

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

DRAFT - Air Permit Review

Permit Issue Date:

Region: Winston-Salem Regional Office
County: Guilford
NC Facility ID: 4100823
Inspector's Name: Eric Hudson
Date of Last Inspection: 11/10/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)	
Applicant (Facility's Name): Greensboro Flexible Packaging LLC dba North State Flexibles Facility Address: Greensboro Flexible Packaging LLC dba North State Flexibles 2619 Phoenix Drive Greensboro, NC 27406 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: n/a NSPS: n/a NESHAP: n/a PSD: n/a PSD Avoidance: n/a NC Toxics: 2Q .0705 112(r): n/a Other:	
Contact Data			Application Data	
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4100823.05B Date Received: 06/30/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 02221/T14 Existing Permit Issue Date: 04/25/2005 Existing Permit Expiration Date: 04/30/2006	
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Review Engineer: Judy Lee Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 02221/T15 Permit Issue Date: Permit Expiration Date:		

1. Purpose of Application:

This revision is a renewal of an existing Title V permit pursuant to 2Q .0513. The facility is currently operating under Title V **Permit No. 02221T14**. Greensboro Flexible Packaging LLC dba North State Flexibles is a contract package printing facility which produces multicolor plastic packaging materials. North State Flexibles operates printing presses that utilize ink and solvents to print on flexible plastic that will be used for packaging. The facility includes several printing stations, a print plate shop, seam and shear stations, and a solvent recovery area. The facility operates 24 hours per day, five to seven days per week, 52 weeks per year.

Pursuant to 15A NCAC 2Q .0506 Greensboro Flexible Packaging submitted its Title V Renewal application to the Division of Air Quality on June 30, 2005 and the application was considered complete for processing. North States. North State also submitted a toxics demonstration on November 3, 2006 that was consolidated with this permit renewal. Since issuance of North States initial Title V permit (Permit Number 02221T10) on May 8, 2001, it has been modified as follows:

- Current Title V Permit Number **02221T14** - permit modification request (application number 4100823.04B) was combined with the second part of the significant modification (application 4100823.01A) that was submitted on March 25, 2003 (application 4100823.03B). This modification request was processed as a significant modification following the procedures in 15A

NCAC 2Q .0501(c)(2) to North State Flexibles **initial Title V Permit #02221T10 and revised permit #02221T13.**

- Administrative Amendment as the result of a stack test performed on December 14, 2004 for the Regenerative Thermal Oxidizer, as required by permit **02221T13**, Specific Condition 2.1-A.5.b. and 2.1-A.6.b. Changes were incorporated into **draft permit 02221T14** prior to issuance. The stack test was reviewed by Ms. Paula Hemmer, Stationary Source Compliance Branch (SSCB). A Memorandum stating the results were acceptable and demonstrate compliance dated April 18, 2005 is attached to this permit review.
- Permit modification (application number 4100823.04A) to issued permit **#02221T12** - request for routing existing press (ID No. ES-C7) to permitted control device (ID No. CD-1). Modification processed as a 502(B)(10) modification to allow for construction and operation of the permitted control device (ID No. CD-1) to control VOC emissions from an existing press (ID No. ES-C7), issued permit **#02221T13**.
- Permit modification (application number 4100823.03A) to issued permit **#02221T11** - permit modification for the addition of one new press (ID No. ES-WH12) and associated control device (ID No. CD-1). Processed as a significant modification per 2Q .0501(c)(2), issued permit **#02221T12**.
- Permit modification (application number 4100823.01A) to North State Flexibles initial Title V Permit **#02221T10**, processed as a 502(b)(10) for the addition of one new press (ID No. ES-WH11) in exchange for the shutdown and removal of four existing presses (ID Nos. ES-K5, ES-K6, ES-U8 and ES-U9), issued Permit **# 02221T11**.

The following table represents the changes to the current Title V permit as proposed to complete this permit renewal:

Old Page No.	New Page No.	Condition No.	Change
		Cover letter and Attachments	Modified to reflect current permit number, effective date, and associated application information and updates Changed mailing address from 2600 to 2619 per facility request
Page 1	Page 1	Cover page	Modified to reflect current permit number, issue and effective date, and associated application information.
Page 3	Page 3	Section 1	Updated Source Descriptions to match IBEAM
Page 4 through Page 10	Page 4 through Page 10	Section 2.1-A. & Table 2.1 A	Updated per current guidance, revised section references, limits/standards description and CAM exemption reference
Page 5 through Page 6	Page 5 through Page 7	Section 2.1-A.1.&3.	Changed Monitoring/Recordkeeping and Reporting Requirements per facility's previous request and based on compliance history to: "c. To assure compliance, the Permittee shall follow the monitoring, recordkeeping, and reporting requirements per Specific Conditions 2.1-A.1.. The Permittee shall be deemed in noncompliance with 2D .0521 if the monitoring and recordkeeping is not maintained."
Page 6 & 7 Page 9	--	Section 2.1-A.4.c. & Section 2.1-A.6.c.	Removed testing requirement - completed on December 14, 2004
Page 11 through Page 14	Page 11 through Page 15	Section 2.2.	Updated per current guidance, revised section references, limits/standards description
Page 13	Page 13	Section 2.2-C.1.	Changed reporting requirement to semi-annual
--	Page 15	Section 2.2.E.	Added Last MACT/Toxics Demonstration to address the requirements in 15A NCAC 2Q .0705(b)
Page 15 through Page 23	Page 15 through Page 23	Section 3	Updated General Conditions and List of Acronyms

2. Application Chronology:

The application chronology is detailed on the attached IMPAQ Comprehensive Application Report and email correspondence.

3. New Equipment/Change in Emissions and Regulatory Review:

No new equipment or change in emissions with this permit renewal.

The facility is currently subject to the following regulations:

- 2D .0515 “Particulates from Miscellaneous Industrial Processes”
- 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”
- 2D .0521 “Control Of Visible Emissions”
- 2D .0530 “Prevention of Significant Deterioration”
- 2D .0535 “Excess Emissions Reporting and Malfunctions”
- 2D .0614 “Compliance Assurance Monitoring” (40 CFR 64)
- 2D .0958 “Work Practices for Sources of Volatile Organic Compounds”
- 2D .1111 “Maximum Achievable Control Technology” (40 CFR 63, Subpart KK Printing and Publishing NESHAP)
- 2D .1806 “Control and Prohibition of Odorous Emissions”
- 2Q .0317 “AVOIDANCE CONDITIONS”
- 2Q .0711 “Emission Rates Requiring a Permit”

Regulations applying to this modification are:

2Q .0705 EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT

In general, 2Q .0705(b) requires a Permittee to submit a permit application to comply with 2D .1100. This application is required to include an “evaluation” for all toxic air pollutants in 2D .1104, for all sources at the facility, excluding exempt sources in 2Q .0702. If the actual emissions from all sources do not exceed the toxic permitting emissions rates (TPERs) in 2Q .0711, no application is required. However, the Permittee must present documentation of those emission rates upon the Director’s request.

Evaluation is defined in 2Q .0703(9) as:

- (a) a determination that the *emissions from the facility*, including emissions from sources exempted by Rule .0702 (a) (24) through (27) of this Section, are less than the rate listed in Rule .0711 of this Section; or
- (b) a determination of ambient air concentrations as described under 15A NCAC 2D .1106, including emissions from sources exempted by Rule .0702 (24) through (27) of this Section.

North State has chosen to commit to being an area source as defined by Subpart KK; therefore, they are considered minor for HAPs and have taken an avoidance condition to avoid any future MACTs. However, as a matter of DAQ policy, a toxics demonstration per 2Q .0705 was required by the compliance date of May 30, 1999. Based on a preliminary review, there is no record of a facility-wide toxics demonstration submittal. The facility will need to submit a toxics demonstration through modeling of all pollutants from all sources or they can submit documentation that the facility’s emissions of TAPs covered under 2D .1104 for all sources at the facility, excluding sources exempt under 2Q .0702 are below the levels in Rule 2Q .0711. If the facility provides documentation that the facility’s emissions of TAPs are below the levels in Rule 2Q .0711, then they will not have to submit a permit application, just an evaluation of all toxics from all sources.

A toxics demonstration was received on November 3, 2006, which demonstrated compliance with 15A NCAC 2Q .0711 and 15A NCAC 2D .1100.

Total Facility-wide emissions based on 2004 Emission Inventory:

Pollutant	2004 Actual Emissions (tons per year)	Expected Potential Emissions (TPY) based on last permit modification
CO	<0.5	3.5
NO _x	<0.5	4.25
TSP	<0.5	0.32
PM ₁₀	<0.5	0.32
PM _{2.5}	<0.5	0.32
SO ₂	<0.5	0.02
VOC	244.64	822.3
HAP	0.10	<10 each HAP <25 any combination HAPs

4. NSPS, NESHAPS, PSD, Attainment Status, 112(r), and CAM:

NSPS

New Source Performance Standards (NSPS) do not apply to this modification.

NESHAP/MACT

This facility is subject to the Maximum Achievable Control Technology (MACT) standards, in 40 CFR Part 63, Subpart KK entitled “National Emission Standards for the Printing and Publishing Industry” because they are consider a Title V Major Source because potential emissions of VOC exceed 100 tons per year. However, they are not major for hazardous air pollutants (HAP) because the facility has chosen to commit to, and meet the criteria of 40 CFR 63.820(a)(2)(i) and (a)(2)(ii) for the purposes of establishing the facility as an area source with respect to this MACT standard. *The applicant shall use less than 10 tons per each rolling 12-month period of each HAP at the facility and use less than 25 tons per rolling 12-month period of any combination of HAP at the facility*, including materials used for source categories or purposes other than printing and publishing. Area sources are **NOT** subject to any of the MACT provisions except recordkeeping.

PSD

This facility is a **MAJOR** PSD source for VOC emissions because they have potential to emit greater than 250 tons per year. The permit being renewed (**#02221T14**) includes four PSD avoidance conditions for volatile organic compound (VOC) emissions:

- flexographic presses (ID Nos. ES-C7, and ES-MA20) have a limit of 64 tons per year of VOC emissions
- flexographic press (ID No. ES-WH11) has a limit of 197 tons per year of VOC emissions
- flexographic press (ID No. ES-U10) has a limit of 85 tons per year of VOC emissions
- flexographic press (ID No. ES-WH12) has a limit of 40 tons per year of VOC emissions

Attainment

Based on the EPA’s boundary designation for 8-hour ozone standards for North Carolina (4/15/04), Guilford County has been designated as nonattainment. Guilford County is participating in an early action compact (EAC); therefore, facility modifications will follow PSD regulations.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store or process any of the regulated substances in quantities above the thresholds in the Rule.

CAM

CAM requirements were removed during the previous permit modification and the PSD Avoidance condition for press ES-WH12 was modified to include continuous compliance monitoring requirements.

5. Facility-Wide Air Toxics:

The facility must comply with the emission limitations and other requirements of 2D .1111 and 40 CFR Part 63, Subpart KK. The facility is subject to Subpart KK of 40 CFR Part 63. As stated under number four above, the facility has chosen to commit to, and meet the criteria of 40 CFR 63.820(a)(2)(i) and (a)(2)(ii) for the purposes of establishing them as an area source with respect to this MACT standard. They submitted a request on March 31, 1998 (prior to the compliance date of May 30, 1999) to commit to, and meet the criteria of 40 CFR 63.820(a)(2)(i) and (a)(2)(ii). ***The applicant shall use less than 10 tons per each rolling 12-month period of each HAP at the facility and use less than 25 tons per rolling 12-month period of any combination of HAP at the facility,*** including materials used for source categories or purposes other than printing and publishing.

Toxics requirements under 15A NCAC 2Q .0711 "Emission Rates Requiring a Permit" do apply to this facility. However, a modeling demonstration is not triggered by this renewal modification because the expected actual or potential emissions of Ethyl Acetate, Methyl Ethyl Ketone, Toluene, and Xylene are below the TPERs and no emissions increase was requested.

The facility is considered minor for HAPs and have taken an avoidance condition to avoid any future MACTs as stated above. However, a toxics demonstration per 2Q .0705 was required by the compliance date of May 30, 1999. The facility will need to submit a toxics demonstration through modeling of all pollutants from all sources or they can submit documentation that the facility's emissions of TAPs covered under 2D .1104 for all sources at the facility, excluding sources exempt under 2Q .0702 are below the levels in Rule 2Q .0711. If the facility provides documentation that the facility's emissions of TAPs are below the levels in Rule 2Q .0711, then they will not have to submit a permit application, just an evaluation of all toxics from all sources. This evaluation was received on November 3, 2006 and consolidated with this renewal; therefore, North State has satisfied the requirements of 15A NCAC 2Q .0705.

6. Compliance Status:

The facility was last inspected on 11/10/2005 by Eric Hudson, WSRO. Based on visual observations and records review, this facility appeared to be in compliance with Air Quality standards and regulations and the settlement agreement at the time of the inspection [taken from last inspection report].

7. Public Notice / EPA and Affected State Review

Pursuant to 2Q .0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30 day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. There are no affected States for this facility.

Public Notice of the DRAFT Title V Permit was published and the public comment period ran from XXXX, 2006 to XXXX, 2006. As of XXXX, 2006, no comments have been received on this DRAFT Title V Permit.

EPA's 45 Day Review period ran from XXXX, 2006 to XXXX, 2006. To date, no significant comments have been received from EPA. Therefore, the permit is ready for issuance as submitted to public notice and EPA.

8. Conclusions, Comments, and Recommendations:

A professional engineers seal was NOT required for this renewal.

A signed consistency determination was NOT required for this renewal.

The WSRO Comments and Recommendations on Air Permit Application received on September 11, 2006 contained the following:

Permit Corrections:

Table 2.1.A – need to remove the reference for 2D .0614 (CAM) permit review for 02221T14 indicate CAM is not applicable.

This correction was addressed during this permit renewal by clarifying CAM requirements and making reference to compliance assurance monitoring requirements that were placed under PSD Avoidance conditions during the last permit modification (see permit review for 02221T14). Updated Table 2.1.A and permit language to clarify CAM requirements after discussions with Mr. Hudson and RCO staff.

Recommendation:

1. The WSRO recommends issuance of the permit per Mr. Eric Hudson's Comments and Recommendations
2. Remove test requirements for oxidizer or require testing before new permit expires.
3. Include table of facility-wide emissions in review.
4. Submit draft permit to RO for review prior to issuance.

All of Mr. Hudson's recommendations were taken into consideration in this review.

A draft permit and review were sent to Mr. Hudson for review on September 19, 2006 and comments received on September 26, 2006.

A draft permit was sent to Mr. Danny Crump, North State Flexibles for review on September 26, 2006 and comments received on October 23, 2006. A toxics demonstration was submitted on November 3, 2006.

RCO concurs with WSRO recommendation to issue air permit number **02221T15**.