#### SOUTHWEST REGIONAL OFFICE

**MEMO** 

TO

Air Quality Permit File Title V OP# 65-00207 OMNOVA Solutions, Inc. / Jeannette Plant

FROM

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DATE

April 4, 2014

RE

Review of Title V Operating Permit Renewal Application

Jeannette City, Westmoreland County

APS# 714456; AUTH # 825372; PF# 272282

## Background:

On January 26, 2010, the Department received a Title V operating permit renewal application from OMNOVA Solutions, Inc. / Jeannette Plant for their facility located in the city of Jeannette, Westmoreland County. This renewal application was submitted to the Department pursuant to 25 Pa. Code Sections §§127.501-127.542. The Department issued a Title V operating permit on July 26, 2005, which expired July 26, 2010. On September 11, 2008, the operating permit was Administratively Amended to identify the change in Responsible Official. On March 24, 2010, the application was determined to be Administratively Complete. OMNOVA has been operating under 25 Pa Code Section 127.446(c): The terms and conditions of an expired permit are automatically continued pending the issuance of a new permit when the permittee has submitted a timely and complete application and paid the fees required by Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

On April 2, 2014, OMNOVA informed the Department of the request to change the Responsible Official and Permit Contact Person. Tob Coss, Operations Manager, will hold the Responsible Official title and Tim Pellegrino, SH&E Manager, will hold the Permit Contact Person title for this proposed operating permit renewal. An Administrative Amendment must be completed and signed with the updated information before the TV Operating Permit renewal is issued.

The manufacturing activities at this facility involve making plastic films for various end uses by combining raw materials including PVC resin, plasticizer oils, fillers, stabilizers, and pigments and then squeezing the fused polymer through a series of heated rollers in a process called calendering. Post-calendering or finishing operations include embossing and/or laminating multiple plies of film or film and fabric together to create the finished product.

OMNOVA consists of 2-12.5 MMBtu/hr natural gas fired boilers, 3-5.165 MMBtu/hr natural gas direct-fired make up air units (building heat), 4 calender lines, 2 embossers/laminator lines, liquid raw material storage, 6 resin silos, scarp reclaiming system, and 50 hp diesel generator.

#### **Authorizations:**

### RFDs:

On May 8, 2012, the Department authorized the Request for Determination (RFD) for the installation and operation of a 13,500 scfm CAMCORP CAM-AIRO Model No. CA24 cartridge collector to control emissions from the existing AZO Scrap System under the provisions of 25 PA Code §127.14(d) listed as NO. 44 in the Department's Plan Approval and Operating Permit Exemption list under 25 Pa Code §127.14(a)(8). It is the Department's understanding that particulate emission from the cartridge collector does not exceed 0.005 gr/dscf and visible emissions from the cartridge collector do not exceed 10 percent opacity at any time. The pressure differential across the cartridge collector is required to be observed and maintained on a daily basis and the cartridge collector is maintained by the manufacturer's recommended maintenance schedule. The required stack testing was performed on September 4, 2013. The Department received the report on October 4, 2013 demonstrating an average of 0.002 gr/dscf particulate. The results have yet to be approved by the Department's Source Testing Section. However, it appears the results are in compliance and will be determined acceptable. This source is being incorporated into the proposed TV Operating Permit.

On April 6, 2007 and September 12, 2007, OMNOVA submitted Requests for Determination (RFD) for the operation of a new product involving the top coating of PVC sheet with a solvent topcoat which is utilized in a thermoformed lawn and garden tractor seat application under the De Minimis Emission Increase provision of 25 Pa Code §127.449. OMNOVA has since withdrawn the application and does not intend to gain further approval from the Department.

On October 24, 2006, the Department authorized the Request for Determination (RFD) for the replacement of the 7 existing resin silos with 6 new resin silos controlled by bin vent filters under the provisions of 25 Pa Code §127.14(a)(8). There is no emission increase associated with the replacement. OMNOVA installed 4 new resin silos and kept 2 existing resin silos. The change is being incorporated into the proposed TV Operating Permit.

## Plan Approvals:

On September 3, 2008, an application for Plan Approval (65-207A) was by the Department to authorize the installation and operation of a plastic film extruder line, burn-off oven, and afterburner controls. However, on December 16, 2008, the Department received the request to withdraw the plan approval application. On February 19, 2009, the Department inactivated the referenced plan approval application as requested.

#### **Emissions:**

Source 035 and 036 consists each of a 12.5 MMBtu/hr Industrial Combustion Co. natural gasfired boiler, Model No. LNDG-145P-30 with flue gas recirculation. Only one boiler operates at a time. Both boilers were authorized under the General Plan Approval/ Operating Permit (BAQ-GPA/GP-1) Small Gas and No. 2 Oil Fired Combustion Units on May 31, 2002 and were included in the previous TV Operating Permit. The GP-1 authorizes the combustion units the ability to fire natural gas, propane, liquefied petroleum or No. 2 commercial fuel oil. The boilers are not permitted to exceed 30 ppmdv NOx at 3% O<sub>2</sub> and 400 ppmdv at 3% O<sub>2</sub>. Particulate matter shall not exceed to 0.4 pounds per MMBtu of heat input as specified in 25 Pa Code §123.11 and sulfur oxides shall not exceed 4 pounds per MMBtu of heat input over any one-hour as specified in 25 Pa Code §123.22. Based on AP-42 Emission Factors from Table 1.4-1 and 2 and 8,760 hours per year, the potential emissions for each boiler are: 5.32 tpy NOx, 4.47 tpy Co, 0.032 tpy SOx, 0.29 tpy VOC, 0.004 tpy HAPs, 0.40 tpy PM, and 0.40 tpy PM10.

Source 251 consists of a 50 hp diesel fired emergency generator. This generator is used as a back-up during an emergency power outage and is tested monthly. The generator is subject to the applicable requirements of 40 CFR Part 63 Subpart ZZZZ, discussed in the Regulatory Section of this document. Particulate matter shall not exceed to 0.04 grains per dry standard cubic foot as specified in 25 Pa Code §123.13 and sulfur oxides shall not exceed 500 parts per million, by volume, dry basis as specified in 25 Pa Code §123.21. The facility elected to take a 500 hours per year restriction. Based on AP-42 Emission Factors from Table 3.3-1 and 500 hours per year, the potential emissions are: 0.14 tpy NOx, 0.03 tpy CO, 0.01 tpy SOx, 0.01 tpy VOC, 0.01 tpy PM, and 0.01 tpy PM10.

Source 252 consists of 3 natural gas direct fired make up air units each rated at 5.165 MMBtu/hr. These units are used to provide building/comfort heat. In accordance with the RACT Operating Permit 65-000-207, the VOC emissions shall not exceed 0.5 tons per year. Particulate matter shall not exceed to 0.04 grains per dry standard cubic foot as specified in 25 Pa Code §123.13 and sulfur oxides shall not exceed 500 parts per million, by volume, dry basis as specified in 25 Pa Code §123.21. Based on AP-42 Emission Factors from Table 1.4-1 and 2 and 8760 hours per year, the potential emissions from all three units combined are: 6.59 tpy NOx, 5.53 tpy CO, 0.04 tpy SOx, 0.36 tpy VOC, 0.005 tpy HAPs, 0.50 tpy PM, and 0.50 tpy PM10.

Source 111-114 consists each of a calender line numbered Line 1 through 4. Each calender line is able to process 2,397-3,836 lbs of film per hour. Each calender line includes a banbury mixer, 1 or 2 dry ribbon blenders and a dedicated mill. Particulate matter shall not exceed to 0.04 grains per dry standard cubic foot as specified in 25 Pa Code §123.13. In accordance with the RACT Operating Permit, 65-000-207, the VOC emissions shall not exceed 40 tons in any consecutive 12 month period from each line and a combined total (all 4 lines) of 150 tons VOC in any consecutive 12 month period. The potential emissions from all 4 lines combined are based on the 1995 Title V initial application and RACT limit: 150 tpy VOC, 159.7 tpy PM, and 42.3 tpy PM10.

Source 221 and 222 consists each of an embosser/laminator line. These lines are considered the finishing lines. Each line is able to process 3,000 yards per hour. In accordance with the RACT Operating Permit, 65-207, the VOC emissions shall not exceed 8 tons in any consecutive 12 month period combined between the two lines. Particulate matter shall not exceed to 0.04 grains per dry standard cubic foot as specified in 25 Pa Code §123.13. The potential emissions from both lines combined are based on the 1995 Title V initial application and RACT limit: 8 tpy VOC, 24.6 tpy PM, and 10.6 tpy PM10.

Source 241 consists of six resin silos each equipped with a bin vent filter. Raw materials stored in the silos are in the pellet form with no VOCs. During loading operations, visible emissions are to be inspected and recorded in a log. No visible emissions are permitted. The potential emissions from the silos are based on the 1995 Title V initial application: 0.7 tpy PM and 0.7 tpy PM10.

Source 300 consists of the AZO scrap system and a 13,500 scfm CAMCORP CAM-AIRO Model No. CA24 cartridge collector. The particulate emission from the cartridge collector shall not exceed 0.005 gr/dscf and visible emissions from the cartridge collector shall not exceed 10 percent opacity at any time. The pressure differential across the cartridge collector shall be observed and maintained on a daily basis and the cartridge collector shall be maintained by the manufacturer's recommended maintenance schedule. The potential emissions are based on the RFD submittal: 0.032 tpy PM and 0.032 tpy PM10.

OMNOVA's actual emissions from the year 2013 AIMs report are as followed: 35.2 tons VOC, 0.6 tons NOx, 0.4 tons CO, and 7.6 tons PM/PM<sub>10</sub>. Based on AP-42 emissions factors and RACT limits, the facility has the potential to emit: 159.10 tons VOC, 17.37 tons NOx, 14.5 tons CO, 0.114 tons SOx, 0.013 tons HAPs, 186.74 tons PM, and 55.34 tons PM<sub>10</sub>.

## Regulatory:

## 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

This subpart was last updated on February 16, 2012. This subpart applies to each steam generating unit which was constructed after June 9, 1989 and has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than 10 MMBtu/hr. Per definition in 60.41c, steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. Source 035 and 036 are each rated at 12.5 MMBtu/hr and were constructed in 2002; therefore, the recordkeeping and reporting requirements are subject to this facility and are incorporated into the proposed TV Operating Permit.

# 40 CFR Part 60 Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart was promulgated on July 11, 2006 and last amended on January 30, 2013. This subpart applies to engines that were manufactured, modified or reconstructed after July 11, 2005, Since the engine has been on site well before the last operating permit was issued in 2005 and has not been modified or reconstructed; this subpart does not apply to this facility.

# 40 CFR Part 63 Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Combustion Engines

This subpart was last amended on January 30, 2013. This subpart applies if you own or operate a stationary RICE at a major or area source of HAP emissions. The 50 hp diesel fired engine is considered an existing stationary engine due to the construction before June 12, 2006. The engine is required to have the oil and filter changed and air cleaner inspected every 1,000 hours or annually, whichever comes first; and all hoses and belts inspected every 500 hours of operation or annually, whichever comes first. Records must be maintained of maintenance conducted on the engine in order to demonstrate the engines are operated and maintained in accordance with the maintenance plan. The engine must be in compliance with this subpart no later than May 3, 2013. All applicable requirements have been incorporated into the proposed TV Operating Permit.

## 40 CFR Part 98 Subparts A, C- Mandatory Greenhouse Gas Reporting

This part was promulgated on October 30, 2009, and November 30, 2010. Per 40 CFR Section 98.2(a), the Greenhouse Gas (GHG) reporting requirements and related monitoring, recordkeeping, and reporting requirements of this part apply to the owners and operators of any facility that is located in the United States and that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section.

However, public comments to the Greenhouse Gas Mandatory Reporting Rule (GHG MRR) questioned the requirements of this rule to meet current definitions of "applicable requirement" at 40 CFR 70.2 and 71.2. The commentators requested that USEPA confirm their interpretation of the regulations. The EPA provided the following response: "As currently written, the definition of "applicable requirement" in 40 CFR 70.2 and 71.2 does not include a monitoring rule such as today's action, which is promulgated under CAA sections 114(a)(1) and 208." The preamble of the final version of the GHG MRR, located at 74 Fed Reg 209, pp. 56287-56288, states that the GHG MRR is not considered an "applicable requirement" under the Title V Operating Permit program. Therefore, this Subpart, while an obligation for OMNOVA, is not considered an applicable requirement for this Title V Operating Permit.

The Greenhouse Gas Tailoring Rule was issued in May 2010. This rule establishes a process for conducting Prevention of Significant Deterioration (PSD) reviews, including Best Available Control Technology (BACT) determinations for control of greenhouse gases (GHG) when a new source or a modification to an existing source results in emissions of GHGs in excess of certain thresholds. Since May, 2010, there have not been any modifications to OMNOVA facility that triggered a GHG PSD review.

# Compliance:

On November 15, 2007, a Notice of Violation (NOV) was submitted to OMNOVA for the violation of 25 PA Code §127.513 for failure to submit the Title V Compliance Certification. Per 25 Pa Code §127.513 and Title V Operating Permit, Section B, Condition #024, one year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of

compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. The compliance certification should be postmarked or hand delivered within thirty days of each anniversary date of the date of issuance or, of the submittal date specified elsewhere in the permit, to the Department and EPA. OMNOVA failed to submit the 2006-2007 Compliance Certification within 30 days of July 26, 2007. On November 20, 2007 OMNOVA submitted the past due Compliance Certification. On December 11, 2007, the Department assessed a civil penalty in the amount of eighteen hundred dollars (\$1,800.00) for the NOV dated November 15, 2007. On December 28, 2007, the Department and OMNOVA agreed to a reduced civil penalty in the amount of one thousand dollars (\$1,000.00). On January 15, 2008, the Department assessed a civil penalty in the amount of \$1,000.00 which was received on January 10, 2008.

In accordance with the proposed TV Operating Permit renewal, OMNOVA is required to submit a Title V Compliance Certification by January 31 of each year which covers the previous calendar year period of January 1 through December 31. Semi-annual monitoring reports must be submitted by January 31 and July 31 of each year. The January 31 semi-annual monitoring report shall cover the period from July 1 through December 31 and may be included in January 31 Title V Compliance Certification. The July 31 semi-annual monitoring report shall cover the period from January 1 through June 30. Annual emission statements are due by March 1 for the preceding calendar year.

## Recommendation:

On January 26, 2010, OMNOVA submitted a Title V Permit renewal application for the continued operation of their facility located in the City of Jeannette, Westmoreland County. OMNOVA has complied with the municipal notification requirements contained in 25 Pa. Code §127.413: municipal notification was received by City of Jeannette and by Westmoreland County on January 20, 2010. A fee of \$750 was remitted to the "Clean Air Fund: by AES on January 20, 2010 as required under 25 Pa. Code §127.704 (b)(3). The proposed Title V Operating Permit renewal will be submitted to OMNOVA for their review with the requirements to post a notice into the newspaper for three separate days. The Notice of Intent to Issue the permit will be published in the Pa. Bulletin for a 30 day comment period. The proposed operating permit renewal and memo will also be submitted to EPA for a 45 day comment period. Arrangements will be made to give the inspector for this facility the opportunity to review the proposed TV Operating Permit renewal.

On August 4, 2013, a compliance inspection was performed by Mr. Gary Bronson, Air Quality Specialist. Mr. Bronson did not note any violations at the time of his inspection. It is my recommendation that the Title V Operating Permit renewal for OMNOVA Solutions, Inc. / Jeannette Plant 65-00207, be issued.