



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM

311
PA6213820503
Franklin Co.

December 8, 2014

CERTIFIED MAIL NO. 9171 9690 0935 0033 0173 62

Todd Johnson, Chief
Letterkenny Army Depot
Environmental Management Division
1 Overcash Avenue
Chambersburg, PA 17201-4150

Re: Issuance of Class 3 Permit Modification
RCRA Part B Permit
Letterkenny Army Depot
EPA ID No. PA6213820503
APS No. 836672, Auth ID 1016027
Greene, Hamilton and Letterkenny Townships, Franklin County

Dear Mr. Johnson:

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 construction and operation of an ammonium perchlorate rocket motor destruction (ARMD) facility, which will use a confined burning unit with emissions control and auxiliary wastewater treatment to treat solid propellant rocket motors.

The following changes have been made to the draft permit, dated September 24, 2014, in response to comments submitted by the Letterkenny Army Depot, dated November 4, 2014. No other comments were received during the public comment period.

1. Attachment 1, Waste Analysis Plan, Section CC-1 has been revised to remove a redundant reference to polyvinylchloride (PVC) propellant.
2. Attachment 1, Waste Analysis Plan, Table CC-4 has been revised to clarify that the propellant is referred to as *AP-NIGU* (nitroguanidine).
3. Attachment 1, Waste Analysis Plan, Section CC-2, subsection titled *Rocket Motor Carcass* has been revised to clarify that any untreated energetic material remaining after ARMD treatment will be further treated at the open burning and/or open detonation treatment units.
4. Attachment 1, Waste Analysis Plan, Section CC-2, subsection titled *Spent Activated Carbon* has been revised to clarify that waste activated carbon from the ARMD's air pollution control system will be containerized and handled in accordance with onsite waste management procedures, and that its final disposal will be to a commercial RCRA TSD facility.

5. Attachment 1, Waste Analysis Plan, Section CC-2(a)(1) has been revised to specify that magnesium hydroxide solution will be used in the air emissions spray tower, rather than sodium hydroxide solution as was stated in the original permit application.

6. Attachment 1, Waste Analysis Plan, Section CC-2(d) has been revised to remove language stating that wastewater effluents from the approved ARMD treatment facility will never be hazardous and, thus, will never be sampled.

7. Attachment 1, Waste Analysis Plan, Section CC-2(f) has been revised to correct a minor grammatical error.

8. Attachment 3, Personnel Training, Section HH has been revised to more specifically clarify that training will be provided by the Letterkenny Munitions Center.

9. Attachment 3, Personnel Training, Section HH-1 has been revised to state that the Letterkenny Munitions Center, in addition to the Letterkenny Army Depot, will identify training needs for personnel at the ARMD treatment facility.

10. Attachment 4, PPC Plan, Section FF-2a has been revised to specifically clarify that inspections of the ARMD treatment facility will be conducted by the Letterkenny Munitions Center.

11. Attachment 4, PPC Plan, Sections GG-4(d)(1), GG-4(e), GG-4(h), and GG-7 have been revised to state that the facility's Incident Commander (IC) will take over the duties that the Installation On-Scene Coordinator (IOSC) formerly performed.

12. Attachment 4, PPC Plan, Section GG-4(d)(2) has been revised to replace standard operating procedure *LE-0000-H59* with *LE-0000-H-039*, for rocket motor demilitarization.

13. Attachment 5, Closure Plan, subsection titled *ARMD Closure Plan* has been revised to remove reference to the Letterkenny Flashing Furnace.

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, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the

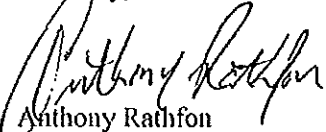
Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you want to challenge this action, your appeal must reach the Board within 30 days. You do not need a lawyer to file an appeal with the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO 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 (717-787-3483) FOR MORE INFORMATION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please call John Oren at 717-705-4907.

Sincerely,



Anthony Rathfon
Program Manager
Waste Management Program

cc: Greg Epstein, LEAD
Rick Frandsen, El Dorado Engineering, Inc.
Greene Township (w/enclosure)
Hamilton Township (w/enclosure)
Letterkenny Township (w/enclosure)
Franklin County Planning Commission (w/enclosure)

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 Drive
Chambersburg, PA 17201

is hereby modified as follows:

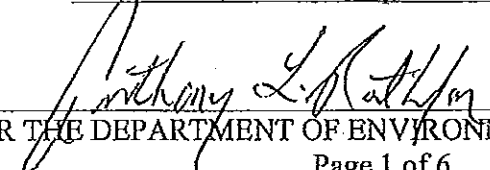
° This permit modification approves the addition of a new ammonium perchlorate (AP) rocket motor destruction (ARMD) facility that will use confined burning with emissions control to treat solid propellant rocket motors that are currently treated at the Open Burning unit at Letterkenny Army Depot. This permit modification is for the ARMD Facility with a location of:

Latitude: 40°01'58" North
Longitude: 77°44'24" West

This permit Modification No. 2 is based upon the following:

1. A public notice that appeared in the Public Opinion and The Record Herald concerning the upcoming public meeting at Letterkenny Army Depot, received by the Department on January 22, 2014.
2. A permit application which was prepared by El Dorado Engineering, Inc., submitted on behalf of Letterkenny Army Depot, and received by the Department on February 27, 2014, consisting of:
 - a. General Information Requirements
 - b. Facility Description
 - c. Waste Feed Characteristics
 - d. Process Information
 - e. Groundwater Monitoring
 - f. Procedures to Prevent Hazards
 - g. Contingency Plan
 - h. Personnel Training

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on December 8, 2014 and expire on August 5, 2018.


FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Letterkenny Army Depot
OBOD RCRA Part B Permit
Greene, Hamilton and Letterkenny Townships
Franklin County
Permit No. PA6213820503
December 8, 2014
Page 2

- d. Process Information
- e. Groundwater Monitoring
- f. Procedures to Prevent Hazards
- g. Contingency Plan
- h. Personnel Training
- i. Closure Plan for ARMD
- j. Solid Waste Management Units
- k. Certification
- l. List of Tables
 - (1) Geographic Coordinates and Elevations
 - (2) Environmental Permits and Licenses
 - (3) Missiles for which Motors will be Demilitarized
 - (4) Chemical Constituents in AP-HTPB Propellant
 - (5) Chemical Constituents in AP-CTPB Propellant
 - (6) Chemical Constituents in AP-NQ Propellant
 - (7) Chemical Constituents in AP-KP Propellant
 - (8) Methods for Testing Wastewater, Sludge, and Thermal Treatment Container Residue
 - (9) Maximum Potential Rocket Motor Firings and Annual Quantities
- m. List of Figures
 - (1) USGS Quadrangle of the Confined Burn Unit and Surrounding Area
 - (2) Map Showing Private Wells, OB/OD Areas, and ARMD Facility
 - (3) Harrisburg Wind Rose
 - (4) FEMA Floodplain Map
 - (5) Flood Boundary and Floodway Map
 - (6) Security Gate and Roads at LEAD
 - (7) Igloo Locations and Transportation Routes
 - (8) ARMD Facility and Boundary
 - (9) Process Flow Diagram
 - (10) Process Flow Chart
 - (11) Land Use at LEAD and ARMD Facility
 - (12) General Land Use at LEAD
 - (13) LEAD Location Map
 - (14) Watershed in LEAD Area
 - (15) Surface Geology in LEAD Area
 - (16) LEAD Organizational Structure
- n. List of Appendices
 - (1) ARMD Location and Directions to Letterkenny Army Depot
 - (2) Process Design and Description
 - (3) MLRS Rocket Motor Testing at China Lake – MCBAT Report

Letterkenny Army Depot
OBOD RCRA Part B Permit
Greene, Hamilton and Letterkenny Townships
Franklin County
Permit No. PA6213820503
December 8, 2014
Page 3

- (4) Phoenix Rocket Motor Testing at China Lake – MCBAT Report
 - (5) Letterkenny Modeling Methodology Report
 - (6) Standard Operating Procedures
 - (7) Inspection Forms
 - (8) Training and Certification Manuals and Procedures
 - (9) Closure Plan
- o. Attachments
- (1) General Information Form (GIF) and Applicant Checklist
 - (2) Professional Certification Form (Form HW-B)
 - (3) Compliance History (Form HW-C)
 - (4) Contractual Consent of Landowner (Form HW-E)
 - (5) Environmental Siting Criteria/Environmental Assessment Process Review Checklist for Hazardous Waste Management Facilities (Module 9)
 - (6) Hazardous Waste Permit Application (Form OMB-2050-0024)
 - (7) Hazardous Waste Treatment, Storage, Disposal Permit
 - (8) RCRA Part B Checklist
 - (9) Electronic Copy of November 2006, RCRA Part B Permit Application for OBOD Areas, Letterkenny Army Depot
 - (10) Public Meeting Attendance, Minutes, and Presentation
3. Application fee of \$7,000.00 received by the Department on March 30, 2014.
4. Response to the Department's Technical Review Letter of July 31, 2014 submitted by El Dorado Engineering, Inc. on behalf of LEAD dated August 8, 2014 and received by the Department on August 11, 2014, consisting of:
- a. Drawings
- (1) Entire Rocket Motor Confined Burn Destruction Facility
Drawing No. 15813-801-05 Sheet 1 REV 2
 - (2) Rocket Motor Stand
Drawing No. 15813-215-01 Sheets 1-4 REV 2
 - (3) Thermal Treatment Chamber
Drawing No. 15813-301-01 Sheets 1-2 REV 3
 - (4) Pollution Abatement System
Drawing No. 15813-405-01 Sheet 1 REV 3
Drawing No. 15813-405-01 Sheet 2 REV 2
 - (5) Effluent Treatment System
Drawing No. 15813-410-01 Sheet 1 REV 3
 - (6) Concrete Pads
Drawing No. 15813-801-03 Sheet 1 REV 2

Letterkenny Army Depot
OBOD RCRA Part B Permit
Greene, Hamilton and Letterkenny Townships
Franklin County
Permit No. PA6213820503
December 8, 2014
Page 4

Drawing No. 15813-801-06 Sheet 1 REV 2
Drawing No. 15813-801-07 Sheet 1 REV 2
Drawing No. 15813-803-03 Sheet 1 REV 2
Drawing No. 15813-803-11 Sheet 1 REV 2
Drawing No. 15813-803-15 Sheet 1 REV 2

(7) Sump

Drawing No. 15813-601-02 Sheets 1-9 REV 2
Drawing No. 15813-801-08 Sheet 1 REV 2
Drawing No. 15813-803-07 Sheet 1 REV 2
Drawing No. 15813-820-01 Sheets 1-6 REV 3

(8) Liquid Collection Conveyances

Drawing No. 15813-802-01 Sheet 1 REV 3

(9) Segmenting Building

Drawing No. 15813-110-01 Sheets 1-2 REV 1

b. Maps

(1) Map 1—Figure AA-1

Drawing No. 15812-750-01

(2) Map 2—Site and Closest Wetland

Drawing No. 15813-100-01

(3) Map 3—Site, Contours, Farmland Classifications, Wetlands

Drawing No. W912DY-04-D-0008-0008 Sheet 3 of 35 C-2

(4) Map 4—Site, Farmland Classifications, Wetlands

Drawing No. W912DY-04-D-0008-0008 Sheet 2 of 35 C-1

(5) Map 5—Boundary Image

(6) Map 6—National Wetlands Inventory

(7) Map 7—National Wetlands Inventory Close-up

c. Details of ARMD

d. Details of Segmenting

e. Updated Table CC-1

f. Sedimentation and Stormwater Plan

(1) Drawing No. W912DY-04-D-0008-0008 Sheet 1 of 5 ES-1

(2) Drawing No. W912DY-04-D-0008-0008 Sheet 2 of 5 ES-2

(3) Drawing No. W912DY-04-D-0008-0008 Sheet 3 of 5 ES-3

(4) Drawing No. W912DY-04-D-0008-0008 Sheet 4 of 5 ES-4

(5) Drawing No. W912DY-04-D-0008-0008 Sheet 5 of 5 ES-5

g. Updated Section AA-6

Letterkenny Army Depot
OBOD RCRA Part B Permit
Greene, Hamilton and Letterkenny Townships
Franklin County
Permit No. PA6213820503
December 8, 2014
Page 5

- h. EA Considerations for Section AA-9 and Module 9
 - i. Waste Sampling Plan
 - j. Updated Section DD-8 (g)
 - k. Updated Closure Plan
 - l. Explanation of Farmland
 - m. Stormwater Explanation
 - n. Sinkholes Update and Geotechnical Report
 - o. Additional Replacement Pages
5. Revised drawing titled, ARMD Site Plan Layout Sketch, dated September 12, 2014 submitted by El Dorado Engineering, Inc. and received by the Department on September 16, 2014.
6. Additional information submitted by Rick Frandsen of El Dorado Engineering, Inc. on behalf of LEAD, sent by email on September 18, 2014 consisting of a revised Table FF-2 Inspection Log – Operations.
7. Additional information submitted by Rick Frandsen of El Dorado Engineering on behalf of LEAD, sent by email on September 22, 2014 consisting of:
- a. A narrative describing that the concern about the piping over open ground would not have secondary containment would be handled by providing “double wall piping for those two piping sections that do not have any additional containment underneath the pipe run.”
 - b. Drawing No. 15813-410-01 Sheet 1 REV 5
 - c. Drawing No. 15813-601-02 Sheet 1 REV 3
 - d. Drawing No. 15813-803-03 Sheet 1 REV 5
8. Response to the Comments in Item #5 above submitted by Todd Johnson of LEAD, received by the Department on November 20, 2014, consisting of:
- a. Comment 12 and 13 Response.
 - b. Comment 14 Response

Letterkenny Army Depot
OBOD RCRA Part B Permit
Greene, Hamilton and Letterkenny Townships
Franklin County
Permit No. PA6213820503
December 8, 2014
Page 6

- c. Comment 15 Response 1
- d. Comment 15 Response 3
- e. Comment 15 Response 2 and Comment 16 Response
- f. Comment 17 Response

PERMIT CONDITIONS:

1. The following Parts of the original permit, issued August 5, 2008, are hereby revised to reflect changes made in permit conditions and/or attachments as a result of this Class 3 permit modification. Revised pages of the original permit are attached and will hereby replace those pages in the permit of August 5, 2008:
 - Part I – General Facility Conditions (new pages 2 - 5)
 - Part III – Treatment of Energetic Wastes (new page 8)
 - Part IV – Permit Conditions (new pages 9 -10)
 - List of Attachments including revisions to indicated 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 97, 35P.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. Duty to Comply. 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. Duty to Reapply. 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. Permit Expiration. 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. Need to Halt or Reduce Activity Not a Defense. 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. Duty to Mitigate. 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. Duty to Provide Information. 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. Inspection and Entry. 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. Anticipated Noncompliance. 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. Twenty-Four Hour Reporting. 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. Documents to be Submitted Prior to Operation. The Permittee shall submit the following documents to the Department for written approval prior to commencing operation of the Ammonium perchlorate Rocket Motor Destruction (ARMD) facility:
 - 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 ARMD facility.
17. Certification of Construction or Modification. The Permittee may not manage hazardous waste at the facility until:
 - The Permittee has submitted to the Department by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit.

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. Burn Cages. Burn cages shall be used to conduct flashing operations of items that have been contaminated by propellant residues, explosive residues, and pyrotechnic residues.
2. Burn Pans. 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. Thermal Battery Activation. 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. Burn Pans. 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.
2. 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. Thermal Battery Activation. 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. Materials and Energetics Treated. 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. Net Explosive Weight. Each detonation that occurs in the Open Detonation Area shall not exceed a net explosive weight of 500 pounds per detonation.
3. Number of Detonations. 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. Materials and Energetics Treated. The Thermal Treatment System Chamber will treat solid-propellant rocket motors.
2. Net Explosive Weight. 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. Number of Motor Firings. 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.

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.

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

The Permittee shall prepare an Environmental Sampling Plan to address potential impacts to the open burning/open detonation (OB/OD) areas that may result from OB/OD activities. The Permittee shall submit the Environmental Sampling Plan to the Department for Department approval within 180 days of the issuance of this permit. Upon Department approval, the Permittee shall comply with the provisions of the Environmental Sampling Plan. The Environmental Sampling Plan shall specifically provide for the following:

1. Sediment Trap Sampling. The Permittee shall conduct sediment sampling in the sediment traps of Open Burning Unit No. 1 and Open Burning Unit No. 2, 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. Sediment Basin Sampling. 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. Soil Sampling. 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. Groundwater Monitoring. 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. Sediment and Soil Analysis. The sediment and soil samples required in IV.B.1 through IV.B.3 above shall be analyzed for:
 - a. 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 CaCO_3), and hardness (as CaCO_3).
8. Macroinvertebrate Sampling. 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 prepare an Environmental Sampling Plan to address potential impacts to the ARMD facility area that may result from activities at the ARMD facility. The Permittee shall submit the Environmental Sampling Plan to the Department for Department approval within 60 days of the issuance of this permit and be implemented prior to operation of the ARMD facility. Upon Department approval, the Permittee shall comply with the provisions of the Environmental Sampling Plan. The Environmental Sampling Plan shall specifically provide for the following:

- Groundwater monitoring
- Soil Sampling
- Surface water and/or sediment sampling from drainageways

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 (including revisions dated February 2014, August 8, 2014 and November 20, 2014)
2. Inspection Schedule (including revisions dated February 2014 and September 18, 2014)
3. Personnel Training (including revisions dated February 2014, September 18, 2014 and November 20, 2014)
4. Preparedness, Prevention, and Contingency (PPC) Plan (including revisions dated February 2014 and November 20, 2014)
5. Closure Plan (including revisions dated February 2014, August 8, 2014 and November 20, 2014)
6. Quarterly Groundwater Monitoring Report (March 2004)
7. Macroinvertebrate Study

