**Facility Data**

Applicant (Facility’s Name): Neptco, Incorporated

Facility Address:
Neptco, Incorporated
2012 Hickory Boulevard
Lenoir, NC 28645

SIC: 2671 / Paper Coated and Laminated Packaging
NAICS: 326112 / Plastics Packaging Film and Sheet (including Laminated) Manufacturing

Facility Classification: Before: Title V After: Title V
Fee Classification: Before: Title V After: Title V

**Contact Data**

<table>
<thead>
<tr>
<th>Facility Contact</th>
<th>Authorized Contact</th>
<th>Technical Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam Chase</td>
<td>Sunil Hangal</td>
<td>Kevin Poovey</td>
</tr>
<tr>
<td>President</td>
<td>Corporate EHS Manager</td>
<td>EHS Manager</td>
</tr>
<tr>
<td>(781) 332-0731</td>
<td>(908) 469-1237</td>
<td>(828) 292-2960</td>
</tr>
<tr>
<td>295 University Avenue</td>
<td>9 Smoke Rise Lane</td>
<td>2012 Hickory Boulevard</td>
</tr>
<tr>
<td>Westwood, MA 02090</td>
<td>Bedminster, NJ 07921</td>
<td>Lenoir, NC 28645+1766</td>
</tr>
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</table>

**Application Data**

Application Number: 1400100.22A
Date Received: 12/28/2021
Application Type: Renewal
Application Schedule: TV-Renewal

<table>
<thead>
<tr>
<th>Existing Permit Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Permit Number: 04180/T22</td>
</tr>
<tr>
<td>Existing Permit Issue Date: 04/13/2018</td>
</tr>
<tr>
<td>Existing Permit Expiration Date: 06/30/2022</td>
</tr>
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</table>

**Total Actual emissions in TONS/YEAR:**

<table>
<thead>
<tr>
<th>CY</th>
<th>SO2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
<th>PM10</th>
<th>Total HAP</th>
<th>Largest HAP</th>
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</thead>
<tbody>
<tr>
<td>2020</td>
<td>0.0200</td>
<td>2.81</td>
<td>7.67</td>
<td>2.36</td>
<td>0.0100</td>
<td>4.42</td>
<td>4.42 (Toluene)</td>
</tr>
<tr>
<td>2019</td>
<td>0.0200</td>
<td>3.63</td>
<td>7.27</td>
<td>3.05</td>
<td>0.0200</td>
<td>4.23</td>
<td>4.23 (Toluene)</td>
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<tr>
<td>2018</td>
<td>0.0200</td>
<td>3.92</td>
<td>9.11</td>
<td>3.29</td>
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<td>4.92</td>
<td>4.92 (Toluene)</td>
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<tr>
<td>2017</td>
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<td>2.94</td>
<td>10.73</td>
<td>2.47</td>
<td>0.0200</td>
<td>4.82</td>
<td>4.82 (Toluene)</td>
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<tr>
<td>2016</td>
<td>0.0200</td>
<td>2.65</td>
<td>10.94</td>
<td>2.23</td>
<td>0.0100</td>
<td>3.79</td>
<td>3.79 (Toluene)</td>
</tr>
</tbody>
</table>

**Review Engineer:** Eric L. Crump, P.E.

<table>
<thead>
<tr>
<th>Comments / Recommendations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue: 04180/T23</td>
</tr>
<tr>
<td>Permit Issue Date:</td>
</tr>
<tr>
<td>Permit Expiration Date:</td>
</tr>
</tbody>
</table>
1. Purpose of Application

Neptco, Incorporated (hereinafter referred to as Neptco) is a laminated/coated film and foil manufacturing facility located in Lenoir, Caldwell County, North Carolina. The facility currently operates under Title V Permit No. 04180T22 with an expiration date of June 30, 2022. Neptco has applied for renewal of their Title V air quality permit. The renewal application was received on December 28, 2021, or at least six months prior to the expiration date as required by General Condition 3.K of the current permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Neptco has not reported the addition, removal, or modification of any sources at the facility in permit renewal application No. 1400100.22A.

2. Facility Description

The Neptco facility in Lenoir, NC coats and laminates various types of material, including polyester and polypropylene films, as well as aluminum foil with solvent-based adhesives. The laminated foil and plastic film are used primarily for shielding of coaxial cable used in the telecommunications industry. The facility also produces cover tape used to produce antistatic packaging material for shipping microchips and other electronic devices. The facility also produces coated fabric for medical use.

Solvents used in the coating/lamination processes include toluene, methyl ethyl ketone, and isopropyl alcohol. The permitted sources are polymer film/metal foil coating and laminating operations with associated natural gas-fired dryers (ID Nos. ES101 through ES105) which are installed in permanent total enclosures and controlled by natural gas-fired thermal oxidizers (ID Nos. CD1 through CD4).

3. Application Chronology

The following chronology dates from when the Neptco permit was last renewed on July 11 2017.

July 11, 2017 Division of Air Quality (DAQ) issues Permit No. 04180T21 to Neptco as a Title V renewal.

July 12, 2017 DAQ issues letter to Neptco stating the Air Permit Application (No. 1400100.17A) received on July 3, 2017 has been deemed incomplete. Neptco is asked to submit the missing application elements within 30 days.

October 19, 2017 DAQ receives resubmitted Air Permit Application No. 1400100.17A from Neptco.

October 27, 2017 DAQ issues letter to Neptco stating the resubmitted Air Permit Application has been deemed incomplete. Neptco is asked to submit the missing application elements within 30 days.

November 27, 2017 DAQ receives resubmitted Air Permit Application No. 1400100.17A from Neptco.

November 30, 2017 DAQ issues letter to Neptco confirming Air Permit Application No. 1400100.17A is considered complete as of November 27, 2017. The application is for a minor modification to replace a 2.2 million British thermal unit per hour (Btu/hr)
regenerative thermal oxidizer (RTO) (ID No. CD2) with a new 4 million Btu/hr RTO (ID No. CD2).

April 13, 2018  Division of Air Quality (DAQ) issues Permit No. 04180T22 to Neptco as a minor modification for replacing a 2.2 million Btu/hr n RTO (ID No. CD2) with a 4 million Btu/hr RTO.

December 28, 2021  DAQ receives permit renewal application No. 1400100.22A from Neptco.

March 18, 2022  Draft permit and review sent for DAQ supervisory review.

March 31, 2022  DAQ supervisor provides comments on draft permit and review

April 29, 2022  DAQ sends draft permit to Neptco and Asheville Regional Office (ARO) for review and comment.

May 10, 2022  DAQ receives comments on draft permit from Neptco and from ARO.

xxx  Permit renewal notice published, 30-day public notice and comment period begins, and 45-day EPA comment period begins.

xxx  30-day public notice and comment period ends.

xxx  45-day EPA comment period ends.

4. Changes to Permit and Title V Equipment Editor (TVEE) Discussion

The following table summarizes changes made to the current Neptco permit as a result of this permit renewal (or modification):

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Section</th>
<th>Description of Changes</th>
</tr>
</thead>
</table>
| Cover and throughout | --- | • Updated all dates and permit revision numbers  
• Changed all citations of 15A NCAC 2D to 15A NCAC 02D  
• Changed all citations of 15A NCAC 2Q to 15A NCAC 02Q  
• “40 CFR” now precedes every citation of a CFR subpart |
<p>| Insignificant Activities List | Attachment | This list is no longer an attachment; it has been relocated to Section 2.3 of the permit |
| 2 | Table of Contents | Moved to new Section 3, Insignificant Activities per 15A NCAC 02Q .0503(8) |
| 3 | List of Acronyms | Relocated from the final page of permit |
| 5 | 2.1 | Limit/standards table updated to most current format/wording with respect to particulate matter, odors, and hazardous air pollutants |
| 6 | 2.1 A.4 | Revised paragraph lettering and numbering of entire section for consistency. Permit section citations are corrected accordingly. |
| 6 | 2.1 A.4.a.ii | Deleted “60.440(b)” to make permit language consistent with Subpart RR |
| 7 | 2.1 A.4.c | Paragraph revised for consistency with 40 CFR 60.440(b) |
| 7 | 2.1 A.4.c.ii.(B) | The word “greater” in second sentence is changed to “less” (in accordance with 40 CFR 60.433(b)” |</p>
<table>
<thead>
<tr>
<th>Page No.</th>
<th>Section</th>
<th>Description of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2.1 A.4.c.ii</td>
<td>Noncompliance statement added to end of section</td>
</tr>
<tr>
<td></td>
<td>2.1 A.4.c.iii.(A)(2)</td>
<td>Paragraph broken into subparagraphs to improve clarity</td>
</tr>
<tr>
<td></td>
<td>2.1 A.4.c.iv</td>
<td>Noncompliance statement added to end of section</td>
</tr>
<tr>
<td>9</td>
<td>2.1 A.4.c.vi.(E)</td>
<td>Added citation of previous monitoring and recordkeeping requirements</td>
</tr>
<tr>
<td>10</td>
<td>2.1 A.5.a</td>
<td>Updated section to reflect the most current stipulations for 15A NCAC 02D .0317 and .0530</td>
</tr>
<tr>
<td></td>
<td>2.1 A.5.d</td>
<td>Restated equation using defined variables</td>
</tr>
<tr>
<td>12</td>
<td>2.2 A</td>
<td>Deleted “Regulated” before “Pollutant” in heading of limits/standards table</td>
</tr>
<tr>
<td></td>
<td>2.2 A.1</td>
<td>Deleted unnecessary “a.” in front of paragraph</td>
</tr>
<tr>
<td></td>
<td>2.2 B</td>
<td>· Added section title “1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY”&lt;br&gt;· Limit/standards table updated to most current format/wording&lt;br&gt;· Revised paragraph lettering and numbering throughout entire section for consistency.</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.a</td>
<td>Changed “40 CFR 63.3300(a) through (g)” to “40 CFR 63.3300(a) through (j)”</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.b</td>
<td>Added “and Nomenclature” to heading</td>
</tr>
<tr>
<td>13</td>
<td>2.2 B.1.e</td>
<td>Added “and 15A NCAC 02D .1111” to end of compliance statement</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.f.i</td>
<td>· Added startup, shutdown, and malfunction language to paragraph&lt;br&gt;· Changed “90 percent reduction” in table to “98 percent reduction”&lt;br&gt;· Deleted “by compound” between “(ppmv)” and “on a dry basis”</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.g</td>
<td>Revised to more closely convey meaning of 40 CFR 63.3350(a) and (b)</td>
</tr>
<tr>
<td>14</td>
<td>2.2 B.1.h</td>
<td>Revised table to reflect July 9, 2020 amendments to 40 CFR 63.3360 (85 FR 41296)</td>
</tr>
<tr>
<td>15-18</td>
<td>2.2 B.1.i</td>
<td>Revised compliance demonstration table to reflect July 9, 2020 amendments to 40 CFR 63.3370 (85 FR 41296), including additional equations and options for demonstrating compliance</td>
</tr>
<tr>
<td>19</td>
<td>2.2 B.1.j.i-iv</td>
<td>Revised to show submittal dates for initial notification, notification of performance test, and notification of compliance status. Also added CEDRI reporting requirement</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.k.i</td>
<td>Defined “CMS” to mean “continuous monitoring system”</td>
</tr>
<tr>
<td></td>
<td>2.2 B.1.k.ii</td>
<td>Added “as indicated in Table 2 to 40 CFR Part 63, Subpart JJJJ.”</td>
</tr>
<tr>
<td>19-20</td>
<td>2.2 B.1.m, n, o</td>
<td>Added recordkeeping requirement from 40 CFR 63.3410 that had not been previously included in permit</td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>· General Conditions moved to new Section 4.&lt;br&gt;· List of insignificant activities moved to Section 3.</td>
</tr>
<tr>
<td>22-30</td>
<td>4</td>
<td>Updated General Conditions to Version 6.0 dated January 7, 2022</td>
</tr>
</tbody>
</table>
No changes were required to the TVEE as a result of this renewal.

5. Description of Changes and Estimated Emissions

Neptco has not reported the addition, removal, or modification of any sources at the facility. No changes in emissions are expected at this time.

6. Regulatory Review

Neptco is subject to the following state regulations, in addition to the requirements in the General Conditions:

15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes. This rule addresses emissions of particulate matter from stacks, vents, or outlets for any industrial process for which no other particulate emission control standards apply. For such processes, the allowable emission rates shall not exceed the level calculated using one of the following equations, as appropriate:

\[
E = 4.10(P)^{0.67}
\]

for process rates less than or equal to 30 tons per hour (ton/hr)

\[
E = 55.0(P)^{0.11} - 40
\]

for process rates greater than 30 ton/hr

Where:

\(E\) = allowable emissions limit for particulate matter in pounds per hour (lb/hr), and
\(P\) = process rate in ton/hr (i.e., the total weight per hour of all materials introduced into a specific process that may cause any emission of particulate matter. Liquid and gaseous fuels and combustion air are not included in the process weight).

Neptco is required to maintain the production records necessary to derive the process rates for the coating and laminating operations (ID Nos. ES101 through ES105) using the formulas provided, and to make these records available to DAQ upon request. Because the firing of natural gas in these operations is unlikely to produce significant particulate emissions, no reporting of particulate emissions from these sources is required. This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources. Under this regulation, emissions of sulfur dioxide (SO\(_2\)) from any source of combustion discharged from any vent, stack, or chimney shall not exceed 2.3 pounds of SO\(_2\) per million British thermal units (MMBtu) input. Because the coating and lamination operations (ID Nos. ES101 through ES105) are fired with natural gas, which contains low amounts of sulfur, monitoring, recordkeeping, and reporting of SO\(_2\) emissions are not required from these sources. This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02D .0521, Control of Visible Emissions. This regulation establishes opacity limits for visible emissions generated by fuel burning operations and industrial processes (except during startups, shutdowns, and malfunctions approved according to procedures in 15A NCAC 02D .0535). Because the coating and lamination operations (ID Nos. ES101 through ES105) at the Neptco facility were manufactured after July 1, 1971, this regulation limits them to 20 percent opacity averaged over a six-minute period. The six-minute averaging periods may exceed 20 percent not more than once in any hour, and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Natural gas is a relatively clean burning fossil fuel that generally
does not produce visible emissions, no monitoring, recordkeeping, or reporting of visible emissions from these sources is required. This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02D .0524, New Source Performance Standards. This rule requires that sources subject to new source performance standards (NSPS) promulgated in 40 CFR Part 60 shall comply with those emission standards, and any requirements for monitoring, reporting, maintenance, notification, recordkeeping requirements, testing, and procedural provisions rather than with any otherwise applicable rule in Section .0500, Emission Control Standards that would conflict with any NSPS. The coating and lamination operations (ID Nos. ES101 through ES105) at Neptco are subject to this rule. This is discussed in further detail in Section 8 of this review.

15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions. This rule, which applies facility-wide and is state-enforceable only, provides for the control and prohibition of objectionable odorous emissions. Under this rule Neptco must implement management practices or install and operate odor control equipment sufficient to prevent odorous emissions from causing or contributing to objectionable odors beyond the facility's boundary. This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02D .1111, Maximum Achievable Control Technology. This regulation stipulates that sources subject to national emission standards for hazardous air pollutants (NESHAPs) for source categories promulgated in 40 CFR Part 63 shall comply with emission standards, monitoring, reporting, maintenance, notification, recordkeeping and testing requirements, and other provisions required therein, rather than with any otherwise-applicable rule in 15A NCAC 02D .0500 which would be in conflict therewith. The Neptco facility is subject to 40 CFR Part 63, Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coatings. The requirements are discussed in further detail in Section 7 of this review.

15A NCAC 02Q .0317, Avoidance Conditions. (PSD). Under this regulation, the owner or operator of a facility may ask DAQ to place terms and conditions in their facility's permit to avoid the applicability of certain regulatory requirements. DAQ may require monitoring, recordkeeping, and reporting as needed to provide assurance that the avoidance conditions are being met. The Neptco permit includes avoidance conditions for 15A NCAC 02D .0530, Prevention of Significant Deterioration, which are discussed in Section 9 of this review.

The Neptco permit has been updated to reflect the most current stipulations for all applicable regulations.


Neptco is subject to 40 CFR Part 63, Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coatings. The provisions of Subpart JJJJ apply to each new and existing facility at which web coating lines are operated that is a major source of HAP—the coating and lamination operations (ID Nos. ES101 through ES105).

The U.S. Environmental Protection Agency (EPA) published amendments to Subpart JJJJ in the July 9, 2020 issue of the Federal Register (85 FR 41296). The amendments reflect the completion of the residual risk and technology review that is required within 8 years after promulgation of a MACT standard, pursuant to CAA section 112(f). These final amendments:
address emissions during startup, shutdown, and malfunction events,
• add a compliance demonstration equation that accounts for retained volatiles in the coated web,
• add requirements for repeat testing and electronic reporting, and
• make technical and editorial changes to Subpart JJJJ.

Accordingly, Section 2.2 B of the Neptco permit has been revised in this permit renewal to include all pertinent amendments to Subpart JJJJ that apply to the facility. In addition, the permit now includes the dates Neptco satisfied the following initial notification requirements in 40 CFR 63.3400:

• Initial notification (per 40 CFR 63.9(b)): April 3, 2003
• Notification of performance test (per 40 CFR 63.7 and 63.9(e)): April 3, 2006
• Notification of compliance status (per 40 CFR 63.9(h)): June 30, 2006.

Continued compliance with 40 CFR Part 63, Subpart JJJJ is expected.

8. New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart RR, Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations applies to each of the coating lines (ID Nos. ES101 through ES105) at the Neptco facility. Neptco is not subject to the emission standards of Subpart RR as long as the amount of VOC input to a coating line (defined as an “affected facility” under the NSPS) does not exceed 45 megagrams (50 tons) per 12-month period. Once a coating line input exceeds 45 megagrams, Neptco shall:

• cause the discharge into the atmosphere from an affected facility not more than 0.20 kg of VOC per kilogram of coating solids applied as calculated on a weighted average basis for one calendar month; or
• demonstrate for each affected facility:
  o a 90 percent overall VOC emission reduction as calculated over a calendar month; or
  o the percent overall VOC emission reduction specified in 40 CFR 60.443(b) as calculated over a calendar month.

The rule specifies various approaches for demonstrating compliance on a monthly basis, which require knowledge of the weight fraction of organics and the weight fraction of solids of each coating applied, either by testing or manufacturer’s formulation data. Neptco is also required to continuously record the combustion temperature of the associated natural gas-fired thermal oxidizer (ID Nos. CD1 through CD4). Startups and shutdowns are considered normal operation for this source category; therefore, emissions from these operations are to be included when determining if the NSPS requirements have been met.

This permit renewal does not affect this status. Continued compliance is expected.

9. New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

As briefly noted in Section 6 of this review, Neptco has accepted an avoidance condition under 15A NCAC 02Q .0317, Avoidance Conditions to avoid the applicability of 15A NCAC 02D .0530, Prevention of Significant Deterioration. Under this condition, emissions of VOC from the coating and lamination operations (ID Nos. ES101 through ES105) shall be less than 250 tons per consecutive twelve-month period.
Under this rule, Neptco was required to demonstrate compliance with this VOC emission limit by testing the thermal oxidizers on the coating lines for VOC destruction efficiency and capture efficiency as follows:

<table>
<thead>
<tr>
<th>Control Device ID No.</th>
<th>Deadline for Testing</th>
<th>Date Testing Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD1</td>
<td>Within 90 days after commencing operation</td>
<td>September 21, 2011 following replacement of the oxidizer</td>
</tr>
<tr>
<td>CD2</td>
<td>Within 90 days of resuming use of VOC based coating in the polymer film and metal foil coating and laminating operation (ID No. ES103).</td>
<td>Not yet required (use of VOC-based coating not resumed)</td>
</tr>
<tr>
<td>CD3</td>
<td>Original deadline: July 19, 2014</td>
<td>November 4, 2014</td>
</tr>
<tr>
<td>CD4</td>
<td>Deadline was extended until December 31, 2014</td>
<td>November 5, 2014</td>
</tr>
</tbody>
</table>

In addition, Neptco is required to do the following:

- Calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material, and accounting for capture and control efficiency where applicable.
- Conduct periodic inspection and maintenance on the thermal oxidizers (ID Nos. CD1 through CD4) as recommended by the manufacturer (which a minimum, should consist of an annual internal inspection of each primary heat exchanger and associated inlet/outlet valves to ensure structural integrity of the systems).
- Record results of all inspections and variances from manufacturer’s recommendations in a logbook to be kept on site.
- Ensure proper performance of each thermal oxidizer by monitoring their operating temperatures using continuous temperature reading and recording instruments. Valid monitoring data is required from at least 90 percent of the hours during which the process operated. The operational temperature shall be measured at the same location used to establish the average. The charts from these instruments shall be kept on-site for two years and made available to DAQ personnel upon request.
- The thermal oxidizers (ID Nos. CD1 through CD4) shall be maintained at an operating temperature no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent test of the control device for VOC destruction efficiency.
- Summary reports of monitoring and recordkeeping activities shall be submitted biannually.

This permit revision does not affect this status. Continuing compliance with this avoidance condition is expected.

10. Risk Management Plan (RMP) Requirements

40 CFR Part 68 requires stationary sources storing more than threshold quantities of regulated substances to develop a RMP in accordance with Section 112(r) of the Clean Air Act. The RMP lists the potential effects of a chemical accident at the facility, steps the facility is taking to prevent an accident, and emergency response procedures to be followed if an accident should occur.

Neptco is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect the 112(r) status of the facility. Continued compliance is expected.
10. Compliance Assurance Monitoring (CAM)

The CAM rule (40 CFR Part 64) applies to each pollutant specific emissions unit located at a major source that is required to obtain a Title V, Part 70 or 71 permit if it meets all of the following criteria:

- It is subject to an emission limitation or standard, and
- It uses a control device to achieve compliance, and
- It has potential pre-control emissions that equal or exceed the major source threshold (i.e., either 100 tpy for criteria pollutants, 10 tpy of any individual HAP, or 25 tpy of any combination of HAP).

The following emission limitations or standards are exempted from the CAM rule:

- NSPS or NESHAP proposed after November 15, 1990;
- Stratospheric ozone protection requirements under Title VI of the Clean Air Act
- Acid rain program requirements;
- Emission limitations or standards or other requirements that apply solely under an approved emissions trading program;
- An emissions cap that meets requirements of 40 CFR 70.4(b)(12) or 71.6(a)(13);
- Emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1, unless the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (e.g., a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).
- Certain municipally-owned utility units, as defined in 40 CFR 72.2.

Please note that the emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g. a state rule or an older NSPS emission limits) apply to the emissions unit.

CAM was determined in a preceding permit review to not be applicable to the Neptco facility because the only emission sources—the coating and lamination operations (ID Nos. ES101 through ES105)—are subject to 40 CFR Part 63, Subpart JJJJ, a NESHAP which was proposed after November 15, 1990. This permit renewal does not affect the facility’s status with respect to CAM. Continued compliance is expected.

11. Facility-wide Air Toxics Review

No facility shall emit any of the NC toxic air pollutants listed in 15A NCAC 02D.1104, (Toxic Air Pollutant Guidelines) “. . . in such quantities that may cause or contribute beyond the facility's premises to any significant ambient air concentration that may adversely affect human health.” 15A NCAC 02Q .0702 lists several circumstances under which a permit to emit toxic air pollutants shall not be required. Among these listed circumstances are the following listed under paragraph (a)(27) of 15A NCAC 02Q .0702, which pertain to facilities that are:

(A) subject to an applicable requirement pursuant to 40 CFR Part 61, as amended;
(B) an affected source pursuant to 40 CFR Part 63, as amended; or
(C) subject to a case-by-case MACT permit requirement issued by the Division pursuant to Paragraph (j) of 42 U.S.C. Section 7412, as amended;

The emission sources at the Neptco facility are subject to the requirements of 40 CFR Part 63, Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coatings as discussed in Section 7 of this review. This NESHAP limits emissions of hazardous air pollutants, including toxic air pollutants. For this reason, Neptco is exempt from toxic air pollutant permitting in accordance with 15A NCAC 02Q .0702(a)(27)(A), however the DAQ is required to evaluate air toxic pollutant emissions for unacceptable health risk.

A modeling exercise was performed by this facility in January 2004¹ and the modeling was evaluated at a maximum rate of 95% of the 24-hour acceptable ambient levels (AALs) for methyl ethyl ketone (MEK), toluene, and hexane. These values were placed into the air permit. Actual emissions from this facility are well below this conservative value. The analysis indicated that the maximum impact for these pollutants was 20% (toluene), 11% (ethyl acetate), and 10% (MEK) of their respective 1-hr AALs. In the application for Permit No. 04180T21, Neptco requested that the modeled limits be removed from the permit in accordance with 15A NCAC 02Q .0702(a)(27)(A). Since 2017 there has been only one modification (revision T22) at this facility and the actual emissions of NC air toxics remain well below the rates after control of the thermal oxidizer and permanent total enclosure. Therefore, the DAQ believes that there is no unacceptable risk to human health from toxic air pollutant emissions from this facility.

This permit revision does not affect this status. Continued compliance is expected.

12. Facility Emissions Review

The table in the header page of this review summarizes emissions Neptco has reported in the annual emissions inventories from 2016 to 2020 after application of required emission controls. There have been no changes to the since the previous permit was issued that would affect potential emissions at the Neptco facility.

During this period, VOCs are the largest single category of criteria pollutant emitted from the Neptco facility. VOC emissions from this facility after control of the thermal oxidizer are 7.67 tons per year in year 2020, which is well under the PSD avoidance limit of 250 tons per year. HAP emissions appear to be exclusively toluene, with the largest annual emission of 4.92 tons occurring in 2018.

From all indications, Neptco appears to be meeting its emissions limitations under the permit. Continued compliance is expected and will be monitored during annual inspections and review of required reports.

13. Compliance History and Status

The following chronology dates from when the Neptco permit was last renewed on July 11 2017.

January 19, 2018 Patrick Ballard, Asheville Regional Office (ARO) conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements

August 20, 2018  DAQ issues Notice of Violation (NOV) to Neptco for failure to submit VOC destruction efficiency test results within 90 days of resuming use of VOC based coating as stipulated in Section 2.1 A.5.c of Air Permit No. 04180T22.

September 6, 2018  Patrick Ballard, ARO conducts facility compliance inspection, and observes stack testing of control device ID No. CD2 for VOC destruction/capture efficiency as stipulated in Section 2.1 A.5.c of the permit. Facility appeared to be operating in compliance with all permit requirements.

December 18, 2018  Memo from Gregg O’Neal, SSCB to Brendan Davey, ARO, documenting that the stack testing conducted at Neptco on September 6, 2018 was found acceptable, and compliance was indicated.

January 31, 2019  Patrick Ballard, ARO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.

April 13, 2021  Patrick Ballard, ARO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.

Despite the NOV issued for failure to submit test results when required, follow-up testing indicated compliance with permit requirements. No other discrepancies or violations have been observed. Neptco is expected to continue to comply with all permit requirements in the future.

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

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

Virginia, South Carolina, and Tennessee are affected states within 50 miles of the facility, and the Mecklenburg County Department of Environmental Protection and the Forsyth County Office of Environmental Assistance and Protection are affected local programs within 50 miles of the facility.

Notice of the DRAFT Title V Permit to Affected States ran from XXXX YY, 2022, to XXXX YY, 2022. Discuss any comments received from Affected States or Local Programs.

Public Notice of the DRAFT Title V Permit ran from XXXX YY, 2022, to XXXX YY, 2022. Discuss any public comments received.

EPA’s 45-day review period ran concurrent with the 30-day Public Notice, from XXXX YY, 2022, to XXXX YY, 2022. Discuss any comments received from EPA and U.S. EPA Region 4 regarding the DRAFT Title V Permit.

15. Other Regulatory Considerations

None of the following items were required in Permit Application No. 1400100.22A:
• Professional Engineer’s seal
• Zoning consistency determination
• Permit fee.

16. Recommendations

The Division has reviewed the permit application(s) for Neptco, Incorporated located in Lenoir, Caldwell County to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 04180T23.