less than the PSD significance level of 40 tons. This means the facility would not be subject to PSD or need a PSD avoidance condition included in their permit. However, the applicant requested the modified equipment be allowed to operate without the use of the thermal oxidizer for a period of up to three months to allow them time to get the unit installed. This Office notified the applicant that without the VOC emissions reduction by the thermal oxidizer, the potential VOC emissions from the modification would be above the 40 ton per year PSD significance level and thus constitute a PSD modification. The applicant then requested a permit condition be included to allow for operation of Line 6 with or without the operation of the thermal oxidizer. This language would include a PSD avoidance limit of 108.5 tons per year (68.56 tons from Line 6 for CY '03-'04 + 39.98 tons for the modification). This limit will be in place regardless of whether the control device is in operation or not.

In July 2017, the facility requested to modify Line 6 to allow the production of 12 ounce cans in addition to the currently produced 24 ounce cans. Our Office reviewed their request and determined that this is a change in the method of operation with regard to the PSD program. The facility stated that they previously ran 12 ounce cans so this should be a decrease in emissions and shouldn't require a permit modification. However, as it is a change in the method of operation, the facility would be required to look at the potential emissions as a result of this change to determine if they were greater than the 40 tons per year significance level for VOC. The facility decided to change their request to include the ability of Line 6 to produce cans of any size (8, 12, 16, 24 ounces, etc.) so they wouldn't have to go through a PSD avoidance review in the future. The facility conceded that the potential VOC emissions would exceed 40 tons per year because they would still like to

have the option of having the exhaust routed to the RTO or atmosphere. They requested a new PSD avoidance limit be placed in their permit.

The applicant provided calculations of VOC emissions comparing the two-year actual average emissions from Line 6 for calendar year's 2011 (63.56 tpy) and 2012 (63.38) to the potential VOC emissions from this modification. The two-year actual average VOC emissions are 63.47 tons. The applicant conceded that the potential emissions from the proposal to run varying size cans on Line 6 would exceed 40 tons per year. The applicant requested a PSD avoidance limit of 39.9 tons be added to the two-year actual average to establish a new limit for Line 6. The new PSD avoidance limit is **103.4 tons per year** (39.9 tpy + 68.47 tpy). This is a slight decrease from their previous limit of 108.5 tons per year. The draft operating permit for this modification to the PSD avoidance limit went to public comment and EPA review on July 18, 2017 and was issued with an effective date of September 1, 2017.

The applicant shall demonstrate compliance with the PSD avoidance limit through the use of the following equation:

$$E_{VOC} = \sum_{n=1}^{12} \frac{[(A) + (B) + (1 - Ox/100)(C) + (D)]}{2000\ lbs/ton}$$

where,

E_{VOC} = monthly rolling 12-month total emissions (in tons) of volatile organic compounds;
A = the monthly amount of VOC emissions from the uncontrolled equipment on Line 6 (ES-43, ES-44, and ES-46);
B = the monthly amount uncontrolled VOC emissions from the inside bake oven (ES-47) on Line 6;
Ox = the overall control efficiency (%) of the regenerative thermal oxidizer (CD-48) based on the most recent performance test;
C = the monthly amount of VOC emissions from inside bake oven (ES-47) on Line 6 routed through the regenerative thermal oxidizer (CD-48);
D = the monthly amount VOC emissions from the clean up solvent usage on Line 6 (ES-F); and
n = the month (1...12).

Previous records and reports submitted to this Office have demonstrated compliance with the PSD limits and the facility is expected to continue to operate in compliance with this limit. Reports received from the facility for the past several years indicate that they will be able to comply with this limit, as their most recent 12-month total emissions are 55.29 tons per year.

1.1.6 3D .0958 – "Work Practice Standards for Sources of Volatile Organic Compounds"

1.1.6.1 General work practice standards

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, and
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.

1.1.6.2 Parts cleaning work practice standards

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, and
e) not agitate solvent to the point of causing splashing, unless volatile organic compound emissions are captured and controlled.

Previous records and reports submitted to this Office have demonstrated compliance with these requirements and the facility is expected to continue to operate in compliance with these requirements.

1.1.7 3D .0515 – "Particulates from Miscellaneous Processes" (Inside Spray Machines ES-18 through ES-20, and ES-46)

None of the Inside Spray Machines operate with the use of a control device. All of this equipment is uncontrolled.

The allowable particulate emission limit for process rates up through 60,000 lb/hr (30 ton/hr) is calculated by the following equation:

$$E = 4.10(P)^{0.67}$$

where E = allowable emission rate for particulate matter in pounds per hour, and
P = process weight in tons per hour

The allowable emission rates are demonstrated as follows:

<u>For ES-18 (Line 1) through ES-20:</u>

(1200 cans/min) x (0.5 oz/can) / (16 oz/lb) x (60 min/hr) = 2,250 lbs/hr or 1.13 tons/hr
$E = 4.1 \times 1.13^{0.67}$

E = 4.45 lbs/hr for each spray line

For ES-18 (Line 2):

(1225 cans/min) x (0.5 oz/can) / (16 oz/lb) x (60 min/hr) = 2,296.9 lbs/hr or 1.15 tons/hr
$E = 4.1 \times 1.15^{0.67}$
E = 4.50 lbs/hr for each spray line

For ES-46 (Inside Spray Machine for Line 6):

(1575 cans/min) x (0.5 oz/can) / (16 oz/lb) x (60 min/hr) = 2,953.1 lbs/hr or 1.48 tons/hr
$E = 4.1 \times 1.48^{0.67}$
E = 5.33 lbs/hr for ES-46

These allowable limits are very conservative because they don't take into account the weight of the inks to determine the allowable limit. If the weight of the inks were added to the equation, the allowable limit would be higher.

The potential particulate emissions for comparison to the allowable limits are calculated as follows:

Particulate emissions from the Inside Spray Machines are due to overspray of the coating. The applicant calculated particulate emissions assuming 6% overspray and 10% entrainment of the overspray in the exhaust. The coating has a density of 8.43 lb/gal and 21.1% solids by weight. At the maximum application rate, 14 gallons/hour for ES-18 through ES-20, the potential PM emissions are:

PM emissions = (14 gal/hr) x (8.43 lb/gal) x (0.211 lb PM/lb) x (0.06) x (0.10) x (6 Lines)

PM emissions = 0.896 lb/hour for ES-18 through ES-20

At the maximum application rate, 23.66 gallons/hour for ES-46, the potential PM emissions are:

PM emissions = (23.66 gal/hr) x (8.43 lb/gal) x (0.211 lb PM/lb) x (0.06) x (0.10)

PM emissions = 0.253 lb/hour for ES-46

Since Line 6, which includes Inside Spray Machines (ES-46), can now produce varying size cans (8, 12, 16, 24 ounce, etc.), the emission rate will vary depending on which size can is being produced. The above calculations for the other Inside Spray Machines are for different size cans and show that the compliance limit is met by a wide margin. The change over to different size can production on Line 6 will result in compliance with the PM limit.

These calculations demonstrate the facility is able to meet the allowable limits by a wide margin. Therefore, no monitoring, reporting or recordkeeping is required to demonstrate

compliance with these limits.

1.18 3D .0516 – "Sulfur Dioxide Emissions from Combustion Sources" (Printer Ovens, Inside Bake Ovens, and Regenerative Thermal Oxidizer)

This rule regulates the emission of sulfur dioxide from any source of combustion that is discharged from a stack. The rule limits the amount of sulfur dioxide emitted from the sources to no more than 2.3 pounds of sulfur dioxide per million Btu of heat input.

The ovens and regenerative thermal oxidizer only combust natural gas which inherently meets this emission limit. The AP-42 emission factor for natural gas combustion is 0.6 pounds of sulfur dioxide per million Btu. The heat content of natural gas is 1020 Btu per cubic foot. So, (0.6 lb/MMBtu) x (1 cf/1020 Btu) = 5.9E-4 lb SO_2/MMBtu. This demonstration reveals that the combustion of natural gas will always be less than the allowable limit. Because the combustion of natural gas inherently meets this standard, no monitoring, recordkeeping, or reporting requirements will be required to demonstrate compliance.

1.19 3D .0521 – "Control of Visible Emissions"

See Section V.

1.2 Monitoring and Recordkeeping Requirements

In addition to monitoring specifically required by certain emission standards, 3Q .0508(f) and 40 CFR 70.6(a)(3) and 70.6(c) require monitoring be included in Title V permits to assure compliance with the terms and conditions of the permit. This monitoring is necessary to provide assurance that emissions from a unit are below the applicable standard in cases where the standard does not specify monitoring.

The applicant is required by general condition **2.15** of the permit to keep sufficient records to estimate the actual annual emissions for inventory and fee purposes.

1.2.1 Monitoring and recordkeeping required for compliance with 3D .0918(c)(1) and (2)

To demonstrate compliance with the emission standards under this rule, the applicant has chosen to use compliant coatings. To demonstrate the coatings comply with applicable standards, the applicant will be required to maintain records of each coating used at the facility containing:

a) the density of each coating,
b) the percentage by weight of VOC of each coating,
c) the amount and VOC percentage by weight of each diluent added to each coating, and
d) the percentage by volume of solids of each coating.

1.2.2 Monitoring and recordkeeping required for compliance with 3D .0524 (Line 6 equipment)

The applicant complies with the NSPS standards through the use of coatings with VOC

constituents which are below the allowable limits. The monitoring and recordkeeping required to demonstrate compliance with these limits are the same as outlined in Section 1.2.1 above.

1.2.3 Monitoring and recordkeeping required for compliance with 3Q .0317(b) (Facility-wide PSD avoidance limit)

To demonstrate compliance with the facility-wide PSD avoidance limit of 535.2 tons per year, the applicant shall maintain monthly records of the VOC usage in the affected emission sources. The applicant shall also record the monthly VOC emissions in tons per month and the 12-month rolling total of VOC emissions in tons per month at the end of each calendar month.

1.2.4 Monitoring and recordkeeping required for compliance with 3Q .0317(b) (Lines 5 and 6 PSD avoidance limit)

To demonstrate compliance with PSD avoidance limit of facility-wide 185.9 tons per year for Lines 5 and 6, the applicant shall maintain monthly records of the VOC usage in the affected emission sources. The applicant shall also record the monthly VOC emissions in tons per month and the 12-month rolling total of VOC emissions in tons per month at the end of each calendar month.

1.2.5 Compliance Assurance Monitoring and recordkeeping required for compliance with 3Q .0317(b) (Line 6 PSD avoidance limit)

The CAM rule applies to each pollutant specific emission units (PSEU) that meets a three-part test. The PSEU must:

a) be subject to an emission limitation or standard, and
b) use a control device to achieve compliance, and
c) have pre-control emissions that exceed or are equivalent to the major source threshold.

The equipment on Line 6 is subject to a PSD avoidance limit of 103.4 tons per twelve month period for emissions of VOC pursuant to a request from the applicant. A control device (regenerative thermal oxidizer, ID No. CD-48) is employed by the inside bake ovens (ID No. ES-47) on Line 6 to ensure VOC emissions remain below the PSD avoidance limit. The post-controlled VOC emissions limit is above the major source threshold of 100 tons per year so it is obvious that the pre-controlled emissions are well above this threshold. Therefore, CAM applies to this PSEU (Line 6 equipment).

The applicant submitted a CAM plan for the regenerative thermal oxidizer and it was approved by this Office. The applicant plans on continuously monitoring the combustion chamber temperature to ensure it is maintained at 1,400 degrees F. The applicant plans to replace the thermocouple on an annual basis during the annual preventative maintenance inspection. The temperature will be continuously monitored and recorded at least four times equally spaced over an hour in accordance with the CAM requirements. The applicant will also be required to record the number of hours the emissions are routed to the regenerative thermal oxidizer for each operational day. In addition, the applicant shall continuously monitor the flow at the fan inlet to the regenerative thermal oxidizer.

The permit does not require the oxidizer to operate at all times. To demonstrate compliance with the limit, the permittee is required to keep records of VOC with, and without, the oxidizer operating and to calculate emissions monthly.

1.2.6 Monitoring and recordkeeping required for compliance with 3D .0958

To ensure compliance with the VOC work practice standards, the applicant 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.

1.2.7 Monitoring and recordkeeping required for compliance with 3D .0515

Because the ovens and thermal oxidizer are fired with natural gas, which inherently meets the particulate matter standard, no monitoring or recordkeeping is required to demonstrate compliance. In addition, engineering calculations demonstrate that the particulate matter emissions from the Inside Spray machines are well below the allowable limits. Therefore, due to the large margin of compliance, no monitoring or recordkeeping is required to demonstrate compliance with the applicable limits.

1.2.8 Monitoring and recordkeeping required for compliance with 3D .0516

Because the ovens and thermal oxidizer are fired with natural gas, which inherently meets the sulfur dioxide standard, no monitoring or recordkeeping is required to demonstrate compliance.

1.2.9 Monitoring and recordkeeping required for compliance with 3D .0521

See Section V.

1.3 Reporting Requirements

The applicant is required by general condition **2.14** of the permit to submit a report by March 1st of each year, certifying compliance with all terms and conditions in the permit, including emissions limitations, standards, and work practices.

The applicant is also required by general condition **2.10** to report excess emissions and deviations from permit conditions within one business day for requirements covered under 3D .0524 (NSPS), .1110 (Part 61 NESHAPs) and .1111 (Part 63 NESHAPs). This report must also be made in writing within two business days. Excess emissions greater than four hours in duration and covered under Rule 3D .0535 are required to be reported within 24 hours. The applicant is required to report excess emissions not covered under Rule

3D .0535 and any permit deviations by the following business day unless an alternative reporting schedule is provided in the specific conditions (the semi-annual reporting period has been determined to be an alternative reporting schedule).

In addition, all instances of deviations from the specific monitoring requirements must be reported semiannually.

1.3.1 Reporting required for compliance with 3D .0918(c)(1) and (2)

The applicant shall clearly identify all instances of deviations from the requirements for these emission sources. The duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant shall make this statement in the report.

1.3.2 Reporting required for compliance with 3D .0524 (Line 6 equipment)

The applicant shall clearly identify all instances of deviations from the requirements for these emission sources. The duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant shall make this statement in the report.

1.3.3 Reporting required for compliance with 3Q .0317(b) (Facility-wide PSD avoidance limit)

VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling total of VOC emissions for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant shall make this statement in the report.

1.3.4 Reporting required for compliance with 3Q .0317(b) (Lines 5 and 6 PSD avoidance limit)

VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling total of VOC emissions for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant

shall make this statement in the report.

1.3.5 Reporting required for compliance with 3Q .0317(b) (Line 6 PSD avoidance limit)

VOC emissions from the affected sources shall be reported semi-annually to this Office. The report shall include the total VOC emissions for each month and the 12-month rolling total of VOC emissions for each month. This report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant shall make this statement in the report.

A summary report of the compliance assurance monitoring required in Section 1.2.5 above including, as a minimum:

a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
b) 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); and
c) A description of the actions taken to implement a QIP (if required by this Office) 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.

1.3.6 Reporting required for compliance with 3D .0958

The applicant shall submit a summary report of the weekly inspections performed to verify compliance with the VOC work practice standards, to this Office by July 30th for the period January through June, and no later than January 30th for the period July through December. This report shall contain the total number of weeks in which the work practice standards weekly check were not made during the reporting period.

1.3.7 Reporting required for compliance with 3D .0515

Because the ovens and thermal oxidizer are fired with natural gas, which inherently meets the particulate matter standard, no reporting requirements are necessary to demonstrate compliance. In addition, engineering calculations demonstrate that the particulate matter emissions from the Inside Spray machines are well below the allowable limits. Therefore, due to the large margin of compliance, no reporting requirements are necessary to demonstrate compliance with the applicable limits.

1.3.8 Reporting required for compliance with 3D .0516

Because the ovens and thermal oxidizer are fired with natural gas, which inherently meets the sulfur dioxide standard, no reporting is necessary to demonstrate compliance.

1.3.9 Reporting required for compliance with 3D .0521

See Section V.

1.4 Alternative Operating Scenario

NA

1.5 Other Specific Conditions

NA

2.0 ES-41 and ES-42, Two Kewanee Model H3W-400-G02Boilers, Uncontrolled

The two boilers are used to provide hot water for the can washing process and for heating the building. Each of the boilers combusts natural gas or propane and each have a maximum heat input rating of 18.74 million Btu per hour. The boilers were manufactured in 1975 and therefore, pre-date the NSPS regulations for boilers. In addition, because the boilers are only capable of combusting natural gas or propane, they are exempt from the Area Source Boiler MACT (Subpart JJJJJJ).

2.1 Applicable Regulatory Requirements

The following provides a summary of the limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Table IV-2.1: Summary of Emission Limits, Standards and other Applicable Requirements.

Regulated Pollutant	Applicable Standard	Applicable Regulation
Particulate Matter	0.383 pounds per million Btu*	Rule 3D .0503
Sulfur Dioxide	2.3 pounds per million Btu	Rule 3D .0516
Visible emissions	20 % opacity	Rule 3D .0521(d)

* The allowable limit is based on the heat input of three boilers each with a maximum heat input of 18.74 MMBtu/hr. One of the boilers has since been removed but the allowable limit remains based on the total heat input of the three boilers even though only two remain.

2.1.1 3D .0503 – "Particulates from Fuel Burning Indirect Heat Exchangers"

The allowable particulate emission limit for each boiler is calculated by the following equation:

$$E = 1.090(Q)^{-0.2594}$$

where E = allowable emission limit for particulate matter in pounds per million Btu, and
Q = maximum heat input in million Btu per hour (for all boilers, including the third one which was removed)

The allowable emission rates are demonstrated as follows:

$$E = 1.090(56.22)^{-0.2594}$$

E = 0.383 lb/MMBtu for each boiler

The emission factor used by the applicant to estimate particulate emissions is 7.6 lb/million cubic feet from Table 1.4-1 of AP-42 for small industrial boilers. This factor is considered conservative since it includes the filterable and condensable fractions. In practice, compliance with the particulate standard is demonstrated by using Method 5 of 40 CFR 60 Appendix A. Method 5 only analyzes the filterable portion to determine compliance with the standard; however, this Office uses the total portion for emission inventory purposes.

The maximum emissions of particulate matter from each boiler combusting natural gas are calculated as follows:

$$(18.74 \text{ MMBtu/hr}) \times (1 \text{ ft}^3/1020 \text{ Btu}) \times (7.6 \text{ lb/MMBtu}) = 0.14 \text{ lb/hr}$$

or:

$$(0.14 \text{ lb/hr}) \times (1/18.74 \text{MMBtu/hr}) = 0.007 \text{ lb/MMBtu}$$

The maximum potential particulate matter emissions limit is well below allowable emission rate. Compliance with this standard is demonstrated by the use of natural gas as the boiler fuel. Compliance is also anticipated, in like manner, when using propane as a backup fuel.

2.1.2 3D .0516 – "Sulfur Dioxide Emissions from Combustion Sources"

This rule regulates the emission of sulfur dioxide from any source of combustion that is discharged from a stack. The rule limits the amount of sulfur dioxide emitted from the sources to no more than 2.3 pounds of sulfur dioxide per million Btu of heat input.

As noted in Section IV. 1.1.8, compliance is demonstrated through the combustion of natural gas. Because the combustion of natural gas inherently meets this standard, no monitoring, recordkeeping, or reporting requirements will be required to demonstrate compliance. Compliance is also anticipated, in like manner, when using propane as a

backup fuel.

2.1.3 3D .0521 – "Control of Visible Emissions"

See Section V.

2.2 Monitoring, Recordkeeping, and Reporting Requirements

In addition to monitoring specifically required by certain emission standards, 3Q .0508(f) and 40 CFR 70.6(a)(3) and 70.6(c) require monitoring be included in Title V permits to assure compliance with the terms and conditions of the permit. This monitoring is necessary to provide assurance that emissions from a unit are below the applicable standard in cases where the standard does not specify monitoring.

The applicant is required by general condition **2.15** of the permit to keep sufficient records to estimate the actual annual emissions for inventory and fee purposes.

The applicant is required by general condition **2.14** of the permit to submit a report by March 1st of each year, certifying compliance with all terms and conditions in the permit, including emissions limitations, standards, and work practices.

The applicant is also required by general condition **2.10** to report excess emissions and deviations from permit conditions within one business day for requirements covered under 3D .0524 (NSPS), .1110 (Part 61 NESHAPs) and .1111 (Part 63 NESHAPs). This report must also be made in writing within two business days. Excess emissions greater than four hours in duration and covered under Rule 3D .0535 are required to be reported within 24 hours. The applicant is required to report excess emissions not covered under Rule 3D .0535 and any permit deviations by the following business day unless an alternative reporting schedule is provided in the specific conditions (the semi-annual reporting period has been determined to be an alternative reporting schedule).

In addition, all instances of deviations from the specific monitoring requirements must be reported semiannually.

2.2.1 Monitoring, Recordkeeping, and Reporting required for compliance with 3D .0503

No monitoring, recordkeeping, or reporting is required to demonstrate compliance with this standard because the boilers combust only natural gas or propane which inherently meet the standard.

2.2.2 Monitoring, Recordkeeping, and Reporting required for compliance with 3D .0516

No monitoring, recordkeeping, or reporting is required to demonstrate compliance with this standard because the boilers combust only natural gas or propane which inherently meet the standard.

2.2.3 Monitoring, Recordkeeping, and Reporting required for compliance with 3D .0521

See Section V.

2.3 Alternative Operating Scenario

NA

2.4 Other Specific Conditions

NA

V. FACILITY-WIDE EMISSION SOURCE CONDITIONS

1. 3D .0521 - Control of Visible Emissions

This rule was promulgated for the prevention, abatement, and control of emissions generated from fuel burning operations and other industrial processes where an emissions can be reasonably expected to occur, except during startups, shutdowns or malfunctions made in accordance with other conditions in the Title V permit.

1.1 Regulatory Requirements

3D .0521(d) states - "For sources established after July 1, 1971, visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period except that six-minute periods averaging no more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24 hour period." All of the equipment was constructed in 1975 or later and therefore is subject to the 20% opacity standard.

1.2 Monitoring and Recordkeeping Requirements

The applicant shall make a daily observation of the stacks/vents/ducting emissions from the printer ovens, the inside spray machines, the inside bake ovens, the regenerative thermal oxidizer, and the boilers. The applicant shall keep a daily log of this daily visible emission stack observation that includes any problems identified and actions taken to remedy these problems. The observation will include the color, duration and density (heavy or light) of any visible emission observed. Where abnormal emissions are observed, the operating conditions under which the visual observation was conducted shall be recorded.

1.3 Reporting Requirements

All instances of deviations from the requirements for these emission sources and the duration of these deviations must be clearly identified and reported in writing to this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December. If no deviations have occurred, the applicant

shall make this statement in the report.

VI. LOCAL ONLY ENFORCEMENT

The requirements in this section are subject to local enforcement only and are not federally enforceable.

1.1 3D .1100 - Control of Toxic Air Pollutants

This facility is subject to the toxic air pollutant (TAP) regulations in the FCAQTC. The facility had to perform a TAP evaluation for the pollutant formaldehyde as a result of the modification of Line 6 in 2007. The modification increased the amount of formaldehyde emissions from the facility and the applicant was notified that they needed to perform an evaluation for this pollutant. The applicant submitted a dispersion modeling demonstration which showed the modeled concentration of formaldehyde to be 69.57% of the acceptable ambient level found in Rule 3D .1104 of the FCAQTC. The modeling demonstration was performed using facility-wide potential emissions of formaldehyde of 2.63 pounds per hour. The modeling demonstration was reviewed by this Office and found to be acceptable.

However, the majority of the formaldehyde emissions were estimated by the applicant to be "cured formaldehyde" emissions based on a stack test performed in 1997 at the facility. The facility provided information from their coatings manufacturer, who in turn got it from the Federal Register Vol. 68, No. 10 of January 2003, page 2112, I. Background, Section C, that states EPA does not have a test method for "cured volatiles" and does not expect a facility to control nor account for these emissions. Our Office sent a letter to the facility on August 29, 2016 stating that they only need to quantify the free formaldehyde emissions present in their coatings and not use the previous calculation for "cured formaldehyde" emissions. This resulted in the emissions of formaldehyde being less than 1 ton per year and well below the modeled rate of 2.63 lb/hour. I spoke with the facility contact and he said he has no problems keeping the formaldehyde limit in the permit as the processes at the facility would never approach this limit.

1.1.2 Monitoring and Recordkeeping Required for Compliance with the TAP emissions

The applicant shall maintain updated records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with the TAP emission rates. At a minimum, these records shall include data sufficient to calculate monthly averaged emission rates (in pounds per hour of emission source operation) for TAPs with 1-hour emission limits.

Copies of these records shall be retained by the applicant for a period of two years after the date on which the record was made, except that the Director may extend the retention period in particular instances. The facility maintains these records and they are readily available during inspections.

If requested by an agent of this Office, the applicant shall readily supply copies of these

records at the time of inspection. Likewise, the applicant shall submit copies of the records upon request by this Office. No reporting is necessary to demonstrate compliance although the facility is required to submit an annual emissions inventory based on actual emissions.

Since the dispersion modeling demonstration was based on potential emissions and tehy no longer are quantifying "cured formaldehyde" emissions, no additional monitoring, recordkeeping, or reporting is required.

2.1 3D .0522 - Control and Prohibition of Odorous Emissions

This regulation applies to all facilities and prohibits the emissions of odors beyond the property lines that 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. This requirement is addressed in General Condition **2.39**.

Violation of this regulation is determined by EAD upon investigation of a complaint. There is currently not a requirement for the applicant to perform any monitoring/recordkeeping/ reporting activities for this rule. Any future requirements will only be in response to complaints received by this Office.

VII. MACT APPLICABILITY AND REQUIREMENTS

A federal standard, Subpart KKKK – National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Metal Cans, was promulgated on November 13, 2003 which lists equipment in operation at Ardagh as an affected source. This facility would be subject to this standard if the potential emissions of the highest individual HAP are greater than 10 tons per year or if the combined HAPs at the facility are greater than 25 tons per year.

The primary constituent of the coating used on the inside spray machines is butyl cellusolve (aka ethylene glycol butyl ether or EGBE). However, this compound was delisted (Federal Register/Vol. 69, No. 228/Monday, November 29, 2004) as a hazardous air pollutant (HAP). Since this compound has been delisted, it is no longer considered a HAP and not included in the facility HAP total. The highest potential HAP at the facility is hexyl cellusolve (CAS# 112-25-4) which is present in the coatings used in the Inside Spray Machines. These emissions are below the 10 tons per year which define a major source of HAPs. These emissions, when combined with other HAPs at the facility are less than 25 tons per year. The facility is a minor source for HAPs (individual potential HAPs less than 10 tons per year and combined HAPs less than 25 tons per year) and will not be subject to this MACT.

The boilers (ES-41 and ES-42) are only capable of combusting natural gas or propane and are therefore exempt from Subpart JJJJJJ – National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources by definition.

The facility does have an emergency generator on site subject to Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal

Combustion Engines. The emergency generator has a rating of 125 kilowatts and is fired with natural gas. Subpart ZZZZ does apply to engines at Area Sources for HAPs (less than 10 tons per year and combined HAPs less than 25 tons per year). However, this unit is exempt from permitting in accordance with Rule 3Q .0102(h)(5) because the potential uncontrolled Criteria Pollutant emissions from the emergency generator are each less than five tons per year. The facility is still required to comply with Subpart ZZZZ but the unit is only included in the Insignificant Activities List attached to the Renewal Permit.

VIII. PERMIT SHIELD (INCLUDING NON-APPLICABLE REQUIREMENTS)

In accordance with Rule 3Q .0512, general condition **2.7** of the permit will contain a provision stating that compliance with the terms, conditions, and limitations of the Title V permit shall be deemed in compliance with applicable requirements specifically identified in the permit, as of the date of permit issuance. If the permit does not expressly state that a permit shield exists then it shall be presumed not to provide such a shield.

In addition, the applicant had requested in the past, a permit shield for the inside spray machines from the applicability of the NSPS Subpart WW "Standards of Performance for the Beverage Can Surface Coating Industry". Documentation provided with the original application (ca. November 1990, Appendix A) to install addition spray guns and supplemented in the Title V application demonstrates the physical change did not result in an increase in the emission rate (expressed as kg/hr) of VOC to the atmosphere. The additional spray guns allow the inside spray machines to continue operation at normal speed while one of the three banks of spray guns is cleaned. Consequently, the addition of the spray guns to the inside spray machines was not a modification under 40 CFR 60.14. Based on the information reviewed, this Office concurred that NSPS was not applicable to the inside spray machines and a permit shield is provided in permit condition **3.1(H)**.

The applicant had also requested a permit shield for modifications made to lines 5/6 machines from the applicability of the NSPS Subpart WW during a modification of the permit in 2000. While these standards do apply to the Two-Piece Aluminum Can Coating NSPS, none of the equipment added or modified qualified as an "affected facility". Therefore, such requirements were not applicable. The applicant requested that the permit explain that these requirements were not applicable to avoid confusion. A permit shield is provided in permit condition **3.1(I)**.

The modification of Line 6 in 2007 did meet the definition of "modification" in NSPS Subpart A. Therefore, the equipment on Line 6 is subject to NSPS Subpart WW, including inside spray machines ES-46. The above permit shield condition **3.1(I)** will now only apply to the equipment on Line 5. The language in the permit was changed to make this clear.

IX. GENERAL CONDITIONS

The General Conditions section of the Title V Operating Permit lists additional applicable rule requirements that the applicant must adhere to, as with any other permit condition. These requirements in general are common to all Title V facilities. The general conditions include provisions such as annual fee payment, permit renewal and expiration, transfer of ownership or operation, submission of documents, inspections and entry procedures, reopen for cause, severability, etc.

In addition, conditions in this section of the permit include the general conditions specific to the New Source Performance Standards (NSPS) program and the general conditions for the CAM rule. These conditions are not necessarily common to all Title V facilities, only those who have emissions sources subject to a NSPS standard and CAM.

X. INSIGNIFICANT ACTIVITIES

The insignificant activities listed in the application have been reviewed and verified. Although each activity is not listed in the Title V permit, a general condition is placed in the Title V permit stating that all insignificant activities shall comply with the applicable requirements. The insignificant activities at the facility will be listed in an attachment to the permit.

XI. PUBLIC NOTICE

The Office will post a notice on our web page concerning the renewal of this permit. The notice will provide for a 30 day comment period, with an opportunity for a public hearing. A concurrent 45 day EPA review period will also begin on the same date the public notice is published on this Office's web page.

XII. EAD COMMENTS/RECOMMENDATIONS

This Office recommends the renewal permit (#00682-TV-18) be issued as written after the concurrent 30 day public notice period and 45 day EPA review.

Agency Reviewer: **Date:**

Agency Q/A Manager: **Date:**