

**TITLE V AIR PERMIT MODIFICATION APPLICATION REVIEW**

<b>APPLICANT:</b>	<b>SITE LOCATION:</b>	<b>COUNTY:</b>	
NEPTCO, Inc.	Lenoir	Caldwell	
<b>TECHNICAL CONTACT:</b>	<b>PHONE:</b>	<b>RESPONSIBLE OFFICIAL:</b>	<b>TITLE:</b>
David Lloyd	(401) 722-5500	Lois B. Kilsey	V. P. Operations
<b>REVIEW ENGINEER:</b>	<b>SIGNATURE:</b>	<b>DATE:</b>	
Wallace Pitts		March 25, 2004	
<b>REGIONAL CONTACT:</b>	<b>REGIONAL OFFICE:</b>	<b>SIC CODE:</b>	
Mike Parkin	Asheville	2671, 2672	
<b>APPLICATION NUMBER:</b>	<b>EXISTING PERMIT NUMBER:</b>	<b>NEW PERMIT NUMBER:</b>	
1400100.02C	04180T15	04180T16	

**I Introduction/Purpose of Application**

NEPTCO initially submitted a request for an administrative amendment to Laura Herbert (ARO) on September 27, 2002. Specifically, NEPTCO requested that the permit be modified such that all references to oxidizer assigned limits, which are stated as ranges, are restated as “minimum limits” to more accurately reflect actual and compliant conditions. However, on December 27, 2002 NEPTCO requested new emission rates for MEK, toluene and ethyl acetate from all four of the facilities oxidizers. This request was based on new test data (original test data for two of the oxidizers was obsolete). NEPTCO submitted the required \$834.00 fee, which was deposited by ARO., and the Processing schedule was changed to 502(b)(10). On February 5, 2003 NEPTCO requested in a letter to Mike Parkin (ARO) that the 12-month 45 Mg of pressure sensitive volatile organic compound (PSVOC) limit is section 2.1.A (4)(a) (NSPS Subpart RR) be removed to give them the capability to expand their production capability. This request represents a significant permit modification under 15A NCAC 2Q .0516 that contravenes an existing permit condition, and consequently, the revised permit is subject to the requirements of 15A NCAC 2Q.0501(d). The existing application 1400100.02C was consolidated into 1400100.04A as a Title V significant modification, and the permit is being processed under 15A NCAC 2Q .0501(d)(1).

The original request for minimum temperature limits as opposed to ranges has not been incorporated since the NSPS has specific temperature monitoring requirements.

The following table summarizes the changes made to the existing permit.

New page #	Old page #	Part	Section	Change
5	5	I	2.1.A	Updated Toxic Air Pollutant emission rates.
6	6	I	2.1.A.3.c-e	Revised monitoring/reporting/recordkeeping to eliminate requirements (2D .0521).
6-10	7	I	2.1.A.4	Removed production limit and revised NSPS Subpart RR requirements.

10	7	I	2.1.A.5.c	Added requirement to test all thermal oxidizers for VOC destruction efficiency and record average temperature during tests.
10	7	I	2.1.A.5.d	Clarified that oxidizers are not required to be operated at all times for VOC control for PSD avoidance. Also edited equation for VOC emissions from oxidizer for clarity.
10-11	7-8	I	2.1.A.5	Re-alphabetized the limitations; they were non-sequentially labeled.
12	8-9	I	2.1.A.6.a	Updated Toxic Air Pollutant emission rates.
12	9	I	2.1.A.b	Added oxidizer operating temperature restrictions.
15-20	10	I	2.2.C	Added MACT requirements Subpart JJJJ.
30-32	20-22	II	All	Renumbered pages.

This permit application is being processed as a significant modification under 15A NCAC 2Q .0516, and 15A NCAC 2Q .0501(d)(1). The permit shield will apply.

## II. Background Information

**April 11, 2002**, – Initial Title V permit issued.

**September 27, 2002** – NEPTCO, Inc. requests administrative amendment in a letter to Laura Herbert (ARO).

**October 10, 2002** – Permit Completeness letter sent to facility.

**December 5, 2002** – ARO sends additional information request.

**December 27, 2002** – NEPTCO responds to ARO add info request. NEPTCO requests new TAP emission rates based on updated thermal oxidizer test results. NEPTCO encloses check for \$834.00 (check deposited by ARO). Processing schedule changed to 502(b)(10).

**February 5, 2003** – NEPTCO provides additional information as requested by ARO in a meeting. NEPTCO also requests removal of production limitations for pressure sensitive tape (limitations were in 2.1.A (4) NSPS Subpart RR). This request will change the modification from a 502(b)(10) to a significant modification under 15A NCAC 2Q.0516. The permit must therefore be processed under 15A NCAC 2Q .0501(d).

**July 11, 2003** – ARO recommendations and comments received (Mike Parkin).

**October 15, 2003** – Draft permit sent to ARO for review.

**November 24, 2003** – Draft permit to NEPTCO for review.

**January 22, 2004** – Draft discussed with ARO and NEPTCO conference call. Gave December 2002 Air Toxics modeling report to DAQ for review.

**January 30, 2004** – Received modeling report review.

**February 2, 2004** – Emailed Revised Air Toxics limits to Mike Parkin (ARO). He will send to NEPTCO.

**February 27, 2004** – ARO receives NEPTCO comments on revised air toxics emission limits – no changes needed.

**March 1, 2004** – ARO forwards NEPTCO comments to RCO.

### III. Facility Description

This facility laminates polyester or polypropylene film to aluminum foil with solvent and water based adhesives.

### IV. Statement of Compliance

The facility was last inspected on February 18, 2004 and appeared to be operating in compliance with all conditions of Permit 4180T15.

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
ES-101 and ES-102 NSPS	Two polymer film and metal foil coating and laminating operations with natural gas-fired dryers with a total maximum heat input of 2.0 and 1.6 million Btu per hour respectively	CD-1	One natural gas-fired thermal oxidizer with a total maximum heat input of 3.0 million Btu per hour
ES-103 NSPS	One polymer film and metal foil coating and laminating operation with a natural gas-fired dryer with a total maximum heat input of 3.83 million Btu per hour	CD-2	One natural gas-fired thermal oxidizer with a total maximum heat input of 2.02 million Btu per hour
ES-104 NSPS	One polymer film and metal foil coating and laminating operation with a natural gas-fired dryer with a total maximum heat input of 5.6 million Btu per hour	CD-3	One natural gas-fired thermal oxidizer with a total maximum heat input of 3.2 million Btu per hour
ES-105 NSPS	One polymer film and metal foil tandem coating and laminating operation with a natural gas-fired dryer with a total maximum heat input of 14.5 million Btu per hour	CD-4	One natural gas-fired thermal oxidizer with a total maximum heat input of 10.0 million Btu per hour
ES-F1	Mixing room	None	None

### VI. Emission Source-by-Source Evaluation (sources pertaining to application only)

There will be no equipment changes or modifications associated with these permit revisions.

Regulatory analysis

#### a. 15A NCAC 2D .0530 "Prevention of Significant Deterioration"

The facility is classified as minor source for VOC emissions (< 250 tons per year VOC emissions) due to a permit

requirement to emit < 250 tons VOC per year. The permit was modified to note that for the purposes of PSD avoidance, the thermal oxidizers are not required to be run continuously.

b. 15A NCAC 2D .0521 “Control of Visible Emissions”

The facility has requested, and ARO concurs that visible emissions monitoring is not required at the facility. The permit has been modified accordingly.

c. 15A NCAC 2D.0524 “New Source Performance Standards”

The polymer film and metal foil coating and laminating operations are subject to 40 CFR 60 Subpart RR “Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations” whenever coating pressure sensitive tape and labels. The permit modifications removed the restriction for each coating line to limit VOC input to less than 45 Mg (mega-grams) VOC per 12-month period.

d. 15A NCAC 2D.1100 “Control of Air Toxics”

The facility has emission limits for Methyl Ethyl Ketone, Toluene, Ethyl Acetate and Hexane. The permitted emission rates were modified in view of the most recent test data.

**VII. Multiple Emission Source Limits:**

The modification of the permit added the MACT Subpart JJJJ applicability requirements. Facility must be compliant by December 5, 2005.

**VIII. MACT Applicability Requirements**

The facility is subject to the Paper and Other Web Surface Coating NESHAP (Subpart JJJJ). The facility is considered an existing facility, must comply with all of the Subpart JJJJ requirements by December 5, 2005.

**IX. Permit Shield (including non-applicable requirements).**

The modification was processed as a 2Q .0501(d)(1), and will be covered under the permit shield (General Condition R).

**X. Other Applicable Requirements**

**A. PSD**

The not a major stationary source for VOC emissions under PSD due to a permit restriction requiring VOC emissions to be less than 250 tons per year.

**B. North Carolina Air Toxics**

The facility has air toxics emission limitations for Methyl Ethyl Ketone, Toluene, Ethyl Acetate and n-Hexane.

**C. 112(g) Case by Case Maximum Achievable Control Technology**

This paragraph does not apply to this facility.

**D. NSPS**

The modification does not trigger any NSPS requirements.

**E. 15A NCAC 2D .1806 “Control and Prohibition of Odorous Emissions” State Only**

The facility is subject to these requirements.

**F. 15A NCAC 2D .0958 “Work Practices For Sources of Volatile Organic Compounds” State Only**

The facility is subject to these requirements.

**XI. General Conditions**

The "General Conditions" section of the Title V Operating Permit lists additional applicable rule requirements that the Permittee 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, property rights, submission of documents, inspections and entry procedures, reopen for cause, severability, etc.

**XII. Insignificant Activities**

The facility has several insignificant activities. These are listed in the permit.

**XIII. Public Notice**

The permit modification will be sent to public notice.

**XIV. Recommendations**

The permit is being issued as a significant modification under 15A NCAC 2Q .0516 and 15A NCAC 2Q .0501(d)(1). The DAQ recommends issuance of the new permit. ARO concurs.