



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

STATEMENT OF LEGAL AND FACTUAL BASIS

Honeywell International, Inc.
Chesterfield County, Virginia
Permit No. PRO - 50831

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9VAC5 Chapter 80, Honeywell International, Inc. has applied for a Title V Operating Permit for its Colonial Heights facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Permit Writer: _____
Anthony Faddoul
(804) 489-1769

Date: _____

Air Permit Manager: _____
James E. Kyle, P.E.

Date: _____

FACILITY INFORMATION

Permittee

Honeywell International, Inc.
15801 Woods Edge Road
Colonial Heights, Virginia 23834

Facility

Honeywell International, Inc. – Colonial Heights Site
15801 Woods Edge Road
Colonial Heights, Virginia 23834

County-Plant Identification Number: 51-041-0114

FACILITY DESCRIPTION

NAICS Code: 325220 - Artificial and Synthetic Fibers and Filaments Manufacturing

Built in 1965, the facility historically served as a research and development center. A boiler was installed in the original facility in 1965 with a second one added in 1969. The plant's focus has shifted from research and development to production due to the high demand for its product. The polyolefin fiber is produced by mixing polyethylene, antioxidant, and walpit oil to form a polymer, which is extruded into fiber. Walpit oil (particulate and VOC) is emitted during the extrusion process, with emissions captured and controlled by oil mist eliminators. The walpit oil is then separated from the fiber using a non-HAP, non-VOC chlorinated solvent which is classified as an Ozone Depleting Substance (ODS Chlorinated Solvent), and then dried. ODS Chlorinated Solvent emissions from the separators and dryers are captured and routed to a carbon adsorption unit for emission control. Lines 2, 3, 4, 5 and 8 are routed to older carbon beds (with 90% efficiency) followed by a Halosorb unit (molecular sieve) for an overall control efficiency of 99% (calculated as a 24-hour rolling average). ODS Chlorinated solvent emissions from Lines 12 and 13 are routed to carbon adsorption units with control efficiencies of at least 95% (calculated as a 24-hr rolling average).

The facility is a Title V major source of a regulated ozone depleting substance (ODS Chlorinated Solvent). This source is located in an attainment area for pollutants, and is a PSD minor source. The facility is currently permitted under a combined minor New Source Review (NSR) permit and State Operating Permit (SOP) issued on August 23, 2024. This permit action resulted in the following changes (discussed in further detail in the respective section):

- Removal of the laboratories in Buildings 5, 6 and 8 from the equipment list and removal of any related conditions

- Updating the reference number for one of the cooling towers
- Updating the ODS Removal Efficiency Monitoring Requirement
- Removal of the daily ODS Emission Rate Limit
- Removal of Building 3 Degreaser – Cold Solvent Cleaner from the equipment list and from any permit conditions associated with this unit
- Removal of conditions pertaining to HAPs
- Installation of CEMS equipment for ODS Chlorinated Solvent

Since the facility's 2017 Title V permit, the facility also received a minor NSR permit to increase the Polyolefin Fiber Line 13 production capacity. These changes are also included in the 2024 combined NSR permit and SOP. The facility also intends on installing a third natural gas boiler (SG-3), manufactured on February 17, 1982. Furthermore, the remaining laboratories in Buildings 2 and 3 are limited to only the analyses related to research and development and quality control, making them insignificant units. These changes are incorporated into this Title V permit.

The facility also operates three emergency engines. The facility's emergency diesel fire pump engine included in the facility's combined NSR permit and SOP is subject to the RICE MACT (40 CFR 63, Subpart ZZZZ). The facility's propane-fired Cummins emergency engine and propane-fired Generac generator are subject to NSPS Subpart JJJJ. These MACT and NSPS requirements have been incorporated into this permit.

The original Title V permit was issued on September 2, 2008, with a significant modification issued on April 12, 2016. The facility's Title V permit was renewed on August 29, 2017. Although this Title V permit expired on August 28, 2022, a timely and complete renewal application was received on December 15, 2021 (as stated in the timely and complete letter dated May 4, 2022), so the facility continues to operate under Title V application shield provisions. To incorporate the changes included in the 2024 combined NSR permit and SOP, the facility submitted a Title V modification application dated September 30, 2024. The renewal and modification of the Title V permit will be processed simultaneously.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was most recently conducted on May 13, 2024. All reports and other data required by permit conditions or regulations, which are submitted to the DEQ, have been evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNITS

Please refer to the Emission Units table in the Title V permit on page 2-5.

EMISSIONS INVENTORY

Emissions from the facility in 2023 are summarized in the following tables.

2023 Criteria Pollutant and Greenhouse Gas Emissions in Tons/Year

Emissions	VOC	CO	SO₂	PM₁₀	PM_{2.5}	NO_x	CO_{2e}
Total	0.65	6.46	0.05	2.99	2.99	7.71	Not reported

2023 Facility Hazardous Air Pollutant (HAP) Emissions

Pollutant	2023 Hazardous Air Pollutant Emission in Tons/Yr
Toluene	0.00
Hexane	0.14
Formaldehyde	0.01

Additionally, the facility emitted 147.60 tons of ODS Chlorinated Solvent in 2023.

FUEL BURNING EQUIPMENT REQUIREMENTS - Boilers (Emission Unit ID#s SG-1, SG-2 and SG-3)

Citations

The basis for the limitations on the existing boilers, SG-1 (MFD 1965 and installed in 1965) and SG-2 (MFD 1961 and installed in 1965), are the operational restrictions listed in the current combined NSR permit and SOP dated August 23, 2024 which are based on AP-42 factors. Pollutants limited include PM-10, NO_x and CO, because they exceed 0.5 tons/year. These boilers were included in the original July 10, 1998 State Operating Permit to provide Federally-enforceable limits on SO₂, since the use of #6 oil with a sulfur content of greater than 0.5% would have resulted in a potential to emit of more than 100 tons per year of SO₂. Although the facility voluntarily switched to natural gas fuel only (and is therefore not subject to MACT Subpart JJJJJ), the limits have been retained in the permit for inventory purposes and because without limits on type of fuel and/or sulfur content, the units would still be potentially major.

The facility intends on installing a third natural gas boiler SG-3 (MFD 1982 and to be installed in 2024). Since it is rated at less than 50 MMBtu/hr, it is exempt from NSR permitting according to 9 VAC5-80-1105 B 1.(4).

The boilers are not subject to NSPS Subpart Dc for boilers (with a capacity greater than 10 MMBtu/hr, but less than 100 MMBtu/hr), since they were constructed before June 9, 1989. The boilers are not subject to MACT Subpart JJJJJ according to 40 CFR 63.11195(e).

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable in the combined NSR permit and SOP:

- 9VAC5-40-80: *Existing Stationary Sources, Part II. Emission Standards, Article 1. Visible Emissions and Fugitive Dust/Emissions (Rule 4-1), Standard for visible emissions (for the boilers SG-1 and SG-2)*
- 9 VAC 5-40-940: *Existing Stationary Sources, Part II. Emission Standards, Article 8. Emission Standards for Fuel Burning Equipment (Rule 4-8), Standard for visible emissions (for the boilers SG-1 and SG-2)*
- 9VAC5-50-50: *New and Modified Stationary Sources, Part I. Special Provisions, Notification, records and reporting (for the boiler SG-3)*
- 9VAC5-50-80: *New and Modified Stationary Sources, Part II. Emission Standards, Article 1. Standards of Performance for Visible Emissions and Fugitive Dust/Emissions (Rule 5-1), Standard for visible emissions (for the boiler SG-3)*
- 9 VAC 5-80-850: *Permits for Stationary Sources. Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits (for the boilers SG-1 and SG-2)*
- 9 VAC 5-80-880: *Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Compliance determination and verification by testing (for the boilers SG-1 and SG-2)*
- 9 VAC 5-80-900: *Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Reporting requirements (for the boilers SG-1 and SG-2)*

Limitations

- Condition 16 of the 8/23/24 combined NSR permit and SOP (Condition 1 of the Title V Permit) states that the approved fuel for the boilers (SG-1 and SG-2) is natural gas. *This limitation was taken to give the source synthetic minor status. Limiting the boilers to natural gas fuel also means that they are not subject to MACT Subpart JJJJJ requirements.*
- Condition 2 (Title V Permit) states that the boiler (SG-3) is designed to use natural gas. *A change in the fuel shall be considered a change in the method of operation of the boiler (SG-3) and may require a new or amended permit since the boiler's rated capacity along with the type of fuel it burns have made it exempt from VA state permitting. Burning natural gas fuel also means that the boiler is not subject to MACT Subpart JJJJJ requirements. Applicable*

requirements have been incorporated into the Title V permit based on the use of natural gas as fuel for this boiler (SG-3).

- Conditions 18 & 19 of the 8/23/24 combined NSR permit and SOP (Conditions 3 & 4 of the Title V Permit) limit the throughput of natural gas to the boilers (SG-1 and SG-2). *The allowed throughput for each boiler is calculated assuming that it operates 8760 hrs/yr at full capacity.*
- Conditions 25 & 26 of the 8/23/24 combined NSR permit and SOP (Conditions 5 & 6 of the Title V Permit) limit the annual emissions from the boilers (SG-1 and SG-2). *These limitations are for inventory purposes. The emission limits for each boiler are calculated using AP-42 factors, assuming the boilers operate 8760 hrs/yr. Only pollutants calculated to be more than 0.5 ton/yr are included in accordance with VADEQ policy.*
- Condition 32 of the 8/23/24 combined NSR permit and SOP (Condition 7 of the Title V Permit) limits visible emissions from the SG-1 and SG-2 boiler stacks to 20% opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. *The units are subject to the visible emissions standard for existing sources (and the Rule 4-8 Emission Standards for Fuel Burning Equipment at 9 VAC 5-40-940, which is identical), since they were installed prior to 1972.*
- Condition 8 (Title V Permit) limits visible emissions from the SG-3 boiler stack to 20% opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. *The unit is subject to the visible emissions standard for New and Modified Stationary Sources (9 VAC 5-50-80).*
- Condition 9 (Title V Permit) requires that emissions from the boilers (SG-1, SG-2 and SG-3) shall be controlled by good operation and maintenance of the boilers. *This condition ensures that the units are well-maintained and are able to meet visible emission standards.*

Monitoring/Recordkeeping

The boilers are not subject to a CAM review, since there is no control equipment installed on the boilers.

- Condition 10 (Title V Permit) requires the permittee to perform monthly visible emission checks to show compliance with the visible emissions limitations for the boilers (SG-1, SG-2 and SG-3). A Method 9 VEE will be required if visible emissions are present unless corrective action is taken. *This condition fulfills the monitoring requirement of Part 70.*
- Condition 37(b) of the 8/23/24 combined NSR permit and SOP (Condition 11 of the Title V

Permit) requires the permittee to keep records of the monthly throughput of natural gas to the boilers (SG-1 and SG-2). A log of the visible emissions observations including the date and time of each observation, the name of the observer, visible emissions evaluations and the corrective actions taken as a result is also required by the Title V permit for the boilers (SG-1, SG-2 and SG-3). *The records will be inspected for compliance with the conditions of the combined NSR permit and SOP and with the monitoring requirement in Condition 10 of the Title V permit.*

- Condition 12 (Title V Permit) requires the permittee to keep records of boiler operator training. *These records will be used to demonstrate compliance with Condition 9 of the Title V permit.*

FUEL BURNING EQUIPMENT REQUIREMENTS - Fire Pump Engine (Emission Unit ID# CP-99)

Citations

The basis for the limitations on the fire pump engine (CP-99) are the operational restrictions listed in the current combined NSR permit and SOP dated August 23, 2024. NO_x emissions are limited by the permit. The engine (manufactured in 1970 and installed in 1970) is also subject to MACT Subpart ZZZZ as an existing emergency engine located at an area source of HAP emissions.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable in the combined NSR permit and SOP:

- 9VAC5-40-80: *Existing Stationary Sources, Part II. Emission Standards, Article 1. Visible Emissions and Fugitive Dust/Emissions (Rule 4-1), Standard for visible emissions*
- 9 VAC 5-80-850: *Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits*
- 9 VAC 5-80-880: *Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Compliance determination and verification by testing*
- 9 VAC 5-80-900: *Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Reporting requirements*

Limitations

- Condition 17 of the 8/23/24 combined NSR permit and SOP (Condition 13 of the Title V Permit) allows the use of distillate oil as fuel in the fire pump engine. *This requirement defines the fuel type for MACT applicability.*

- Condition 20 of the 8/23/24 combined NSR permit and SOP (Condition 14 of the Title V Permit) limits the throughput of distillate oil to the fire pump engine. *Since this is an emergency engine, the throughput was calculated based on 500 hours/yr operation at full capacity. This limit is based on the EPA (John Seitz) memo from September 6, 1995 regarding the PTE for emergency generators.*
- Condition 21 of the 8/23/24 combined NSR permit and SOP (Condition 15 of the Title V Permit) defines the distillate oil fuel requirements and limits fuel sulfur content to 0.5%. *The fuel oil specifications and fuel sulfur limit were added to the original State Operating Permit issued July 10, 1998, which imposed facility-wide limits on the facility, including existing equipment. Because it is an existing engine at an area source, the fire pump engine does not have ultra-low-sulfur diesel fuel requirements. Furthermore, CP-99 does not operate for the purposes specified in § 63.6640(f)(4)(ii), making the fuel diesel requirements in 40 CFR 1090.305 for nonroad diesel fuel inapplicable in accordance with 40 CFR 63.6604(b).*
- Condition 27 of the 8/23/24 combined NSR permit and SOP (Condition 16 of the Title V Permit) limits NO_x emissions to 0.8 tons/yr. *This limitation is for inventory purposes. The emission limits for the engine were calculated using AP-42 factors, assuming the engine operates 500 hrs/yr. NO_x was the only pollutant calculated to be more than 0.5 ton/yr.*
- Condition 17 (Title V Permit) limits visible emissions to 20% opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. *The engine is subject to the visible emissions standard for existing sources (9 VAC 5-40-80), since it was installed prior to 1972.*

Monitoring/Recordkeeping

EPA has stated that MACT (40 CFR 63) and NSPS Standards promulgated after 1990 can be considered by default to include monitoring, recordkeeping, and reporting provisions sufficient to qualify as periodic monitoring without additional requirements. The engine is not subject to a CAM review, since there is no control equipment installed on the engine.

- Condition 18 (Title V Permit) requires the permittee to perform monthly visible emission checks to show compliance with the visible emissions limitations for the fire pump engine (CP-99). A Method 9 VEE will be required if visible emissions are present unless corrective action is taken. *This condition fulfills the monitoring requirement of Part 70.*

- Condition 22 of the 8/23/24 combined NSR permit and SOP (Condition 19 of the Title V Permit) requires that the permittee obtain fuel supplier certifications with each shipment of distillate oil. *This requirement is to demonstrate compliance with the fuel specifications and sulfur limit contained in Title V Condition 15.*
- Condition 37 of the 8/23/24 combined NSR permit and SOP (Condition 20 of the Title V Permit) requires that records be kept to show compliance with the Title V permit, including annual records of fuel oil and fuel supplier certifications, visible emissions evaluations, and a log of actions taken during periods of malfunction to minimize emissions. *The records will be inspected for compliance with the conditions of the combined NSR permit and SOP and with the monitoring requirements in Conditions 18 & 19 of the Title V permit.*

Requirements by Reference

- Condition 21 (Title V Permit) incorporates the requirements of MACT Subpart ZZZZ. *This condition fulfills Part 70 requirements to include all applicable requirements into the Title V permit. This is an existing engine, as defined under 40 CFR 63.6590(a)(1)(iii), since it was constructed prior to June 12, 2006 and is located at an area source of HAP. Thus, this engine has to comply with the requirements for an existing stationary RICE located at an area source of HAP emissions as outlined under 40 CFR 63.6603(a).*

FUEL BURNING EQUIPMENT REQUIREMENTS - Generac Emergency Engine (Emission Unit ID# GG-01)

Citations

The Generac Emergency Engine (GG-01), manufactured in 2013 and installed on 12/7/2013, is propane-fired and rated at 10 HP. It is exempt from NSR permitting, however it is subject to MACT (40 CFR 63) Subpart ZZZZ and NSPS (40 CFR 60) Subpart JJJJ.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- 9VAC5-50-80: *New and Modified Stationary Sources, Part II. Emission Standards, Article 1. Standards of Performance for Visible Emissions and Fugitive Dust/Emissions (Rule 5-1), Standard for visible emissions*

Limitations

- Condition 22 (Title V Permit) states that the emergency engine is designed to use propane fuel. *Applicable requirements have been incorporated into the Title V permit based on the use of propane as fuel for this spark ignition engine.*
- Condition 23 (Title V Permit) limits the emergency engine operation to 500 hours/year. *This limit is based on the EPA (John Seitz) memo from September 6, 1995 regarding the PTE for emergency generators.*
- Condition 24 (Title V Permit) limits visible emissions, which shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. *This requirement is taken from 9 VAC 5-50-80, the opacity standard for new and modified sources.*

Monitoring/Recordkeeping

EPA has stated that MACT (40 CFR 63) and NSPS Standards promulgated after 1990 can be considered by default to include monitoring, recordkeeping, and reporting provisions sufficient to qualify as periodic monitoring without additional requirements. The engine is not subject to a CAM review, since there is no control equipment installed on the engine.

- Condition 25 (Title V Permit) requires the permittee to perform monthly visible emission checks to show compliance with the visible emissions limitations for the emergency engine (GG-01). A Method 9 VEE will be required if visible emissions are present unless corrective action is taken. *This condition fulfills the monitoring requirement of Part 70.*
- Condition 26 (Title V Permit) requires the permittee to keep records of operating hours, visible emissions observations, periods of malfunction, and any corrective actions taken. *The records will be inspected for compliance with Condition 23 and with the monitoring requirement in Condition 25 of the Title V permit.*

Requirements by Reference

- Condition 27 (Title V Permit) requires that the permittee comply with the requirements of the New Source Performance Standards (40 CFR 60) Subpart JJJJ for the Generac Emergency Engine (GG-01), including emission limitations, operating limitations, testing and compliance, monitoring, operating and maintenance, notification, recordkeeping and reporting requirements. *This condition fulfills Part 70 requirements to include all applicable requirements into the Title V permit. The Generac Emergency Engine (GG-01) is a propane-fired engine with maximum engine power < 500 HP, manufactured after 2008, and located at an area source of HAP. It is subject to NSPS Subpart JJJJ. The*

facility will also demonstrate compliance with the RICE MACT by complying with the requirements of 40 CFR 60, Subpart JJJJ (40 CFR 63.6590(c)).

FUEL BURNING EQUIPMENT REQUIREMENTS - Cummins Emergency Engine (Emission Unit ID# GG-03)

Citations

The Cummins Emergency Engine (GG-03), manufactured on 2/26/13 and installed on 5/1/2013, is propane-fired and rated at 27 HP. It is exempt from NSR permitting, however it is subject to MACT (40 CFR 63) Subpart ZZZZ and NSPS (40 CFR 60) Subpart JJJJ. The facility will show compliance with MACT Subpart ZZZZ by complying with the requirements of NSPS Subpart JJJJ.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- 9VAC5-50-80: *New and Modified Stationary Sources, Part II. Emission Standards, Article 1. Standards of Performance for Visible Emissions and Fugitive Dust/Emissions (Rule 5-1), Standard for visible emissions*

Limitations

- Condition 28 (Title V Permit) states that the emergency engine is designed to use propane fuel. *Applicable requirements have been incorporated into the Title V permit based on the use of propane as fuel for this spark ignition engine.*
- Condition 29 (Title V Permit) limits the emergency engine operation to 500 hours/year. *This limit is based on the EPA (John Seitz) memo from September 6, 1995 regarding the PTE for emergency generators.*
- Condition 30 (Title V Permit) limits visible emissions, which shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. *This requirement is taken from 9 VAC 5-50-80, the opacity standard for new and modified sources.*

Monitoring/Recordkeeping

EPA has stated that MACT (40 CFR 63) and NSPS Standards promulgated after 1990 can be considered by default to include monitoring, recordkeeping, and reporting provisions sufficient

to qualify as periodic monitoring without additional requirements. The engine is not subject to a CAM review, since there is no control equipment installed on the engine.

- Condition 31 (Title V Permit) requires the permittee to perform monthly visible emission checks to show compliance with the visible emissions limitations for the Cummins emergency engine (GG-03). A Method 9 VEE will be required if visible emissions are present unless corrective action is taken. *This condition fulfills the monitoring requirement of Part 70.*
- Condition 32 (Title V Permit) requires the permittee to keep records of operating hours, visible emissions observations, periods of malfunction, and any corrective actions taken. *The records will be inspected for compliance with Condition 29, and the monitoring requirement in Condition 31 of the Title V permit.*

Requirements by Reference

- Condition 33 (Title V Permit) requires that the permittee comply with the requirements of the New Source Performance Standards (40 CFR 60) Subpart JJJJ for the Cummins Emergency Engine (GG-03), including emission limitations, operating limitations, testing and compliance, monitoring, operating and maintenance, notification, recordkeeping and reporting requirements. *This condition fulfills Part 70 requirements to include all applicable requirements into the Title V permit. The Cummins Emergency Engine (GG-03) is a propane-fired engine with maximum engine power >19 kW (25 HP), manufactured after 2006, and located at an area source of HAP. It is subject to NSPS Subpart JJJJ. The facility will also demonstrate compliance with the RICE MACT by complying with the requirements of 40 CFR 60, Subpart JJJJ (40 CFR 63.6590(c)).*

PROCESS EQUIPMENT REQUIREMENTS – Polyolefin Fiber Production Lines (Emission Unit ID#s Lines 2, 3, 4, 5, 8, 12 and 13)

Citations

The current Polyolefin Fiber Production Lines were permitted as new and modified sources. Lines 2-5 and Line 8 were permitted between 1984 and 1997. These lines were included in the original July 10, 1998 SOP, which was issued to establish the facility as a synthetic minor source for Title V purposes. The SOP limited ODS Chlorinated Solvent to 99.0 tons/yr. Line 12 was then permitted as a new source on June 6, 2002, and the facility modified its SOP to include Line 12, even though ODS Chlorinated Solvent was limited to 138.2 tons/yr and the facility was considered major for Title V purposes. Line 13 was permitted in a minor NSR permit action on October 15, 2004, and incorporated into the facility-wide State Operating Permit on October 29, 2007.

On March 13, 2020, the facility received a minor NSR permit (accomplished as a combined minor NSR permit and minor amendment to the facility's SOP) to increase the production capacity of Line 13, from 6.67 fiber units to 8.53 fiber units by increasing the size of the walpit oil and polymer feed pumps. At the time, none of the existing permit limits changed, but a new, separate permit condition limiting the hourly walpit oil emissions from Line 13 was added. There was no increase in potential emissions as a result of this project. Both the 100 ton per year limit on Line 13 ODS Chlorinated Solvent emissions, and the annual combined emissions limit from all of the polyolefin fiber manufacturing lines, remained unchanged. On January 12, 2022, the facility was granted an 18-month extension to its March 13, 2020 minor NSR permit approval.

On August 23, 2024, the facility's combined NSR permit and SOP was amended based on the facility's request to remove the daily ODS emission rate limit. The ODS removal efficiency monitoring requirement was also updated to include clarification in Conditions 1, 2 and 3 of the 2024 combined permit that the calculation of the 24-hour average removal efficiency for the carbon bed adsorber/molecular sieve for Lines 2, 3, 4, 5 and 8 and the carbon adsorbers for Lines 12 and 13 excludes periods of time where the source processes (Lines 2, 3, 4, 5, 8, 12 and 13) are not in operation. Furthermore, the condition was updated to require either 95% ODS chlorinated solvent control or the maintenance of ODS chlorinated solvent outlet concentration (ppm) equivalent or better than the concentration equivalent to the hourly mass emission limits established. In order to establish this concentration, the 100 ppm concentration included in Condition 45 of the 2017 Title V permit was utilized. To show compliance with the 100 ppm concentration, the facility is now required to install a CEMS on the outlets of the carbon bed adsorbers and/or molecular sieves (Ref. No. CB/HZ, CB-4 and CB-5). Requirements pertaining to performance evaluations, reporting, recordkeeping and implementation of a quality control program were also incorporated into the 2024 permit amendment.

These recent changes have been incorporated into this Title V permit.

40 CFR Part 82 requirements pertaining to Ozone Depleting Substances are addressed in General Condition No. 114, Stratospheric Ozone Protection.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- *9VAC5-50-50: New and Modified Stationary Sources, Part I. Special Provisions, Notification, records and reporting*
- *9VAC5-50-260: New and Modified Stationary Sources, Part II. Emission Standards, Article 1. Standards of Performance for Stationary Sources (Rule 5-4), Standard for stationary sources*

- *9 VAC 5-80-850: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits*
- *9 VAC 5-80-880: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Compliance determination and verification by testing*
- *9 VAC 5-80-900: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Reporting requirements*
- *9VAC5-80-1180: Permits for Stationary Sources, Article 6. Permits for New and Modified Stationary Sources, Standards and conditions for granting permits*

Limitations

- Condition 1 of the 8/23/24 combined NSR permit and SOP (Condition 34 of the Title V Permit) requires that ODS Chlorinated Solvent emissions from Lines 2, 3, 4, 5, and 8 be controlled by a combination of carbon bed adsorbers and a molecular sieve, with a removal efficiency of at least 99% (rolling 24-hr average) or the outlet ODS Chlorinated Solvent concentration (from the carbon bed adsorbers and a molecular sieve) shall not exceed 100 ppm (calculated as an hourly average), whichever is less stringent.
- Condition 2 of the 8/23/24 combined NSR permit and SOP (Condition 35 of the Title V Permit) requires that ODS Chlorinated Solvent emissions from Line 12 be controlled by a carbon bed adsorber with a removal efficiency of at least 95% (rolling 24-hr average) or the outlet ODS Chlorinated Solvent concentration (from the carbon bed adsorber) shall not exceed 100 ppm (calculated as an hourly average), whichever is less stringent.
- Condition 3 of the 8/23/24 combined NSR permit and SOP (Condition 36 of the Title V Permit) requires that ODS Chlorinated Solvent emissions from Line 13 be controlled by a carbon bed adsorber with a removal efficiency of at least 95% (rolling 24-hr average) or the outlet ODS Chlorinated Solvent concentration (from the carbon bed adsorber) shall not exceed 100 ppm (calculated as an hourly average), whichever is less stringent. *This is a BACT requirement.*
- Condition 4 of the 8/23/24 combined NSR permit and SOP (Condition 37 of the Title V Permit) requires that Honeywell maintain a Preventative Maintenance and Operation Plan (PMO Plan) for Lines 12 and 13, to minimize ODS Chlorinated Solvent emissions during startup, shutdown, maintenance, and malfunction. *This condition was added to the 2015 State Operating Permit in conjunction with the change in the compliance demonstration for Lines 12 & 13. Because Honeywell demonstrates compliance with its annual ODS Chlorinated Solvent emission limit by generating a facility-wide ODS Chlorinated Solvent emission factor on a 12-month rolling basis, the plan ensures that Honeywell maintains consistent fugitive emission minimization practices and procedures over time such that there will be a reasonable assurance that the relative level of fugitive emissions from Lines 12 and 13*

remain constant.

- Condition 5 of the 8/23/24 combined NSR permit and SOP (Condition 38 of the Title V Permit) requires that particulate emissions as walpit oil emissions from Lines 2, 3, 4, 5, and 8 be controlled by a mist eliminator with a control efficiency of at least 97% (or a 0.002 gr/dscf standard, whichever is less stringent). *This is a BACT requirement.*
- Condition 6 of the 8/23/24 combined NSR permit and SOP (Condition 39 of the Title V Permit) requires that particulate emissions as walpit oil emissions from Line 12 be controlled by a mist eliminator with a control efficiency of at least 97% (or a 0.002 gr/dscf standard, whichever is less stringent). *This is a BACT requirement.*
- Condition 7 of the 8/23/24 combined NSR permit and SOP (Condition 40 of the Title V Permit) requires that particulate emissions as walpit oil emissions from Line 13 be controlled by a mist eliminator with a control efficiency of at least 97% (or a 0.002 gr/dscf standard, whichever is less stringent). *This is a BACT requirement.*
- Condition 13 of the 8/23/24 combined NSR permit and SOP (Condition 41 of the Title V Permit) limits the production of polyolefin fiber to 102.8 fiber units (production units are held to be confidential). *This condition provides an enforceable means to limit emissions.*
- Condition 23 of the 8/23/24 combined NSR permit and SOP (Condition 42 of the Title V Permit) limits the hourly walpit oil emissions from Line 13. *This is a BACT requirement established for the March 13, 2020 minor SOP/NSR permit action (accomplished as a combined minor NSR permit and minor amendment to the facility's SOP) based on the facility's request to increase the production capacity of Line 13, from 6.67 fiber units to 8.53 fiber units (by increasing the size of the walpit oil and polymer feed pumps).*
- Conditions 24 and 31 of the 8/23/24 combined NSR permit and SOP (Conditions 43 and 46 of the Title V Permit) limit criteria pollutant emissions, limit ODS Chlorinated Solvent emissions (a non-HAP, non-criteria pollutant regulated by Title VI of the Clean Air Act), and limit visible emissions to 5 percent for the production of polyolefin fiber. *These are BACT requirements. The ODS Chlorinated Solvent daily limit, which is based on modeling associated with the August 14, 1990 permit, for Line 5 was removed on August 23, 2024 as part of the amendment to the combined minor New Source Review (NSR) permit and State Operating Permit (SOP). The modeling results are based on a 24-hour concentration that was compared to the SAAC for "non-carcinogens". This is an analysis that is no longer done. The regulations no longer contain a SAAC for "non-carcinogens". Since the ODS daily limit does not serve any role in: a current or prior BACT determination, providing enforceability to any annual emission limit (including PSD avoidance limits), any RACT or non-attainment analysis or providing an enforcement mechanism to any still-valid modeling demonstration,*

it was removed from the underlying permit at the facility's request.

- Conditions 29 & 30 of the 8/23/24 combined NSR permit and SOP (Conditions 44 & 45 of the Title V Permit) limit Line 12 and Line 13 ODS Chlorinated Solvent emissions to 100 tons/yr each (notwithstanding the facility-wide ODS Chlorinated Solvent limit of 190.8 tons/yr). In addition, these conditions provide a method to calculate monthly and annual ODS Chlorinated Solvent emissions by calculating an emission factor (ODS Chlorinated Solvent emissions divided by annual facility-wide emissions) on a monthly basis. *This compliance demonstration method was added to the 2015 State Operating Permit and replaced an earlier method based on actual flow rates that featured a measurement error (13 lbs/hr) more than twice as large as the Line 12 or Line 13 fugitive emission rates, and resulted in frequent negative emission values on both a monthly basis and a rolling 12-month basis.*

Monitoring/Recordkeeping

The Title V Permit includes Compliance Assurance Monitoring (CAM) requirements (Conditions 53-62 and 66 of the Title V permit) for the oil mist eliminators controlling PM/VOC emissions from the polyolefin fiber production lines.

The oil mist eliminators which control PM/VOC emissions from the polyolefin fiber production lines are subject to CAM because of the following:

- *The facility is a major source subject to Title V permitting.*
- *The polyolefin fiber lines are subject to emission limitations.*
- *The emission limitations require the use of a control device.*
- *The uncontrolled emissions from the polyolefin fiber lines are above major source thresholds.*

Solvent emissions are subject to a continuous compliance demonstration method and are therefore exempt from CAM per 40 CFR 64.2(b)(1)(vi).

- Condition 11 & 12 of the 8/23/24 combined NSR permit and SOP (Conditions 47 & 48 of the Title V Permit) require that the carbon bed adsorbers used for the capture and control of ODS Chlorinated Solvent emissions from Lines 2, 3, 4, 5, 8, 12 and 13 be equipped with devices to measure gas inlet and outlet concentrations of ODS Chlorinated Solvent, as well as a high concentration alarm (greater than 100 ppm). *These requirements provide for monitoring to show compliance with Conditions 34, 35 and 36 of the Title V permit.*
- Condition 13 of the 8/23/24 combined NSR permit and SOP (Condition 49 of the Title V Permit) requires that the monitoring devices required by Conditions 47 & 48 of the Title V

permit be observed no less than once per day, and that operators shall respond promptly to any high concentration alarm. *These requirements provide for monitoring to show compliance with Conditions 34, 35 and 36 of the Title V permit, and to ensure prompt corrective action if high concentration is detected.*

- Condition 50 (Title V Permit) requires the permittee to perform quarterly visible emission checks to show compliance with the visible emissions limitations for the polyolefin fiber production lines. A Method 9 VEE will be required if visible emissions are present unless corrective action is taken. *This condition fulfills the monitoring requirements of Part 70. Emissions are quarterly rather than monthly, because it is unlikely based on past performance that the stacks from the polyolefin fiber lines will exhibit visible emissions.*
- Condition 33 of the 8/23/24 combined NSR permit and SOP (Condition 51 of the Title V Permit) requires the permittee to install CEMS to measure and record the outlet emissions of ODS Chlorinated Solvent from the combination of carbon bed adsorbers and a molecular sieve (Ref. No. CB/HZ), carbon bed adsorber (Ref. No. CB-4) and carbon bed adsorber (Ref. No. CB-5). *This requirement shows compliance with the 100 ppm limit from Conditions 34, 35 and 36 of the Title V permit.*
- Condition 35 of the 8/23/24 combined NSR permit and SOP (Condition 52 of the Title V Permit) requires the permittee to implement a quality control program for the CEMS required by Condition 51 of the Title V permit.
- Condition 53-62 of the Title V permit contain requirements for Compliance Assurance Monitoring (CAM) and associated recordkeeping. *These are requirements from 40 CFR 64.6, 40 CFR 64.7, 40 CFR 64.8 and 40 CFR 64.9.*
- Condition 37 of the 8/23/24 combined NSR permit and SOP (Condition 63 of the Title V Permit) requires the permittee to keep records of ODS Chlorinated Solvent consumption, polyolefin fiber production, monthly emission calculations for Lines 12 & 13, monitoring records, CEMS data (continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions), and any stack test data, as well as visible emissions data. *The underlying permit requires the facility to keep annual throughput records of polyolefin fiber. However, since this is the product being manufactured, that condition (Condition 37.f of the 8/23/24 combined NSR permit and SOP) was rephrased to clarify that annual production records of polyolefin fiber product must be kept. The records will be inspected for compliance with Title V Conditions 34-46, the monitoring requirements in Conditions 47-52 of the Title V permit and the performance evaluation requirement in Condition 64 of the Title V permit and the reporting requirement in Condition 65 of the Title V permit. This requirement is based on 9 VAC 5-80-900 and 9VAC5-50-50 of State Regulations. Condition 63.j of the Title V Permit fulfills the recordkeeping requirement of*

Part 70.

Testing

- Condition 34 of the 8/23/24 combined NSR permit and SOP (Condition 62 of the Title V Permit) requires the permittee to conduct performance evaluations in accordance with 40 CFR Part 60, Appendix B for the CEMS required by Condition 51 of the Title V permit. *This requirement is based on 9VAC5-50-40 of State Regulations.*

Reporting

- Condition 36 of the 8/23/24 combined NSR permit and SOP (Condition 63 of the Title V Permit) requires quarterly reporting of any CEMS monitoring data related to excess emissions and deviations from normal operation. *This requirement is based on 9VAC5-50-50 of State Regulations.*
- Condition 64 of the Title V permit requires reporting of any CAM monitoring data that show any deviations from normal operation. *This requirement is based on 40 CFR 64.9(a).*

PROCESS EQUIPMENT REQUIREMENTS – Cooling Towers (Emission Unit ID#s TW-3, TW-5, TW-6, TW-9, TW-10, TW-11 and TW-14)

Citations

Cooling Towers TW-3, TW-5, TW-6, TW-7, TW-8 and TW-9 were included in the original July 10, 1998 State Operating Permit in order to provide an enforceable limit on PM. Limits were calculated based on AP-42 emission factors. The replacement of Cooling Tower TW-7 with TW-10 was authorized in the June 6, 2002 NSR permit for the construction of Line 12 and found to meet BACT requirements. The addition of Cooling Tower TW-11 was authorized in the October 15, 2004 NSR permit for the construction of Line 13 and was also subject to BACT. References to Cooling Tower “TW-8” have been replaced by “TW-14” because of a like for like replacement of TW-8 with TW-14. This change was incorporated into the 2024 combined NSR permit and SOP.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- *9VAC5-50-50: New and Modified Stationary Sources, Part I. Special Provisions, Notification, records and reporting*

- *9VAC5-50-260: New and Modified Stationary Sources, Part II. Emission Standards, Article 1. Standards of Performance for Stationary Sources (Rule 5-4), Standard for stationary sources*
- *9 VAC 5-80-850: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits*
- *9 VAC 5-80-900: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Reporting requirements*

Limitations

- *Condition 9 of the 8/23/24 combined NSR permit and SOP (Condition 67 of the Title V Permit) prohibits the use of chromium as a water treatment chemical for the cooling towers. This condition was included so that the facility would not be subject to the Industrial Process Cooling Tower MACT (40 CFR 63, Subpart Q).*
- *Condition 28 of the 8/23/24 combined NSR permit and SOP (Condition 68 of the Title V Permit) limits particulate emissions from the cooling towers. This is a BACT requirement, with emission limits mainly for inventory purposes. The permitted limits represent the PTE for the cooling towers.*

Recordkeeping

- *Condition 37 (g) of the 8/23/24 combined NSR permit and SOP (Condition 69 of the Title V Permit) requires records of yearly throughput of water, calculated monthly as the sum of each consecutive 12-month period. The records will be inspected to demonstrate compliance with the emission limits in Title V Condition 68.*

PROCESS EQUIPMENT REQUIREMENTS – Spinning Equipment Burnoff Oven (Emission Unit ID# Lindberg Oven)

Citations

The Lindberg Oven (also called the “burn-off oven”) is an electric oven used to remove solidified polymer from machine parts used in the polyolefin fiber manufacturing process. Polyamide polymer residue may result in the formation of trace quantities of NO_x. However, the limitation on the number of operating cycles allowed per year results in emissions that are less than 0.5 tons/yr for all pollutants. This is an existing source. It is not subject to CAM because no control equipment is installed on the oven.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- *9 VAC 5-80-850: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits*
- *9 VAC 5-80-900: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Reporting requirements*

Limitations

- Condition 15 of the 8/23/24 combined NSR permit and SOP (Condition 70 of the Title V Permit) limits the number of cycles allowed per year. *This limit is for inventory purposes, and was added in the State Operating Permit modification dated August 1, 2000.*

Recordkeeping

- Condition 37(a) of the 8/23/24 combined NSR permit and SOP (Condition 71 of the Title V Permit) requires the source to keep records of the number of monthly and annual operating cycles for the Lindberg oven. *These records will be inspected to ensure compliance with the limit on annual operating cycles.*

PROCESS EQUIPMENT REQUIREMENTS – Oil/Water Separator (Emission Unit ID# OWS)

Citations

The Oil/Water Separator separates water and lube oil from air compressors, as well as walpit oil and water from the polyolefin fiber manufacturing process. It is equipped with a sealed cover to minimize emissions.

The following citations from the Virginia Administrative Codes identify the underlying authorities to implement the specific requirements determined to be applicable:

- *9 VAC 5-80-850: Permits for Stationary Sources, Part II. Permit Procedures, Article 5. State Operating Permits, Standards and conditions for granting permits*

Limitations

- Condition 8 of the 8/23/24 combined NSR permit and SOP (Condition 72 of the Title V Permit) requires the permittee to control VOC emissions from the Oil/Water Separator by using a sealed cover.

Monitoring/Recordkeeping

- Condition 73 (Title V Permit) requires the permittee to inspect the OWS sealed cover to ensure that it is in proper working order. *This requirement will ensure compliance with the operational requirement contained in Condition 72 of the Title V permit.*
- Condition 72 (Title V Permit) requires that the facility keep records of annual sealed cover inspections. *These records will be inspected to ensure compliance with the requirements contained in Conditions 72 and 73 of the Title V permit.*

FACILITY WIDE CONDITIONS

Facility-wide conditions apply generally to the facility, and were consolidated in this section to avoid repetition.

Limitations

- Condition 10 of the 8/23/24 combined NSR permit and SOP (Condition 75 of the Title V permit) specifies work practice standards intended to minimize fugitive VOC emissions. *This requirement is based on 9 VAC 5-50-20 F, compliance with provisions of 9 VAC 5 Chapter 50 (New and Modified Stationary Sources).*
- Condition 41 of the 8/23/24 combined NSR permit and SOP (Condition 76 of the Title V permit) includes maintenance and operating procedures that must be followed by the facility. This condition also requires the facility to keep records pertaining to any maintenance and training that is performed. *This requirement is based on 9 VAC 5-50-20 E, compliance with provisions of 9 VAC 5 Chapter 50 (New and Modified Stationary Sources).*

Recordkeeping

- Condition 37 of the 8/23/24 combined NSR permit and SOP (Condition 77 of the Title V Permit) requires the source to maintain records of safety data sheets (SDS) and the results of any visible emissions observations, visible emissions evaluations and performance evaluations. *These records are required to determine compliance with emission and work practice standards. Clarifications to this condition have been made to indicate that the facility must maintain the SDS (not the material safety data sheets (MSDS) as described in the underlying permit) on site to provide a better description of the records that must be kept.*

- Condition 42 of the 8/23/24 combined NSR permit and SOP (Condition 78 of the Title V Permit) requires records of bypass, malfunction, shutdown or failure of the facility or air pollution control equipment that results in excess emissions for more than one hour. Record requirements are specified. *This requirement is based on 9 VAC 5-20-180 J, facility and control equipment maintenance or malfunction provisions of 9 VAC 5 Chapter 20 (General Provisions).*

Testing

- Condition 38 of the 8/23/24 combined NSR permit and SOP (Condition 79 of the Title V Permit) requires that the facility be constructed to allow for emissions testing. *This condition applies to the entire facility to enable the permittee to perform testing when necessary to demonstrate compliance with a permit or standard.*
- Condition 80 (Title V Permit) requires that the permittee use appropriate methods and procedures approved by DEQ if any testing is conducted in addition to the monitoring specified in the permit. *DEQ or EPA approval is required for compliance testing.*

STREAMLINED REQUIREMENTS

- The combined NSR permit and SOP’s emission limitations (Conditions 5 & 6 of the Title V Permit) on boilers SG-1 and SG-2, based on AP-42 factors, are more stringent than those contained in 9 VAC 5-40-930. The visible emissions standard of 9 VAC 5-40-80 is equivalent to that of 9 VAC 5-40-940.

INSIGNIFICANT EMISSIONS UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation¹	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
	Buildings 2, and 3 Laboratory Facilities (R&D, QC)	9 VAC 5-80-270B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation¹	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HT-19	Dowtherm Relief Storage Tank (pressurized), 100 gallons	9 VAC 5-80-270B	VOC	NA
HT-24	Fire Pump Diesel Tank, 240 gallons	9 VAC 5-80-270B	VOC	NA
HT-5430	White Walpit Oil Horizontal Fixed Roof Tank (pressurized), 6000 gallons	9 VAC 5-80-270B	VOC	NA
VT-221	White Walpit Oil Horizontal Fixed Roof Tank, 600 gallons	9 VAC 5-80-270B	VOC	NA
VT-222	White Walpit Oil Horizontal Fixed Roof Tank, 600 gallons	9 VAC 5-80-270B	VOC	NA
VT-301	Recycled Oil Storage Tank, 600 gallons	9 VAC 5-80-270B	VOC	NA
VT-302	Recycled Oil Storage Tank, 600 gallons	9 VAC 5-80-270B	VOC	NA
VT-7061	Aluminum non-HAP VOC Tank, 3 gallons/min, 480 gallons	9 VAC 5-80-270B	VOC	NA
VT-01	Walpit Oil, 440 gallons	9 VAC 5-80-270B	VOC	NA
HT-5430 A	Walpit Oil, 8500 gallons	9 VAC 5-80-270B	VOC	NA
VT-5313	Walpit Oil (Line 5 and 8), 1000 gallons	9 VAC 5-80-270B	VOC	NA
VT-5307	Slurry Oil (Line 5 and 8), 240 gallons	9 VAC 5-80-270B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation¹	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HT-5876	Virgin chlorinated solvent, 8250 gallons	9 VAC 5-80-270B	Non-VOC Chlorinated Solvent	NA
HT-5880	Used chlorinated solvent, 8250 gallons	9 VAC 5-80-270B	Non-VOC Chlorinated Solvent	NA
VT-119	Walpit oil/chlorinated solvent, 2000 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
VT-100	Walpit Oil, 300 gallons	9 VAC 5-80-270B	VOC	NA
VT-5100	Walpit oil/chlorinated solvent, 700 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
VT-5101	Chlorinated solvent, 300 gallons	9 VAC 5-80-270B	Non-VOC Chlorinated Solvent	NA
VT-322	Walpit oil/chlorinated solvent – SRU, 300 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
BB 2	Walpit oil/chlorinated solvent, 70 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
BB 3	Walpit oil/Chlorinated solvent, 300 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
BB 4	Walpit oil/Chlorinated solvent, 300 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
VT-2918	Walpit Oil Slurry, 79 gallons	9 VAC 5-80-270B	VOC	NA
VT-5784	Walpit Oil Slurry, 79 gallons	9 VAC 5-80-270B	VOC	NA
VT-1000	Walpit Oil, 517 gallons	9 VAC 5-80-270B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation¹	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
VT-5413	Walpit oil/chlorinated solvent, 600 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
D-5447	Walpit oil/chlorinated solvent, 1000 gallons	9 VAC 5-80-270B	VOC and Non-VOC Chlorinated Solvent	NA
VT-5829	Walpit oil/water, 151 gallons	9 VAC 5-80-270B	VOC	NA
VT-5674	Dirty walpit oil, 1043 gallons	9 VAC 5-80-270B	VOC	NA
VT-5678	Clean walpit oil, 1580 gallons	9 VAC 5-80-270B	VOC	NA
VT-398	Walpit oil, 100 gallons	9 VAC 5-80-270B	VOC	NA
HT-5413	Therminol, 30 gallons	9 VAC 5-80-270B	VOC	NA
HT-154	Therminol, 49 gallons	9 VAC 5-80-270B	VOC	NA
HT-1012	Therminol, 200 gallons	9 VAC 5-80-270B	VOC	NA
HT-5319	Therminol, 235 gallons	9 VAC 5-80-270B	VOC	NA
HT-6047	Therminol, 150 gallons	9 VAC 5-80-270B	VOC	NA
Used Oil	Used Lube Oil Tank, 400 gallons	9 VAC 5-80-270B	VOC	NA

¹The citation criteria for insignificant activities are as follows:
 9VAC5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
 9VAC5-80-720 B - Insignificant due to emission levels
 9VAC5-80-720 C - Insignificant due to size or production rate

PERMIT SHIELD AND INAPPLICABLE REQUIREMENTS

The startup, shut down, and malfunction opacity exclusion listed in 9VAC5-40-20 A.4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9VAC5-40-20 E, which state that

"At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Dc	New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units	The boilers (SG-1, SG-2 and SG-3) are not subject to NSPS Subpart Dc for boilers (with capacity greater than 10 MMBtu/hr, but less than 100 MMBtu/hr), since they were constructed before June 9, 1989.
40 CFR 60, Subpart IIII	New Source Performance Standards – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	The Cummins Diesel Fire Pump Engine (CP-99) is not subject to NSPS Subpart IIII because it was constructed prior to July 1, 2006.
40 CFR 63, Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	The MACT is not applicable, since the State Operating Permit (and Title V Permit) prohibits the use of chromium.
40 CFR 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	The subpart does not apply to the boilers (SG-1, SG-2 and SG-3) because they are authorized to use natural gas fuel only.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9VAC5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

Federal Enforceability

Article 1 (9VAC5-80-110 N) states that all terms and conditions in the Title V permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

Permit Expiration

This condition refers to the DEQ taking action on a permit application. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the Code of Virginia, and the “Department of Environmental Quality Agency Policy Statement No. 2-09”.

This general condition cites the Article that follows:

(For TV): Article 1 (9VAC5-80-50 et seq.), Part II of 9VAC5 Chapter 80. Federal Operating Permits for Stationary Sources]

This general condition cites the sections that follow:

9VAC5-80-80. Application

9VAC5-80-140. Permit Shield

9VAC5-80-150. Action on Permit Applications

Failure / Malfunction Reporting

Section 9VAC5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9VAC5-20-180 is from the general regulations. All affected facilities are subject to section 9VAC5-20-180 including Title V facilities. A facility may make a single report that meets the requirements of 9VAC5-20-180. The report must be made within four daytime business hours of discovery of the malfunction.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors meeting the requirements of 9VAC5-50-410 or 9VAC5-40-41.

This general condition cites the sections that follow:

9VAC5-40-41. Emissions Monitoring Procedures for Existing Sources

9VAC5-40-50. Notification, Records and Reporting

9VAC5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.

Permit Modification

This general condition cites the sections that follow:

9VAC5-80-50. Applicability, Federal Operating Permit for Stationary Sources
9VAC5-80-190. Changes to Permits
9VAC5-80-260. Enforcement
9VAC5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9VAC5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications
Located in Prevention of Significant Deterioration Areas
9VAC5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications
Locating in Nonattainment Areas

Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follows:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9VAC5-60-70. Designated Emissions Standards
9VAC5-80-110. Permit Content

CONFIDENTIAL INFORMATION

The permittee submitted confidential and non-confidential versions of their Title V renewal and modification application. The DEQ approved the basis of confidentiality for the confidential version. However, because of the confidential units, it was unnecessary to create two versions of the Title V permit. There is only one version of the Title V permit renewal (and Statement of Basis), and it does not contain any confidential information.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice from November 26, 2024 to December 26, 2024. The notice will be published in the Richmond-Times Dispatch newspaper on November 26, 2024.