West Virginia Department of Environmental Protection

Joe Manchin, III Governor

Division of Air Quality

Randy C. Huffman Cabinet Secretary

Permit to Operate Open Burning Grounds For The Treatment Of Energetic Hazardous Waste



R25- HW-X-2

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 25 – Control of Air Pollution from Hazardous Waste, Treatment, Storage, and Disposal Facilities

The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Orbital ATK- Alliant Techsystems Operations LLC Allegany Ballistics Laboratory 057-00011

> William F. Durham Director

Issued:October 6, 2015 •Effective:October 6, 2015 •Expiration:March 30, 2025

This permit will supercede and replace Permit R25-HW-X-1.

Facility Location: Rocket Center, Mineral County, West Virginia

Mailing Address: 210 State Route 956, Rocket Center, WV 26726-0210

Facility Description: Open Burning Grounds for Treatment of Energetic Hazardous Waste

UTM Coordinates: 686.30 km Easting • 4381.45 km Northing • Zone 17

Permit Type: Renewal

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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Attachments

- 1. Consolidated Waste Analysis Plan for Burning Grounds and Container Storage Areas
- 2. Process Information
- 3. General Operating Procedure Explosives Burning Grounds Operations
- 4. General Operating Procedure Rules for Vehicles (Other than Forklifts) Transporting Explosives
- 5. General Operating Procedure Waste Classification, Labeling, Storage, and Disposal Procedures to Prevent Hazards

1.0. General Conditions

1.1. Definitions

For the purpose of this permit, terms used herin shall have the same meaning as those in 45 CSR 25, Section 2, unless this permit specifically states otherwise. Where terms are not otherwise defined, the terms shall have the meaning as listed in a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

1.2. Acronyms

CAAA	Clean Air Act Amendments	NO_X	Nitrogen Oxides
CBI	Confidential Business	NSPS	New Source Performance
	Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	$PM_{2.5}$	Particulate Matter less than 2.5
C.F.R. or CFR	Code of Federal Regulations		μm in diameter
CO	Carbon Monoxide	PM_{10}	Particulate Matter less than
	Codes of State Rules	10	10μm in diameter
DAQ	Division of Air Quality	Ppb	Pounds per Batch
DEP	Department of Environmental	Pph	Pounds per Hour
	Protection	Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	Ppm _V or	Parts per Million by Volume
FOIA	Freedom of Information Act	ppmv	
HAP	Hazardous Air Pollutant	PSD	Prevention of Significant
HON	Hazardous Organic NESHAP		Deterioration
HP	Horsepower	Psi	Pounds per Square Inch
lbs/hr	Pounds per Hour	SIC	Standard Industrial
LDAR	Leak Detection and Repair		Classification
M	Thousand	SIP	State Implementation Plan
MACT	Maximum Achievable	SO_2	Sulfur Dioxide
	Control Technology	TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	TPY	Tons per Year
MM	Million	TRS	Total Reduced Sulfur
MMBtu/hr or	Million British Thermal Units	TSP	Total Suspended Particulate
mmbtu/hr	per Hour	USEPA	United States Environmental
MMCF/hr or	Million Cubic Feet per Hour		Protection Agency
mmcf/hr		UTM	Universal Transverse Mercator
NA	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic Compounds
	Standards	VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

1.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 1.3.1. 45CSR25 –Control of Air Pollution from Hazardous Waste Treatment, Storage, and Disposal Facilities
- 1.3.2. This permit authorizes operation of open burning grounds and contains requirements for preventing and controlling organic air emissions associated with hazardous waste management utilizing containers. For the purposes of enforcement, compliance with this permit during its term constitutes compliance with requirements of 45 CSR 25. Permittee means both the Co-permittees ATK Tactical Systems Company LLC and U.S. Navy Naval Sea Systems Command.

1.4. Term and Renewal

- 1.4.1. This permit supersedes and replaces previously issued Permit R25-HW-X-1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR25 or any other applicable legislative rule;
- 1.4.2. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. An application must be submitted at least one hundred eighty (180) days before this permit expires;
- 1.4.3 This permit may be modified, revoked, or reissued, or terminated for cause as specified in 45 CSR 25 Section 5.5. The filing of a request for a permit modification, revocation and reissuance, or termination or notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition;
- 1.4.4. This permit and all conditions therein will remain in effect beyond the permit expiration date if the permittee has submitted a timely, complete application for reissuance of a permit and through no fault of the permittee, the Secretary has not issued a new permit before the stated expiration date.

1.5. Duty to Comply

- 1.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in the Part A & Part B RCRA, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
- 1.5.2. The permittee must comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of this permit and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application;

- 1.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 1.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

1.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

1.7 Duty to Mitigate

In the event of noncompliance with this permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

1.8. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

1.9. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- 1. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

4. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

1.10. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

1.11. Property Rights

Neither permit issuance nor permit possession conveys any property rights of any sort or any exclusive privilege. Neither permit issuance nor permit possession authorizes any injury to persons or property or invasion of other property rights, or any infringement of State or local law or regulation.

1.12. Proper Operation and Maintenance

Neither permit The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not necessarily limited to, effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

1.13. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

1.14. Transferability

This permit is transferable in accordance with the requirements outlined in 45CSR25.

1.15. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

1.16. Documents to be Maintained at the Facility Site

Unless otherwise specified by this permit or 45CSR25, the permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents:

- 1. Current waste analysis plan.
- 2. Personnel training documents and records (maintain three years after employment for former employees).
- 3. The facility operating record.
- 4. All other documents required by this permit

1.17. Monitoring and Records

- Samples and measurements taken for the purpose of monitoring shall be representative of the
 monitored activity. Laboratory methods to support the Waste Analysis Plan must be those
 specified in <u>Test Methods for Evaluating Solid Waste: Physical/Chemical Methods</u> (SW-846,
 Third Edition, as amended) or an equivalent method approved by the EPA Administrator.
- 2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period at least three (3) years from the date of the sample, measurement, report, or application. This periods may be extended at the request of the Director at any time and are automatically extended during the course of any unresolved hazardous waste management enforcement action regarding this facility.).
- 3. Records of monitoring information shall include:
 - (a) The date, exact place, and the time of sampling or measurements;
 - (b) The sampling techniques or methods used;
 - (c) The name(s) of individual(s) who performed the sampling or measurements;
 - (d) The date(s) analyses were performed;
 - (e) The name(s) of individual(s) who performed the analyses;
 - (f) The analytical techniques or methods used; and
 - (g) The results of such analyses.

1.18. Reporting Requirements

- 1. Planned Changes. The permittee shall give written notice to the Secretary as soon as possible of any planned physical alterations or additions to the permitted facility.
- 2. Anticipated Noncompliance. The permittee shall give advance written notice to the Secretary of any planned changes in this permitted facility or activity which may result in noncompliance with the requirements of this permit.
- 3. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information or previously omitted information in the permit application, the permittee shall promptly submit such facts or information and a written explanation of the circumstances of the incomplete or inaccurate submittal to the Secretary.
- 4. Noncompliance. The permittee shall report to the Secretary all instances of permit noncompliance, for which records must be kept pursuant to Section 3.6 of this permit, within thirty (30) days following the end of each calendar quarter during which the noncompliance occurred. The reports shall contain the information listed in Section 1.19 of this permit.
- 5. The permittee shall promptly notify the Director or a duly authorized representative of any unplanned or accidental release of hazardous substances to the atmosphere that are in excess of the Reportable Quantity under Title III.
- 6. Other monitoring results related to the scope of this permit shall be reported at the request of the Director.

1.19. Twenty-four (24) Hour Reporting

The permittee shall report any noncompliance which may endanger human health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:

- 1. Information concerning release or discharge of any air emissions that may cause an endangerment to human health or the environment; and
- 2. Information concerning the release or discharge of hazardous waste or constituents thereof or of a fire or explosion which could threaten the environment or human health.
- 3. Any such report shall include a description of the occurrence and its cause, if known, including:
 - (a) Name, address, and telephone number of the owner or operator;
 - (b) Name, address, and telephone number of the facility;
 - (c) Date, time, and type of incident;
 - (d) Name and quantity of material(s), hazardous waste(s), or pollutant(s) involved.

- (e) The extent of injuries, if any;
- (f) An assessment of actual or potential hazard(s) to the environment and human health; and
- (g) Estimated quantity and disposition of recovered material that resulted from the incident.
- (h) Within five (5) days of such occurrence, a written report shall be provided to the Director. This written report shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Director may waive the five (5) days written notice requirement in favor of a written report within fifteen (15) days. Compliance with this provision does not relieve the permittee from all other applicable requirements of this permit.

1.20. Information Repository

The Director may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in 40 CFR 124.33(b). The information repository will be governed by the provisions in 40 CFR 124.33(c) through (f).

2.0. General Facility Conditions

2.1. Design and Operation of Facility

- 2.1.1. The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation.
- 2.1.2. This permit authorizes the permittee to operate the Burning Grounds and hazardous waste management activities subject to RCRA Subpart CC at Allegany Ballistics Laboratory, subject to all conditions and requirements contained in this permit.

2.2. General Waste Analysis

The permittee shall follow the waste analysis plan included as Permit Attachment 1 or the most recent revision of the facility waste analysis plan. The permittee shall verify its waste analysis as part of its quality assurance program, in accordance with current EPA practices (<u>Test Methods for Evaluating Solid Waste: Physical /Chemical Methods</u>, SW-846) or equivalent methods approved by the EPA Administrator; and at a minimum maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations.

2.3. Personnel Training

The permittee shall implement a personnel training program as required by 45CSR25. This training program shall include classroom instruction and/or on-the-job training for new facility personnel and an annual review of such training by all waste disposal personnel. The permittee's personnel training program, as included in the permit application, may be amended upon written approval of the Secretary, provided the change is minor.

2.4. General Requirement For Ignitable, Reactive, or Incompatible Waste

The permittee shall take precautions to prevent reactions which:

- 2.4.1. Produce uncontrolled toxic mists, fumes, dust, or gases in sufficient quantities to threaten human health or the environment; and
- 2.4.2. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion.

2.5. Reports, Notifications, and Submissions to the Secretary

- 2.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit and 45 CSR 25 to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible corporate officer or a duly authorized representative that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. "Responsible corporate officer" and "duly authorized representative" shall have the meanings assigned in 40 CFR 270.11.
- 2.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of 45 CSR 5.15.
- 2.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director WVDEP

Division of Air Quality

601 57th Street

Charleston, WV 25304-2345

Attention: Hazardous & Solid Waste Program

If to the US EPA:

Associate Director

Office of Enforcement and Permits Review

(3AP12)

U.S. Environmental Protection Agency

Region III 1650 Arch Street

Philadelphia, PA 19103-2029

2.6. Closure (RCRA Subpart O, 40 CFR 264.351)

- 2.6.1. A statutory provision of the West Virginia Hazardous Waste Management Act charges the Department of Environmental Protection, Division of Water and Waste Management (DWWM) with administering those parts of the hazardous waste management regulatory program that pertain to closure.
- 2.6.2. The absence of specific conditions for closure in this permit shall not be considered by the Permittee as a shield from complying with the specific rules of DWWM related to closure.

3.0. Treatment of Energetic Wastes

3.1. Permitted and Prohibited Waste Identification

3.1.1. The permittee may open burn the following wastes subject to the terms of this permit and as described below:

Waste Description	Hazardous Waste Code	Allowed Quantity Pounds/Event Pounds/Day Pounds/Year		
Aluminized Composite Propellant	D003	1,630 ³	14,670	500,000
Non-Aluminized Composite Propellant	D003	1,630³	14,670	500,000
Double-Base Propellant	D003, D008	1,630³	14,670	500,000
Plastic-Bonded Explosives (PBX)	D003	1,630³	14,670	500,000
Type 1 P/E Waste ¹	D003, D008, F003	1,630 ³	14,670	500,000
Type 2 P/E Waste ²	D003, F003	1,630³	14,670	500,000
MA	1,630³	14,670	500,000	

¹Type 1 wastes include double-base propellant (DBP) components with acetone and sawdust as an absorbent and stabilizer.

3.1.2. The permittee is prohibited from treating hazardous waste that is not identified in Permit Condition 3.1.1

3.2. Operating Requirements

- 3.2.1. The permittee shall construct, operate and maintain Pans A, B, C, D, E, and F at the Burning Grounds in accordance with the procedures contained in Permit Attachment 2 or the most recent revision of the facility process information.
- 3.2.2. The permittee shall operate and maintain a precipitation cover in accordance with the procedures contained in Permit Attachment 2 or the most recent revision of the facility process information.

²Type 2 wastes include Plastic-Bonded Explosives (PBE) components, composite-propellant components, and miscellaneous materials (with acetone and sawdust as an absorbent and stabilizer). Miscellaneous materials in Type 2 waste are materials such as stir sticks that may contain energetic materials.

³The quantity/distance calculations for the current pan configuration limits pounds/event to 1355 pounds.

- 3.2.3. The permittee shall operate and maintain the Burning Grounds in order to minimize air emissions or exposure of people (onsite or offsite) to toxic or hazardous emissions in accordance with Permit Attachments 2 and 3, or the most recent revisions to these process information and general operating procedures as follows:
 - 3.2.3.1. No open burning shall commence without certification by the Plant Manager's authorized representative that the conditions allow for ignition to occur;
 - 3.2.3.2 Open burning activities shall not occur when wind velocity exceeds fifteen (15) miles per hour, when electrical storms are in progress or imminent, or during rain events.
- 3.2.4. Ash/residue from the open burning shall be managed in accordance with Permit Attachment 3 or the most recent revision of the facility general operating procedures.

3.3. Handling and Storage Requirements

3.3.1. The permittee shall handle, manage, and store energetic wastes in accordance with Permit Attachments 4 and 5 or the most recent revisions to these general operating procedures.

3.4. Inspection Schedules and Procedures

3.4.1. The permittee shall inspect the open burning unit in accordance with the Inspection Schedule and Procedures in Permit Attachment 3 and 6 or the most recent revisions to these general operating procedures.

3.5. Prevention of Unintended Ignition or Reaction of Wastes

3.5.1. The permittee shall follow the procedures, contained in Permit Attachment 3 or the most recent revision to the general operating procedures, designed to prevent unintended ignition or reaction of wastes.

3.6. Recordkeeping

3.6.1. The permittee shall develop and maintain all records to comply with 40 CFR 264.73, 40 CFR 264.602, and Permit Attachment 3 or the most recent revision to the general operating procedure.

4.0. Preventing Organic Air Emissions from the Management of Hazardous Waste Containers Treatment of Energetic

The permittee shall comply with RCRA Subpart CC- Air Emission Standards for Tanks, Surface Impoundments, and Containers (40 CFR 264.1080 et. seq.), as incorporated by reference in 45 CSR 25, with respect to containers to manage hazardous waste at the permittee's plant site.