

Air Permit Review

Permit Issue Date:

Region: Asheville Regional Office
County: Rutherford
NC Facility ID: 8100190
Inspector's Name: Patrick Ballard
Date of Last Inspection: 12/20/2007
Compliance Code: C/In Compliance With
 Procedural Reqr

Facility Data			Permit Applicability (this application only)		
Applicant (Facility's Name): Plastic Packaging, Inc. - Plant No. 2 Facility Address: Plastic Packaging, Inc. - Plant No. 2 681 Piney Ridge Road Forest City, NC 28043 SIC: 2759 / Commercial Printing, Nec NAICS: 323112 / Commercial Flexographic Printing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	Application Number: 8100190.08A Date Received: 04/15/2008 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 08091/T10 Existing Permit Issue Date: 11/02/2007 Existing Permit Expiration Date: 02/29/2012		
Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043			
Review Engineer: Joseph Voelker Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 08091/T11 Permit Issue Date: Permit Expiration Date: 02/29/2012			

I. Purpose of Application

Plastic Packaging, Inc. - Plant No. 2 is a plastic converter that prints customer designs, patterns, and/or writing onto plastic (polyethylene/polypropylene) film and then converts the material into plastic packaging.

This application was submitted to satisfy the following requirements in Permit Nos. T09 and T10 respectively:

1. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the air emission source (ID No. ES-P7) on or before 12 months after commencing operation.
2. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the air emission source (ID No. ES-P8) on or before 12 months after commencing operation.

II. History/Background/Application Chronology

Date	Description
March 27, 2007	Permit 08091T08 was issued as a renewed permit with an expiration date of February 29, 2012 .
April 9, 2007	Permit 08091T09 was issued as a 501(c)(2) modification for the construction and operation of flexographic press (ID No. ES-P7). That permit required the submittal of a complete title V application within 12 months of operation of the new press.
April, 2007	Press ES-P7 begins operation

Date	Description
September 27, 2007	Permit application 8100190.07B was received as a 501(c)(2) modification for the removal of presses (ID Nos. ES-P3 and ES-P5) and the construction and operation of press (ID No. ES-P8).
November 2, 2007	Permit 08091T10 was issued
February 2008	Press ES-P8 begins operation
April 7, 2008	A permit application (8100190.08A) was submitted to modify the TV permit pursuant to 15A NCAC 2Q .0504
April 30, 2008	JMV (permit engineer) contacts consultant to ask if Press ES-P8 has begun operation. Mr. Voelker asked for the permit application to be revised to include Press ES-P8 if it has begun operation in order to process both modifications at the same time.
May 30, 2008	Application for both presses was submitted.
September 19, 2008	Draft permit and review sent to the Asheville Regional Office (ARO).
September 23, 2008	Comments on the draft permit received from the ARO. No changes suggested.

III. Permit Modifications/Changes and ESM Discussion

The modifications discussed above have been reviewed for compliance with all applicable State and Federal air quality regulations by the NC DAQ and have been issued air permits to operate the sources under the NC State permitting rules (15A NCAC 2Q .0300).

To satisfy the NC Title V permitting rules (15 A NCAC 2Q .0500), the facility had to submit another application that would (upon verification that the modifications were performed as requested previously) be submitted to public and EPA notice for comments. The subsequent revised permit would as a result contain a permit shield for the new sources (ES-P7 and ES-P8).

Other than the revision of some general conditions and regulatory citations, and one reporting change, there have been no significant changes to the air permit since the issuance of permit no. T10.

To review changes to the air permit since it was last presented for public and EPA review (permit no T08) see the attached permit review documents.

Change in 2D .0515 condition reporting

As stated in permit review document for T10:

ARO noted no required stipulation modifications as the permit has recently completed renewal. At that time, all specific Part I permit conditions and Part II General Conditions were updated per current DAQ shell documents. However it has been pointed out that there are needed modifications to the specific condition for particulate matter (15A NCAC 2D .0515). It should be noted that uncontrolled sources are ONLY required to keep records of process weight "P" to be used in the associated particulate matter equation and subsequently should NOT be subject to reporting requirements. **However, the permit does currently require semi-annual reporting.**

The processes subject to his regulation do not utilize any control device to comply with this emission standard. The reporting of process rates is an unnecessary reporting burden to the Permittee and adds little value to compliance assurance. Records will still need to be maintained and the annual inspector will verify that the process rates will result in emission less than those allowed by the regulation.

The permit condition will be revised to remove the reporting requirement.

The following table presents all significant changes to the current permit (T10).

Condition No.	Changes
Cover Letter	Updated, permit revision numbers, issue and effective dates

Condition No.	Changes
Insignificant Activities List	Updated to current DAQ standards
Equipment list	Removed footnote
Table of Contents	Removed reference to PART I and PART II as TV permits will no longer contain a State Only PART II section. See General Conditions below.
ALL	Removed reference to PART I as TV permits will no longer contain a PART II. See below.
PART II	Removed PART II of the air permit.
2.1.A.1.D	Removed reporting requirement.
All Testing [15A NCAC 2D .0501 (c)(3), (4) and (8)] Conditions	For all Testing [15A NCAC 2D .0501 (c)(3), (4) and (8)] Conditions the regulatory citation was revised to 15A NCAC 2D .2601 to reflect recent rule changes
General Conditions	Updated to version v.2.22.1, which includes the new conditions: <ul style="list-style-type: none"> •MM, which is for 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources", a state enforceable only condition and • NN, which addresses application guidance for modifications made pursuant to 15A NCAC 2Q .0501(c)(2), 15A NCAC 2Q .0501(d)(2), and 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C)

IV. Public Notice/EPA and Affected State(s) Review

TBD

V. Conclusions, Comments, and Recommendations

TBD

Attachment A
Review T10

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: November 2, 2007

Region: Asheville Regional Office
County: Rutherford
NC Facility ID: 8100190
Inspector's Name: Patrick Ballard
Date of Last Inspection: 01/17/2007
Compliance Code: C/In Compliance With
Procedural Reqr

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Plastic Packaging, Inc. - Plant No. 2 Facility Address: Plastic Packaging, Inc. - Plant No. 2 681 Piney Ridge Road Forest City, NC 28043 SIC: 2759 / Commercial Printing, Nec NAICS: 323112 / Commercial Flexographic Printing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 8100190.07B Date Received: 09/27/2007 Application Type: Modification Application Schedule: TV-Sign-501(c)(2) Existing Permit Data Existing Permit Number: 08091/T09 Existing Permit Issue Date: 04/09/2007 Existing Permit Expiration Date: 02/29/2012
Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	
Review Engineer: Mark Cuilla Review Engineer's Signature: Date: November 2, 2007		Comments / Recommendations: Issue 08091/T10 Permit Issue Date: November 2, 2007 Permit Expiration Date: February 29, 2012	

I. Purpose of Application

The facility is proposing to construct an additional wide-web flexographic printing press and associated bake oven at its Forest City plant. The press/oven is currently located at Plastic Packaging, Inc.'s Hickory facility and is proposed to be re-located to Forest City in October 2007.

The Permittee requested that this permit application be processed pursuant to the two-step procedure outlined in 15A NCAC 2Q .0501(c)(2). The new press will be constructed after obtaining an air permit in accordance with 15A NCAC 2Q .0300. A second application for the title V modification will be filed within 12 months of operation, in accordance with 15A NCAC 2Q .0504.

II. Facility Description

The facility is a plastic converter that prints customer designs, patterns, and/or writing onto plastic (polyethylene/polypropylene) film and then converts the material into plastic packaging. The facility is currently permitted to operate six flexographic presses (**ID Nos. ES-P2 through ES-P7**) and miscellaneous insignificant activities.

III. History/Background/Application Chronology

March 27, 2007 – Permit **08091T08** was issued as a renewed permit with an expiration date of **February 29, 2012**.

April 9, 2007 – Permit **08091T09** was issued as a 501(c)(2) modification for the construction and operation of flexographic press (**ID No. ES-P7**). That permit required the submittal of a complete title V application within 12 months of operation of the new press.

September 27, 2007 – Permit application **8100190.07B** was received as a 501(c)(2) modification for the removal of presses (**ID Nos. ES-P3 and ES-P5**) and the construction and operation of press (**ID No. ES-P8**).

October 12, 2007 – DRAFT permit sent to Permittee, Regional Office and Title V Coordinator for comment prior to issuance.

IV. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of this permit modification.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant Activities	-updated permit revision number
Cover	-	-updated permit revision numbers and all dates
TOC	-	-added reference to Section 2.2
All	Header	-updated permit revision number
3	Equipment Table	-removed references to ES-P3 and ES-P5 per Permittee -added reference to ES-P8 per Permittee with asterisk language
4	2.1 A 2.1 A (Table) 2.1 A.1.a	-updated equipment description -updated three PSD Avoidance conditions with references to remaining and new equipment with new avoidance limits -updated ID Nos.
5	2.1 A.2.a 2.1 A.2.c 2.1 A.3.a	-updated ID Nos. -updated ID Nos. -updated ID Nos.
6	2.1 A.3.c 2.1 A.4.a 2.1 A.5.a 2.1 A.5.b	-updated ID Nos. -updated ID Nos. and corrected PSD Avoidance limit -updated ID Nos. and corrected PSD Avoidance limit -updated ID Nos.
7	2.1 A.6.a 2.1 A.6.b	-updated ID Nos. and corrected PSD Avoidance limit -updated ID Nos.
10-19	General Conditions	-updated shell conditions with v2.19
21	Part II	-added Table 2 for ES-P8

The following table indicates the modifications to ESM as a result of this permit modification.

Current Description	Change resulting from permit renewal
One 36-inch wide-web flexographic press with eight printing stations and one natural gas-fired bake oven (1.6 million Btu per hour maximum heat input capacity; ID No. ES-P3)	End-dated per Permittee
One 45-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P5)	End-dated per Permittee
NA	<i>One 56-inch wide-web flexographic press with eight printing stations and one natural gas-fired bake oven (2.4 million Btu per hour maximum heat input capacity; ID No. ES-P8)</i>

V. Regulatory Review

The proposed equipment is subject to the following permit conditions:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes: The new press joins the current presses subject to this regulation. The press itself is not a source of particulate matter. However, the associated bake oven is for the combustion of natural gas. Particulate matter emissions shall be less than the amount calculated from the following equation:

$$E = 4.10 \times P^{0.67}$$

For this group of uncontrolled sources, the Permittee is required to maintain records of process weight rate “P” for its use in the associated equation. The current permit also requires semi-annual reporting of all associated recordkeeping. (See note in Section IX of this Document for a discussion of this condition). Continued compliance is expected.

15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources: The new press joins the current presses subject to this regulation. The press itself is not a source of sulfur dioxide. However, the associated bake oven is for the combustion of natural gas. Emissions of sulfur dioxide are limited to less than 2.3 pounds per million Btu. The new bake oven is rated at 2.4 million Btu per hour maximum heat input capacity bake oven. This equates to an allowable sulfur dioxide limit of 5.52 pounds. A check against the DAQ natural gas combustion spreadsheet indicates compliance. No monitoring/recordkeeping/reporting is required for the combustion of natural gas in this source.

15A NCAC 2D .0521, Control of Visible Emissions: The new press joins the current presses subject to this regulation. The press itself is not a source of visible emissions. However, the associated bake oven is for the combustion of natural gas. Emissions of visible emissions are limited to less than 20 percent opacity. No monitoring/recordkeeping/reporting is required for the combustion of natural gas in this source.

15A NCAC 2D .0958, Work Practice Standards for Sources of Volatile Organic Compounds: As a source of volatile organic compounds (VOCs), the proposed equipment is also subject to the work practice standards of this regulation. The Permittee is required to comply with the housekeeping activities in the rule, as well as perform monthly visual inspections of all operations and processes utilizing VOCs. The results of these inspections are to be maintained in a logbook and reported semiannually. Continued compliance is expected.

15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions: The Permittee is required, facility wide, to not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundaries. Continued compliance is expected.

15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration): See Section VI of this Document for a discussion.

15A NCAC 2Q .0711, Emission Rates Requiring a Permit: See Section VII of this Document for a discussion.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS – The facility is not currently subject to any New Source Performance Standards. This permit modification does not affect this status.

NESHAPS/MACT – The facility is not currently subject to any National Emission Standards for Hazardous Air Pollutants as they are a title III minor source. This permit modification does not affect this status.

PSD – The facility is classified as a PSD major facility for volatile organic compounds (VOCs) because their potential to emit is greater than 250 tons per year. In order to avoid the applicability of the PSD program, the facility currently operates under two separate 250 tons per year emission limits as well as a single 40 tons per year limit. The first is for the collection of presses (**ID Nos. ES-P2 through ES-P4**), the second is for the collection of presses (**ID Nos. ES-P5 and ES-P6**), and the third is for press (**ID No. ES-P7**). The permit requires that the Permittee calculate VOC emissions from these sources on a monthly basis by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. Calculations are to be recorded monthly in a logbook and reported semi-annually. This permit modification does not affect this status. Continued compliance is expected.

As part of this modification, the Permittee is requesting the removal of two presses (**ID Nos. ES-P3 and ES-P5**) and for the installation of one press (**ID No. ES-P8**). The Permittee is proposing to change the emission limits for the existing and proposed presses that will reduce current emission limits and allow the facility to remain a PSD-minor source. Past actual emissions for press P3 and P5 are being used in this netting exercise. The following table illustrates the current and proposed emission limits:

Press Combinations	Current Emission Limit	Proposed Emission Limit
ES-P2, ES-P3, and ES-P4	<250 tpy	<234.4 tpy*
ES-P5 and ES-P6	<250 tpy	<207.3 tpy**
ES-P7	<40 tpy	<98.3 tpy***
Total	540 tpy	540 tpy

* represents a proposed press combination of ES-P2 and ES-P4 only (*press ES-P3 has been removed*)

** represents a proposed press combination of ES-P6 only (*press ES-P5 has been removed*)

*** represents a proposed press combination of ES-P7 and ES-P8 only

As shown in the table, there is no net increase in potential/actual VOC emissions as a result of this modification. The first original 250-tpy limit has been reduced by the past actual of press P3 of 15.6 tpy. The second 250-tpy limit has been reduced by the past actual of press P5 of 42.7 tpy. The past actuals have been applied to the proposed new press P8 and added to the third original 40-tpy limit for a total of 98.3 tpy.

The proposed press P8 will be operated in the same manner that it is currently being operated in Hickory. Historic emission records for press P8 indicate a maximum 40.2 tons per year VOCs. This added to the 40-tpy limit of press P7 indicates expected compliance with the proposed 98.3 tpy emission limit.

112(r) – The facility is not currently subject to Section 112(r) of the Clean Air Act as it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit modification does not affect this status.

CAM – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The facility does not currently operate control equipment for any of its permitted equipment; therefore CAM is not applicable. This permit modification does not affect this status. The proposed equipment is uncontrolled.

VII. Facility Wide Air Toxics

The facility is currently subject to the toxic permit emission rates (TPERs) for ethyl acetate (36 pounds per hour). This permit condition requires the Permittee to obtain a permit modification PRIOR to exceeding the TPER. The Permittee indicates no increase in ethyl acetate from the proposed modification. Continued compliance is expected.

VIII. Facility Emissions Review

The following table represents the latest years emission inventory from the facility:

Pollutant(s)	2006 Actual Emissions (tpy)
CO	0.11
NO _x	0.14
PM ₁₀	0.01
VOC	207.41
Total HAP/TAP	0.046

IX. Stipulation Review

ARO noted no required stipulation modifications as the permit has recently completed renewal. At that time, all specific Part I permit conditions and Part II General Conditions were updated per current DAQ shell documents. However it has been pointed out that there are needed modifications to the specific condition for particulate matter (15A NCAC 2D .0515). It should be noted that uncontrolled sources are ONLY required to keep records of process weight “P” to be used in the associated particulate matter equation and subsequently should NOT be subject to reporting requirements. **However, the permit does currently require semi-annual reporting.** This reporting requirement can only be removed during a significant modification of the permit. This first step construction permit modification does not allow for the reporting requirement to be removed. This should be kept in mind when the second step is received within 12 months of startup of the proposed equipment. The permit at that time will be open for modification of all parts and the unnecessary requirements should be removed.

X. Public Notice/EPA and Affected State(s) Review

Under the significant 15A NCAC 2Q .0501(c)(2) two-step modification process, the “first step” permit, which is processed using the state permitting procedures pursuant to 15A NCAC 2Q .0300, is not required to complete a 30-day public notice and 45-day EPA review prior to issuance. However, the modified permit does require that the Permittee submit a complete title V application pursuant to the procedures in 2Q .0500 within 12 months of equipment startup. This second step submittal will be required to complete the public notice and EPA review periods prior to issuance.

XI. Conclusions, Comments, and Recommendations

ARO recommends issuance of the permit and was presented with a DRAFT permit prior to issuance.

RCO concurs with ARO’s recommendation to issue the modified air permit.

Attachment B Review T09

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: April 9, 2007

Region: Asheville Regional Office
County: Rutherford
NC Facility ID: 8100190
Inspector's Name: Patrick Ballard
Date of Last Inspection: 01/17/2007
Compliance Code: C/In Compliance With
Procedural Reqr

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Plastic Packaging, Inc. - Plant No. 2 Facility Address: Plastic Packaging, Inc. - Plant No. 2 681 Piney Ridge Road Forest City, NC 28043 SIC: 2759 / Commercial Printing, Nec NAICS: 323112 / Commercial Flexographic Printing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NA NSPS: NA NESHAP: NA PSD: NA PSD Avoidance: 15A NCAC 2Q .0317 NC Toxics: NA 112(r): NA Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 8100190.07A Date Received: 02/08/2007 Application Type: Modification Application Schedule: TV-502(b)(10) Existing Permit Data Existing Permit Number: 08091/T08 Existing Permit Issue Date: 03/27/2007 Existing Permit Expiration Date: 02/29/2012
Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	Edward Sievers Plant Manager (828) 286-1356 P O Box 130 Forest City NC, 28043	
Review Engineer: Mark Cuilla Review Engineer's Signature: Date: April 9, 2007		Comments / Recommendations: Issue 08091/T09 Permit Issue Date: April 9, 2007 Permit Expiration Date: 02/29/2012	

I. Purpose of Application

The facility is proposing to construct an additional wide-web flexographic printing press and associated bake oven at its Forest City plant. The press/oven is currently located at Plastic Packaging, Inc.'s Hickory facility and is proposed to be re-located to Forest City in March 2007.

The facility is also proposing to construct a solvent recovery unit that will distill and recover used solvent (n-propyl alcohol and n-propyl acetate). The unit is considered exempt from permitting because it is totally enclosed during distillation. The Permittee notes that a small amount of surface evaporation may occur when solvent is poured from the recovery tank to a 55-gallon drum (less than 1 pound per day). The unit is operated as a batch process and has the capacity to recover 1013 gallons of solvent per cycle. Each cycle is approximately 10 hours (8 hours for solvent recovery and 2 hours for cool down). A maximum of two cycles per day can be operated at the facility.

The Permittee requested that this permit application be processed pursuant to the two-step procedure outlined in 15A NCAC 2Q .0501(c)(2). The new press will be constructed after obtaining an air permit in accordance with 15A NCAC 2Q .0300. A second application for the title V modification will be filed within 12 months of operation, in accordance with 15A NCAC 2Q .0504.

II. Facility Description

The facility is a plastic converter that prints customer designs, patterns, and/or writing onto plastic (polyethylene/polypropylene) film and then converts the material into plastic packaging. The facility is currently permitted to operate four flexographic presses (**ID Nos. ES-P2 and ES-P4 through ES-P6**) with six print stations each and miscellaneous insignificant activities.

III. History/Background/Application Chronology

February 3, 2006 – Permit application **8100190.06A** was received as a title V renewal application.

February 8, 2007 – Permit application **8100190.07A** was received as Part I of a two-step 501(c)(2) significant modification for the installation of a new flexographic press (**ID No. ES-P7**).

March 23, 2007 – Permit application **8100190.07A** was transferred from Jenny Kelvington to Mark Cuilla for processing.

March 27, 2007 – Permit **08091T08** was issued as a renewed permit with an expiration date of **February 29, 2012**.

March 28, 2007 – DRAFT permit sent to Permittee, Regional Office, Title V Coordinator for review prior to issuance. Received ARO comments via email. See Section IX of this Document for a discussion. These comments were directed to the Permittee to answer.

March 29, 2007 – Received comments on the DRAFT permit and responses to ARO comments from the Permittee. See Section IX of this Document for a discussion.

IV. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of this permit modification.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant Activities	-updated permit revision number -added solvent recovery unit per Permittee request -amended wash-off tank sizes per Permittee's response to ARO comments
Cover	-	-amended all dates and permit revision numbers
TOC	-	-added reference to Part II Sections
All	Header	-updated permit revision number
3	Equipment table	-added new press (ES-P7) with 501(c)(2) asterisk language -clarified equipment descriptions of current equipment
4	2.1 A 2.1 A (table) 2.1 A.1.a 2.1 A.1.b	-added reference to new press (ES-P7) -added PSD avoidance condition citation for new press (ES-P7) -clarified PSD avoidance condition citations for current presses -amended ID Nos. -updated shell language
5	2.1 A.2.a 2.1 A.2.c 2.1 A.3.a 2.1 A.3.c 2.1 A.4.a	-amended ID Nos. -amended ID Nos. -amended ID Nos. -amended ID Nos. -clarified PSD avoidance condition emission limit for current presses (ES-P2 through ES-P4)
6	2.1 A.5.a	-clarified PSD avoidance condition emission limit for current presses (ES-P5 and ES-P6)
6-7	2.1 A.6	-added new PSD avoidance condition for new press (ES-P7)

Page(s)	Section	Description of Change(s)
8	2.2 A.1.e 2.2 A.3	-updated shell language -corrected rule citation
19-20	Part II	-added Part II for the construction of new press (ES-P7)

The following table indicates the modifications to ESM as a result of this permit modification.

Current Description	Change resulting from permit renewal
Wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.3 million Btu per hour maximum heat input capacity; ID No. ES-P2)	<i>One 45-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.3 million Btu per hour maximum heat input capacity; ID No. ES-P2)</i>
Wide-web flexographic press with eight printing stations and one natural gas-fired bake oven (1.6 million Btu per hour maximum heat input capacity; ID No. ES-P3)	<i>One 36-inch wide-web flexographic press with eight printing stations and one natural gas-fired bake oven (1.6 million Btu per hour maximum heat input capacity; ID No. ES-P3)</i>
Wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P4)	<i>One 45-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P4)</i>
Wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P5)	<i>One 45-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P5)</i>
Wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P6)	<i>One 45-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (2.0 million Btu per hour maximum heat input capacity; ID No. ES-P6)</i>
NA	<i>One 66-inch wide-web flexographic press with six printing stations and one natural gas-fired bake oven (1.6 million Btu per hour maximum heat input capacity; ID No. ES-P7)</i>
Three wash-off tanks (60, 30, and 55 gallon capacity, respectively; ID Nos. IWOT1 through IWOT3)	Three wash-off tanks (40, 70, and 80 gallon capacity, respectively; ID Nos. IWOT1 through IWOT3)
Ink/solvent storage and mixing area (ID No. ISSMA)	One ink/solvent storage and mixing area (ID No. ISSMA)
one solvent storage tank (2,000 gallon capacity; ID No. ISST4)	One solvent storage tank (2,000 gallon capacity; ID No. ISST4)
NA	<i>One n-propyl alcohol and n-propyl acetate used solvent recovery unit (1,013 gallon of solvent per cycle; maximum of two cycles per day; ID No. ISRUI)</i>

V. Regulatory Review

The proposed equipment is subject to the following permit conditions:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes: The new press joins the current presses subject to this regulation. The press itself is not a source of particulate matter. However, the associated bake oven is for the combustion of natural gas. Particulate matter emissions shall be less than the amount calculated from the following equation:

$$E = 4.10 \times P^{0.67}$$

For this group of uncontrolled sources, the Permittee is required to maintain records of process weight rate “P” for its use in the associated equation. The current permit also requires semi-annual reporting of all associated recordkeeping. (See note in Section IX of this Document for a discussion of this condition). Continued compliance is expected.

15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources: The new press joins the current presses subject to this regulation. The press itself is not a source of sulfur dioxide. However, the associated bake oven is for the combustion of natural gas. Emissions of sulfur dioxide are limited to less than 2.3 pounds per million Btu. The new bake oven is rated at 2.3 million Btu per hour maximum heat input capacity bake oven. This equates to an allowable sulfur dioxide limit of 5.29 pounds. A check against the DAQ natural gas combustion spreadsheet indicates compliance. No monitoring/recordkeeping/reporting is required for the combustion of natural gas in this source.

15A NCAC 2D .0521, Control of Visible Emissions: The new press joins the current presses subject to this regulation. The press itself is not a source of visible emissions. However, the associated bake oven is for the combustion of natural gas. Emissions of visible emissions are limited to less than 20 percent opacity. No monitoring/recordkeeping/reporting is required for the combustion of natural gas in this source.

15A NCAC 2D .0958, Work Practice Standards for Sources of Volatile Organic Compounds: As a source of Volatile organic compounds (VOCs), the proposed equipment is also subject to the work practice standards of this regulation. The Permittee is required to comply with the housekeeping activities in the rule, as well as perform monthly visual inspections of all operations and processes utilizing VOCs. The results of these inspections are to be maintained in a logbook and reported semiannually. Continued compliance is expected.

15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions: The Permittee is required, facility wide, to not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundaries. Continued compliance is expected.

15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration): See Section VI of this Document for a discussion.

15A NCAC 2Q .0711, Emission Rates Requiring a Permit: See Section VII of this Document for a discussion.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS – The facility is not currently subject to any New Source Performance Standards. This permit modification does not affect this status.

NESHAPS/MACT – The facility is not currently subject to any National Emission Standards for Hazardous Air Pollutants as they are a title III minor source. This permit modification does not affect this status.

PSD – The facility is classified as a PSD major facility for volatile organic compounds (VOCs) because their potential to emit is greater than 250 tons per year. In order to avoid the applicability of the PSD program, the facility currently operates under two separate 250 tons per year emission limits. The first is for the collection of presses (**ID Nos. ES-P2 through ES-P4**) and the second is for the collection of presses (**ID Nos. ES-P5 and ES-P6**). The permit requires that the Permittee calculate VOC emissions from these sources on a monthly basis by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. Calculations are to be recorded monthly in a logbook and reported semi-annually. This permit modification does not affect this status. Continued compliance is expected.

However, the Permittee has requested that in order to continue to avoid the applicability of PSD, that the additional press (**ID No. ES-P7**) be limited to less than 40 tons VOC per year. The Permittee notes that historic emission records for the press (while in operation in Hickory) indicate a maximum 30 tons VOC per year. Potential emissions are estimated as follows:

Potential VOC emissions:

Solvent – 8000 gallons x (50% solvent emitted) x (7.2 lbs VOC/gallon) = 28800 lbs/yr (14.4 tons/yr)

White ink – 25000 lbs/yr x (0.4504 VOC weight percentage from MSDS) = 11260 lbs/yr (5.63 tons/yr)

Varnish/other inks – 55000 lbs/yr x (0.6521) = 35865.5 lbs/yr (17.93 tons/yr)

Total VOCs = 37.96 tons/yr

Hourly VOC emissions – 37.96 tons/yr x (2000 lbs/ton) x (1 yr/4800 hrs) = 15.82 lbs/hr

Notes.

1. Maximum usage rates are based on historic emission records for the press operated in Hickory.
2. VOC weight percentage is based on vendor-supplied MSDS as provided in the air permit application dated August 2003.
3. Hourly emissions are based on operating the printer 4800 hours per year.

Compliance with the requested permit limit of 40 tons per year is expected.

112(r) – The facility is not currently subject to Section 112(r) of the Clean Air Act as it does not store any of the regulated substances in quantities above the thresholds in the Rule.

CAM – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The facility does not currently operate control equipment for any of its permitted equipment; therefore CAM is not applicable. This permit modification does not affect this status. The proposed equipment is uncontrolled.

VII. Facility Wide Air Toxics

The facility is currently subject to the toxic permit emission rates (TPERs) for ethyl acetate (36 pounds per hour). This permit condition requires the Permittee to obtain a permit modification PRIOR to exceeding the TPER. The Permittee indicates no increase in ethyl acetate from the proposed modification. Continued compliance is expected.

VIII. Facility Emissions Review

The following table represents the latest years emission inventory from the facility:

Pollutant(s)	2005 Actual Emissions (tpy)
CO	0.16
NO _x	0.18
PM ₁₀	0.01
VOC	265.01
Total HAP/TAP	0.012

IX. Stipulation Review

ARO noted no required stipulation modifications as the permit has recently completed renewal. At that time, all specific Part I permit conditions and Part II General Conditions were updated per current DAQ shell documents. However, as part of her review, Judy Lee pointed out needed modifications to the specific condition for particulate matter (15A NCAC 2D .0515). She states that uncontrolled sources are ONLY required to keep records of process weight “P” to be used in the associated particulate matter equation and subsequently should NOT be subject to reporting requirements. However, the permit does currently require semi-annual reporting. This reporting requirement can only be removed during a significant modification of the permit. This first step construction permit modification does not allow for the reporting requirement to be removed. This should be kept in mind when the second step is received within 12 months of startup of the proposed equipment. The permit at that time will be open for modification of all parts and the unnecessary requirements should be removed.

Comments on DRAFT permit from ARO prior to issuance (Permittee’s response):

1. Make sure the three wash-off tank sizes are correct. One of them was to be replaced with a larger unit as part of the press change out. (The capacities of the wash-off tanks are 40, 70, and 80 gallons). *Agree; change has been made to permit and to ESM.*
2. Press No. 3 has been removed from the facility (to be replaced by Press No. 7) but it is still listed on the permit. Did the facility want to keep Press No. 3 listed on the permit? (Press No. 3 was removed from the facility. Initially, we were going to replace this 6-color press with an 8-color press and leave ES-P3 in the permit. However, it was recently determined that the press will not be replaced in the immediate future. Therefore, we would like to remove ES-P3 from the permit.) *Disagree; according to PSD policy, removal of Press 3 at this time would restrict flexibility for future netting exercises. Press will be left on the permit.*
3. This permit modification was triggered because the facility switched from a 36-inch press (Press 3) to a 45-inch press (Press 7) (increase in size). Because of situations like this, it may be a good idea to list the press widths in the equipment list descriptions. (For your information, there is not a linear relationship between press size and emissions. If you would like to include the press sizes in the equipment description, each of the presses at the Forest City plant are 45-inches, with the exception of Press ES-P7 with is 66-inches.) *Agree; modifications to the descriptions have been made to the permit and ESM.*

X. Public Notice/EPA and Affected State(s) Review

Under the significant 15A NCAC 2Q .0501(c)(2) two-step modification process, the “first step” permit, which is processed using the state permitting procedures pursuant to 15A NCAC 2Q .0300, is not required to complete a 30-day public notice and 45-day EPA review prior to issuance. However, the modified permit does require that the Permittee submit a complete title V application pursuant to the procedures in 2Q .0500 within 12 months of equipment startup. This second step submittal will be required to complete the public notice and EPA review periods prior to issuance.

XI. Conclusions, Comments, and Recommendations

ARO recommends issuance of the permit and was presented with a DRAFT permit prior to notice and issuance.

RCO concurs with ARO’s recommendation to issue the renewed air permit.