



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

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STATEMENT OF LEGAL AND FACTUAL BASIS

H.L. Mooney Advanced Water Reclamation Facility
1851 Rippon Boulevard, Woodbridge, Virginia 22191
Permit No. NRO-71751

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 9 VAC 5 Chapter 80, Prince William County Service Authority has applied for a Title V Operating Permit for its H.L. Mooney Advanced Water Reclamation Facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Air Permit Writer: _____ Date: _____
K. Dean Gossett
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Air Permit Manager: _____ Date: _____
James B. LaFratta

Regional Director: _____ Date: _____
Thomas A. Faha

FACILITY INFORMATION

Permittee

Prince William County Service Authority
4 Complex Court
P.O. Box 2266
Woodbridge, Virginia 22195-2266

Facility

H.L. Mooney Advanced Water Reclamation Facility
1851 Rippon Boulevard
Woodbridge, Virginia 22191

County-Plant Identification Number: 51-153-00057

SOURCE DESCRIPTION

NAICS Code 221320 - Sewage Treatment Facilities

H.L. Mooney is a publically owned 24 million-gallon per day (MGD) (average volume) advanced water reclamation facility (AWRF), which incorporates preliminary, primary, secondary and tertiary treatment processes to remove pollutants from wastewater generated by residences and businesses in the eastern half of Prince William County. The plant utilizes a biological nutrient removal (BNR)-activated sludge process in conjunction with advanced (tertiary) treatment, which includes chemical addition and denitrification filters. The wastewater treatment process removes ninety-nine percent of the pollutants in the wastewater influent received by the facility. The residuals (settled and undigested solids and waste activated sludge) are dewatered using high-speed centrifuges and then incinerated in a fluidized bed incinerator (FBI). In addition the facility has a seven-hearth multiple hearth sludge incinerator (MHI), which is not currently in use. The inert ash from the incineration process is disposed of in the Prince William County landfill. Particulate matter and sulfur dioxide emissions from the FBI are controlled by a venturi scrubber and a tray tower scrubber that both vent through one stack. Particulate matter and sulfur dioxide emissions from the MHI are controlled by a cyclone, venturi scrubber and impingement scrubber.

The facility is located in Prince William County, which is classified as a marginal non-attainment area for the 2008 ozone standard.

The facility is not a Title V major source of any criteria pollutant or hazardous air pollutants (HAPs), but is a Title V source by rule, per 9 VAC 5 Chapter 40, Part II. Emission Standards for Sewage Sludge Incineration Units (Rule 4-55), promulgated August 15, 2012. This regulation incorporates the emission guidelines and compliance times for existing sewage sludge incineration units in accordance with 40 CFR 60, Subpart M. Both the facility's FBI and

MHI units are sewage sludge incinerators that commenced construction on or before October 14, 2010. Per Title V Permitting Regulation 9 VAC 5-80-110 A.2., for any source other than a major source subject to Title V permitting, the board shall include in the permit all applicable requirements that apply to emissions units that cause the source to be subject to this article. This Title V Permit only addresses requirements applicable to the FBI and MHI. The facility is also subject to 40 CFR 60 Subpart O, Standards of Performance for Sewage Treatment Plants and 40 CFR 61 Subpart E, National Emission Standard for Mercury.

The facility was initially permitted under a Minor NSR permit, issued on October 29, 1975 for the MHI. On July 9, 1990 a Minor NSR permit was issued to construct the FBI. On May 22, 2006 a Minor NSR was issued which combined the MHI and FBI permits and superseded both the October 29, 1975 and July 9, 1990 Minor NSR permits. On March 1, 2012 a Minor NSR was issued to construct two additional emergency generators. The facility is currently operating under a Minor NSR permit issued on October 2, 2014, which limits the pollutants of concern, NO_x to 69.1 tpy and CO to 99.4 tpy. In addition the Minor NSR permit issued on October 2, 2014 contains lbs/dry ton sludge burned limits on PM-10, SO₂, NO_x, CO, VOCs and Lead and lbs/day limits on Beryllium, Mercury and Vanadium.

The industry standard definition for dry ton of sludge is: dry ton of sludge = wet solids produced (wet tons) x % (decimal) solids.

To support the operation of the FBI and MHI and their associated air pollution control devices, the facility is equipped with various auxiliary systems, including three diesel engine driven emergency generators and fuel storage tanks, all of which are not addressed in this permit.

This Title V Permit is the initial such permit for this facility.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was last conducted on November 7, 2012. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any other state or federal applicable requirements at this time.

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EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Sludge Incinerators							
MHI	MHIS	Envirotech Multi-Hearth Sludge Incinerator (7 hearths)	48 dry tons/day	SWEMCO dust collector, Model# 56-HE	MCYC	PM	October 2, 2014
				VOP, Inc. venturi scrubber	MVENT	PM, SO2 & Acid Gas	
				VOP, Inc. impingement scrubber	MSCR	SO2 & Acid Gas	
FBI	FBIS	Hankin Fluidized Bed Incinerator	45 dry tons/day**	SWEMCO venturi scrubber	FVENT	PM	October 2, 2014
				SWEMCO tray cooler	FSCR	SO2 & Acid Gas	

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement

** Based on HHV of sludge at approximately 6,300 Btu/dry lb.

EMISSIONS INVENTORY

Annual emissions summarized in the following table are derived in part from the 2014 CEDS emission report. A copy of the report is included as Attachment A.

2014 Pollutant Emissions (FBI and MHI Total)	
Pollutant	Tons Emitted
Criteria Pollutants	
Particulate Matter (PM)	0.002
PM-10	0.002
PM-2.5	0.002
Nitrogen Oxides (NO _x)	10.66
Sulfur Dioxide (SO ₂)	0.595
Carbon Monoxide (CO)	3.947
Volatile Organic Compounds (VOC)	3.643
Lead (Pb)	0.001

EMISSION UNIT APPLICABLE REQUIREMENTS

Sewage Sludge Incinerators: Ref. Nos. MHI and FBI

Limitations

The following limitations are derived from the New Source Review permit issued March 1, 2012 (as amended October 2, 2014):

Condition 1 (NSR Condition 2):	Particulate Matter Emission Controls (FBI)
Condition 2 (NSR Condition 3)	Particulate Matter Emission Controls (MHI)
Condition 3(NSR Condition 4)	Fugitive Particulate Matter Emission (Ash Handling System) Controls (FBI)
Condition 4 (NSR Condition 5)	SO ₂ and acid Emission Controls (FBI)
Condition 5 (NSR Condition 6)	NO _x Emission Controls (FBI)
Condition 6 (NSR Condition 7)	VOC and CO Emission Controls (FBI)
Condition 7 (NSR Condition 14)	Product Throughput (FBI) *This is maximum rated capacity of unit
Condition 8 (NSR Condition 15)	Product Throughput (MHI) *This is maximum rated capacity of unit
Condition 9 (NSR Condition 16)	Approved Fuels (FBI)
Condition 10 (NSR Condition 17)	Approved Fuels (MHI)
Condition 11 (NSR Condition 18)	Fuel Specifications (FBI and MHI)
Condition 12 (NSR Condition 19)	Fuel Certification (FBI and MHI)
Condition 13 (NSR Condition 20)	40 CFR 60, Subpart O
Condition 14 (NSR Condition 26)	Emission Limits (MHI)
Condition 15 (NSR Condition 27)	Emission Limits (FBI)
Condition 16 (NSR Condition 28)	Annual Emission Limits (FBI and MHI)
Condition 17 (NSR Condition 29)	Visible Emission Limits (FBI and MHI)

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-50-80	Standards of Performance for Visible Emissions
9 VAC 5-50-90	Standards of Performance for Fugitive/Dust Emissions
9 VAC 5-50-260	BACT Standards for New and Modified Stationary Sources
9 VAC 5-50-400	Environmental Protection Agency Standards of Performance for New Stationary Sources
9 VAC 5-50-410	Designated Standards of Performance
9 VAC 5-60-60	Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants, General
9 VAC 5-60-70	Designated Emission Standards
9 VAC 5-40-8200, et.seq.	Emission Standards for Sewage Sludge Incineration Units (Rule 4-55)

The following Codes of Federal Regulations have been determined to be applicable:

- 40 CFR 60, Subpart O Standards of Performance for Sewage Treatment Plants
- The current mNSR permit (October 2, 2014) incorporates the applicable requirements of Subpart O, these conditions will be incorporated into the Title V permit.
 - Both the FBI and MHI did the performance test for PM required under Subpart O. The MHI did not test below the 0.75 lbs/ton standard and did not qualify for the reduced monitoring option listed in 40 CFR 60.153 (d), but did meet the standard listed in 40 CFR 60.152(a)(1) i.e. 1.3 lb/ton for PM emissions. The FBI did test below the 0.75 lbs/ton PM emission standard and did qualify for the reduced monitoring option listed in 40 CFR 60.153 (d).
- 40 CFR 61, Subpart E National Emissions Standard for Mercury
- The current mNSR permit (October 2, 2014) incorporates the 7.1 lb/day limit set forth in Subpart E, this condition will be incorporated in the Title V permit.
 - Initial testing of the sludge was undertaken to demonstrate compliance with the standard set in Part 61.52 (b), which the sludge met the standard.
 - The sludge is tested monthly for metals including mercury and the level of mercury does not exceed the standard set in Part 61.55.

Monitoring

Condition 18 requires that the permittee shall:

- Install, maintain, calibrate and continuously operate equipment that will measure and record the input sludge feed rate to the MHI and FBI.
- Install, maintain, calibrate and continuously operate equipment that will measure and record the oxygen percentage in the MHI and FBI exhaust streams.
- Install, maintain, calibrate and continuously operate equipment that will measure record the temperature in the MHI and FBI beds and outlet ducts.
- Install, maintain, calibrate and continuously operate equipment that will measure and record the differential pressure drop across the scrubbers for the MHI and FBI.
- Instructs the permittee that they must have constructed the MHI and FBI in a manner that access is provided to the sludge charged to the incinerators. That the permittee must take at least one grab sample per day of the sewage sludge fed to

the incinerators to test for daily moisture content and that records must be kept of that content.

- Instructs that if the MHI is re-started, the permittee must install, calibrate, maintain and operate a device for measuring the fuel flow to the incinerator.
- The permittee must install, maintain, calibrate and continuously operate a device to monitor the liquid flow rates of the scrubbers and data recorded a minimum of fifteen minutes for each hour the incinerator is operated.
- The permittee must install, maintain, calibrate and continuously operate a device on the FBI and MHI scrubbers to continuously measure the scrubber liquid pH. The data must be recorded at a minimum of fifteen minutes for each hour the incinerator is operated.
- Sets conditions for restarting the MHI if it has been out of service for longer than 12 months (currently the MHI has not been operated in several years), which include inspecting the air pollution control equipment for the unit.

The terms of this condition are derived from Condition 10 of the March 1, 2012 (as amended October 2, 2014) mNSR permit and incorporates the monitoring requirements of NSPS O Standards of Performance for Sewage Sludge Incinerators (40 CFR 60.153).

Condition 19 requires that the permittee shall:

- Visually observe the MHI and FBI and the associated control device monitors used to continuously measure oxygen, temperature, differential pressure and feed rate with a frequency of not less than once per day, or as recommended by the manufacturer.
- Keep a log of the observations.

The terms of this condition are derived from Condition 12 of the March 1, 2012 (as amended October 2, 2014) NSR permit and incorporates the monitoring requirements of NSPS O Standards of Performance for Sewage Sludge Incinerators (40 CFR 60.153).

Condition 20 creates a periodic monitoring requirement:

- Requires daily visible emissions observation when the FBI or MHI is operating; using a EPA Method 22-like procedure. The presence of visible emissions shall require the permittee to:
 - Take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
 - Conducts a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR Part 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 10 percent opacity or less (if the FBI is operating) or 20 percent or less (if the MHI is operating). If any of the observations exceed the

opacity limitation, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary.

- The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, which incinerator was operating, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the day, it shall be noted in the log book.

The monitoring and recordkeeping requirements in Condition 20 have been created to meet Part 70 periodic monitoring requirements for the limits set in Condition 17. The terms of this condition are derived from 9 VAC 5-80-110 E and 9 VAC 5-80-110 K.

Recordkeeping & Reporting

Condition 21 requires the permittee to:

Maintain records of emission data and operating parameters as necessary to demonstrate compliance with the permit. The records shall include:

- a. Daily throughput (calculated hourly) of sludge.
- b. Annual throughput of sludge, calculated monthly.
- c. Fuel supplier certifications
- d. Monthly NO_x and CO emission calculations to verify compliance with emission limits set in the permit.
- e. Daily log book of VEE observations
- f. Operation and monitoring records for the air pollution control devices.
- g. Maintenance scheduled and unscheduled.
- h. Operator training.
- i. Results of all tests (stack, sludge, VEE and performance).
- j. Other records as may be required.

The terms of this condition are derived from Condition 41 of the March 1, 2012 (as amended October 2, 2014) mNSR permit.

Condition 22

- Requires the permittee to submit, semi-annual reports that contain the items listed in Condition 21.

The terms of this condition are derived from Condition 43 of the March 1, 2012 (as amended October 2, 2014) mNSR permit. Condition 43 was crafted to meet the semi-annual reports required by NSPS Subpart O (40 CFR Part 60.155).

Testing

Condition 23 provides:

- The facility must stack test the sewage sludge incinerators to demonstrate compliance with the emission limits contained in Condition 14 and 15.
- This performance testing may be in conjunction with the compliance demonstration required in Condition 31.
- The details of the test shall be worked out with the Regional Compliance Manager of the DEQ's NRO.

The terms of this condition are derived from 9 VAC 5-40-30 and 9 VAC 5-80-110.

Conditions 24, 25 and 26 provide:

- The testing stipulations for the facility.
- These conditions require the MHI and FBI to be modified, if necessary, so as to allow that appropriate emissions testing can be conducted.
- Sampling ports shall be provided when requested and safe sampling platforms.
- The DEQ has the right to request additional performance testing to demonstrate compliance with emission limits in the permit.
- The DEQ has the right to request additional VEEs of the MHI and FBI to demonstrate compliance with the visible emissions limit in the permit.

The terms of this condition are derived from Conditions 35, 37 and 38 of the March 1, 2012 (as amended October 2, 2014) mNSR permit.

EMISSION STANDARDS FOR SEWAGE SLUDGE INCINERATORS – REQUIREMENTS (Rule 4-55)

Sewage Sludge Incinerators: Ref. Nos. MHI and FBI

The two sewage sludge incinerator units (Ref. Nos. MHI and FBI) located at H.L. Mooney are subject to the requirements of 9 VAC 5 Chapter 40, Part II, Article 55 (Rule 4-55) which establishes emission standards for existing sewage sludge incineration (SSI) units. The following applicable requirements from Rule 4-55 are incorporated into the Title V:

Limitations

Conditions 27 and 28 incorporate:

- emission limits and standards for the FBI specified in Table 2 of 40 CFR 60, Subpart Mmmm (as IBR in Rule 4-55).
- emission limits and standards for the MHI specified in Table 3 of 40 CFR 60, Subpart Mmmm (as IBR in Rule 4-55).

This condition incorporates by reference requirements from 9 VAC 5-40-8220, 40 CFR 60.5165, 40 CFR 60.5180 and Table 2 and 3 of 40 CFR 60 Subpart Mmmm.

Condition 29 sets:

- A visible emissions limit for any ash conveying system (including transfer points) for the FBI and MHI.
- Provides the testing method which must be used to show compliance.

This condition incorporates by reference requirements from 9 VAC 5-40-8240 and 40 CFR 60.5165 and Table 2 and 3 of 40 CFR 60 Subpart Mmmm.

Operator Training and Qualifications

Condition 30 prescribes:

- The operator training and qualification requirements.
- When the operator training course must be completed.
- How to obtain an operator qualification.
- How to maintain an operator qualification.
- How to renew a lapsed operator qualification.
- What must be done if all the qualified operators are temporarily not accessible.
- The required site specific documentation.

This condition incorporates by reference requirements from 9 VAC 5-40-8270 and 40 CFR 60.5130 through 40 CFR 60.5160.

Compliance, Performance Testing and Setting Operating Limits

Condition 31 prescribes:

- When the permittee must meet the new operating limits and requirements.
- How the permittee may reduce their compliance testing.
- The process for using a continuous emissions monitoring system.

This condition incorporates by reference requirements from 9 VAC 5-40-8310 and 40 CFR 60.5170, 40 CFR 60.5175, 40 CFR 60.5185, 40 CFR 60.5190, 40 CFR 60.5205 (a & b), CFR 60.5220, 40 CFR 60.5225 and Tables 2 and 3 of 40 CFR Part 60 Subpart Mmmm.

Condition 32 prescribes:

- When the permittee must do an initial compliance test for fugitive ash.
- The methodology which must be used to do compliance test.

This condition incorporates by reference requirements from 9 VAC 5-40-8310, 40 CFR 60.5185, 40 CFR 60.5200(g)).

Condition 33 prescribes:

- The permittee must establish (or re-establish) site-specific operating limits during its initial performance test as required in 40 CFR 60.185.
- The permittee must meet the requirements in 40 CFR 60.5210(d) to confirm the operating limits or re-establish new operating limits using operating data recorded during any performance test or performance evaluation required in 40 CFR 60.5205.
- The permittee must follow the data measurement and recording frequencies and data averaging times specified in Table 4 of 40 CFR Part 60 Subpart Mmmm or as established in 40 CFR 60.5175

This condition incorporates by reference requirements from 9 VAC 5-40-8290, 40 CFR 60.5175, 40 CFR 60.185 and 40 CFR 60.5190.

Condition 34 prescribes:

- How and when the permittee must demonstrate continuous compliance with the emission limits and standards.
- How the permittee must demonstrate continuous compliance with the operating limits.

This condition incorporates by reference requirements from 9 VAC 5-40-8300, 40 CFR 60.5205, 40 CFR 60.5210 and 40 CFR 60.5225.

Initial and Annual Air Pollution Control Device (APCD) Inspections

Condition 35 prescribes:

- The timeframe for the initial APCD inspection for the FBI and MHI.
- What a APCD inspection must consist of.
- The timeframe for when new APCDs must be inspected.
- Timeframe for when APCD repairs following initial inspection must be completed by.

This condition incorporates by reference requirements from 9 VAC 5-40-8300, 40 CFR 60.5195 and 40 CFR 60.5220(c).

Condition 36 prescribes:

- The timeframe for annual inspection of each APCD for the FBI and MHI.
- Timeframe for when APCD repairs following annual inspection must be completed by.

This condition incorporates by reference requirements from 9 VAC 5-40-8310 and 40 CFR 60.5215.

Monitoring

Condition 37 prescribes:

- That site-specific monitoring plans must be developed for each continuous monitoring system and submitted to the Regional Air Compliance Manager of the DEQ's NRO according to requirements in 40 CFR 60.5200 (a), (b) and (c).
- The permittee must submit a site-specific monitoring plan for its ash handling system.
- These plans must be submitted for approval at least 60 days prior to initial performance evaluation of continuous monitoring systems.

This condition incorporates by reference requirements from 9 VAC 5-40-8310, 40 CFR 60.5200 (a), (b) and (c) and 40 CFR 60.5200 (d), (f) and (g).

Condition 38 prescribes:

- An updated monitoring plan must be submitted if there are any changes in monitoring procedures or if there is a process change.
- The permittee must submit monitoring plans involving alternate monitoring requirements to demonstrate compliance.
- Alternate monitoring plans must be submitted for approval no later than the notification of the initial performance test.

This condition incorporates by reference requirements from 9 VAC 5-40-8310, 40 CFR 60.5200 (h) and 40 CFR 60.5200 (e).

Reports and Notifications

Condition 39 prescribes:

- When notifications of Final Achievement of Increments of Progress must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.
- What should be included in the Achievement of Increments of Progress notification.

This condition incorporates by reference requirements from 9 VAC 5-40-8280, 40 CFR 60.5035, 40 CFR 60.5090, and Table I of 40 CFR Part 60 Subpart MMMM.

Condition 40 prescribes:

- When the Initial Compliance Report must be submitted to the Regional Air Compliance Manager of the DEQ's NRO and what must be included in that report.
- When the Annual Compliance Report must be submitted to the Regional Air Compliance Manager of the DEQ's NRO and what must be included in that

report.

This condition incorporates by reference requirements from 9 VAC 5-40-8320, 40 CFR 60.5235(b) & (c) and Table 6 of 40 CFR Part 60 Subpart Mmmm.

Condition 41 prescribes:

- When a Deviation Report must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.
- When a Qualified Operator Deviation Report must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.523(d), (e) and (h).

Condition 42 prescribes:

- When a Force Majeure Report must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.
- What a force majeure consists of.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.5235(f).

Condition 43 prescribes:

- When a notification of intent to conduct a performance test must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.
- When a notification of rescheduled performance test is due.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.5235(g).

Condition 44 prescribes:

- When a notification to start or stop use of a continuous monitoring system used to demonstrate compliance with an emission limit must be submitted to the Regional Air Compliance Manager of the DEQ's NRO.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.5235(g).

Condition 45 prescribes:

- When a relative accuracy test audit data and performance test must be submitted.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.5235(h).

Condition 46 prescribes:

- That annual or semi-annual reporting dates may be changed with the agreement of the Regional Air Compliance Manager of the DEQ's NRO.
- Where to find the procedures to seek such approval of date changes.

This condition incorporates by reference requirements from 9 VAC 5-40-8320 and 40 CFR 60.5235(i).

Recordkeeping

Condition 47 requires:

- That the permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit and to meet the requirements of 40 CFR 60.5230
- These records shall include, but are not limited to:
 - Documentation of operator training and operator training procedures as specified under 40 CFR 60.5230(c).
 - Copies of final control plans and any additional notifications associated with the Permittee's Increments of Progress.
 - Performance test reports, initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable.
 - Records of the results of initial and annual air pollution control device inspections.
 - Monitoring plans and performance evaluations for continuous monitoring systems.
 - Records of malfunctions and actions taken to minimize emissions.
 - Annual compliance reports.
 - Deviation reports.
 - Force majeure and other reports.
 - Equipment specifications and operation and maintenance requirements.
Equipment specifications and related operation and maintenance

- requirements received from vendors for the incinerator, emission controls and monitoring equipment.
- Continuous monitoring data.
- Records of inspections, calibrations and validation checks of monitoring devices.
- Other records as may be required by the Air Compliance Manager, Northern Regional Office.
- That these records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.

This condition incorporates by reference requirements from 9 VAC 5-40-8320, 40 CFR 60.5230, and 40 CFR 60.5235.

FACILITY WIDE CONDITIONS

Testing

Conditions 48 and 49

The Title V permit incorporates by reference portions of 9 VAC 5-50-30 and 9 VAC 5-80-110, which requires the facility to be constructed in a manner, that at any time, would allow emissions testing using appropriate methods and, upon request of the DEQ, test ports to be installed at appropriate locations.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal-operating permit 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.

Permit Expiration – Conditions 52 through 57

These conditions refer to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. 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 cite(s) the Article(s) that follow:

Article 1 (9 VAC 5-80-50 et seq.) Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources, 9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

General Condition 51-56 cites the sections that follow:

9 VAC 5-80-80 B, C, and F

9 VAC 5-80-110 D

9 VAC 5-80-170 B

Failure/Malfunction Reporting – Conditions 63 through 64

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four daytime hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. A Title V facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41 Emissions Monitoring Procedures for Existing Sources

9 VAC 5-40-50. Notification, Records and Reporting (*for existing sources*)

9 VAC 5-50-50. Notification, Records and Reporting (*for new sources*)

This general condition contains a citation from the Code of Federal Regulations as follows: 40 CFR 0.13 (h). Monitoring Requirements.

Permit Modification – Condition 68

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit for Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits for New and Modified Stationary Sources

9 VAC 5-80-1605. Applicability, Permits for Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

Malfunction as an Affirmative Defense – Conditions 82 through 85

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The

malfunction requirements are listed in General Conditions 82 through 85. For further explanation see the comments on general condition 63.

General condition 85. cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Asbestos Requirements – Condition 89

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 follow:

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:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State:

9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions

9 VAC 5 Chapter 60, Part II, Article 5: Emission Standards for Toxic Pollutants from New and Modified Sources

9 VAC 5 Chapter 20, Part II, Air Quality Programs: Registration

FUTURE APPLICABLE REQUIREMENTS

None were identified by the applicant.

INAPPLICABLE REQUIREMENTS

40 CFR 64, Compliance Assurance Monitoring (CAM) – H.L. Mooney is not a major source, but a “Title V by Rule” facility and therefore the CAM regulation is not applicable.

40 CFR 63, Subpart VVV, National Emission Standards for Hazardous Air Pollutants for Publicly Owned Treatment Works – H.L. Mooney is not a major source of HAPS, so therefore Subpart VVV is not applicable.

40 CFR 61, Subpart C, National Emissions Standards for Beryllium – H.L. Mooney is not a beryllium processing facility, and while the facility does have an incinerator, that incinerator’s purpose is not for processing/destruction of beryllium.

COMPLIANCE PLAN

No compliance plan was included in the application or in the permit.

INSIGNIFICANT EMISSION UNITS

H.L. Mooney is a Title V by rule and per 9 VAC 5-80-110 A.2: For any source other than a major source subject to this article, the board shall include in the permit all applicable requirements that apply to emissions units that cause this source to be subject to this article. The Title V only addresses requirements applicable to the FBI and MHI.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the permit application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in *The Prince William Today*, in Woodbridge, Virginia, on July 3, 2015. The EPA was sent a copy of the draft permit and notified of the public notice on July 1, 2015. All persons on the Title V mailing list were sent a copy of the public notice by either electronic mail or in letters on July 2, 2015. Maryland and the District of Columbia were sent a copy of the public notice by either electronic mail or in letters on July 2, 2015.

The 30-day public comment period ran from July 3, 2015 through August 3, 2015.

ATTACHMENTS

Attachment A - 2014 CEDS Facility Pollutant Emissions Report