

October 26, 2018

UPS TRACKING NO: 1Z1696310397022855

Douglas A. Warnock, Ph.D. Chief, Environmental Management Division Letterkenny Army Depot 1 Overcash Avenue Chambersburg, PA 17201

Re: Issuance of Class 2 Permit Modification

RCRA Part B Permit Letterkenny Army Depot EPA ID No. PA6213820503

APS No. 946853, Authorization No. 1192363

Greene, Hamilton and Letterkenny Townships, Franklin County

Dear Mr. Warnock:

Enclosed is the Hazardous Waste Permit modification to operate a hazardous waste treatment facility issued to Letterkenny Army Depot, 1 Overcash Avenue, Chambersburg, PA in accordance with Article V of the Solid Waste Management Act, 35 P.S. Sections 6018.101, et seq. This permit modification approves the operation of a Flashing Furnace unit that will thermally treat outdated small arms munitions at Letterkenny Army Depot's Open Burning/Open Detonation Area.

Please note that the Department did not receive any comments on the draft permit, dated July 23, 2018, during the forty-five (45) day public comment period.

Compliance with the terms and conditions set forth in the permit is mandatory. Please note that issuance of this permit does not eliminate the necessity to comply with all federal, state, or local requirements at the permitted facility. You have the right to file an appeal as to these terms and conditions.

Any final operation, design, or other plan developed subsequent to permit issuance which exhibits changes in the structures, locations, specifications, control measures or other changes of substance shall be submitted to the Department for subsequent permit action. Any deviation of plans herein approved shall not be implemented before first obtaining a permit modification or written approval from the Department.

Nothing herein shall be construed to supersede, amend or authorize violation of the provisions of any valid and applicable local law ordinance, or regulation, provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. § 6018.101, et seq.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board Rachel Carson State Office Building, Second Floor 400 Market Street P.O. Box 8457 Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within thirty (30) days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at http://ehb.courtapps.com or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN THIRTY (30) DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact John Oren, Permits Section Chief, at 717.705.4706.

Sincerely,

Anthony Rathfon Program Manager

Waste Management Program

Enclosures

cc: Greg Epstein, LEAD

Brian Sauls, Skelly and Loy, Inc. Letterkenny Township Supervisors Greene Township Supervisors Hamilton Township Supervisors Franklin County Planning Commission bcc: Glenn Mitzel, DEP BWM, Hazardous Waste Division
Sara Kinslow, EPA Region III, RCRA Permitting Program
John Oren
Carrie Fleming
Linda Houseal
Tim Long
Ed Rawski
Jamie Smathers
Derek Bartram
Bryan Walter
Jessica Fultz
File
T

CC addresses:

Greg Epstein Letterkenny Army Depot 1 Overcash Avenue Chambersburg, PA 17201

Brian Sauls Skelly and Loy, Inc. 449 Eisenhower Blvd., Suite 300, Harrisburg, PA 17111-2302

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION WASTE MANAGEMENT PROGRAM SOUTHCENTRAL REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number PA6213820503, issued on August 5, 2008 to:

Letterkenny Army Depot 1 Overcash Avenue Chambersburg, PA 17201

Greene Township, Hamilton Township and Letterkenny Township, Franklin County

is hereby modified as follows:

o This permit modification approves the addition of a Flashing Furnace unit that will thermally treat outdated small arms munitions at Letterkenny Army Depot's Open Burning/Open Detonation Area.

This permit modification no. 3 is based upon the following submittals:

- 1. An application for a Class 2 Permit Modification submitted on June 28, 2017 by Brian D. Sauls of Skelly and Loy, Inc., on behalf of Letterkenny Army Depot, and received by the Department on June 28, 2017, consisting of:
 - a. Letter of Transmittal
 - b. Payment receipt for permit application fee of \$700
 - c. General Information Requirements
 - d. Facility Description
 - e. Waste Feed Characteristics
 - f. Process Information
 - g. Groundwater Monitoring
 - h. Procedures to Prevent Hazards
 - i. Contingency Plan
 - j. Personnel Training

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on ____Qctober 26, 2018 ____. ____.

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

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- k. Closure Plan for the Flashing Furnace
- 1. Solid Waste Management Units
- m. Certification
- n. List of Figures
 - (1) USGS Quadrangle for the Flashing Furnace, OB/OD Areas, Private Wells, ARMD Facility and Surrounding Area
 - (2) 100-Year Floodplain Delineation Map
 - (3) Security Gates and Roads at LEAD
 - (4) Igloo Locations and Transportation Routes
 - (5) Flashing Furnace Location Map
 - (6) Land Use at LEAD and Flashing Furnace Area
 - (7) General Land Use at LEAD
 - (8) Watersheds in LEAD Area
 - (9) Surface Geology in LEAD Area
 - (10) Harrisburg Wind Rose
 - (11) LEAD Organizational Structure
 - (12) Evacuation Route
- o. List of Tables
 - (1) Geographic Coordinates and Elevations of the Flashing Furnace Facility and the Existing ARMD and OB/OD Facilities
 - (2) Environmental Permits and Licenses Issued to LEAD
 - (3) Air Emission Data
- p. List of Appendices
 - (1) Directions to Letterkenny Army Depot
 - (2) Examples of Materials to be Treated with the Flashing Furnace
 - (3) Letterkenny Army Depot Standard Operating Procedures for Small Quantities of Ammunition, Explosives, Explosive Contaminated Material and Mutilation of Inert Items
 - (4) Integrated Contingency Plan
 - (5) Transportable Flashing Furnace Economy Model Owner's Manual
 - (6) Preventative Maintenance Checks and Services
 - (7) Training and Certification Program for Personnel Working in Ammunition Operations
 - (8) Flashing Furnace Closure Plan
- g. List of Attachments
 - (1) General Information Form (GIF)
 - (2) Form HW-B Professional Certification
 - (3) Form HW-C Compliance History
 - (4) Form HW-E Contractual Consent of Landowner
 - (5) RCRA Subtitle C Site Identification Form
 - (6) Application for a Hazardous Waste Treatment, Storage and Disposal Permit
 - (7) Checklist for Review of RCRA Part B Permit Applications

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- 2. Response to the Department's August 7, 2017 administrative review letter submitted on September 6, 2017 by Douglas A. Warnock of Letterkenny Army Depot, and received by the Department on September 8, 2017, consisting of:
 - a. Cover letter
 - b. Copy of Request for Determination of Requirement for Plan Approval/Operating Permit
 - c. USGS Quadrangle of the Open Burning/Open Detonation Areas, Surroundings (Figure A-1)
 - d. Two eMapPA maps showing the location of the Flashing Furnace and OB/OD Area
 - e. List of Notices of Violation and other enforcement actions
 - f. Copy of June 21, 2017 letter indicating that Letterkenny Army Depot submitted EPA Form 8700-12 to the Department's Division of Hazardous Waste Management
 - g. Revised Pages 3-B-10 through 3-B-14 of the Checklist for Review of RCRA Part B Permit Applications
 - h. Revised Page 11 in Section C of the application narrative
 - i. Addition of Section E to the Checklist for Review of RCRA Part B Permit Applications
 - j. Revised Page 19 in Section E of the application narrative
 - k. Environmental Sampling Plan for OB/OD Areas
 - 1. Revised Pages 3-B-31 through 3-B-33 of the Checklist for Review of RCRA Part B Permit Applications
 - m. Revised Sections F-3(c) and F-5 of the application narrative
 - n. Addendum to Final Report: Transportable Flashing Furnace
 - o. Revised Pages 3-B-105 of the Checklist for Review of RCRA Part B Permit Applications
 - p. Revised Section G-4(h) of the application narrative
 - q. Revised Pages 3-B-124 through 3-B-127 of the Checklist for Review of RCRA Part B Permit Applications
 - r. Revised Section I-8 of the application narrative
 - s. Copy of Public Meeting Attendance Sign-In Sheet and Meeting Minutes
 - t. Copy of the public notices that appeared in *The Public Opinion* and *The Record Herald* concerning the upcoming public meeting on July 25, 2017 at Letterkenny Army Depot
 - u. Copy of memorandum documenting the electronic sign advertisement for the public meeting
- 3. Response to the Department's Technical Review Letter No. 1 dated January 23, 2018 submitted on February 15, 2018 by Douglas A. Warnock of Letterkenny Army Depot and received by the Department on February 21, 2018, consisting of:
 - a. Cover letter
 - b. Revised Section A-5 of the application narrative
 - c. Revised Section B-3(b) of the application narrative
 - d. Revised 100-Year Floodplain Map (Figure 2)
 - e. Revised Flashing Furnace Location Map (Figure 5)
 - f. Copy of NPDES permit application dated October 31, 2017
 - g. Plan Drawing for the Flashing Furnace's Concrete Pad

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- h. Map of Open Burning Ground 1 that shows the locations of the concrete pad and the proposed sedimentation basin
- 4. Response to the Department's Technical Review Letter No. 2 dated March 13, 2018 submitted on March 22, 2018 by Douglas A. Warnock of Letterkenny Army Depot and received by the Department on March 27, 2018, consisting of:
 - a. Erosion and Sediment Control Measures in OB1 and Flashing Furnace Area (Figure D-15)

Permit Conditions:

- 1. The following Parts of the original permit, issued on August 5, 2008 and modified on December 31, 2012 and December 8, 2014, are hereby revised to reflect changes in permit conditions and/or attachments as a result of this Class 2 permit modification. Revised pages of the original permit are attached and will hereby replace those pages in the permit of December 8, 2014:
 - Part I General Facility Conditions (new page 4)
 - Part III Treatment of Energetic Wastes (new page 8)
 - Part IV Permit Conditions (new pages 9-10)
 - List of Attachments (new page 11)
- 2. Nothing herein shall be construed to supersede, amend or authorize violation of the provisions of any valid and applicable local law, ordinance or regulation, provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 98, 35 P.S.§6018.101, et seq.

PART I - STANDARD CONDITIONS

A. EFFECT OF PERMIT

This permit authorizes only the management of hazardous waste expressly described in this permit and does not authorize any other management of hazardous waste. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under the Act or any other law governing protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, terminated for cause as specified in 25 Pa. Code 270a.41, 270a.42, 270a.43 and 40 CFR 270.41, 270.42, and 270.43 or suspended in accordance with the Act. The filing of a request for a permit modification, revocation and reissuance, or revocation or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay or supersede the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held to be invalid, the application of such provision to other circumstances and the remaining provisions of this permit shall not be affected thereby.

D. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 25 of the Pennsylvania Code and Title 40 of the Code of Federal Regulations (25 Pa. Code Chapters 260a - 270a and 40 CFR 260 - 270), unless this permit specifically states otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "The Department" is the Department of Environmental Protection of the Commonwealth of Pennsylvania.

E. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE DEPARTMENT

All reports, notifications, or other submissions which are required by this permit to be sent or given to the Department should be sent certified mail or given to:

PA Department of Environmental Protection Southcentral Region – Field Operations Facilities Manager Waste Management Program 909 Elmerton Avenue Harrisburg, PA 17110-8200

F. SIGNATORY REQUIREMENTS

All reports or other information requested by the Department shall be signed and certified as required by 40 CFR 270.11.

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions, and modifications to these documents:

- 1. Waste analysis plan required by 25 Pa. Code 264a.13 and this permit.
- 2. Personnel training documents and records required by 40 CFR 264.16(d) and this permit.
- 3. Contingency plan required by 40 CFR 264.53(a) and this permit.
- 4. Closure and post-closure plan(s) required by 40 CFR 264.112(a) and (b) and 40 CFR 264.118(a) and (b) and this permit.

- 5. Operating record required by 40 CFR 264.73 and Part II, Section H.1 of this permit.
- 6. Inspection schedules and logs required by 25 Pa. Code 264a.15, 40 CFR 264.15(b)(2) and this permit.
- 7. Documents required by Part I, Section H, and Part II, Sections D and H of this permit.

H. DUTIES AND REQUIREMENTS

- 1. <u>Duty to Comply.</u> The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and the regulations promulgated thereunder and is grounds for enforcement action; for permit revocation, termination and reissuance, or modification; or for denial of a permit renewal application.
- 2. <u>Duty to Reapply</u>. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least 180 days before this permit expires.
- 3. <u>Permit Expiration</u>. This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application and through no fault of the Permittee, the Department has not issued a new permit.
- 4. <u>Need to Halt or Reduce Activity Not a Defense</u>. It shall not be a defense for the Permittee in an enforcement action to argue that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 5. <u>Duty to Mitigate</u>. In the event of noncompliance with the Act, the regulations, or this permit, the Permittee shall take all necessary steps to prevent and abate any releases to the environment, and shall carry out such measures as are necessary to prevent significant adverse impacts on human health or the environment.
- 6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of storage, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the Act, the regulations, and the conditions of this permit. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall operate back-up or auxiliary facilities or similar systems if necessary to achieve compliance with the Act, the regulations and the conditions of the permit.
- 7. <u>Duty to Provide Information</u>. The Permittee shall furnish to the Department within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by the Permittee pursuant to the Act, the regulations, or any permit condition.
- 8. <u>Inspection and Entry</u>. The Permittee shall allow the Department, its agents and authorized representatives, upon the presentation of credentials and other documents as may be required by law, or without advance notice or a search warrant to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records concerning the regulated facility or activity are kept;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act, the regulations, or this permit;
 - d. Sample or monitor any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by the Act or the regulations; and
 - e. Engage in any other activities necessary or appropriate to the documentation of events or conditions at any locations.

9. Monitoring and Records.

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 – Representative Sampling Methods, or an equivalent method approved by the Department. Laboratory methods must be those specified in Appendix III to 40 CFR Part 261- Chemical Analysis; Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (U.S. EPA Document SW-846, most recent edition); Standard

- Methods of Waste Water Analysis (U.S. EPA; 15th ed.; 1980); or an equivalent method approved by the Department and as specified in the attached waste analysis plan.
- b. 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 and records required by the Act, the regulations, or this permit, and all records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record, or application. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
- c. The Permittee shall maintain records of all groundwater quality and groundwater surface elevations for the active life of the facility and during the post-closure care period as well.
- d. The Permittee shall, at a minimum, keep monitoring records which include the following information:
 - (1) The dates, exact place, and times of sampling or measurements;
 - (2) The individuals who performed the sampling or measurements;
 - (3) The dates analyses were performed;
 - (4) The individuals who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses
- 10. Reporting Planned Changes. The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. This notice must include a description of all incidents of noncompliance reasonably expected to result from the proposed changes. The Permittee shall not modify the facility without first obtaining a permit from the Department.
- 11. <u>Anticipated Noncompliance</u>. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- 12. Transfer of Permits. This permit shall not be transferred or assigned to any other person or municipality.
- 13. <u>Twenty-Four Hour Reporting</u>. The Permittee shall report to the Department any noncompliance with the Act, the regulations or any condition of this permit or any occurrence or event at the facility, which may endanger health or the environment.
 - a. Information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
 - (1) Information concerning release or potential release of any hazardous waste from the facility that may endanger public drinking water supply sources.
 - (2) Any information of a release, potential release, or discharge of hazardous waste from the facility, or information of a potential or actual fire or explosion at the facility, which may threaten the environment or human health.
 - b. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazards to the environment and human health at or near the facility; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.
 - c. A written submission shall also be provided to the Department within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of non-compliance (including exact dates and times); 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 reoccurrence of the noncompliance. The Permittee need not comply with the five-day written notice requirement if the Department extends it to 15 days.

- 14. Other Noncompliance. The Permittee shall report to the Department all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition I.H.13.
- 15. Other Information. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, or whenever the Permittee becomes aware of circumstances which require a modification or clarification of any fact or representation made to the Department in connection with a permit application, it shall promptly submit such facts or information to the Department.
- 16. <u>Documents to be Submitted Prior to Operation</u>. The Permittee shall submit the following documents to the Department for written approval prior to commencing operation of the Flashing Furnace unit:
 - A Form HW-B Professional Certification Hazardous Waste Facility Construction, Repair or Closure Activity; and
 - As-built plans shall be submitted to the Department for review and approval prior to operation of the new Flashing Furnace unit.
- 17. <u>Certification of Construction or Modification</u>. The Permittee may not manage hazardous waste at the Flashing Furnace unit until:
 - The Department has inspected the modified or newly constructed unit and finds it is in compliance with the conditions of the permit.

PART II - GENERAL FACILITY CONDITIONS

A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to air, soil, surface water, or groundwater which could threaten human health or the environment.

B. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment 1. The Permittee shall verify its waste analysis as part of its quality assurance program, in accordance with current EPA practices (*Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, U.S. EPA Document SW-846, most recent edition) or equivalent methods approved by the Department in accordance with procedures in 40 CFR 260.21; 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.

C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (c).

D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection plan set out in the inspection schedule, Attachment 2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).

E. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the attached outline, Attachment 3. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).

F. PREPAREDNESS AND PREVENTION

- 1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the PPC plan, Attachment 4, as required by 40 CFR 264.32.
- 2. <u>Testing and Maintenance of Equipment</u>. The Permittee shall test and maintain the equipment specified in the previous permit condition and in Attachment 4 as necessary to assure its proper operation in time of emergency.
- 3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.34.
- 4. <u>Arrangements with Local Authorities</u>. The Permittee shall maintain arrangements with state and local authorities as required by 40 CFR 264.37. If state or local officials refuse to enter into or renew existing preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

G. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

- 1. <u>Implementation of PPC Plan.</u> The Permittee shall immediately carry out the provisions of the PPC plan, Attachment 4, and follow the emergency procedures described by 25 Pa. Code 264a.56 and 40 CFR 264.56(a) (j) whenever there is a fire, explosion, emission or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment.
- 2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR 264.53.
- 3. <u>Amendments to Plan</u>. The Permittee shall review and immediately amend, if necessary, the PPC plan, as required by 40 CFR 264.54.
- 4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR 264.55.
- 5. <u>Emergency Procedures</u>. The Permittee shall comply with the requirements of 25 Pa. Code 264a.56 and 40 CFR 264.56(a) through (i).

H. RECORDKEEPING AND REPORTING

- 1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73.
- 2. <u>Biennial Report</u>. The Permittee shall comply with all applicable biennial facility report requirements in 25 Pa Code 264a.75 and 40 CFR 264.75.
- 3. Required Reports. The Permittee shall comply with all applicable reporting requirements as described in Part I, Sections H, and Part IV, of this permit.

I. CLOSURE

- 1. <u>Performance Standard</u>. The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the closure plan, Attachment 5.
- 2. <u>Amendment to Closure Plan</u>. The Permittee shall amend the closure plan in accordance with 40 CFR 264.112(c) whenever necessary.
- 3. <u>Notification of Closure</u>. The Permittee shall notify the Department in writing at least 180 days prior to the date he expects the final volume of waste.
- 4. <u>Time Allowed for Closure</u>. After receiving the final volume of hazardous waste, the Permittee shall remove from the site all hazardous waste and shall complete closure activities in accordance with the schedules specified in the closure plan, Attachment 5.
- 5. <u>Disposal or Decontamination of Equipment</u>. The Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by 40 CFR 264.114 and the closure plan, Attachment 5.
- 6. <u>Certification of Closure</u>. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 25 Pa. Code 264a.115 and 40 CFR 264.115.

PART III - TREATMENT OF ENERGETIC WASTES

A. OPEN BURNING UNIT NO. 1

The Permittee is hereby authorized to treat energetic wastes in Open Burning Unit No. 1 according to the following:

- 1. <u>Burn Cages</u>. Burn cages shall be used to conduct flashing operations of items that have been contaminated by propellant residues, explosive residues, and pyrotechnic residues.
- 2. <u>Burn Pans</u>. Burn pans in Open Burning Unit No. 1 shall be used to conduct flashing operations of items that have been contaminated by propellant residues, explosive residues, and pyrotechnic residues.
- 3. <u>Thermal Battery Activation</u>. Open Burning Unit No. 1 may be used to conduct thermal battery activation operations.

B. OPEN BURNING UNIT NO. 2

The Permittee is hereby authorized to treat energetic wastes in Open Burning Unit No. 2 according to the following:

- 1. <u>Burn Pans</u>. Burn pans in Open Burning Unit No. 2 shall be used to conduct burning operations of propellants and incendiary materials. Each burn pan in Open Burning Unit No. 2 shall be used no more than once per day. Each burn pan in Open Burning Unit No. 2 shall not exceed a net explosive weight of 1,000 pounds per burn.
- Rocket Motor Static Firing Tubes. Rocket motor static firing tubes in Open Burning Unit No. 2 shall be used to
 conduct static firing operations of rocket motors. Each rocket motor static firing tube shall not exceed a net
 explosive weight of 375 pounds per firing.
- 3. <u>Thermal Battery Activation</u>. Open Burning Unit No. 2 may be used to conduct thermal battery activation operations.

C. OPEN DETONATION AREA

The Permittee is hereby authorized to treat energetic wastes in the Open Detonation Area, including both the Long Field and the Short Field as identified in Figure A-2 of the application, according to the following:

- 1. <u>Materials and Energetics Treated</u>. The Open Detonation Area shall be used to demilitarize high explosives, pyrotechnics, incendiaries, bombs, grenades, fuzes, conventional warheads, mines, rocket motors, rockets, demolition material, and other military munitions by detonation.
- 2: <u>Net Explosive Weight</u>. Each detonation that occurs in the Open Detonation Area shall not exceed a net explosive weight of 500 pounds per detonation.
- 3. <u>Number of Detonations</u>. The number of detonations that occur in the Open Detonation Area in a single day shall not exceed 28.

D. AMMONIUM PERCHLORATE ROCKET MOTOR DESTRUCTION (ARMD) FACILITY

The permittee is hereby authorized to treat energetic wastes at the Ammonium Perchlorate Rocket Motor Destruction (ARMD) Facility as identified in the ARMD Facility Site Plan Layout Sketch dated 9/12/2014. The Facility is composed of a Preparation Building, Segmentation Building (for those rocket motors which require segmenting), RAMSLIC (Remote Automated Motor Sealing, Loading and Ignition Completion) Shelter, Thermal Treatment System Chamber, Pollution Abatement System, and Effluent Handling System. Specifically, treatment activities will be conducted within the Thermal Treatment System Chamber as follows:

- 1. <u>Materials and Energetics Treated</u>. The Thermal Treatment System Chamber will treat solid-propellant rocket motors
- 2. <u>Net Explosive Weight</u>. Based on the largest motors to be treated, the maximum daily amount of propellant (NEW) treated shall not exceed 32,100 pounds per day.
- 3. <u>Number of Motor Firings</u>. Maximum number of motor firings per day is dependent upon the size of the rocket motors to be fired that day, however, the number of firings per day shall not exceed 60 per day.

E. FLASHING FURNACE UNIT

The Permittee is hereby authorized to treat energetic wastes in the Flashing Furnace Unit according to the following:

1. <u>Materials and Energetics Treated</u>. The Flashing Furnace Unit shall be used to thermally treat items that have been contaminated by propellant residues, explosive residues, and pyrotechnic residues. The items to be treated are limited to ammunition up to 50 caliber, fuses, mortars, grenades, and missile components.

PART IV - PERMIT CONDITIONS

The Permittee is hereby authorized to treat energetic wastes in accordance with Parts I, II, and III of this permit, subject to the following permit conditions:

A. CONSTRUCTION ACTIVITIES

- 1. The Permittee shall install diversion dikes and a sediment trap down gradient of Open Burning Unit No. 1. The diversion dikes shall divert runoff to the sediment trap.
- 2. The Permittee shall install diversion dikes and a sediment trap down gradient of Open Burning Unit No. 2. The diversion dikes shall divert runoff to the sediment trap.
- 3. The Permittee shall install diversion dikes and a sediment trap down gradient of the Flashing Furnace's concrete pad. The diversion dikes shall divert runoff to the sediment trap.

B. ENVIRONMENTAL SAMPLING (OPEN BURNING/OPEN DETONATION AREAS)

The Permittee shall conduct environmental sampling in accordance with the provisions of the most current version of the Environmental Sampling Plan for OB/OD Areas and Flashing Furnace, Attachment 8:

- 1. <u>Sediment Trap Sampling</u>. The Permittee shall conduct sediment sampling in the sediment traps of Open Burning Unit No. 1, Open Burning Unit No. 2, and the Flashing Furnace both of which are required for installation in permit condition IV.A above. This sampling shall be conducted no less than once per year.
- 2. <u>Sediment Basin Sampling</u>. The Permittee shall conduct sampling of the sedimentation basin (aka sediment pond) dredgings. This sampling shall be conducted no less than once per year.
- 3. <u>Soil Sampling</u>. The Permittee shall conduct soil sampling in the Open Detonation Area. This sampling shall be conducted subsequent to detonation operations, with at least one sample taken at grade surface within 50 feet of the detonation operations after the regarding of the craters is completed. This sampling shall be conducted no less than once per year.
- 4. Surface Water Monitoring. The Permittee shall conduct surface water monitoring in the ONB/OD areas. This monitoring shall be conducted subsequent to high rainfall events of no less than two (2) inches of rain per 12-hour period. This monitoring shall be conducted in the Back Creek Sub-Basin in the unnamed tributary downstream from Open Burning Unit No. 1 and Open Burning Unit No. 2, on the downstream side of Georgia Avenue. This monitoring shall also be conducted in the Rocky Springs Branch Sub-Basin in the effluent stream of the sediment pond and in the effluent stream of the old impoundment pond, downstream of Barricade Road. This monitoring shall be conducted no less than once per year.
- 5. <u>Groundwater Monitoring</u>. The Permittee shall conduct groundwater monitoring in the OB/OD areas. This monitoring shall be consistent with, and a continuation of, the groundwater monitoring that was conducted between June 2003 and March 2004 at the Department's request for the application, Attachment 6. This monitoring shall be conducted no less than once per year.
- 6. <u>Sediment and Soil Analysis</u>. The sediment and soil samples required in IV.B.1 though IV.B.3 above shall be analyzed for:
 - all parameters listed in Table 4 of Appendix A of 25 Pa Code §250.1 et seq. (regarding the Department's Land Recycling Program);
 - b. the inorganic parameters of sulfate, chloride, fluoride, nitrate, and nitrite; and
 - c. the explosives parameters of nitrocellulose, nitroguanidine, nitroglycerine, perchlorate, 2,4-dinitrotoluene, 2-amino-4,6-dinitrotoluene, 4-amino-2,6-dinitrotoluene, tetryl, 1,3,5-trinitrobenzene, 2,4,6-trinitrotoluene, HMX, and RDX.
- 7. Surface Water Analysis. The surface water samples required in IV.B.4 above shall be analyzed for:
 - a. Total and dissolved phases of all parameter required in IV.B.6 above; and

- b. The parameter of temperature, dissolved oxygen, ammonia nitrogen, specific conductance, total dissolved solids, total suspended solids, pH, alkalinity (as CaCO₃), and hardness (as CaCO₃).
- 8. <u>Macroinvertebrate Sampling</u>. The Permittee shall conduct macroinvertebrate sampling. This sampling shall be consistent with, and a continuation of, the macroinvertebrate sampling that was conducted in January 2002 for the application, Attachment 7. This sampling shall be conducted no less than once per year.

C. ENVIRONMENTAL SAMPLING (ARMD FACILITY)

The Permittee shall conduct environmental sampling in accordance with the provisions of the most current version of the Environmental Sampling Plan for Soil, Groundwater, and Surface Water Quality Monitoring for the ARMD Facility, Attachment 9.

D. RECORDKEEPING AND REPORTING

The Permittee shall record the sampling and analysis data required by the approved Environmental Sampling Plan. The Permittee shall summarize and report this sampling and analysis data to the Department no less than once per year. The Permittee shall maintain records of this information in accordance with permit conditions I.G.7, I.H.9.d, and II.H.3.

LIST OF ATTACHMENTS

- 1. Waste Analysis Plan
- 2. Inspection Schedule (September 2017)
- 3. Personnel Training (February 2009)
- 4. Preparedness, Prevention and Contingency (PPC) Plan (March 2016)
- 5. Closure Plan (September 2017)
- 6. Quarterly Groundwater Monitoring Report (March 2004)
- 7. Macroinvertebrate Study
- 8. Environmental Sampling Plan for OB/OD Areas and Flashing Furnace (April 2018)
- 9. Environmental Sampling Plan for Soil, Groundwater, and Surface Water Quality Monitoring for the ARMD Facility (May 2016)