

NORTH CAROLINA DIVISION OF AIR QUALITY			Region: Asheville Regional Office
Air Permit Review – Renewal (with addition of one insignificant source)			County: Henderson
Permit Issue Date: XXXX, 2007			NC Facility ID: 4500256
			Inspector's Name: Mike Parkin
			Date of Last Inspection: 05/10/2007
			Compliance Code: 3/In Compliance - Inspection
Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Printpack, Inc.			SIP: 15A NCAC 2Q. 0513, 2D .0614
Facility Address: Printpack, Inc. 3510 Asheville Highway Hendersonville, NC 28791			NSPS: N/A
SIC: 2761 / Manifold Business Forms			NESHAP: N/A
NAICS: 323116 / Manifold Business Forms Printing			PSD: N/A
Facility Classification: Before: Title V After: Title V			PSD Avoidance: N/A
Fee Classification: Before: Title V After: Title V			NC Toxics: N/A
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4500256.05A and 4500256.07A
Scott Gower Environmental Coordinator Ph: (704) 693-1723 Fax: (704) 692 -1716 3510 Asheville Highway Hendersonville NC, 28791 sgower@printpack.com	Douglas Cook Director of Engr. Services Ph: (404) 691-5830 Fax: (404) 696-1205 4335 Wendell Drive Atlanta, Ga. 30336 dcook@prinpack.com	Camilo Cruz Ph: (404) 691-5830 Fax: (404) 696-1205 4335 Wendell Drive Atlanta, Ga. 30336 ccruz@printpack.com	Date Received: 05/31/2005 & July 9, 2007 Application Type: Renewal (consolidated with Part II of a significant modification) Application Schedule: TV-Renewal
			Existing Permit Data
			Existing Permit Number: 03342T21
			Existing Permit Issue Date: 10/31/2005
			Existing Permit Expiration Date: 07/31/2010
Review Engineer: Booker Pullen Regional Engineer: Mike Parkin		Comments / Recommendations:	
Review Engineer's Signature: _____		Issue 03342T22	
Date: July 16, 2007		Permit Issue Date: XXXX, 2007	
		Permit Expiration Date: XXXX, 2012	
		Facility is minor for HAPs and contains two 250 ton PSD Avoidance limits and one 53.82 ton PSD Avoidance limits for VOCs.	

I. Introduction:

Printpack, Inc. is a manufacturer of flexible packaging materials. They print wrappers for primarily Hershey products such as Reese's Peanut Butter Cups using flexographic print machines. Application No. 4500256.05A (renewal) was received by the Division of Air Quality (DAQ) on May 31, 2005 and was originally assigned to Mr. Steve Proctor. It was considered complete on that date. This application has been reassigned three times. Application No. 4500256.07A was received by the DAQ on July 9, 2007 and considered complete on that date. These two applications will be consolidated into one permit and processed as a renewal of the existing Title V Permit. These applications and permit will go through the 30-day public notice and the EPA 45-day review period prior to permit being signed.

II. Purpose of these applications (4500256.05A and 4500256.07A):

- A. Renewal of permit No. 03342T21. Permit will be issued as revision No. T22 after going through public notice and EPA review.
- B. Submittal of the second part of a 2-step significant modification and the addition of one photopolymer plate system (ID No. IES-12) to the insignificant activities list. This process is used for manufacturing print plates. This process emits less than 5 tons per year of VOC, before controls, and less than 1000 lbs of HAPs.

III. Changes to existing permit per applications (4500256.05A and 4500256.07A):

Old page No.	New Page No.	Condition No.	Changes
Cover Letter			
Page 1	Page 1	Heading and body of letter	Revised issue date, revised permit number, changed "complete application" received date, added current cover letter language, changed application processing procedure to "renewal"
Page 2	Page 2	Heading and body of letter	Revised date at the top of letter, and changed the effective date and issue date of permit, changed name of the Permit Chief to Don van der Vaart, added EPA Region IV to copy list
Page 3	Page 3	Insignificant activities list	Added insignificant source (IES-12) to the list, reformatted the table
Changes to Part I			
Page 1	Page 1	Cover page of permit	Revised permit number, revised "replaces permit" number, changed the expiration date of permit, added current language for permit cover page, revised application number, removed renewal date, revised issue date, changed name of Permit Chief
Page 2	Page 2	Table of Contents	Removed the Part II Section
All pages	All pages	Heading	Changed Permit No. revision to T22
Page 3	Page 3	Permitted Emission Sources	Added current permit language to first paragraph, removed * from ES-C001 description
Page 4	Page 4	Permitted Emission Sources table	Remove * from ink jet printer description
Page 5	Page 5	Permitted Emission Sources table	Removed foot note at bottom of table
N/A	Pages 16 & 17	Multiple Emissions	Added Compliance Assurance Monitoring plan
Page 22 - 33	Pages 22-33	General Condition	Added current General Conditions

IV. Statement of Compliance:

The DAQ has reviewed the compliance status of this facility. Mr. Mike Parkin of the Asheville Regional Office, performed a facility inspection on May 10, 2007 and the facility was determined to be 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 effective date will continue to comply with these requirements. The applicant has also certified that the facility will be in compliance with any applicable requirements taking effect during the term of the permit and will meet such requirements on a timely basis.

V. Summary of emission sources for which this renewal is being issued

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
PSD Avoidance Group One including :			
ES-P02	One totally enclosed Wide Web Flexographic Press 2 with six printing stations, two outboard coating stations and four bake ovens fired by propane/natural gas with a total maximum heat input of 7.6 million Btu per hour	CD-IO3	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour, and
ES-CO01	Outboard coating station installed either on Wide Web Flexographic Press 3 OR Wide Web Flexographic Press 4	CD-IO2	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour (these units are operated in parallel)

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The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances: continued

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
PSD Avoidance Group One including : Continued			
ES-P03	One totally enclosed Wide Web Flexographic Press 3 with ten printing stations, one outboard coating station, and three bake ovens fired by propane/natural gas with a total maximum heat input of 4.0 million Btu per hour	CD-IO3 CD-IO2	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour, and Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour (these units are operated in parallel)
ES-P04	One totally enclosed Wide Web Flexographic Press 4 with six printing stations, one outboard coating station, and four bake ovens fired by propane/natural gas with a total maximum heat input of 8.25 million Btu per hour	CD-IO3 CD-IO2	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour, and Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour (these units are operated in parallel)
ES-TK1.1 & ES-TK1.2	One 8,000 gallon fixed roof organic liquid storage tank baffled into two sections of 4,000 gallons each	None	None
ES-TK2 & ES-TK3	One 6,000 gallon fixed roof organic liquid storage tank baffled into two sections of 3,000 gallons each	None	None
ES-TK4 & ES-TK5	One 6,000 gallon fixed roof organic liquid storage tank baffled into two sections of 3,000 gallons each	None	None
ES-TK6	One 5000 gallon cone bottom hazardous waste storage tank	None	None
ES-PW01	One manual solvent parts washer with a maximum design capacity of 150 gallons	CD-IO3 CD-IO2	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour, and Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour (these units are operated in parallel)
ES-PW02	One solvent distillation unit with a maximum design capacity of 75 gallons installed on one closed loop wash system consisting of: an end loading wash machine, a dirty solvent discharge line and holding tank, and a clean solvent holding tank with return line feeding back to the wash machine		
ES-IJ01	One ink jet printer	None	None

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The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances: continued

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
PSD Avoidance Group Two including : Continued			
ES-P05	One totally enclosed Narrow Web Flexographic Press 5 with eight printing stations, two outboard coaters, and four bake ovens fired by propane/natural gas with a total maximum heat input of 2.4 million Btu per hour	CD-IO3	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour, and
ES-P06	One totally enclosed Wide Web Flexographic Press 6 with eight printing stations, two outboard coaters, and four bake ovens fired by propane/natural gas with a total maximum heat input of 8.4 million Btu per hour	CD-IO2	Regenerative Thermal Oxidizer fired by natural gas with a maximum heat input rate of 10.9 million Btu per hour (these units are operated in parallel)
ES-P07	One totally enclosed Wide Web Flexographic Press 7 with ten printing stations, two outboard coaters, and four bake ovens fired by natural gas with a total maximum heat input of 6.7 million Btu per hour		
ES-PH01	One photopolymer plate making process	None	None

VI: PSD Avoidance Group Explanation:

The emission sources at this facility had been separated into two PSD Avoidance groups (for VOCs) prior to the issuance of revision T19. Actual VOC emissions had been as high as 167 tons since 1993. When permit revision T21 was issued for the modification of Press 3, another PSD Avoidance condition was placed in the permit for VOCs from the affected sources (ID Nos. ES-P03, CO01, and IF01) not to exceed 53.82 tons VOCs per year. This limit represented baseline plus 39 tons per year.

Group One

- ES-P02
- ES-CO01
- ES-P03
- ES-P04
- ES-PW01
- ES-PW02

All of these sources listed above in Group one are controlled by either one of two regenerative thermal oxidizers (CD-IO3-RTO and CD-IO2-RTO) operating in parallel;

- ES-TK1.1 & ES-TK1.2, uncontrolled
- ES-TK2 & ES-TK3, uncontrolled
- ES-TK4 & ES-TK5, uncontrolled
- ES-TK6, uncontrolled
- ES-IJ01, uncontrolled

Group Two

- ES-P05
- ES-P06
- ES-P07
- ES-PH01

All of these sources listed above in Group two are controlled by either one of two regenerative thermal oxidizers (CD-IO3-RTO and CD-IO2-RTO) operating in parallel;

Note: No changes will be required for this renewal application to the conditions already listed in the permit. CAM (15A NCAC 2D .0614) will be added because the potential to emit before controls of VOC's is greater than 100 tons prior to entering each of the regenerative thermal oxidizers.

VII. Emission Source-by-Source Evaluation:

A. For PSD Avoidance Group One and associated control devices

1. Applicable Regulatory Requirements:

These VOC sources and control equipment are subject to the following regulations:

- **15A NCAC 2D .0515** “Particulates From Miscellaneous Industrial Process” [ES-P02, ES-P03, ES-P04, ES-P05, ES-P06, & ES-P07]
- **15A NCAC 2D .0516** “Sulfur Dioxide Emissions From Combustion Sources [ES-P02, ES-P03, ES-P04, ES-P05, ES-P06, ES-P07, CD-IO3-RTO, & CD-IO2-RTO]
- **15A NCAC 2Q .0317 (2D .530)** “PSD Avoidance” [ES-P02, ES-P03, ES-P04, ES-P04, ES-P05, ES-P06, ES-P07, ES-TK1.1, ES-TK1.2, ES-TK2, ES-TK3, ES-TK4, ES-TK5, ES-TK6, ES-PW01, ES-PW02, ES-PH01, and ES-IJ01] & [ES-P03, ES-CO01, & ES-IJ01]
- **15A NCAC 2Q .0317 (2D .1111)** “MACT Avoidance” [Sources facility-wide]
- **15A NCAC 2D .0711** “Toxic Air Pollutant Emissions Limits” [Sources facility-wide]
- **15A NCAC 2D .0930** “Solvent Metal Cleaning” [ES-PW01 & PW02]
- **15A NCAC 2D .0936** “Graphic Arts” [ES-P02, ES-P03, ES-P05, ES-P06, ES-P07]
- **15A NCAC 2D .0958** “Work Practices For Sources of Volatile Organic Compounds” [ES-P02, ES-P03, ES-P04, ES-P05, ES-P06, ES-P07, ES-TK1.1, ES-TK1.2, ES-TK2, ES-TK3, ES-TK4, ES-TK5, ES-TK6, ES-PW01, ES-PW02, ES-PH01, and ES-IJ01]
- **15A NCAC 2D .1100** “Control of Toxic Air Pollutants” [ES-P02 & ES-P07]
- **15A NCAC 2D .1806** “Odorous Emissions” [ES-P02, ES-P03, ES-P04, ES-P04, ES-P05, ES-P06, ES-P07, ES-TK1.1, ES-TK1.2, ES-TK2, ES-TK3, ES-TK4, ES-TK5, ES-TK6, ES-PW01, ES-PW02 and ES-IJ01]

2. No regulatory review is required for the regulations listed above at this time since there are no new sources being added for this renewal application. MACT, (40 CFR Part 63, Subpart KK) does not apply because the potential emissions of HAPs are below the applicability threshold. However, the sources at this facility are subject to review under Regulation 15A NCAC 2D .0614 “Compliance Assurance Monitoring” because the potential VOC emissions into each regenerative thermal oxidizer are greater than 100 tons per year.

3. 40 CFR Part 64, 15A NCAC 2D. 0614 “Compliance Assurance Monitoring”

A compliance assurance monitoring plan is required for this facility in the operation of the regenerative thermal oxidizers (CD-IO2-RTO and IO3-RTO). The plan is as follows:

a. Emission units

- Enclosed Wide Web and Narrow Web Flexographic printing stations (ID Nos. ES-P02, P03, P04, P06, & P07)
- Enclosed Narrow Web Flexographic printing station (ID No. ES- P05), and
- Coating station (ID No. ES-CO01)
- Parts washers (ID Nos. PW01, & PW02)

b. Applicable regulations: 15A NCAC 2Q .0317 (2D .0530) – PSD Avoidance

c. Applicable limits:

Less than 250 tons per year VOCs for Group one
Less than 250 tons per year for Group two, and
Less than 53.82 tons per year of VOCs for sources (ID Nos. ES-P03, CO01, and IF01)

d. Control technology: Two natural gas-fired regenerative thermal oxidizers (10.9 million Btu per hour maximum heat input) operated in parallel

- e. General Criteria:
 - i. Performance indicators:
The equipment manufacturer has provided documentation that the system will operate at the required efficiency at all times that the average combustion temperature meets or exceeds 1600 degrees Fahrenheit. Accordingly the following performance indicators have been chosen:
(A) Combustion chamber temperature
 - ii. Indicator ranges or designated conditions:
The acceptable range for the combustion chamber temperature is based on a 3-hour average combustion chamber temperature that demonstrated compliance during the most recent compliance test.
- f. **Monitoring Approach:** The key elements of the monitoring approach are presented in the following table.

Indicator	Indicator No. 1	Indicator No. 2	Indicator No. 3
Indicator Range	Combustion chamber temperature	Bypass interlock	Work practice/inspections
Measurement Approach	Continuously record the operating temperature of the combustion chamber zone.	Verify operational condition of control device bypass interlocks.	Inspect internal structural integrity of oxidizer to ensure proper operation. Inspect clean switch valve to insure structural integrity.
Indicator Range	A deviation is identified as any 3-hour period when the average temperature is 50 degrees Fahrenheit less than the 3-hr average temperature demonstrated during the most recent compliance demonstration.	A deviation is identified as any finding that any bypass damper interlocks are inoperative.	A deviation is identified as any finding that the structural integrity of the oxidizer has been jeopardized and it no longer operates as designed.
Corrective Action	Each deviation triggers an assessment of the problem, corrective action and reporting requirement.	Each deviation triggers an assessment of the problem, corrective action and reporting requirement.	Each deviation triggers an assessment of the problem, corrective action and reporting requirement.
Recordkeeping	Maintain for a period of 5 years combustion chamber temperature monitoring data and corrective actions taken in response to deviations.	Maintain for a period of 5 years, records of inspections and any required corrective actions.	Maintain inspection records and corrective actions for a period of 5 years.
Reporting responses to deviations	Number and duration of any deviations and the corrective action taken.	Number and duration of any deviations and the corrective action taken.	Number and duration of any deviations and the corrective action taken.
Reporting Frequency	Semi-annual reports to be submitted by January 30 and July 30 fro the preceding 6-month period.	Semi-annual reports to be submitted by January 30 and July 30 fro the preceding 6-month period.	Semi-annual reports to be submitted by January 30 and July 30 fro the preceding 6-month period.
Data Representation	Any temperature monitoring device employed to measure the oxidizer combustion zone temperature shall be accurate to within 2.0% of temperature measured or +/- 10 degree Fahrenheit, whichever is greater.	Properly operating interlocks will ensure that the dampers are correctly positioned. Periodic inspection and verification will adequately identify problems.	Inspection of the oxidizer system will identify problems.
Verification of Operational Status	Temperature recorded on chart paper or electronic media.	Inspection records.	Inspection records.

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Indicator	Indicator No. 1	Indicator No. 2	Indicator No. 3
QA/QC Practices and Criteria	Validation of temperature system conducted annually. Acceptance criteria +/- 25 degrees Fahrenheit.	Not applicable.	Not applicable.
Monitoring Frequency	Measured continuously	Annually	Internal inspection to be completed biannually.
Data Collection Procedures	Recorded at least 15 minutes on chart paper or electronic media.	Record results of interlock operation verification, inspections and observations.	Record results of all inspections and observations.
Averaging period	3-hour average	Not applicable	Not applicable

CAM will be added to the permit. The indicator ranges that were included in the CAM plan would be when the thermal oxidizer is not achieving a temperature of 1550 degrees Fahrenheit (98% control efficiency). Failure to achieve this temperature does not mean that the PSD Avoidance condition has been violated, because this condition is based on a 12-month calculation interval.

- VIII. A consistency determination **is not** required for this renewal application or the second part of the 2-step significant process.
- IX. An application fee **is not** required for the renewal application (4500256.05A). However, an application fee is required for the Part II application (4500256.07A) that was consolidated into the renewal. The application fee (\$867.00) was received on July 9, 2007.
- X. A professional engineer's seal **is not** required for either of these applications because no new control devices are being added.
- XI. The appropriate number of copies were received for the renewal application (4500256.05A), received by the DAQ on May 31, 2005 and the 2-step significant modification application (4500256.07A), which was received on July 9, 2007.
- XII. The application did contain the Reduction and Recycling Form.
- XIII. The application was signed by an authorized official as defined by 15A NCAC 2Q .0304(j).
- XIII. An Air toxics review **is not** required because no new sources are being added in this renewal application nor in the second step of the significant modification.
- XIV. **Other:**
This facility is not subject to 40 CFR Part 68, Prevention of Accidental Releases program, Section 112(r) of the Clean Air Act.
- XV. **Public Notice/EPA Review:**
A thirty-day public notice and EPA review period **is required.**

Public notice: The 30 day public notice period was from ____, 2007 through ____2007. ____public comments were received for this permit application.

EPA 45-Day review Period: The DAQ sent copies of the appropriate information to the USEPA on ____2007. The EPA 45-day review period was from __,2007 through ____, 2007. The USEPA _____stating that they_____ comments on the renewal permit for this facility.

XV. Recommendations

This renewal permit for the Printpack, Inc. facility, which is located at 3510 Asheville Highway, Hendersonville, Henderson County, North Carolina, has been reviewed by the DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is complying or will achieve compliance as specified in the permit with all applicable requirements.

Regional Comments for this permit and review were received on August 3, 2007, which was prior to the permit being sent to public notice. Comments from the applicant were received on August 17, 2007. All legitimate comments were addressed in the final permit.

This permit does not contain a Part II Section.

Issue permit No. 03342T22.