PERMIT FORMS
PURSUANT TO
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR PERMITS
FORM 7 APPLICATION

NEW SOURCE REVIEW PERMITS
and STATE OPERATING PERMITS

VIRGINIA DEPARTMENT OF
ENVIRONMENTAL QUALITY

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WHAT PAGES DO I FILL OUT FOR MY FACILITY?

- ALL NEW SOURCES AND MAJOR MODIFICATIONS:
  - **Page 5** - Local Governing Body Certification Form

- ALL NEW AND MODIFIED SOURCES (EXCEPT FOR TRUE MINORS):
  - **Page 6** - 2019 Air Permit Application Fee Form

- ALL PERMITS:
  - **Page 9** - Document Certification Form
  - **Page 10** - General Information Form

- ALL NEW AND MODIFIED MAJOR SOURCES: **(PSD MAJOR SOURCES ONLY)**
  - **Page 27** - Proposed Permit Limits For Greenhouse Gases (GHGs) On Mass Basis
  - **Page 28** - Proposed Permit Limits For Greenhouse Gases (GHGs) On CO_2 Equivalent Emissions (CO_2e) Basis
    Page 29 - Baseline Actual Emissions (BAE) For Criteria Pollutants
  - **Page 30** - Baseline Actual Emissions (BAE) For Greenhouse Gases (GHGs) Pollutant Emissions On Mass Basis
  - **Page 31** - Baseline Actual Emissions (BAE) For Greenhouse Gases (GHGs) Pollutant Emissions On CO2 Equivalent Emissions (CO2e) Basis

In Addition, Complete the Following Pages If You Operate or Plan to Operate any the Following Processes or Types of Equipment:

- FOR BOILERS, EXTERNAL COMBUSTION UNITS, TURBINES:
  - **Page 12** - Fuel Burning Equipment: (Boilers, Turbines, Kilns, And Other External Combustion Units)
  - **Page 21** - Air Pollution Control And Monitoring Equipment (If Applicable)
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information (If Applicable)
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits For Toxic Pollutants/HAPS
  - **Page 26** - Proposed Permit Limits For Other Regulated Pollutants
  - **Page 32** - Operating Periods

- FOR STATIONARY COMBUSTION ENGINES:
  - **Page 13** - Stationary Internal Combustion Engines
  - **Page 21** - Air Pollution Control And Monitoring Equipment (If Applicable)
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information (If Applicable)
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
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- FOR INCINERATORS:
  - **Page 14** - Liquid and/or Solid Waste Incinerators: (Not An Air Emissions Control Device)
  - **Page 21** - Air Pollution Control And Monitoring Equipment
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits for Toxic Pollutants/HAPS
  - **Page 26** - Proposed Limits For Other Regulated Pollutants
    Page 32 - Operating Periods

- FOR SURFACE COATING OPERATIONS
  - **Page 15** - Processing, Manufacturing, Surface Coating and Degreasing Operations
  - **Page 16** - Inks, Coatings, Stains and Adhesives
  - **Page 21** - Air Pollution Control And Monitoring Equipment (If Applicable)
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information (If Applicable)
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits for Toxic Pollutants/HAPS
  - **Page 26** - Proposed Limits For Other Regulated Pollutants
  - **Page 32** - Operating Periods

- FOR QUARRY OPERATIONS:
  - **Page 15** - Processing, Manufacturing, Surface Coating and Degreasing Operations
  - **Page 21** - Air Pollution Control And Monitoring Equipment
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants

- FOR VOC/PETROLEUM STORAGE TANKS:
  - **Pages 17 and 18** - Volatile Organic Compound (VOC)/Petroleum Liquid Storage Tanks
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits for Toxic Pollutants/HAPS
  - **Page 26** - Proposed Limits For Other Regulated Pollutants
  - **Page 32** - Operating Periods

- FOR LOADING RACKS AND OIL WATER SEPARATORS:
  - **Page 19** - Loading Racks And Oil-Water Separators
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits for Toxic Pollutants/HAPS
  - **Page 26** - Proposed Limits For Other Regulated Pollutants
  - **Page 32** - Operating Periods

- FOR FUMIGATION OPERATIONS:
  - **Page 20** - Fumigation Operations

- FOR ALL OTHER SOURCES:
  - **Page 15** - Processing, Manufacturing, Surface Coating and Degreasing Operations
  - **Page 21** - Air Pollution Control And Monitoring Equipment (If Applicable)
  - **Page 22** - Air Pollution Control Equipment – Supplemental Information (If Applicable)
  - **Page 23** - Stack Parameters And Fuel Data
  - **Page 24** - Proposed Permit Limits For Criteria Pollutants
  - **Page 25** - Proposed Permit Limits for Toxic Pollutants/HAPS (If Applicable)
  - **Page 26** - Proposed Limits For Other Regulated Pollutants (If Applicable)
  - **Page 32** - Operating Periods

****NOTE:** ***Complete only the applicable pages in Form 7.*** If any pages are unused, the facility does not need to submit the unused pages with the application.

Source-Specific Form 7 Applications

There are **specific** Form 7 Applications available on the DEQ website for the sources listed below:

- Asphalt plants (Form 7A)
- Crematories (Form 7B)
- Concrete Batch Plant (Form 7C)

Return to "What Pages Do I Fill Out For My Facility?"

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR PERMITS
LOCAL GOVERNING BODY CERTIFICATION FORM

Business Entity Name (same name on file with the Virginia SCC) **NASA**	Registration Number: **40909**
Applicant's Name: **NASA Goddard Space Flight Center, Wallops Flight Facility**	Name of Contact Person at the site: **Mr. Theodore J. Meyer**
Applicant's Mailing address: **Attn: Mr. Theodore J. Meyer** **NASA Wallops Flight Facility** **Mailstop: 250.W** **Wallops Island, VA 23337**	Contact Person Telephone Number: **(757) 824-1987**
Facility location (also attach map): **Route 803, Wallops Island, VA 23337**	
Facility type, and list of activities to be conducted: **Space Flight Test Facility**	

The applicant is in the process of completing an application for an air pollution control permit from the Virginia Department of Environmental Quality. In accordance with § 10.1-1321.1. Title 10.1, Code of Virginia (1950), as amended, before such a permit application can be considered complete, the applicant must obtain a certification from the governing body of the county, city or town in which the facility is to be located that the location and operation of the facility are consistent with all applicable ordinances adopted pursuant to Chapter 22 (§§ 15.2-2200 et seq.) of Title 15.2. The undersigned requests that an authorized representative of the local governing body sign the certification below.

Applicant's signature: T. J. Meyer	Date: 3-4-2020

The undersigned local government representative certifies to the consistency of the proposed location and operation of the facility described above with all applicable local ordinances adopted pursuant to Chapter 22 (§§15.2-2200 et seq.) of Title 15.2. of the Code of Virginia (1950) as amended, as follows:

(**Check one block**)

☐ The proposed facility is **fully consistent** with all applicable local ordinances.

☐ The proposed facility is **inconsistent** with applicable local ordinances; see attached information.

Signature of authorized government representative:	Date:
Type or print name:	Title:
County, city or town:	

[THE LOCAL GOVERNMENT REPRESENTATIVE SHOULD FORWARD THE SIGNED CERTIFICATION TO THE APPROPRIATE DEQ REGIONAL OFFICE AND SEND A COPY TO THE APPLICANT.]

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY – 2019 AIR PERMIT APPLICATION FEES

VALID JANUARY 1, 2020 TO DECEMBER 31, 2020

Air permit applications are subject to a fee and fee are adjusted January 1 of each calendar year. **The fee does not apply to administrative amendments or** true minor sources. Applications will be considered incomplete if the proper fee is not paid and will not be processed until full payment is received. **Air permit application fees are not refundable. Please contact the Regional Air Permit Manager if you are unsure of your fee amount.**

Step 1: Send this **ORIGINAL** form and a check (or money order) payable to "Treasurer of Virginia" to:

Department of Environmental Quality **Receipts Control** **P.O. Box 1104** **Richmond, VA 23218**	**OR** **FOR OVERNIGHT** **DELIVERY**	**Department of Environmental Quality** **Receipts Control** **1111 East Main Street, Suite 1400** **Richmond, VA 23219**

Step 2: Send a **COPY** of this form with the permit application to the appropriate **DEQ Regional Office**

Step 3: Retain a copy for your records. Questions should be directed to the DEQ regional office where the application will be submitted

COMPANY NAME:	**NASA**	**FIN:**	**51-001-00031**
COMPANY REPRESENTATIVE:	**Mr. Theodore J. Meyer**	**REG. NO.**	**40909**
MAILING ADDRESS:	Attn: Mr. Theodore J. Meyer NASA Wallops Flight Facility Mailstop: 250.W Wallops Island, VA 23337		
BUSINESS PHONE:	**(757) 824-1987**	**FAX:**	**(757) 824-1819**
FACILITY NAME:	**NASA Goddard Space Flight Center, Wallops Flight Facility**		
PHYSICAL LOCATION:	Route 803, Wallops Island, VA 23337		

PERMIT ACTIVITY AIR PERMIT APPLICATION FEES ARE NOT REFUNDABLE **Please contact the Regional Air Permit Manager if you are unsure of your fee amount**	**APPLICATION FEE AMOUNT**	**CHECK ONE**
Sources subject to Title V permitting requirements:		
• Major NSR permit (Articles 7, 8, 9)	$70,512	
• Major NSR permit amendment (Articles 7, 8, 9) (except administrative)*	$11,192	
• State major permit (Article 6)	$27,981	
• Title V permit (Articles 1, 3)	$39,173	
• Title V permit renewal (Articles 1, 3)	$16,788	
• Title V permit modification (Articles 1, 3)	$4,476	
• Minor NSR permit (Article 6)	$5,596	
• Minor NSR amendment (Article 6) (except administrative)*	$2,798	
• State operating permit (Article 5)	$11,192	
• State operating permit amendment (Article 5) (except administrative)*	$4,476	
Sources subject to Synthetic Minor permitting requirements:		
• Minor NSR permit (Article 6)	$3,357	
• Minor NSR amendment (Article 6)* (except administrative)*	$1,119	
• State operating permit (Article 5)	$5,596	
• State operating permit amendment (Article 5)* (except administrative)*	$2,798	x

*AIR PERMIT APPLICATION FEES DO NOT APPLY TO ADMINISTRATIVE AMENDMENTS

DEQ OFFICE TO WHICH PERMIT APPLICATION WILL BE SUBMITTED (check one)

☐ SWRO/Abingdon	☐ NRO/Woodbridge	☐ PRO/Richmond	**FOR DEQ USE ONLY** **Date:** _____ **DC #:** _____
☐ VRO/Harrisonburg	☐ BRRO/Roanoke	☒ TRO/Virginia Beach	**Reg. No.:** _____

Return to "What Pages Do I Fill Out For My Facility?"

APPLICATION FEE FORM DEFINITIONS:

Administrative amendment – An administrative change to a permit issued pursuant to Article 1 (9 VAC 5-80-50 et seq.), Article 3 (9 VAC 5-80-360 et seq.), Article 5 (9 VAC 5-80-800 et seq.), Article 6 (9 VAC 5-80-1100 et seq.), Article 7 (9 VAC 5-80-1400 et seq.), Article 8 (9 VAC 5-80-1605 et seq.), or Article 9 (9 VAC 5-80-2000 et seq.) of 9 VAC 5 Chapter 80. Administrative amendments include, but are not limited to, the following:

- Corrections of typographical or any other error, defect or irregularity which does not substantially affect the permit,
- Identification of a change in the name, address, or phone number of any person identified in the permit, or of a similar minor administrative change at the source,
- Change in ownership or operational control of a source where the board determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the board.

Major new source review permit (Major NSR permit) – A permit issued pursuant to Article 7 (9 VAC 5-80-1400 et seq.), Article 8 (9 VAC 5-80-1605 et seq.), or Article 9 (9 VAC 5-80-2000 et seq.) of 9 VAC 5 Chapter 80. **For purposes of fees, the Major NSR permit also includes applications for projects that are major modifications.**

- An Article 7 permit is a preconstruction review permit (case-by-case Maximum Achievable Control Technology (MACT) determination) for the construction or reconstruction of any stationary source or emission unit that has the potential to emit, considering controls, 10 tons per year or more of any individual hazardous air pollutant (HAP) or 25 tons per year or more of any combination of HAPs and EPA has not promulgated a MACT standard or delisted the source category.
- An Article 8 permit is for a source (1) with the potential to emit over 250 tons per year of a single criteria pollutant OR (2) is in one of the listed source categories under 9 VAC 5-80-1615 and has the potential to emit over 100 tons per year of any criteria pollutant OR (3) with the potential to emit over 100,000 tons per year of CO_2 equivalent (CO_2e) (9 VAC 5-85 Part III). PSD permits are issued in areas that are in attainment of the National Ambient Air Quality Standards.
- An Article 9 permit is a preconstruction review permit for areas that are in nonattainment with a National Ambient Air Quality Standard (NAAQS). Nonattainment permits are required by any major new source that is being constructed in a nonattainment area and is major for the pollutant for which the area is in nonattainment. Nonattainment permitting requirements may also be triggered if an existing minor source makes a modification that results in the facility being major for the pollutant for which the area is in nonattainment. A major source is any source with potential to emit over 250 tons per year of a single criteria pollutant or is in one of the listed source categories under 9 VAC 5-80-2010 and the potential to emit over 100 tons per year of any criteria pollutant. However, if any area is in nonattainment for a specific pollutant, the major source threshold may be lower for that pollutant. For example, sources locating in the Northern Virginia Ozone Nonattainment Area which are part of the Ozone Transport Region would be a major source if they have the potential to emit more than 100 tons per year of NO_X and/or 50 tons per year of VOC regardless of source category. Nonattainment permits do not require an air quality analysis but require a source to control to the Lowest Achievable Emission Rate (LAER) and to obtain offsets.

Major NSR permit amendment – A change to a permit issued pursuant to Article 7 (9 VAC 5-80-1400 et seq.), Article 8 (9 VAC 5-80-1605 et seq.), or Article 9 (9 VAC 5-80-2000 et seq.) of 9 VAC 5 Chapter 80. **Only minor amendments and significant amendments are included in this category.**

Minor new source review permit (Minor NSR permit) – A permit to construct and operate issued under Article 6 (9 VAC 5-80-1100 et seq.) of 9 VAC 5 Chapter 80. Minor NSR permits are 1) categorically required; or 2) issued to sources whose uncontrolled emission rate for a regulated criteria pollutant is above exemption thresholds and permitting allowables are below Title V thresholds, and/or 3) issued to sources whose potential to emit for a toxic pollutant is above state toxic exemption thresholds and permitting allowables are below Title V thresholds. The minor NSR permit can be used to establish synthetic minor limits for avoidance of state major, PSD and/or Title V permits. **For purposes of fees, the Minor NSR permit also includes exemption applications and applications for projects at existing sources.**

Minor NSR amendment - A change to a permit issued pursuant to Article 6 (9 VAC 5-80-1100 et seq.) of 9 VAC 5 Chapter 80. **Only minor amendments and significant amendments are included in this category.**

Sources subject to Synthetic Minor permitting requirements - Stationary sources whose potential to emit exceeds the Title V threshold (100 tons per year of a criteria pollutant, 10/25 tpy of HAPs, and/or 100,000 tpy CO_2e) but have taken federally enforceable limits, either through a state operating permit or a minor NSR permit, to avoid Title V permit applicability.

Sources subject to Title V permitting requirements – Stationary sources that have a potential to emit above the Title V thresholds or are otherwise applicable to the Title V permitting program.

State major permit – A permit to construct and operate issued under Article 6 (9 VAC 5-80-1100 et seq.) of 9 VAC 5 Chapter 80. State major permits are for facilities that have an allowable emission rate of more than 100 tons per year, but less than 250 tons per year, of any criteria pollutant and are not listed in the 28 categories under "major stationary source" as defined in 9 VAC 5-80-1615.

State operating permit (SOP) – A permit issued under Article 5 (9 VAC 5-80-800 et seq.) of 9 VAC 5 Chapter 80. SOPs are most often used by stationary sources to establish federally enforceable limits on potential to emit to avoid major New Source Review permitting (PSD and Nonattainment permits), Title V permitting, and/or major source MACT applicability. SOPs can also be used to combine multiple permits from a stationary source into one permit or to implement emissions trading requirements. The State Air Pollution Control Board, at its discretion, may also issue SOPs to cap the emissions of a stationary source or emissions unit causing or contributing to a violation of any air quality standard or to establish a source-specific emission standard or other requirement necessary to implement the federal Clean Air Act or the Virginia Air Pollution Control Law.

SOP permit amendment - A change to a permit issued pursuant to Article 5 (9 VAC 5-80-800 et seq.) of 9 VAC 5 Chapter 80. **Only minor amendments and significant amendments are included in this category**.

Title V permit – A federal operating permit issued pursuant to Article 1 (9 VAC 5-80-50 et seq.) or Article 3 (9 VAC 5-80-360 et seq.) of 9 VAC 5 Chapter 80. Facilities which (1) have the potential to emit of air pollutants above the major source thresholds, listed in 9 VAC 5-80-60 OR (2) are area sources of hazardous air pollutants, not explicitly exempted by EPA OR (3) have the potential to emit over 100,000 tons per year of CO_2 equivalent (CO_2e) (9 VAC 5-85 Part III), are required to obtain a Title V permit. For purposes of fees, the Title V permit also includes Acid Rain (Article 3) permit applications.

Title V permit modification - A change to a permit issued pursuant to Article 1 (9 VAC 5-80-50 et seq.) or Article 3 (9 VAC 5-80-360 et seq.) of 9 VAC 5 Chapter 80. Only minor modifications and significant modifications are included in this category.

Title V permit renewal – A renewal of a Title V permit pursuant to Article 1 (9 VAC 5-80-50 et seq.) of 9 VAC 5 Chapter 80. Title V permits are renewed every 5 years and a renewal application must be submitted to the regional office no sooner than 18 months and no later than 6 months prior to expiration of the Title V permit. For purposes of fees, the Title V permit renewal also includes Acid Rain (Article 3) permit renewal applications.

True minor source – A source that does not have the physical or operational capacity to emit major amounts (even if the source owner and regulatory agency disregard any enforceable limits). For further information regarding the definition of a true minor source, see DEQ's website.

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AIR PERMIT APPLICATION
CHECK ALL PAGES ATTACHED AND LIST ALL ATTACHED DOCUMENTS

___ Local Government Certification Form, Page 5
x Application Fee Form, Pages 6-8
x Document Certification Form, Page 9
x General Information, Pages 10-11
x Fuel Burning Equipment, Page 12
x Stationary Internal Combustion Engines, Page 13
___ Incinerators, Page 14
x Processing, Page 15
___ Inks, Coatings, Stains, and Adhesives, Page 16
x VOC/Petroleum Storage Tanks, Pages 17-18
___ Loading Rack and Oil-Water Separators, Page 19
___ Fumigation Operations, Page 20
___ Air Pollution Control and Monitoring Equipment, Page 21
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x Stack Parameters and Fuel Data, Page 23
x Proposed Permit Limits for Criteria Pollutants, Page 24
x Proposed Permit Limits for Toxic Pollutants/HAPs, Page 25
x Proposed Permit Limits for Other Reg. Pollutants, Page 26
___ Proposed Permit Limits for GHGs on Mass Basis, Page 27
___ Proposed Permit Limits for GHGs on CO_2e Basis, Page 28
___ BAE for Criteria Pollutants, Page 29
___ BAE for GHGs on Mass Basis, Page 30
___ BAE for GHGs on CO_2e Basis, Page 31
x Operating Periods, Page 32

___ ATTACHED DOCUMENTS:
___ Map of Site Location
___ Facility Site Plan
___ Process Flow Diagram/Schematic
___ MSDS or CPDS Sheets
___ Estimated Emission Calculations
___ Stack Tests
___ Air Modeling Data
___ Confidential Information (see Instructions)
___ BACT Analysis
X Updated Equipment List
x Estimated PTE Calculations

Check added form sheets above; also indicate the number of copies of each form in blank provided.

DOCUMENT CERTIFICATION FORM

I certify under penalty of law that this document and all attachments [as noted above] were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I certify that I understand that the existence of a permit under [Article 6 of the Regulations] does not shield the source from potential enforcement of any regulation of the board governing the major NSR program and does not relieve the source of the responsibility to comply with any applicable provision of the major NSR regulations.

SIGNATURE: Theodore J. Meyer — DATE: 3-4-2020

NAME: Theodore J. Meyer — REGISTRATION NO: 40909

TITLE: Associate Chief, Medical & Environmental Management Division — COMPANY: NASA Goddard Space Flight Center, Wallops Flight Facility

PHONE: (757)824-1987 — ADDRESS: Wallops Island, VA 23337

EMAIL: theodore.j.meyer@nasa.gov

References: Virginia Regulations for the Control and Abatement of Air Pollution (Regulations), 9VAC5-20-230B and 9VAC5-80-1140E.

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GENERAL INFORMATION

Person Completing Form: Kathleen Moxley	Date:	Registration Number: 40909
Company and Division Name: NASA Goddard Space Flight Center		FIN: 51-001-00031
Mailing Address: Medical Environmental Management Division, Greenbelt, MD 20771		
Exact Source Location – Include Name of City (County) and Full Street Address or Directions: 8800 Greenbelt Road		
Telephone Number: (301) 286-0717	No. of Employees:	Property Area at Site:
Person to Contact on Air Pollution Matters – Name and Title: Kathleen Moxley Environmental Engineer	Phone Number: 301-286-0717 Fax: 301-286-1745 Email: Kathleen.moxley@nasa.gov	
Latitude and Longitude Coordinates **OR** UTM Coordinates of Facility:		

Reason(s) for Submission (Check all that apply):

☐ State Operating Permit — This permit is applied for pursuant to provisions of the Virginia Administrative Code, 9 VAC 5 Chapter 80, Article 5 (SOP)

☐ New Source
☐ Modification of a Source
☐ Relocation of a Source

This permit is applied for pursuant to the following provisions of the Virginia Administrative Code:
- ☐ 9 VAC 5 Chapter 80, Article 6 (Minor Sources)
- ☐ 9 VAC 5 Chapter 80, Article 8 (PSD Major Sources)
- ☐ 9 VAC 5 Chapter 80, Article 9 (Non-Attainment Major Sources)

☒ Amendment to a Permit Dated: 2/10/2014 Permit Type: ☒ SOP (Art. 5) ☐ NSR (Art. 6, 8, 9)

Amendment Type:
- ☐ Administrative Amendment
- ☐ Minor Amendment
- ☒ Significant Amendment

This amendment is requested pursuant to the provisions of:

☐ 9 VAC 5-80-970 (Art. 5 Adm.)	☐ 9 VAC 5-80-1935 (Art. 8 Adm.)
☐ 9 VAC 5-80-980 (Art. 5 Minor)	☐ 9 VAC 5-80-1945 (Art. 8 Minor)
☒ 9 VAC 5-80-990 (Art. 5 Sig.)	☐ 9 VAC 5-80-1955 (Art. 8 Sig.)
☐ 9 VAC 5-80-1270 (Art. 6 Adm.)	☐ 9 VAC 5-80-2210 (Art. 9 Adm.)
☐ 9 VAC 5-80-1280 (Art. 6 Minor)	☐ 9 VAC 5-80-2220 (Art. 9 Minor)
☐ 9 VAC 5-80-1290 (Art. 6 Sig.)	☐ 9 VAC 5-80-2230 (Art. 9 Sig.)

☐ Other (specify): _____

Explanation of Permit Request (attach documents if needed):

We have completed a comprehensive review of our missions and facilities and are submitting the following changes to better reflect our current operations and emissions sources.

a. Replaced many of our #2 diesel sources with propane or geothermal systems, significantly reducing our air emissions load. The updated inventory of emissions sources is attached and identifies sources removed, replaced and newly reported.
b. Request exemptions according to 9VAC5-80-1105.
c. Modify allowable lead emissions limit to apply to boilers and space heaters (current permit only addresses lead emissions from static fire test operations)
d. Clarify generator usage classification to emergency status for all generators

Return to "What Pages Do I Fill Out For My Facility?"

GENERAL INFORMATION (CONTINUED)

For Portable Plants:

Is this facility designed to be portable? ☐ Yes ☐ No

- If yes, is this facility already permitted as a portable plant? ☐ Yes ☐ No Permit Date: _____

If not permitted, is this an application to be permitted as a portable plant? ☐ Yes ☐ No

If permitted as a portable facility, is this a notification of relocation? ☐ Yes ☐ No

- Describe the new location or address (include a site map): _____

- Will the portable facility be co-located with another source? ☐ Yes ☐ No Reg. No. _____
- Will the portable facility be modified or reconstructed as a result of the relocation? ☐ Yes ☐ No
- Will there be any new emissions other than those associated with the relocation? ☐ Yes ☐ No
- Is the facility suitable for the area to which it will be located? (attach documentation) ☐ Yes ☐ No

Describe the products manufactured and/or services performed at this facility:

Research and launch support facilities with administrative and engineering offices, facilities and grounds maintenance, UAV runway, launch pads and open burn facility.

List the Standard Industrial Classification (SIC) Code(s) for the facility:

List the North American Industry Classification System (NAICS) Code(s) for the facility:

List all the facilities in Virginia under common ownership or control by the owner of this facility:

Milestones: This section is to be completed if the permit application includes a new emissions unit or modification to existing operations.

Milestones*:	Starting Date:	Estimated Completion Date:
New Equipment Installation		
Modification of Existing Process or Equipment		
Start-up Dates	Ongoing	

*For new or modified installations to be constructed in phased schedule, give construction/installation starting and completion date for each phase.

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FUEL BURNING EQUIPMENT: (Boilers, Turbines, Kilns, and Other External Combustion Units)

Company Name:	Date:	Registration Number:

Unit Ref. No.	Equipment Manufacturer, Type, and Model Number	Date of Manuf.	Date of Const.	Max. Rated Input Heat Capacity For Each Fuel (Million Btu/hr)	Type of Fuel	Type of Equip. (use Code A)	Usage (use Code B)	Requested Throughput* (hrs/yr OR fuel/yr)	Federal Regulations that Apply
	See attached table of emission sources and equipment in supporting documents.								

☐ Estimated Emission Calculations Attached (include references of emission factors) and/or Stack Test Results if Available

Code A – Equipment		Code B - Usage
BOILER TYPE: 1. Pulverized Coal - Wet Bottom 2. Pulverized Coal - Dry Bottom 3. Pulverized Coal - Cyclone Furnace 4. Circulating Fluidized Bed 5. Spreader Stoke 6. Chain or Travelling Grate Stoker 7. Underfeed Stoker 8. Hand Fired Coal 9. Oil, Tangentially Fired 10. Oil, Horizontally Fired (except rotary cup)	11. Gas, Tangentially Fired 12. Gas, Horizontally Fired 13. Wood with Flyash Reinjection 14. Wood without Flyash Reinjection 15. Other (specify) _____ OTHER COMBUSTION UNITS: 16. Oven / Kiln 17. Rotary Kiln 18. Process Furnace 19. Other (specify) _____	1. Steam Production 2. Drying / Curing 3. Space Heating 4. Process Heat 5. Food Processing 6. Electrical Generation 7. Mechanical Work 8. Other (specify) _____

***Pick only one option for a requested throughput.**
NOTE: Dryers, kilns, and furnaces also have to fill out Page 15.

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PROCESSING, MANUFACTURING, SURFACE COATING AND DEGREASING OPERATIONS:

Company Name:	Date:	Registration Number:

Unit Ref. No.	Process or Operation Name	Equipment Manufacturer, Type, and Model Number	Date of Manuf.	Date of Const.	Max. Rated Capacity (_____/hr)*	Requested Throughput*			Federal Regulations that Apply
						(_____/hr)	(_____/day)	(_____/yr)	
	See attached table of emission sources and equipment in supporting documents.								

☐ Estimated Emission Calculations Attached (include references of emission factors) and/or Stack Test Results if Available

*** Specify units for each operation in tons, pounds, gallons, etc., as applicable. For coating operations, the maximum rated capacity is the spray gun capacity.**

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INKS, COATINGS, STAINS, AND ADHESIVES:

Company Name:	Date:	Registration Number:

Unit Ref. No.	Coating Material (specify)	Coating Use (use Code F)	Lbs VOC in Coating as Applied			VOC Control Method (use Code G)	Solids Transfer Efficiency (%)	Coating Density as Applied (lbs/gal)	Maximum Coating Usage as Applied	
			Per gal coating	Per gal coating less water & exempt solvent	Per gal solids				(Gal/hr)	(Gal/yr)
	See attached table of emission sources and equipment in supporting documents.									

Hazardous Air Pollutants (HAPs)	Lbs HAP/gal coating as applied	Hazardous Air Pollutants (HAPs)	Lbs HAP/gal coating as applied
CAS #: HAP Name:		CAS #: HAP Name:	
CAS #: HAP Name:		CAS #: HAP Name:	
CAS #: HAP Name:		CAS #: HAP Name:	

☐ Estimated Emission Calculations Attached (include references of emission factors and MSDS or CPDS for each coating)

Code F – Coating Use

1. Large Appliance Coatings
2. Magnet Wire Coatings
3. Auto and Light Duty Truck Coatings
   a. Prime Coat
   b. Guidecoat
   c. Topcoat
   d. Final Repair
   e. Anti-chip
   f. Anti-chip extreme performance
   g. Anti-chip visible surface
4. Aerospace Industries Coating
5. Magnetic Tape Coating
6. Can Coatings
   a. Base/Overvarnish
   b. Internal body/external ends
   c. 3-piece Can, side seam
   d. End seals
7. Metal Coil Coating
8. Non-Printing Paper/Fabric Coating
9. Publication Printing Inks and Coatings
10. Packaging Printing Inks and Coatings
11. Vinyl Coatings
12. Metal Furniture Coatings
13. Plastic Parts and Products Coatings
14. Miscellaneous Metal Parts Coatings
    a. Clear coatings
    b. Air-dried Coatings
    c. Extreme Performance Coatings
    d. Other coatings
15. Flatwood Paneling Coatings
    a. Printed Hardwood/Particleboard
    b. Natural finish Hardwood/Plywood
    c. Class II Hardboard
16. Paper and other Webs
17. Shipbuilding and Ship Repair Coating
18. Wood Furniture Coating
19. Flexographic Ink
20. Lithographic Ink
21. Rotogravure Ink
22. Adhesives – describe:_____
    _____
23. Other:_____

Code G – VOC Control Method

1. Low-VOC Coatings
   a. High-Solids Coatings
   b. Low-Solvent Coatings
   c. Waterborne Coatings
   d. Powder Coatings
   e. UV Light/Electron Beam Cured Coatings
   f. Electrodeposited Waterborne Coatings
2. Increased Solids Transfer Efficiency
3. Carbon Adsorption
4. Incineration
5. Regenerative Thermal Oxidizer (RTO)
6. Enclosures - Partial _____ % or
   Capture Efficiency _____ %
7. Other:_____

NOTE: Fill out one page for each ink, coating, stain, and adhesive

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VOLATILE ORGANIC COMPOUND (VOC)/PETROLEUM LIQUID STORAGE TANKS:

Company Name:	Date:	Registration Number:

Unit Ref. No.	Tank Type (use Code H)	Source of Tank Contents (use Code I)	Date of Manuf.	Date of Const.	Material Stored - Name and CAS # (include Reid Vapor Pressure for Gasoline)	Max. True Vapor Pressure (psia)	Density* (lbs/gal)	Max. Average Storage Temp. (°F)	Tank Diameter (feet)	Tank Capacity (gal)	Requested Throughput (gal/yr)	Federal Regulations that Apply
	See attached table of emission sources and equipment in supporting documents.											

☐ Estimated Emission Calculations Attached (include TANKS Program printouts)

Code H – Tank Type		Code I – Source of Tank Contents
1. Fixed Roof a. Vertical Tank b. Horizontal Tank 2. Floating Roof a. Internal (welded deck) b. Internal (bolted deck) – Specify Panel or Sheet c. External (welded deck) d. External (riveted deck)	3. Variable Vapor Space 4. Pressure Tank (over 15 psig) 5. Underground Splash Loading 6. Underground Submerged Loading 7. Underground Submerged Loading, Balanced 8. Other:_____	1. Pipeline 2. Rail Car 3. Tank Truck 4. Ship or Barge 5. Process

*** Specify the ASTM temperature standard at which the density was measured.**

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VOLATILE ORGANIC COMPOUND (VOC)/PETROLEUM LIQUID STORAGE TANKS (CONTINUED):

Company Name:	Date:	Registration Number:

Unit Ref. No.	Tank Color		Fixed Roof Only					Floating Roof Only				
					External Fixed Roof					Internal Floating Roof		
											If no,	
	Shell	Roof	Internal Tank Height or Length (feet)	Max. Hourly Filling (gallons)	Type of Roof (cone or dome)	Cone height (ft) and slope (ft/ft)	Dome height (ft) and radius (ft)	Seal Type (use Code J)	Max. Hourly Withdrawal (gallons)	Self Supporting?	No. of Columns	Column Diameter (ft)
	See attached table of emission sources and equipment in supporting documents.											

Code J – Seal Type (Pontoon External Only)	(Double Deck External Only)	(Internal Only)
1. Mechanical Shoe a. Primary only b. Shoe mounted secondary c. Rim mounted secondary 2. Liquid Mounted a. Primary only b. Weather shield secondary c. Rim mounted secondary 3. Vapor Mounted a. Primary only b. Weather shield secondary c. Rim mounted secondary	4. Mechanical Shoe a. Primary only b. Shoe mounted secondary c. Rim mounted secondary 5. Liquid Mounted a. Primary only b. Weather shield secondary c. Rim mounted secondary 6. Vapor Mounted a. Primary only b. Weather shield secondary c. Rim mounted secondary	7. Mechanical Shoe a. Primary only b. Shoe mounted secondary c. Rim mounted secondary 8. Liquid Mounted a. Primary only b. Rim mounted secondary 9. Vapor Mounted a. Primary only b. Rim mounted secondary

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PROPOSED PERMIT LIMITS FOR CRITERIA POLLUTANTS:

Company Name:	Date:	Registration Number:

Unit Ref. No.	Proposed Permit Limits for Criteria Pollutants															
	PM [a] (Particulate Matter)		PM-10 [a,b] (10 µM or smaller particulate matter)		PM 2.5 [a,b] (2.5 µM or smaller particulate matter)		SO_2 (Sulfur Dioxide)		NO_X (Nitrogen Oxides)		CO (Carbon Monoxide)		VOC [a] (Volatile Organic Compounds)		Pb (Lead)	
	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	No change															
TOTAL:																

☐ Estimated Emission Calculations Attached (totals and per Unit Ref. No.)

[a] **PM, PM-10, PM 2.5, and VOC should also be split up by component and reported under the Proposed Permit Limits for Toxic Pollutants/HAPs.**

[b] **PM-10 and PM 2.5 includes filterable and condensable.**

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PROPOSED PERMIT LIMITS FOR TOXIC POLLUTANTS/HAPS:

Company Name:																	Date:	Registration Number:
Unit Ref. No.	Proposed Permit Limits for Toxic/HAP Pollutants*																	
	HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:		HAP Name: CAS #:			
	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr		
	No change																	
TOTAL:																		

☐ Estimated Emission Calculations Attached (totals and per Unit Ref. No.)

*** Specify the name of the toxic pollutant/HAP for each Unit Ref. No. along with the respective CAS Number**. Toxic Pollutant means a pollutant on the designated list in the Form 7 Instructions document. Particulate matter and volatile organic compounds are not toxic pollutants as generic classes of substances, but individual substances within these classes may be toxic pollutants because their toxic properties or because a TLV (tm) has been established.

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PROPOSED PERMIT LIMITS FOR OTHER REGULATED POLLUTANTS:

Company Name:	Date:	Registration Number:

Unit Ref. No.	Proposed Permit Limits for Other Regulated Pollutants*															
	Pollutant Name:		Pollutant Name:		Pollutant Name:		Pollutant Name:		Pollutant Name:		Pollutant Name:		Pollutant Name:		Pollutant Name:	
	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	No change															
TOTAL:																

☐ Estimated Emission Calculations Attached (totals and per Unit Ref. No.)

* **Other Regulated Pollutant** include Fluorides, Sulfuric Acid Mist, Hydrogen Sulfide (H_2S), Total Reduced Sulfur (including H_2S), Reduced Sulfur Compounds (including H_2S), Municipal Waste Combustor Organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans), Municipal Waste Combustor Metals (measured as particulate matter), Municipal Waste Combustor Acid Gases (measured as the sum of SO_2 and HCl), and Municipal Solid Waste Landfill Emissions (measured as nonmethane organic compounds).

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OPERATING PERIODS:

Company Name: NASA	Date:	Registration Number: 40909

Unit Ref. No.	Percent Annual Use/Throughput by Season				Normal Process/Equipment Operating Schedule			Maximum Process/Equipment Operating Schedule		
	December February	March May	June August	September November	Hours per Day	Days per Week	Weeks per Year	Hours per Day	Days per Week	Weeks per Year
	No seasonal variance				8	5	52			

Maximum Facility Operating Schedule		
Hours per Day	Days per Week	Weeks per Year
24	7	52