



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

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www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

STATEMENT OF LEGAL AND FACTUAL BASIS Significant Permit Modification

Aerojet Rocketdyne, Inc.

Orange County, Virginia

Permit No. NRO40743

Effective Date: March 7, 2012

Amendment Date: October 7, 2013

Modification Date: January 24, 2017

Expiration Date: March 7, 2017

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, Aerojet Rocketdyne, Inc., has applied for a significant modification to the Title V Operating Permit for its rocket motor and solid propellant manufacturing facility located in Orange County, Virginia. The Department has reviewed the application and has prepared a draft significant modification to the facility's Title V Operating Permit.

Engineer/Permit Contact: Alieza Khalilzadeh Date: 1/20/2017
Alieza Khalilzadeh
(703) 583-3839

Air Permit Manager: James B. LaFratta Date: 1/20/2017
James B. LaFratta

Regional Director: Thomas A. Faha Date: 1-24-17
Thomas A. Faha

FACILITY INFORMATION

Permittee

Aerojet Rocketdyne, Inc.
7499 Pine Stake Road
Culpeper, Virginia 22701

Facility

Aerojet Rocketdyne, Inc.
Orange County Facility
7499 Pine Stake Road
Culpeper, Virginia 22701

County-Plant Identification Number: 51-137-00022

SOURCE DESCRIPTION

NAICS Codes: 336415, 332999 - Manufacture, research and development (R&D), and testing of rocket motors and associated components, including propellants and propellant ingredients. The facility periodically test fires and open burns propellants.

Aerojet Rocketdyne, Inc., formerly Atlantic Research Corporation (ARC) and Aerojet Corporation, owns and operates the Orange County facility. The company manufactures solid rocket motors, missile systems, and similar products, as well as their associated propellants, for the United States Department of Defense (DOD). The propellants, also known as "energetic materials", are utilized in the on-site production operations, and also commercially distributed as finished products. Aerojet Rocketdyne also performs R&D activities for the aforementioned products. Aerojet Rocketdyne's manufacturing and R&D activities include the static test firing of rocket motors and other components. Aerojet Rocketdyne expects to commence production of components for Standard Missile #3 (SM3) rocket motors by early to mid-2017, which are in turn critical components of the Aegis Ballistic Missile Defense System of DOD.

As a result of the manufacturing operations, various scrap propellants and other waste energetic materials are generated. These reactive hazardous wastes are destroyed by open burning in the permitted Thermal Treatment Facility (TTF). On January 7, 1987, Aerojet's TTF was granted a RCRA Research, Development and Demonstration (RD&D) Permit by EPA Region III for operation as a hazardous waste treatment facility. The permit became effective upon approval by EPA Region III of the Operation Monitoring Plan in August 1990. The RD&D Permit was transferred from ARC to Aerojet in October 2003.

The facility is a Title V major source of PM-10 and hazardous air pollutants (HAPs). The facility's potential-to-emit exceeds ten tons per year for an individual HAP and more than twenty-five tons per year of any combination of HAPs. This source is located in an area presently classified as an attainment area for all pollutants, and is a PSD minor source. Aerojet Rocketdyne's Orange County facility currently operates under a minor new source review (mNSR) permit that was issued on January 14, 2016 (copy enclosed as Attachment A, referred to as the 1/14/16 mNSR permit). Aerojet is subject to the National Emission Standards for Aerospace Manufacturing and Rework Facilities (40 Code of Federal Regulations (CFR) Part §63, Subpart GG), hereinafter referred to as the Aerospace MACT (Maximum Achievable Control Technology Standards).

REQUESTED MODIFICATION

Aerojet Rocketdyne, Inc. is seeking the following modifications to its Title V Permit:

1. Addition of a new Rocket Test Bay (#1A) rated at 50 lbs/hr of propellant material. The new test bay and four existing test bays [EU-01(A)] shall have a combined limit of 4.8 tons of propellant fired per year, which remains the same as in the previous permit.
2. Addition of a mold release coating operation with a new paint spray booth (PB-3) and resulting increased throughput of miscellaneous coatings for this source (EU-02). The spray booth will be equipped with filters (to control particulate matter emissions) and the use of a HVLP spray gun to minimize overspray and reduce the use of coatings (and VOC/HAP emissions). Also, the "super paint formulation" for miscellaneous coatings will be revised to include a new fungicide, which contains a HAP, 4-nitrophenol.
3. Modification of an existing RDX drying oven (EU-04B) for increased explosives drying capacity to 125 lbs/hr. (There is an existing drying oven (EU-04A) rated at 500 lbs/hr.)
4. Two propellant cut-back machines to be added with the existing cut-back machines (saw and lathe) as part of EU-09. They will increase the capacity from 250 lbs/hr to 500 lbs/hr of propellant machined. The cut-back machines are used to trim excess propellant from the motor case or cup. Each new cut-back machine will be equipped with a custom "wet box" for the control of dust emissions from the propellant machining operations.
5. A new motor case lining operation (EU-13) to be added with a liner applicator machine and mix vessel that exhaust through a new vent hood (VH-1). Alternatively, the operation may be relocated at spray paint booth 2 (PB-2, part of EU-02) in Building 216. The actual emissions will be less than 1 ton/yr of Methylene Chloride, which is a HAP; or alternatively, isopropanol or methyl ethyl ketone, which are VOC and not HAPs. There are no emission controls proposed for less than 1 ton per year of HAP or VOC.
6. Removal of one degreaser (Ultra-Kool), leaving one degreaser, Philips model 13409, at EU-05. Also, since halogenated solvent use was discontinued in 2012, the degreaser is exempt from MACT Subpart T and corresponding permit conditions have been removed.

BASIS OF MODIFICATION

Most of the permit changes result from the facility modification to produce the "Throttleable Divert and Attitude Control System" for the SM3 rocket motor manufacturing program. Their production is a critical component of the Aegis Ballistic Missile Defense System developed for the U.S. DOD. An unrelated change was the removal of a vapor degreaser and discontinuing use of HAP solvents that subjected the facility to MACT Subpart T. The changes were included in the 1/14/16 mNSR permit, and are now being incorporated in the Title V permit as a significant modification.

APPLICABILITY OF 9 VAC 5-80-230

According to 9 VAC 5-80-230, significant modification procedures must be used for those permit modifications that do not qualify as minor permit modifications under 9 VAC 5-80-210 or as administrative amendments under 9 VAC 5-80-200. The proposed modification to the Aerojet Rocketdyne, Inc. Title V Permit does not meet the specifications for an administrative amendment or a minor permit modification. The Regulations further list criteria, any of which, if met, require use of significant modification procedures. The changes proposed by Aerojet Rocketdyne meet the following criterion, as stated in 9 VAC 5-80-230.A.1:

Significant modification procedures shall be used for those permit modifications that involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit...

The Aerojet Rocketdyne, Inc. Title V permit modification adds a new spray paint booth (EU-02, PB-3), also a new motor case lining operation (EU-13), as well as two propellant cut-back machines (EU-09), a modified RDX explosives dryer (EU-04B) and a small rocket test bay (EU-01A, #1A) that result in increased potential emissions. There are emission reductions also, as from removal of a solvent cleaning machine, which is no longer subject to MACT Subpart T requirements. However overall, the new and modified equipment have increased capacity or operating limits or emissions, with associated recordkeeping and monitoring, which makes the changes subject to a significant modification of the Title V permit.

CHANGES TO TITLE V OPERATING PERMIT

The changes made to the Title V permit are described below, and include the requirements from the 1/14/16 mNSR permit. Throughout the permit, there were also minor administrative corrections made, mostly to citations at the end of each condition, referencing current regulations and the 1/14/16 mNSR permit conditions.

- I. **Facility Information:** Name and title of Responsible Official changed to Mr. Chris W. Conley, Vice President of Environmental Health & Safety.

Facility Description: No change.

II. Significant Emission Units

The significant emissions units/processes at this facility consist of the following (with the changes highlighted):

Unit Ref. No.	Stack ID. No.	Process Name	Equipment Manufacturer & Construction Date	Maximum Rated Capacity	Pollution Control Device & Pollutant Controlled
EU-01(A)	None - Fugitive Emissions	Rocket Test Facility (five bays)	ARC, Aerojet 1988, 2004, 2010, 2012 & 2016	2,000 lb/hr of propellant	None
EU-01(B)	None - Fugitive Emissions	Thermal Treatment Facility	ARC 1988	10,000 lb/hr of propellant	None
EU-02	Fugitive Emissions	Facility-Wide Surface Coating and Adhesive Application Operations – Hand Painting	ARC, Aerojet 1989, 2004, 2006, 2008 & 2016 ^a	9 gal/hr of coatings and adhesives	None
EU-02	PB-1, PB-2 & PB-3	Spray Paint Booths	Aerojet 2005, 2011 & 2016 ^a	Same as Above	Dry Particulate Filter for PM Control
EU-03	None - Fugitive Emissions	Facility-Wide Hand-Wipe and Other Cleaning Operations	ARC, Aerojet 1989, 2004 ^a	1 gal/hr of solvents	None
EU-04A & EU-04B	XD-1, XD-2	Explosives Drying Operations	Stokes 1989; modified RDX 2016	500 lb/hr and 125 lbs/hr of explosives	None
EU-05	None - Fugitive Emissions	Solvent Cleaning Machine	Phillips Degreaser 2004	1 gal/hr of solvents	None
EU-06	None - Fugitive Emissions	Sparging and Drying Operations	Aerojet 2004	10 lb/hr of solvents	None
EU-07	OX-1 OX-2	Oxidizer Grinding Operations ^b	Various Manufacturers 2004	500 lb/hr of oxidizers	Dry Particulate Filter Systems
EU-08	GB-1, GB-2, GB-3	Grit Blast Machines ^c	Various Manufacturers 2004	200 lb/hr of grit-blasting media	Dry Particulate Filter Systems
EU-09	PM-2, PM-3, PM-4	Propellant Machining Operations ^d	Various Manufacturers 1989, 2004, 2016	500 lb/hr of propellant	Particulate Collection Systems
EU-10	IM-1	Insulation Machining Operations	Various Manufacturers 1989, 2004	25 lb/hr of insulated components	Dry Particulate Filter System
EU-11	RM-1	Phenolic and Rubber Parts Machining Operations	Various Manufacturers 2004	100 lb/hr of phenolic and rubber parts	Dry Particulate Filter System
EU-13	VH-1	Motor Case Lining Operation	Custom Unit 2016	30 lb/batch of liner materials	None

- Notes:
- a. EPA first proposed the Aerospace MACT on 06/06/94; construction/reconstruction of sources commenced after such date are considered "new sources" under this MACT.
 - b. Two of the oxidizer units are not vented to the atmosphere.
 - c. One of the grit blast machines is vented inside the production building.
 - d. Only one propellant lathe is vented to the atmosphere through a dust filter. Propellant saw is vented, as well as new propellant cut-back machines. Wet suppression is used for control of particulate emissions from the propellant saw and to be used for new cut-back machines.

III. Rocket Test Facility [EU-01(A) and Thermal Treatment Facility [EU-01(B)]

A new Rocket Test Bay (#1A) rated at 50 lbs/hr of propellant material is added to the equipment list as part of Rocket Test Facility [EU-01(A)]. However, no permit conditions are changed. The annual throughput and emission limits for propellant firing remain the same. (Only changes to citations or references to the 1/14/16 mNSR Permit.)

IV. Facility-Wide Surface Coating and Adhesive Application Operations [EU-02] –

A new spray paint booth (PB-3) for the application of a mold release agent will be constructed. It will result in increased spraying capacity from 8 to 9 gallons/hr. Condition IV.A.7 is revised to include the third spray paint booth equipped with particulate filter but also requiring High-Volume Low-Pressure (HVLP) spray gun be used to minimize overspray. The throughput limit of miscellaneous coatings has been increased from 1500 to 2500 pounds/yr in Condition IV.A.5. Initial notification of DEQ on the new construction and startup of the spray paint booth is required in Condition IV.D.5.

V. Facility-wide Hand-Wipe and Other Cleaning Operations [EU-03]

No changes (except for regulation citations and references to the 1/14/16 mNSR permit.)

VI. Explosives Drying Operations [EU-04A/B]

An existing explosives drying oven (previously considered insignificant for R&D use) has been modified with capacity increased to 125 lbs/hr, in addition to the existing 500 lbs/hr oven. The combined throughput of dried explosives in Condition VI.A.1 is increased from 60 to 65 tons/yr with VOC emissions limit increased from 2.7 to 3.2 tons/yr in Condition VI.A.2.

VII. Solvent Cleaning Machine [EU-05]

The permit was modified to remove the second vapor degreaser, Ultra-Kool, leaving only the Phillips model 13409 on-site. The facility also discontinued use of HAP solvent

1,1,1, trichloroethane in the cleaning machines, as of 2012. Therefore, they are no longer subject to 40 CFR 63, MACT Subpart T, and several conditions have been removed from the Title V permit (previous Conditions VII.A.1, 2; also conditions VII.B.1.d. and VII.C.1). The permittee submitted EPA Applicability Determinations to confirm their exemption from the MACT Subpart T requirements (see Attachment B). The new Conditions VII.A.1 and VII.A.2 lower the throughput and VOC emissions limit, now covering only the Phillips vapor degreaser, from 2.9 tons/yr to 1.3 tons/yr. The primary cleaning solvent is now n-propyl bromide (NPB), which is a non-HAP VOC. However, they may use other solvents including exempt VOCs such as Freon 113, HCFC-123, HFC-4310MEE or VOC mixed with NPB, such as Leksol and Hypersolv.

VIII. Sparging & Drying Operations [EU-06]

No changes other than to citations and references to the 1/14/16 mNSR permit.

IX. PM-Emitting Process Equipment [EU-07 through EU-11]

Two new propellant cut-back machines will be added to the propellant machining operations [EU-09]. Some of the existing equipment vents inside the building. Other equipment that vent to the atmosphere have fabric filters (baghouses) for particulate control, including oxidizer grinders [EU-07], grit blasters [EU-08], lathes for insulation machining [EU-10] and for phenolic and rubber parts machining [EU-11]. The fabric filters have differential pressure gages used to indicate proper operation (normally reading up to 6 inches of water). The permittee is required to keep a daily log of the readings. The new cutback propellant machines [EU-09] use "wet box" scrubbers for particulate control. They are custom air pollution control devices, which are part of their "wet/dry vacuum system". Each has a vacuum pressure gage to take daily readings that normally range from -9 to -85 millimeters of mercury. The existing cutback saw is used intermittently and has a "wet box" scrubber also but no monitoring device. Instead, the permittee shall keep a log of observations and tasks completed following the standard operating procedures that include the "wet box" to minimize emissions. The log of all monitoring device readings and observations for the cutback saw unit shall be kept for DEQ review. Corrective action shall be taken if monitoring observations exceed the proper parameter ranges (or if there are exceptions noted from monitoring procedures for the cutback saw). The added permit conditions include expanded requirements (not in the 1/14/16 mNSR permit) for daily performance monitoring of the "wet boxes" as well as the fabric filters.

X. Motor Case Lining Operation [EU-13]

The new section is added to the Title V permit for the new Motor Case Lining Operation. A new vent hood (VH-1) was planned for the process equipment in Building 300 or 204 annex. However, Aerojet Rocketdyne may instead relocate the operation to Building #216 to use their existing spray paint booth (PB-2). The Title V permit conditions are

taken from the 1/14/16 mNSR permit. Conditions X.A.1 and X.A.2 limit solvent throughput and VOC emissions to 0.9 tons/yr. Condition X.B.1. requires recordkeeping on the solvent use, MSDS and calculated VOC emissions. There is no initial stack testing required but DEQ may require later testing using EPA Method 25 or 25A. There is an initial DEQ notification requirement on the construction and start-up dates for the motor case lining operation, as stated in Condition X.D.1.

- XI. Insignificant Emission Units:** Minor changes, deletions and additions were made to update the list for Insignificant Emission Units.
- XII. Permit Shield & Inapplicable Requirements:** MACT Subpart T is no longer applicable to the cleaning machine since halogenated solvent is no longer used. The SSM Plan reference to MACT Subpart T was removed since it is no longer applicable.
- XIII. General Conditions:** Removal of previous General Condition "U. Malfunction as an Affirmative Defense" because of change in the state Regulations effective June 1, 2016. A minor wording change was also made to General Condition "F. Failure/Malfunction Reporting".
- XIV. State-Only Enforceable Requirements:** No changes were made in the permit.

PUBLIC PARTICIPATION

The public participation requirements of 9 VAC 5-80-270 apply to significant permit modifications. A public notice regarding the draft permit was placed in the December 15, 2016, edition of the *Orange County Review*. The *Orange County Review* is published daily and is the local newspaper of general circulation in the area where Aerojet Rocketdyne, Inc. is located. The 30-day comment period ended on January 17, 2017. A copy of the public notice and draft permit was sent to EPA Region III as a proposed permit modification (i.e., concurrent review). A copy of the public notice was provided to the appropriate government officials for the affected states (Maryland and Washington, D.C.) for this permit action. All persons on the Title V mailing list were also sent a copy of the public notice. No comments were received from the public and EPA approved the draft on January 12, 2017. Aerojet Rocketdyne sent a letter on January 16, 2017, about administrative errors in the permit and statement of basis, which were corrected.

ATTACHMENTS

- Attachment A – Minor NSR Permit dated January 14, 2016
- Attachment B – Applicability Determination Index document on MACT Subpart T exemption.

ATTACHMENT A

**MINOR NEW SOURCE REVIEW PERMIT
(DATED JANUARY 14, 2016)**



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Secretary of Natural Resources

David K. Paylor
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Thomas A. Faha
Regional Director

January 14, 2016

Mr. Chris W. Conley
Vice President of Environmental Health & Safety
Aerojet Rocketdyne, Inc.
7499 Pine Stake Road
Culpeper, Virginia 22701

Location: Orange County
Registration No.: 40743

Dear Mr. Conley:

Attached is a permit to construct and operate a rocket motor and solid propellant manufacturing facility located in Orange County, Virginia. This permit is issued in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This permit supersedes your permit dated July 14, 2011, as amended on January 10, 2013, and October 1, 2013.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on December 13, 2015.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to construct and operate shall not relieve Aerojet Rocketdyne, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Some processes/operations at the facility are subject to 40 CFR 63, Maximum Achievable Control Technology, (MACT) Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities. In summary, the affected emission units/sources are required to comply with certain federal emission standards and operating limitations. The Department of Environmental Quality (DEQ) advises you to review the referenced MACT to ensure compliance with applicable emission and operational limitations. As the owner/operator you are also responsible for any monitoring, notification, reporting and recordkeeping requirements of the MACT. Notifications shall be sent to both EPA, Region III, and Virginia DEQ.

To review any federal rules referenced in the above paragraph or in the attached permit, the US Government Publishing Office maintains the text of these rules at www.ecfr.gov, Title 40, Part 63.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

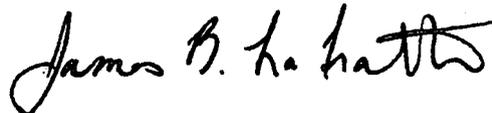
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Mr. Alireza Khalizadeh at 703-583-3839.

Sincerely,



James B. LaFratta
Regional Air Permit Manager

TAF/JBL/AK/40743mnsr(1-14-16)

Attachment: Permit

cc: Regional Air Compliance Manager (electronic file submission)
Chief, Air Enforcement Branch (3AT20), U.S. EPA, Region III



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STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

**This permit includes designated equipment subject to 40 CFR Part 63,
National Emission Standards for Hazardous Air Pollutants,
Subpart A and Subpart GG.**

This permit document supersedes your permit dated July 14, 2011, amended January 10, 2013,
and October 1, 2013

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia
Regulations for the Control and Abatement of Air Pollution,

Aerojet Rocketdyne, Inc.
7499 Pine Stake Road
Culpeper, Virginia 22701

Registration No.: 40743

is authorized to construct and operate

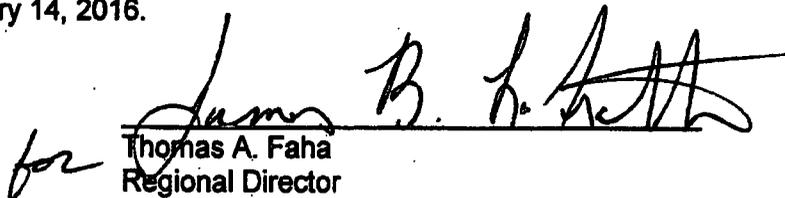
a rocket motor and solid propellant manufacturing facility

located at

7499 Pine Stake Road
Culpeper, Virginia 22701
(Orange County)

in accordance with the Conditions of this permit.

Approved on January 14, 2016.


Thomas A. Faha
Regional Director

Permit consists of 18 pages.
Permit Conditions 1 to 50.

INTRODUCTION

This permit approval is based on the permit application dated October 15, 2015, with supplemental information submitted on December 1, 2015, and December 11, 2015; permit application dated June 19, 2013; permit application dated September 27, 2012, with supplemental information dated November 12, 2012, and December 19, 2012; permit application dated July 26, 2010; permit applications and letter requests dated November 12, 2007, and January 25, 2008; additional information dated February 16, 2004; including amendment information dated March 5, 2004, March 19, 2004, March 31, 2004, and October 4, 2004, and the permit application dated May 11, 1998, including amendment information dated September 4, 1998, December 18, 1998, March 16, 1999, and June 9, 1999. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

Equipment List – Equipment at this facility consists of:

Equipment to be Constructed:			
Reference No.	Equipment Description	Rated Capacity	Delegated Federal Requirements
EU-01(A)	Rocket Test Facility (One Additional Test Bay (#1A))	50 lbs/hr Solid Propellant	None
EU-02	Surface Coating and Adhesive Application Operations (One Additional Spray Booth (PB-3))	1 gal/hr of Coatings	40 CFR 63 (MACT), Subparts A & GG

Equipment to be Constructed (continued):			
Reference No.	Equipment Description	Rated Capacity	Delegated Federal Requirements
EU-04B	Explosives Drying Operations (Modified RDX Drying Oven)	125 lbs/hr Explosives	None
EU-09	Propellant Machining Operations (Two New Propellant Cut-Back Machines)	150 lbs/hr Propellant per Unit	None
EU-13	Motor Case Lining Operation	30 lb/batch liner	40 CFR 63 (MACT) Subparts A & GG

Equipment permitted prior to the date of this permit:			
Reference No.	Equipment Description	Rated Capacity	Delegated Federal Requirements
EU-01(A)	Four Bay Rocket Test Facility	2,000 lbs/hr Solid Propellant (Total for All Four Bays)	None
EU-01(B)	Thermal Treatment Facility with Four Open Burn Units	10,000 lbs/hr Waste Explosives & Propellants	None
EU-02	Surface Coatings & Adhesive Application Operations (Facility Wide)	8 Gallons/hr Coatings & Adhesives	40 CFR 63 (MACT) Subparts A & GG
EU-03	Hand-Wipe & Other Cleaning Operations	1 Gallon/hr Cleaning Solvent	40 CFR 63 (MACT) Subparts A & GG
EU-04A	Explosives Drying Operations	500 lbs/hr Explosives	None
EU-05	Solvent Cleaning Machine, (One Model 13409 Phillips Vapor Degreaser)	1 Gallon/hr Cleaning Solvents	None
EU-06	Sparging & Drying Operations	10 lbs/hr Solvents	None
EU-07	Four Oxidizer Grinders	500 lbs/hr Oxidizers	None
EU-08	Four Grit Blast Machines	200 lbs/hr Blasting Media	None
EU-09	Propellant Machining Operations (Including One Propellant Cut-Back Machine/Saw)	200 lbs/hr Propellant	None

EU-10	Insulation Machining Operations	25 lbs/hr Insulated Materials	None
EU-11	Phenolic & Rubber Parts Machining Operations	100 lbs/hr Phenolic & Rubber Components	None

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

PROCESS REQUIREMENTS

1. **Hand-Wipe Cleaning Operations** – The solvent hand-wipe cleaning operations (Ref. No. EU-03) shall meet the criteria of *exempt cleaning operations* as defined under 40 CFR §63.744 (e) or comply with the hand-wipe cleaning requirements of 40 CFR §63.744 (b). (9 VAC 5-170-160, 9 VAC 5-50-260, and 40 CFR §63.744)

2. **Surface Coating Operations** – The surface coatings and adhesives used in the surface coating operations (Ref. No. EU-02) and motor case lining operation (Ref. No. EU-13) shall meet the criteria of *specialty coatings* provided in 40 CFR §63.742 or comply with the standards for primer and top-coat application operations of 40 CFR §63.745. (9 VAC 5-170-160, 9 VAC 5-50-260, 40 CFR §63.742, and 40 CFR §63.745)

3. **Spray Gun Cleaning Operations** – The spray gun cleaning activities (Ref. No. EU-02) shall comply with the applicable requirements of 40 CFR §63.744(c)(2) through (c)(4). Spray gun cleaning operations using cleaning solvent solutions that contain hazardous air pollutants (HAPs) and volatile organic compounds (VOCs) below the *de minimis* levels specified in §63.741(f) are exempt from these requirements. (9 VAC 5-170-160, 9 VAC 5-50-260, and 40 CFR §63.744(c))

4. **Emission Controls for Hand-Wipe Cleaning** – VOC and VOC-HAP emissions from the solvent hand-wipe cleaning operations (Ref. No. EU-03) shall be controlled by the following:
 - a. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning, in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

 - b. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

 - c. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

Approved cleaning solvents (Table 1 of NESHAP Subpart GG) and solvent solutions that contain HAPs and VOCs below the *de minimis* levels specified in §63.741(f) are exempt from these requirements.

(9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-50-260, and 40 CFR §63.744(a))

5. **Emission Controls for Coating Operations** – VOC and VOC-HAP emissions from the surface coating operations (Ref. No. EU-02) and motor case lining operation (Ref. No. EU-13) shall be controlled by the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. Coatings that are defined as specialty coatings under 40 CFR §63.742 are not subject to the requirements of this condition.

(9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-50-260, and 40 CFR §63.745 (b))

6. **Emission Controls for Spray Paint Booths** – Particulate emissions from the three spray paint booths (Ref. No. EU-02) shall be controlled by dry particulate filters. The filter systems shall be operated in accordance with the manufacturer's instructions, shall be provided with adequate access for inspection, and shall be in operation when the spray booths are operating. If non-specialty coatings are applied in the paint booths, then the equipment shall be operated in accordance with 40 CFR §63.745(g). Also, the new spray booth (PB-3) shall be equipped with a High-Volume Low-Pressure (HVL) spray gun to minimize overspray.

(9 VAC 5-50-20E, 9 VAC 5-50-260, 40 CFR §63.744(b) and 40 CFR §63.745(g))

7. **Emission Controls for Spray Gun Cleaning** – VOC and VOC-HAP emissions from the spray gun cleaning activities (Ref. No. EU-02) shall be controlled by following the work practices specified in §63.744(c)(2) through (c)(4) for non-atomized cleaning, disassembled gun cleaning and/or atomizing cleaning, respectively. Spray gun cleaning operations using cleaning solvent solutions that contain HAPs and VOCs below the *de minimis* levels specified in §63.741(f) are exempt from these requirements.

(9 VAC 5-50-260, 9 VAC 5-80-1180 and 40 CFR §63.744(c))

8. **Fugitive VOC Emission Controls** – Fugitive VOC emission controls shall include the following, or equivalent, as a minimum:

Volatile organic compounds shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

(9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20, and 9 VAC 5-50-90)

9. **Emission Controls for PM-Emitting Process Equipment** – Particulate emissions from operation of the following equipment (with the exception of the three propellant cut-back machines EU-09), shall be controlled with an appropriate dust collection system at each source:

- a. Oxidizer grinders (Ref. No. EU-07);
- b. Grit blast machines (Ref. No. EU-08);

- c. Propellant machining operations (Ref. No. EU-09);
- d. Insulation machining operations (Ref. No. EU-10); and
- e. Phenolic and rubber parts machining operations (Ref. No. EU-11).

The dust collection system for each source shall have a control efficiency of 95% or greater. Emission controls and monitoring devices are only required on those new and modified units which are vented to the atmosphere.

Particulate emissions from the three propellant cut-back machines associated with propellant machining operations (Ref. No. EU-09) shall be controlled with wet suppression. (9 VAC 5-50-260 and 9 VAC 5-80-1180)

10. **Monitoring Devices for PM-Emitting Process Equipment** – The dust collection system for each of the emission units identified in Condition 9 which are vented to the atmosphere (with the exception of the three propellant cut-back machines associated with Ref. No. EU-09) shall be equipped with a device to continuously measure the differential pressure change across the filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures that shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the emission unit is operating.
(9 VAC 5-80-1180 D, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

11. **Observation of Monitoring Devices for PM-Emitting Process Equipment** – The control monitoring devices used to continuously measure differential pressure change across the filter of the dust collection system identified in Condition 10 (for each of the emission units identified in Condition 9 which are vented to the atmosphere (with the exception of the three propellant cut-back machines associated with Ref. No. EU-09)), shall be observed by the permittee with a frequency of not less than once per day when the emission unit is in operation. The permittee shall keep a log of the observations.
(9 VAC 5-80-1180 D)

OPERATING LIMITATIONS

12. **Explosives Drying** – The total amount of explosives dried (Ref. No. EU-04A/B) shall not exceed 65 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)
13. **Hand-Wipe Solvent Usage** – The solvent consumption for the hand-wipe cleaning operations (Ref. No. EU-03) shall not exceed 12.2 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)

- 14. Rocket Test Facility** – Except as specified in Conditions 15 and 18, the maximum quantity of propellant fired per test firing event at the rocket test facility (Ref. No. EU-01(A)) shall not exceed 2,000 pounds. The quantity of propellant test fired at the rocket test facility shall not exceed 2,000 pounds in any one 24-hour period. The quantity of propellant fired at the rocket test facility shall not exceed 4.8 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-60-300 and 9 VAC 5-80-1180)
- 15. Rocket Test Facility** – The maximum quantity of the worst-case lead-based propellant fired per test firing event at the rocket test facility (Ref. No. EU-01(A)) shall not exceed 700 pounds. The quantity of the worst-case lead-based propellant test fired at the rocket test facility shall not exceed 700 pounds in any one 24-hour period.
(9 VAC 5-60-300 and 9 VAC 5-80-1180)
- 16. Thermal Treatment Facility** – Except as specified in Conditions 17 and 18, the maximum quantity of waste explosives/propellants combusted per open burning event at the thermal treatment facility (Ref. No. EU-01(B)) shall not exceed 10,000 pounds. The quantity of waste explosives/propellants combusted at the thermal treatment facility shall not exceed 10,000 pounds in any one 24-hour period. The quantity of waste explosives/propellants combusted at the thermal treatment facility shall not exceed 240 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-60-300 and 9 VAC 5-80-1180)
- 17. Thermal Treatment Facility** – The maximum quantity of the worst-case lead-based waste propellant combusted per open burning event at the thermal treatment facility (Ref. No. EU-01(B)) shall not exceed 1,000 pounds. The maximum quantity of the worst-case hydrogen chloride-generating waste propellant combusted per open burning event shall not exceed 6,000 pounds.
(9 VAC 5-60-300 and 9 VAC 5-80-1180)
- 18. Rocket Test Facility & Thermal Treatment Facility** – When both a test firing event at the rocket test facility (EU-01(A)) and an open burning event at the thermal treatment facility (Ref. No. EU-01(B)) occur within the same 24 hour period, the maximum quantity of propellant fired at the rocket test facility shall not exceed 500 pounds and the maximum quantity of waste explosives/propellants combusted at the thermal treatment facility shall not exceed 9,500 pounds.
(9 VAC 5-60-300 and 9 VAC 5-80-1180)
- 19. Rocket Test Facility** - The test-firing events at the rocket test facility (Ref. No. EU-01(A)) are restricted to rocket propellants and liquefied propane (supplemental fuel for "Air Facility"). The usage of propane shall not exceed 7,500 gallons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)
- 20. Thermal Treatment Facility** - The open burning events at the thermal treatment facility (Ref. No. EU-01(B)) are restricted to diesel fuel (catalyst fuel) and waste explosives/

propellants: The usage of diesel fuel shall not exceed 5,000 gallons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)

21. **Paint and Adhesive Usage in Coating Operations** - The throughput of paints and adhesives in the surface coating operations (Ref. No. EU-02) shall not exceed the values listed below, calculated monthly as the sum of the each consecutive twelve-month period:

Surface Coatings	4,500 pounds/year
Adhesives	4,500 pounds/year
Miscellaneous Coatings	2,500 pounds/year

(9 VAC 5-80-1180)

22. **Solvent Usage in Cleaning Machines** – The solvent throughput in the solvent cleaning machine (Ref. No. EU-05) shall not exceed 1.3 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)

23. **Solvent Usage in Sparging & Drying Operations** – The solvent throughput in the sparging and drying operations (Ref. No. EU-06) shall not exceed 2.8 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)

24. **Solvent Usage in Liner Operation** – The solvent throughput in the motor case lining operation (Ref. No. EU-13) shall not exceed 0.9 tons per year, calculated monthly as the sum of the each consecutive twelve-month period.
(9 VAC 5-80-1180)

EMISSION LIMITS

25. **Emission Limits for EU-02 Through EU-06 and EU-13** – For the processes listed below, VOC emissions shall not exceed the respective limits specified, calculated monthly as the sum of the each consecutive twelve-month period:

Surface coating & adhesive application operations (EU-02)	5.8 tons/yr
Hand-wipe and other cleaning operations (EU-03)	10.0 tons/yr
Explosives drying (EU-04)	3.2 tons/yr
Solvent cleaning machines (EU-05)	1.3 tons/yr
Sparging & drying operations (EU-06)	1.8 tons/yr
Motor Case Lining Operation (EU-13)	0.9 tons/yr

(9 VAC 5-50-260, 9 VAC 5-60-300, and 9 VAC 5-80-1180)

26. Emission Limits for EU-01(A) and (B) – Emissions from the combined operation of the rocket test facility (Ref. No. EU-01(A)) and the thermal treatment facility (Ref. No. EU-01(B)) shall not exceed the limits specified below (averaging period indicated by footnote), calculated monthly as the sum of the each consecutive twelve-month period:

Particulate Matter & PM ₁₀		119.4 tons/yr
Total Nitrogen Oxides (as Total NO _x)		5.9 tons/yr
Sulfur Dioxide		0.03 tons/yr
Carbon Monoxide		3.8 tons/yr
Volatile Organic Compounds (VOC)		6.1 tons/yr
Cadmium	0.7 lbs/hr ^a	0.01 tons/yr
Chlorine	194.4 lbs/hr ^a	4.0 tons/yr
Chromium (Total)	12.8 lbs/hr ^a	0.24 tons/yr
Hydrogen Chloride	1915.0 lbs/hr ^a	54.3 tons/yr
Hydrogen Fluoride	14.6 lbs/hr ^a	0.32 tons/yr
Lead	33.3 lbs/hr ^a	4.8 tons/yr

^a hourly average

These emissions are derived from the estimated overall emission contribution from operating limits and emission factors supplied by the permittee. Exceedance of the operating limits shall be considered credible evidence of the exceedance of the emission limits. Compliance with these emission limits shall be determined as stated in Condition numbers 14 through 20.

(9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-60-300)

27. Particulate Emissions Limits for EU-01 (A) – Particulate matter (PM) and PM-10 emissions from the operation of the rocket motor test facility shall not exceed 714 lbs/hr. (9 VAC 5-80-1180 and 9 VAC 5-220-30)

28. Malfunction/Equipment Failure - HAPs (Toxics) Processes: Each process listed below shall, upon request of the DEQ, be shut down immediately if its emissions increase in any amount because of a bypass, malfunction, shutdown or failure of the process or its associated air pollution control equipment. The process shall not return to operation until it and the associated air pollution control equipment are able to operate in a proper manner.

a. Rocket Test Facility (EU-01(A))

b. Thermal Treatment Facility (EU-01(B))

(9 VAC 5-20-180 F 3)

29. **Limited Use of HAPs** – As of the date of this permit, the permittee is allowed to use the following volatile hazardous air pollutants (HAPs) in the sparging and drying operations (EU-06):

<u>HAP</u>	<u>CAS No.</u>
Hexane	CAS #110-54-3.
Methylene chloride	CAS #75-09-2.

Per 9 VAC 5-60-300 et seq., the permittee may use additional HAPs in the sparging and drying operations (Ref. No. EU-06) without obtaining a new permit provided that the following conditions are met:

- a. Notification shall be given to the Regional Air Compliance Manager of the DEQ's NRO. Such notification shall be made within fifteen days after the use of additional HAPs and shall include identification of the HAPs, the date each HAP was first used, the anticipated maximum throughput of the compounds in pounds/hour and tons/year, and calculations demonstrating that the anticipated maximum throughput does not exceed the limitations specified in paragraph b of this permit condition. Additional details of the notification shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO.
- b. Emissions of each HAP shall not exceed the exemption levels specified in 9 VAC 5-60-300 C.1. In no event shall the emissions of any volatile HAP exceed the maximum hourly or annual VOC emission limitations for the sparging and drying operations.
- c. The permittee shall record the monthly and annual emissions (in pounds or tons) of each HAP substituted under this Condition. Annual emissions shall be calculated monthly as the sum of each consecutive twelve-month period.
- d. The permittee shall not use any HAP in the sparging and drying operations that would make the facility subject to federal emission standards in 40 CFR §61 or §63.
- e. If a permit is required, then failure to obtain a permit prior to the change in process formulation or the use of any additional HAP may result in enforcement action.

This Condition shall not apply to the following units whose HAP emissions are regulated under a NESHAP subpart: (a) surface coating and adhesive application operations (Ref. No. EU-02), (b) hand-wipe and other cleaning operations (Ref. No. EU-03) and (c) motor case lining operation (Ref. No. EU-13).

This Condition shall not apply to any existing, new or modified exempt emission units whose HAP emissions satisfy the requirements of 9 VAC 5-60-300 et seq.

This Condition is in the permit to implement the requirements of 9 VAC 5-60-300 et seq. and is enforceable only by the Virginia Air Pollution Control Board (and not federally enforceable). (9 VAC 5-80-1180, 9 VAC 5-80-1120 F, 9 VAC 5-170-160 and 9 VAC 5-60-300)

30. **Visible Emission Limit** – Visible emissions from the exhaust of each of the three spray paint booths (Ref. No. EU-02) shall not exceed twenty percent opacity as determined by EPA Method 9 (reference 40 CFR §60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-1180, 9 VAC 5-50-80, 9 VAC 5-50-260 and 9 VAC 5-50-410)
31. **Requirements by Reference** – Except where this permit is more restrictive than the applicable requirement, the surface coating operations (Ref. No. EU-02), hand-wipe cleaning operations (Ref. No. EU-03), and motor case lining operation (Ref. No. EU-13) shall be operated in compliance with the requirements of 40 CFR §63, Subpart GG.
(9 VAC 5-60-90, 9 VAC 5-60-100, and 9 VAC 5-80-1180)

RECORDS AND NOTIFICATIONS

32. All correspondence concerning this permit should be submitted to the following address -

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

(9 VAC 5-50-50)

33. **Initial Notifications** – The permittee shall furnish written notification to the Regional Air Compliance Manager of the DEQ's NRO of:
- a. The actual date on which construction of Rocket Test Bay #1A (Ref. No. EU-01(A)), the new spray paint booth (Ref. No. EU-02), the modified RDX drying oven (Ref. No. EU-04B), the two new propellant cut-back machines (Ref. No. EU-09), and the new motor case lining operation (Ref. No. EU-13) commenced within thirty days after such date. The notification must include the following:
 - i. Name and address of the permittee;
 - ii. The address of the affected source.
 - b. The anticipated start-up date of Rocket Test Bay #1A (Ref. No. EU-01(A)), the new spray paint booth (Ref. No. EU-02), the modified RDX drying oven (Ref. No. EU-04B),

the two new propellant cut-back machines (Ref. No. EU-09), and the new motor case lining operation (Ref. No. EU-13), postmarked not more than sixty days nor less than thirty days prior to such date.

- c. The actual start-up date of Rocket Test Bay #1A (Ref. No. EU-01(A)), the new spray paint booth (Ref. No. EU-02), the modified RDX drying oven (Ref. No. EU-04B), the two new propellant cut-back machines (Ref. No. EU-09), and the new motor case lining operation (Ref. No. EU-13) within 15 days after such date.

(9 VAC 5-50-50 and 9 VAC 5-80-1180)

34. Notifications: General – The permittee shall fulfill the notification requirements contained in 40 CFR §63.9(h) through (j) and the record keeping and reporting requirements contained in 40 CFR §63.10(a), (b), (d) and (f) of the General Provisions, 40 CFR §63, Subpart A. (9 VAC 5-50-50, 40 CFR §63.753(a)(1), 40 CFR §63.9 and 40 CFR §63.10)

35. Notifications: Specific – The permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO of the following:

- a. if the facility engages in any solvent hand-wipe cleaning operations that are not considered *exempt cleaning operations* as specified in 40 CFR §63.744(e).
- b. if any of the coatings used in the surface coating operations do not meet the criteria of *specialty coatings* provided in 40 CFR §63.742.
Notification will be made as part of the semi-annual "Aerospace NESHAP Compliance Reports" required by Condition 42.

(9 VAC 5-50-50 and 9 VAC 5-170-160)

36. Notification for Control Equipment Maintenance – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least twenty-four hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B)

- 37. Notification of Facility or Control Equipment Malfunction** – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph, as soon as practicable but not later than four daytime business hours after the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the board.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)
- 38. On-Site Records** – The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. These records shall include, but are not limited to:
- a. The annual amount of explosives dried (Ref. No. EU-04A/B), calculated monthly as the sum of each consecutive twelve-month period.
 - b. The annual solvent consumption for the hand-wipe cleaning operations (Ref. No. EU-03), calculated monthly as the sum of each consecutive twelve-month period.
 - c. The start times, dates and quantities (specified in pounds) of solid propellant fired per testing event at the rocket test facility (Ref. No. EU-01(A)). The end time of the test event shall be recorded whenever the duration of the event lasts longer than one hour.
 - d. Hourly calculated emissions (in pounds) of particulate matter (PM) and PM-10 for each rocket testing event (Ref. No. EU-01(A)).
 - e. The start times, dates and quantities (specified in pounds) of waste explosives/propellants combusted per open burning event at the thermal treatment facility (Ref. No. EU-01(B)). The end time of the burn event shall be recorded whenever the duration of the event lasts longer than one hour.
 - f. The yearly quantity (specified in tons) of propellant fired at the rocket test facility (Ref. No. EU-01(A)), calculated monthly as the sum of each consecutive twelve-month period.
 - g. The yearly quantity (specified in tons) of waste explosives/propellants combusted at the thermal treatment facility (Ref. No. EU-01(B)), calculated monthly as the sum of each consecutive twelve-month period.
 - h. The yearly quantity (specified in gallons) of propane (supplemental fuel) combusted at the rocket test facility (Ref. No. EU-01(A)), calculated monthly as the sum of each consecutive twelve-month period.
 - i. The yearly quantity (specified in gallons) of diesel fuel (catalyst fuel) combusted at the thermal treatment facility (Ref. No. EU-01(B)), calculated monthly as the sum of each consecutive twelve-month period.

- j. The maximum quantity of propellant fired per day at the rocket test facility (Ref. No. EU-01(A)) and the thermal treatment facility (Ref. No. EU-01(B)), whenever a test-firing event and an open-burn event occur within the same 24-hour period.
- k. Propellant types and derived emission factors for all regulated air pollutants emitted from the operation of the rocket test facility (Ref. No. EU-01(A)) and the thermal treatment facility (Ref. No. EU-01(B)).
- l. Hourly calculated emissions for each HAP listed in Condition 26 (cadmium, chlorine, chromium, hydrogen chloride, hydrogen fluoride and lead) for each rocket testing (Ref. No. EU-01(A)) and open burning event (Ref. No. EU-01(B)).
- m. Monthly and annual calculated emissions of each pollutant listed in Conditions 26 and 27. Annual totals shall be calculated monthly as the sum of each consecutive twelve-month period. Calculation methods approved by the Regional Air Compliance Manager of the DEQ's NRO shall be used to verify compliance.
- n. The annual amount of surface coatings, adhesives and miscellaneous coatings processed in the surface coating and adhesive application operations (Ref. No. EU-02), calculated monthly as the sum of each consecutive twelve-month period.
- o. The "super" paint, adhesive and miscellaneous coating formulations for the surface coating and adhesive application operations (Ref. No. EU-02).
- p. The annual amount of solvent processed in the solvent cleaning machine (Ref. No. EU-05), calculated monthly as the sum of each consecutive twelve-month period.
- q. The annual amount of solvent processed in the sparging and drying operations (Ref. No. EU-06), calculated monthly as the sum of each consecutive twelve-month period.
- r. Material Safety Data Sheets (MSDSs)/Safety Data Sheets (SDSs) for the surface coatings, adhesives, miscellaneous coatings, liner materials, cleaning solvents, solvent-stabilized energetic materials ("lacquers") and stabilizing solvents used on-site.
- s. The following information for each cleaning solvent used for the facility's exempt solvent hand-wipe cleaning operations (Ref. No. EU-03) specified in 40 CFR §63.744(e) that does not conform to the vapor pressure or composition requirements of 40 CFR §63.744(b):
 - i. The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and
 - ii. A list of the processes set forth in 40 CFR §63.744(e) to which the cleaning operations apply.
- t. The information specified in 40 CFR §63.752(c) and (d) for any primer and topcoat application operations (Ref. No. EU-02) that utilize non-specialty coatings, where applicable.

- u. The annual amount of solvent processed in the motor case lining operation (Ref. No. EU-13), calculated monthly as the sum of each consecutive twelve-month period.

These records shall be updated within thirty days after the end of the month to which the records pertain. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-1180, 9 VAC 5-50-50, and 40 CFR §63.752)

39. Visual Emission Inspections. - The permittee shall conduct weekly visual emission inspections on the exhaust of each of the three spray paint booths (Ref. No. EU-02) during daylight hours when the booths are operating. Visual inspections shall consist of a visual survey of the exhaust over a minimum two-minute period to identify if there are visible emissions other than condensed water vapor. If there are no visible emissions observed during this period, the permittee shall record this fact and no further action is necessary for that particular weekly inspection. If any visible emissions other than condensed water vapor are observed, then the permittee shall:

- a. Conduct a visible emissions evaluation (VEE) using a certified opacity reader in accordance with Method 9 (40 CFR §60, Appendix A) for a minimum of six minutes, unless the visible emissions condition is corrected as expeditiously as possible. If the average opacity of the emissions from the exhaust of any of the spray paint booths (Ref. No. EU-02) exceeds twenty percent during any six-minute period, then a VEE shall be conducted immediately on the source for a consecutive sixty-minute period to determine compliance with the visible emissions standard prescribed in Condition 32. The VEE shall be conducted in accordance with Method 9 (40 CFR §60, Appendix A).
- b. Record the results of the weekly visible emissions inspections, the substance of any corrective actions, and the results of all visible emissions evaluations conducted in accordance with Method 9 (40 CFR §60, Appendix A).

(9 VAC 5-50-80 and 9 VAC 5-80-1180)

40. Reports (40 CFR Part 63, Subpart GG) – The permittee shall submit semi-annual reports to the EPA and the Regional Air Compliance Manager of the DEQ's NRO by November 1 and May 1 of each year for the preceding six-month reporting period (March 1 through August 31 and September 1 through February 28/29, respectively) that identify the following information:

- a. Any instance where a non-compliant cleaning solvent was used for a non-exempt hand-wipe cleaning operation;
- b. A list of any new cleaning solvents used for non-exempt hand-wipe cleaning in the previous six months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR §63.744(b)(1);
- c. Any instance where a non-compliant spray gun cleaning method was used;

- d. A statement that the cleaning operations have been in compliance for the semi-annual period, if the operations have been in compliance for the semi-annual period; and
- e. The information specified in 40 CFR §63.753(c) on any primer and topcoat application operations that utilize non-specialty coatings, where applicable.

The permittee shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements of 40 CFR §63, Subpart GG.

(9 VAC 5-80-1180 and 40 CFR §63.753(b) and (c))

41. **Reports (40 CFR Part 63, Subpart GG)** – The permittee shall notify the EPA and the Regional Air Compliance Manager of the DEQ's NRO of construction of the third spray paint booth (Ref. No. EU-02). This one-time notification shall be submitted on or before March 1 of the appropriate year for the preceding calendar year. The notice shall contain the information specified in 40 CFR §63.5(b)(4), except that such information shall be limited to inorganic HAPs.
(9 VAC 5-80-1180, 40 CFR §63.743(a)(10) and 40 CFR §63.5(b)(4))

GENERAL CONDITIONS

42. **Permit Invalidation** – The portions of this permit to construct the project, Rocket Test Bay #1A (Ref. No. EU-01(A)), the new spray paint booth (Ref. No. EU-02), the modified RDX drying oven (Ref. No. EU-04B), the two new propellant cut-back machines (Ref. No. EU-09), and the new motor case lining operation (Ref. No. EU-13), shall become invalid, unless an extension is granted by the DEQ, if:
- a. A program of continuous construction is not commenced within 18 months from the date of this permit.
 - b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of the phased construction of a new stationary source or project.

(9 VAC 5-80-1210)

43. **Permit Suspension/Revocation** – This permit may be suspended or revoked if the permittee:
- a. Knowingly makes material misstatements in the permit application or any amendments to it;
 - b. Fails to comply with the conditions of this permit;
 - c. Fails to comply with any emission standards applicable to a permitted emissions unit;

- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emissions limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 G)

44. Right of Entry – The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130 and 9 VAC 5-80-1180)

45. Maintenance/Operating Procedures – At all times, including periods of start-up, shutdown, soot blowing and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

- 46. Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of occurrence. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

- 47. Notification for Facility or Control Equipment Malfunction** – In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered notify the Regional Air Compliance Manager of the DEQ's NRO by facsimile transmission, telephone, email or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the facility or control equipment is again in operation, the owner shall notify the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

- 48. Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)

- 49. Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the Regional Air Compliance Manager of the DEQ's NRO of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

- 50. Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

ATTACHMENT B

EPA APPLICABILITY DETERMINATION INDEX Control Numbers M040001 (07/24/2001), and M050029 (02/18/2005) on MACT Subpart T (exemption)



40743

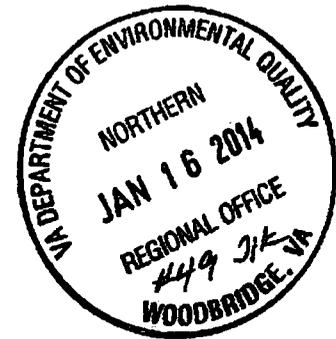
FILE ONLY

7499 Pine Stake Road
Culpeper, Virginia 22701

Telephone: (540) 854-2037
Facsimile: (540) 854-2002

January 13, 2014

Mr. R. David Hartshorn
Regional Air Compliance Manager
Virginia Department of Environmental Quality (VDEQ)
Northern Regional Office
13901 Crown Court
Woodbridge, Virginia 22193



Ms. Zelma Maldonado
Associate Director
Office of Air Enforcement & Compliance Assistance (3AP20)
Air Protection Division
U.S. Environmental Protection Agency (EPA), Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

RE: Termination of Coverage under NESHAP Subpart T
Phillips Vapor Degreaser (EU-05) at Building #5
Aerojet Rocketdyne, Inc. – Orange County Facility – Culpeper, Virginia
Title V Permit No. NRO40743 – Registration No. 40743

Dear Mr. Hartshorn and Ms. Maldonado:

Aerojet Rocketdyne, Inc., formerly named Aerojet-General Corporation, is writing to inform you that the batch vapor degreaser (Emission Unit (EU) -05) at Building #5 is no longer subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning (40 Code of Federal Regulations, Part 63, Subpart T).

The Phillips Model #2CRU-1012 machine was formerly covered under NESHAP Subpart T because a regulated halogenated solvent (1,1,1-trichloroethane) was historically utilized in this equipment. However, use of this particular cleaning agent stopped in September 2011. A non-regulated halogenated solvent (n-propyl bromide) is now processed.

The EPA allows a facility to terminate coverage under NESHAP Subpart T provided that they certify in writing that use of a regulated solvent (i.e., one listed in Part 63.460(a)) has been permanently discontinued. Two guidance memos on this subject are attached for your general reference. These documents were obtained from the EPA's on-line Applicability Determination Index.

A statement certifying that use of a regulated halogenated solvent in the Phillips vapor degreaser (EU-05) at Building #5 has been permanently discontinued is enclosed.

Mr. R.D. Hartshorn – VDEQ Northern Regional Office
Ms. Zelma Maldonado – EPA Region 3
Termination of Coverage under NESHAP Subpart T
Aerojet Rocketdyne, Inc. – Orange County Facility, Culpeper, Virginia
January 13, 2014 – Page 2

Aerojet Rocketdyne will no longer file semi-annual NESHAP Subpart T Compliance Reports for this equipment.

Historically, a second vapor degreaser, an Ultra-Kool Model #126-18 unit, was also subject to NESHAP Subpart T. However, this machine was never actually operated on-site. The Ultra-Kool degreaser was permanently decommissioned and sold as scrap metal during 2012.

Please contact me at (540) 854-2037 or Tim.Holden@Rocket.com if you have any questions or comments.

Sincerely,

AEROJET ROCKETDYNE, INC.



Timothy E. Holden
Environmental and Safety Manager
Virginia Operations

Enclosures (Certification and Two Guidance Memos)

cc: James LaFratta, VDEQ Northern Regional Office
Brian Wheatley, Aerojet Rocketdyne
Bill Schwennesen, Aerojet Rocketdyne
Dave Rymph, Aerojet Rocketdyne
David Carstens, ECCI

Mr. R.D. Hartshorn - VDEQ Northern Regional Office
Ms. Zelma Maldonado - EPA Region 3
Termination of Coverage under NESHAP Subpart T
Aerojet Rocketdyne, Inc. - Orange County Facility, Culpeper, Virginia
January 13, 2014 - Page 3

TERMINATION OF COVERAGE UNDER NESHAP SUBPART T
CERTIFICATION BY RESPONSIBLE OFFICIAL

Identifying Information	
Title V Permit No.:	<u>NRO40743 dated October 7, 2013</u>
Facility Name:	<u>Aerojet Rocketdyne, Inc.</u>
Facility Address:	<u>7499 Pine Stake Road</u> <u>Culpeper, Virginia 22701</u>
Mailing Address:	<u>Same as above.</u>
Responsible Official:	<u>Robert Shenton</u> Phone: <u>(870) 574-3198</u> Fax: <u>(870) 574-2509</u>
Technical Contact:	<u>Timothy Holden</u> Phone: <u>(540) 854-2037</u> Fax: <u>(540) 854-2002</u>
Principal Product:	<u>Solid Rocket Propellants & Motors</u> Primary SIC Code: <u>3764</u>
Certification by Responsible Official	
As a responsible official of Aerojet Rocketdyne, Inc., I certify that processing of a regulated halogenated solvent in the Phillips Model #2CRU-1012 Vapor Degreaser at Building #5 has been permanently discontinued.	
Signature:	<u></u> Date: <u>1/14/14</u>
	<u>BRIAN WHEATLEY (FOE)</u>
Name:	<u>Robert Shenton</u> Title: <u>V.P. of Operations</u>

AEROJET

GM-09-023

MEMO

TO: File
FROM: Rob Shenton *R*
DATE: September 23, 2009
SUBJECT: Signature Authorization for Environmental Matters

I hereby authorize Tim Holden, Environmental and Safety Manager or Brian Wheatley, Director of Manufacturing Operations at Aerojet's Orange County, VA facility, to sign all environmental documents for me. These include, but are not limited to, NPDES reporting requirements, Stormwater monitoring reports, Pollution Prevention and Waste Minimization Reports, Air Permits, RCRA Part B Permit, and SARA Tier II and Form R reports.



Robert E. Shenton
Vice President and Chief Operating Officer

cc: Brian Wheatley
Tim Holden
Robert Payne
Tom Haggerty
Jim Valetutti



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: M040001

Category: MACT
EPA Office: Region 1
Date: 07/24/2001
Title: Switching to non-HAP Solvent
Recipient: Arthur McMannus
Author: Michael Kenyon
Comments:

Subparts: Part 63, T, Halogenated Solvent Cleaning

References: 63.460

Abstract:

Q. Will the Associated Spring facility remain subject to 40 CFR part 63, subpart T, if it permanently stops using hazardous air pollutant (HAP) solvent and switches to a non-HAP solvent?

A. No. The Associated Spring facility no longer uses one of the listed solvents. Based on its commitment to continue in that mode for the foreseeable future, EPA has determined that the facility is no longer subject to the halogenated solvent NESHAP.

Letter:

July 24, 2001

**Mr. Arthur McMannus
Associated Spring
Bristol Division
18 Main Street
Bristol, CT 06010**

RE: Request for Applicability Determination on Halogenated Solvent Cleaning National Emission Standard for Hazardous Air Pollutant (NESHAP) and Title V Operating Permit Program

Dear Mr. McMannus:

The U.S. Environmental Protection Agency (EPA) has reviewed the letter dated July 21, 2000 from Associated Spring located in Bristol, CT regarding applicability to 40 CFR Part 63, Subpart T, halogenated solvent cleaning NESHAP and applicability to the Title V operating permit program. This letter provides you with a written applicability determination.

The July 21, 2000 letter describes the operations at the facility, including the operation of two vapor degreasers that employed methylene chloride as the cleaning solvent. The applicability of the NESHAP standard to Associated Spring, combined with the fact that Associated Spring had the potential to emit more than 10 tons per year of methylene chloride per year, made the facility subject to the requirement to obtain a Title V operating permit. In April 1998, Associated Spring eliminated the use of methylene chloride from its vapor degreasing operations. Associated Spring now uses Hypersolve NPB, a brominated solvent which is comprised of greater than 95% n-Propyl bromide. Associated Spring notified EPA Region I of this change in a letter dated April 20, 1998.

The halogenated solvent NESHAP applies to cleaning machines that use any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform in a total concentration greater than five percent by weight. Because Associated Spring no longer uses one of the listed solvents, and based on your commitment that it will continue in that mode for the foreseeable future, EPA has determined that Associated Spring's vapor degreasers and Associated Spring's facility are no longer subject to the halogenated solvent NESHAP. Because Associated Spring is no longer subject to the halogenated solvent NESHAP and provided that nothing else requires the facility to obtain a Title V operating permit, EPA has determined that the facility is not required to obtain a Title V operating permit.

The question of whether Associated Spring remains subject to Title V is to some extent separate from the question of MACT applicability. A source that has the potential to emit more than 10 tons per year of a hazardous air pollutant (HAP), or 25 tons per year of a combination of HAPs, is considered major and must obtain a Title V permit, regardless of whether it is subject to a NESHAP standard. In many cases, where a change from HAP to non-HAP cleaning solvents occurs, it is reasonable to assume that the change is permanent, that is, that the facility is not likely to switch back to HAP solvents in the future. Where this is the case, it is reasonable to recalculate potential to emit based upon use of the non-HAP solvent. Such a recalculation may result in the facility becoming non-major, in which case it could elect to follow the permitting authority's procedures for termination of its Title V permit. The Title V permitting authority should ask for any information it feels it needs in order to exercise its judgement regarding whether the switch to non-HAP solvents is sufficiently permanent to justify a change in the calculation of potential to emit. If you want to permanently cease use of halogenated solvents and not be considered subject to the standard, you must certify in writing under section 114 that you have no present intention of using the HAP solvents.

Please note, however, that an assumption that a facility has changed its potential to emit by switching solvents may prove false if the facility switches back. Where a facility that switches from HAP solvents to non-HAP and then switches back to HAP solvents, it should be apparent that the potential for use of HAP solvents always existed. While such a change in status may be due to legitimate business needs, permitting authorities should be prepared to use enforcement authorities as appropriate to discourage efforts to circumvent NESHAP and Title V requirements.

It follows that if Associated Spring elects to recommence use of methylene chloride or any other listed solvent in its vapor degreasers, Associated Spring will be subject immediately to the halogenated solvent NESHAP and Associated Spring must obtain a Title V operating permit. In addition, Associated Spring would be required under 40 CFR Part 63 Section 63.9(j) to inform EPA of any change in status within 15 days after the change.

This applicability determination does not relieve Associated Spring of responsibility for complying fully with any and all applicable federal, state and local laws, regulations and permits. If you have any questions about this letter, please call me at (617) 918-1521 or Susan Lancey at (617) 918-1656.

Sincerely yours,

Michael P. Kenyon
Air Branch Chief

cc: Charlie Garlow, EPA HQ
Patricia Embrey, EPA HQ
Ingrid Ward, EPA HQ
Ellen Morris, CT DEP
Gary Rose, CT DEP



**U.S. Environmental Protection Agency
Applicability Determination Index**

Control Number: M050029

Category: MACT
EPA Office: Region 5
Date: 02/18/2005
Title: Degreaser No Longer Using Regulated Solvent
Recipient: Jay Williams
Author: George Czerniak
Comments:

Subparts: Part 63, A, General Provisions
Part 63, T, Halogenated Solvent Cleaning

References: 63.9(j)
63.460(a)

Abstract:

Q: Will a vapor degreaser at Tecumseh Products research laboratory in Ann Arbor, Michigan, still be subject to MACT subpart T if the facility replaces trichloroethylene with Leksol, a solvent consisting of 94 weight percent n-propyl bromide?

A: No. Once the facility permanently ceases to use any of the solvents listed in 40 CFR 63.460(a), and certifies that fact in writing, the vapor degreaser will no longer be subject to MACT subpart T. However, if the facility recommences the use of any of these solvents, the degreaser will immediately become subject to the NESHAP, and per 40 CFR 63.9(j), the facility will have to inform EPA within 15 calendar days of the date of the change.

Letter:

February 18, 2005

Jay Williams
Tetra Tech, Inc.
710 Avis Drive
Ann Arbor, Michigan 48108

Re: Request for Removal from the Requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning at 40 C.F.R. Part 63, Subpart T on Behalf of Tecumseh Products Company, Ann Arbor Research Laboratory, Ann Arbor, Michigan

Dear Mr. Williams:

This letter is in response to your January 28, 2005 fax of a letter dated September 18, 2003 from Dennis McDonnell of Tecumseh to Glen Erikson of the Michigan Department of Environmental Quality, regarding applicability to the NESHAP for Halogenated Solvent Cleaning at 40 C.F.R. Part 63, Subpart T. Specifically, you requested that the United States Environmental Protection Agency, Region 5 (U.S. EPA) allow Tecumseh to be removed from the requirements of the NESHAP for Halogenated Solvent Cleaning because it no longer uses a solvent regulated under this standard in its vapor degreasing operation.

40 C.F.R. 63.460(a) states that the NESHAP for Halogenated Solvent Cleaning applies to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Mr. McDonnell declared that Tecumseh will discontinue the use of these halogenated solvents in its vapor degreasing operation. Specifically, Tecumseh will replace trichloroethylene with Leksol, a solvent consisting of 94 wt. % n-propyl bromide, in a vapor degreaser currently subject to the NESHAP for Halogenated Solvent Cleaning at the Ann Arbor Research Laboratory.

The U.S. EPA has reviewed your request and has determined that the vapor degreaser at Tecumseh's Ann Arbor Research Laboratory will no longer be subject to the NESHAP for Halogenated Solvent Cleaning once it ceases to use any of the solvents listed in 40 C.F.R. 63.460(a). You must certify in writing under Section 114 of the Clean Air Act that Tecumseh will permanently cease the use of halogenated solvents in its vapor degreasing operation. If Tecumseh recommences use of any of these solvents in its vapor degreasing operation, it will become immediately subject to the NESHAP for Halogenated Solvent Cleaning and must inform the U.S. EPA of this within 15 calendar days after the change, per 40 C.F.R. 63.9(j).

If you have any questions regarding this response, please contact Ray Cullen at (312) 886-0538.

Sincerely yours,

George Czerniak, Branch Chief
Air Enforcement and Compliance Assurance Branch