

## **PART I – STANDARD PERMIT CONDITIONS**

### **I.A. EFFECT OF PERMIT**

The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of this Permit. Any storage or treatment of hazardous waste not authorized in this Permit, or another permit issued by the Director (e.g., an emergency permit), is prohibited. Compliance with this Permit generally constitutes compliance, for purposes of enforcement, with the Colorado Hazardous Waste Act, C.R.S. §§25-15-101 *et seq.* (the Act). Since the Department has not adopted all portions of U.S. Environmental Protection Agency's (EPA's) Military Munitions Rule, the Colorado Hazardous Waste Regulations (6 CCR 1007-3) supersede any references to EPA's Military Munitions Rule, including any references in documents referenced by this Permit, Permit Attachments, and associated Appendices. Issuance of this Permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal, state, or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the imminent hazard provisions of the Act or §7003 of Resource Conservation and Recovery Act (RCRA); §§106(a), 104, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*, commonly known as CERCLA), or any other law providing for protection of public health or the environment.  
[6 CCR 1007-3 §§100.46 and 100.42(g)]

### **I.B. PERMIT ACTIONS**

#### **I.B.1. Permit Modification, Revocation and Reissuance, and Termination**

This Permit may be modified, revoked and reissued, or terminated for cause, as specified in 6 CCR 1007-3 §100.60. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.  
[6 CCR 1007-3 §§100.60 and 100.42(f)]

#### **I.B.2. Permit Renewal**

This Permit may be renewed as specified in 6 CCR 1007-3 §100.42(b) and Permit Condition I.E.2. Review of any application for a permit renewal will consider improvements in the state of control and measurement technology, as well as changes in applicable regulations [6 CCR 1007-3 §100.42(b)].

### **I.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 invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

## **I.D. DEFINITIONS**

For purposes of this Permit, terms used herein shall have the same meaning as those in 6 CCR 1007-3 Parts 2, 99, 100, and 260 through 268, unless this Permit specifically provides otherwise. Where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. “Director” means the Director of the Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division, or his designee or authorized representative.

## **I.E. DUTIES AND REQUIREMENTS**

### **I.E.1. Duty to Comply**

The Permittee must comply with all conditions of this Permit, except to the extent and for the duration an emergency permit authorizes such noncompliance. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [6 CCR 1007-3 §100.42(a)]

### **I.E.2. Duty to Reapply**

If the Permittee wishes to continue an activity allowed 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 prior to Permit expiration. [6 CCR 1007-3 §§100.42(b) and 100.11(e)(1)]

### **I.E.3. Permit Expiration**

Pursuant to 6 CCR 1007-3 §100.45, this Permit shall be effective for a fixed term of ten years. As long as CDPHE is the permit-issuing authority, this Permit and all conditions herein 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 Director has not issued a new permit as set forth in 6 CCR 1007-3 §100.11(e)(2).

### **I.E.4. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [6 CCR 1007-3 §100.42(c)]

### **I.E.5. Duty to Mitigate**

In the event of noncompliance with this Permit, the Permittee must take all reasonable steps to minimize releases to the environment and must carry out

such measures, as are reasonable, to prevent significant adverse impacts on human health or the environment. [6 CCR 1007-3 §100.42(d)]

I.E.6. Proper Operation and Maintenance

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 conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control 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 this Permit. [6 CCR 1007-3 §100.42(e)]

I.E.7. Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [6 CCR 1007-3 §100.42(f)]

I.E.8. Property Rights

This Permit does not convey any property rights of any sort, or any exclusive privilege. [6 CCR 1007-3 §100.42(g)]

I.E.9. Duty to Provide Information

The Permittee must furnish to the Director, within a reasonable time, any relevant information that the Director 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 must also furnish to the Director, upon request, copies of records required to be kept by this Permit. [6 CCR 1007-3 §§264.74(a) and 100.42(h)]

I.E.10. Inspection and Entry

Pursuant to 6 CCR 1007-3 §100.42(i), the Permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

I.E.10.a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

I.E.10.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

- I.E.10.c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
  - I.E.10.d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.
- I.E.11. Monitoring and Records
- I.E.11.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. See Permit Condition II.C.1. [6 CCR 1007-3 §100.42(j)(1)]
  - I.E.11.b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports and records required by this Permit and 6 CCR 1007-3 §264.74, the certifications and notices required by 6 CCR 1007-3 §264.73(b)(9) and (11), and records of all data used to complete the application for this Permit, from the date of the sample, measurement, report, record, certification, or application until closure of the facility, except as otherwise specified. This period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [6 CCR 1007-3 §§264.74(b) and 100.42(j)(2)]
  - I.E.11.c. Pursuant to 6 CCR 1007-3 §100.42(j)(3), records of monitoring information must specify:
    - I.E.11.c.i) The date, exact place, and time of sampling or measurements;
    - I.E.11.c.ii) The individuals who performed the sampling or measurements;
    - I.E.11.c.iii) The sample collection, storage, and handling techniques;
    - I.E.11.c.iv) The dates analyses were performed;
    - I.E.11.c.v) The individuals who performed the analyses;
    - I.E.11.c.vi) The analytical techniques or methods used; and
    - I.E.11.c.vii) The results of such analyses.

I.E.12. Reporting Planned Changes

The Permittee shall give notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. For a facility being modified the Permittee may not treat or store hazardous waste in the modified portion of the facility until:

I.E.12.a. The Permittee has submitted to the Director by certified mail or hand delivery a letter and Facility Construction Certification (FCC) signed by the Permittee and a Colorado-Registered Professional Engineer stating that the facility has been constructed or modified in compliance with the Permit; and

I.E.12.b.i) The Director has inspected the modified facility and finds it is in compliance with the conditions of the Permit, or

I.E.12.b.ii) If within 15 days of the date of submission of the letter in Permit Condition I.E.12.a, the Permittee has not received notice from the Director of his or her intent to inspect, prior inspection is waived and the Permittee may commence the storage of hazardous waste. [6 CCR 1007-3 §100.42(1)(1)]

I.E.13. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a facility being modified, the Permittee may not treat or store hazardous waste in the modified portion of the facility except as provided in §100.61 and §100.63, until:

I.E.13.a The Permittee has submitted to the Director by certified mail or hand delivery a letter and Facility Construction Certification signed by the Permittee and a Colorado-Registered Professional Engineer stating that the facility has been constructed or modified in compliance with the Permit; and

I.E.13.b.i) The Director has inspected the modified facility and finds it in compliance with the conditions of the Permit; or

I.E.13.b.ii) If within 15 days of the date of submission of the letter in Permit Condition I.E.13.a, the Permittee has not received notice from the Director of his or her intent to inspect, prior inspection is waived and the Permittee may commence treatment and storage of hazardous waste. [6 CCR 1007-3 §100.42(1)(2)]

I.E.14. Transfer of Permits

This Permit is not transferable to any person, except after notice to the Director. The Director may require modification, or revocation and

reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Act, pursuant to 6 CCR 1007-3 §100.62. Before transferring ownership or operation of the facility during its operating life, the Permittee must notify the new owner or operator in writing of the requirements of 6 CCR 1007-3 Parts 264 and 100 and this Permit. [6 CCR 1007-3 §§100.42(1)(3) and 264.12(c)]

I.E.15. Monitoring Reports

Monitoring results shall be reported at the intervals and frequencies specified elsewhere in this Permit and in accordance with requirements specified in 6 CCR 1007-3 Part 264. [6 CCR 1007-3 §100.42(1)(4)]

I.E.16. Compliance Schedules

Reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of this Permit shall be submitted at the intervals specified elsewhere in this Permit. [6 CCR 1007-3 §100.42(1)(5)]

I.E.17. Twenty-Four Hour Reporting

I.E.17.a. The Permittee shall report to the Director any noncompliance that may endanger human health or the environment. Any such information must be reported verbally within 24 hours from the time the Permittee becomes aware of the circumstances. The verbal report shall include the following:

I.E.17.a.i) Information concerning release of any hazardous waste or hazardous constituent (6 CCR 1007-3 Part 261 Appendix VIII, and Part 264 Appendix IX) that may cause an endangerment to public drinking water supplies;

I.E.17.a.ii) Information concerning release or discharge of hazardous waste or hazardous constituent (6 CCR 1007-3 Part 261 Appendix VIII, and Part 264 Appendix IX), or of a fire or explosion from the hazardous waste management facility which could threaten the environment or human health outside the facility; and

I.E.17.a.iii) A description of the occurrence and its cause, 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 materials involved;
- (E) The extent of injuries, if any;
- (F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- (G) Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.17.b. A written report shall also be provided within fifteen (15) days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected, and, if not, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [6 CCR 1007-3 §100.42(1)(6)]

I.E.18. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above in Permit Conditions I.E.15 through I.E.17, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition I.E.17. [6 CCR 1007-3 §100.42(1)(7)]

I.E.19. 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 Director, the Permittee must submit such facts or information within 30 calendar days. [6 CCR 1007-3 §100.42 (1)(8)]

I.E.20. Additional Reporting

I.E.20.a. The Permittee must submit to the Director a biennial report covering facility activities during the previous calendar year, if required by the Director under 6 CCR 1007-3 §264.75.

I.E.20.b. The Permittee must submit all requested information necessary for use by the Director in determining annual hazardous waste fees. [6 CCR 1007-3 §100.31]

I.E.21. Information Repository

Permittee shall maintain information repositories at the locations specified under Permit Conditions I.E.21.a., I.E.21.b. and I.E.21.c. The information repositories must contain all documents, reports, data, and information deemed necessary by the Director to inform the public about the permitted facility. The Permittees will make permitting documents available in the information repositories within 15 days of a written request made by the Director to include such document. The Permittees may change the location of any information repository with the approval of the Director and in accordance with the procedures for modification of permits 6 CCR 1007-3 §100.60. Modification of the location for an information repository shall be considered a Class 1 Modification with prior written approval from the Director.

I.E.21.a. Robert Hoag Rawlings Public Library  
100 East Abriendo Avenue  
Pueblo, CO 81004

I.E.21.b. McHarg Community Center  
405 2nd Street  
Avondale, CO 81022

I.E.21.c. Boone Volunteer Fire Department  
421 East 1<sup>st</sup> Street  
Boone, CO 81025

**I.F. SIGNATORY REQUIREMENT**

All applications, reports, or information submitted to or requested by the Director, his designee, or authorized representative, must be signed and shall comply with all other requirements of 6 CCR 1007-3 §§100.44(a) and 100.42(k).

**I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR**

All reports, notifications, or other submissions which are required by this Permit to be sent or given to the Director should be sent by certified mail, overnight delivery services, or hand delivered to:

Colorado Department of Public Health and Environment  
Hazardous Materials and Waste Management Division  
HMWMD-B2  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530

## **I.H. CONFIDENTIAL INFORMATION**

In accordance with 6 CCR 1007-3 Part 2, the Permittee may claim as confidential any information required to be submitted by this Permit.

## **I.I. DOCUMENTS TO BE MAINTAINED AT THE FACILITY**

The Permittee may maintain records required by the terms of this Permit on microfilm, microfiche, or electronically. The Permittee shall maintain at the facility, the following documents and all amendments, revisions and modifications to these documents:

- I.I.1. This Permit and all approved modifications;
- I.I.2. Waste Analysis Plan and all documents developed in accordance with it, as required by 6 CCR 1007-3 §264.13(b) and this Permit;
- I.I.3. Inspection schedules, as required by 6 CCR 1007-3 §264.15(b) and this Permit;
- I.I.4. Personnel training documents and records, as required by 6 CCR 1007-3 §264.16(d) and this Permit;
- I.I.5. Contingency Plan, as required by 6 CCR 1007-3 §264.53(a) and this Permit;
- I.I.6. Operating Record, as required by 6 CCR 1007-3 §264.73, Part 264 Appendix I, and this Permit;
- I.I.7. Closure Plan, as required by 6 CCR 1007-3 §264.112 and this Permit; and
- I.I.8. All other documents required by Permit Condition I.E.11.

## **I.J. COMPLIANCE SCHEDULE**

- I.J.1. Prior to treating any hazardous waste in the Explosive Destruction System Phase 2 Unit R (P2R), the Permittee must submit the location and tag information for each piece of Subpart BB equipment and provide an updated **Figure Appendix 8-3-3**, EDS Phase 2A Flow Diagram [Part V.J.3.a. and Part V.J.3.b.] for incorporation into the permit.
- I.J.2. Within 30 days prior to treating any hazardous waste in the Explosive Destruction System Phase 2 Unit A (P2A), the Permittee must submit the location and tag information for each piece of Subpart BB equipment and provide an updated **Figure Appendix 8-3-3**, EDS Phase 2A Flow Diagram [Part V.J.3.a. and Part V.J.3.b.] for incorporation into the permit.

## PART II – GENERAL FACILITY CONDITIONS

### II.A. DESIGN AND OPERATION OF FACILITY

The Permittee shall construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste or hazardous constituents to air, soil, surface water, or groundwater which could threaten human health or the environment as required by 6 CCR 1007-3 §264.31.

### II.B. PROHIBITIONS

#### II.B.1. Hazardous Waste from Off-Site Sources

The Permittee is prohibited from receiving hazardous waste from off-site.

#### II.B.2. Hazardous Waste Imports

The Permittee is prohibited from receiving hazardous wastes from a foreign source.

#### II.B.3. Transfer of Ownership

The Permittee is prohibited from transferring ownership of the facility until closure has been certified complete by the Permittee and by an independent, qualified, Colorado-registered professional engineer.

### II.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the waste analysis procedures required by 6 CCR 1007-3 §264.13, and those described in the WAP, Permit **Attachment 3**. The WAP includes the following documents, which are contained by version number and date in **Attachment 2**, **Attachment 3**, and **Attachment 10** of this Permit:

- Laboratory PCD Site Specific Monitoring Plan (SSMP)
- PCD Site Specific Laboratory Quality Control Plan (LQCP)
- PCD SOP 465 Toxic Chemical Laboratory Analytical Operating Procedures
- PCD SOP 468 Propellant Stability Sampling
- PCD SOP 491 Near Real Time (NRT) Monitoring Systems
- U.S. Army's Edgewood Chemical Biological Center (ECBC), *Environmental Monitoring Laboratory, Laboratory and Monitoring Quality Control Plan for Chemical Materials Agency (CMA) and for Chemical Agent Standard Analytical Reference Material (CASARM)*
- Edgewood Chemical Biological Center (ECBC) Internal Operating Procedure (IOP) IOP – MT-2 Operation and Maintenance Procedures for Fixed Site MINICAMS
- ECBC IOP – MT-08 Analysis of Chemical Warfare Agents in Extracts Using a Gas Chromatograph/Mass Spectrometer (GCMS) System
- ECBC IOP – MT-11 DAAMS Tubes Monitoring Procedures

- ECBC IOP – MT-13 Analysis of Chemical Warfare Agents and Degradation Products on DAAMS Tubes using Gas Chromatography System Coupled with a Mass Spectrometer Detector (GC/MS)
- ECBC IOP – MT-60 Analysis of Residual Sulfur Mustard (HD) and HD Breakdown Products in EDS Neutralent/Waste including Monoethanolamine (MEA).
- Pueblo Chemical Agent-Destruction Pilot Plant Explosive Destruction System at PCD – Site-Specific Monitoring Plan

The Permittees shall maintain an updated copy of the WAP at the facility (6 CCR 1007-3 §264.13(b)).

The Permittees shall make a determination, in consultation with the Director, regarding the regulatory severity of changes to the WAP. Class 1 modifications to these documents are minor and self-implementing; Class 1 with prior approval modifications require consent and agreement, and Class 2 and 3 modifications require further regulatory mechanisms in accordance with 6 CCR 1007-3 §100.63.

The Permittees shall supply a current working copy of the documents included in the WAP and identified above to the Director, and shall provide any changes prior to implementation.

Class 1 modifications, and Class 1 with prior approval modifications to the WAP and any approval from the Director, will be documented in email correspondence prior to implementation. At least once annually, a new working copy which incorporates all the Class 1 or Class 1 with prior approval modifications that were completed in the previous year, will be provided to the Director. Class 2 and 3 modifications to the WAP must be documented in a working copy of the WAP that is provided to the Director and approved prior to implementation.

The Permittee shall also comply with the following requirements:

- II.C.1. The method used to obtain a representative sample of the waste to be analyzed shall be the appropriate method from 6 CCR 1007-3 Part 261 Appendix I, or an equivalent method approved by the Director. Laboratory methods shall be those specified in the most current, approved version of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method which shall be specified in the WAP, Permit **Attachments 3 and 10**.
- II.C.2. As part of its quality assurance program, the Permittee shall verify the analysis of each waste stream as necessary to ensure that it is accurate and up to date, in accordance with methods specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, or an equivalent method which shall be specified in the WAP, Permit **Attachments 3 and 10**.

- II.C.3. At a minimum, the Permittee must maintain the appropriate functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform analyses, the Permittee must inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this Permit. The Permittee must keep a copy of this written notice as part of the operating record.

## **II.D. SECURITY**

- II.D.1. The Permittee must comply with the security provisions of 6 CCR 1007-3 §264.14, and Procedures to Prevent Hazards, Permit **Attachment 2**.
- II.D.2. The Permittee must prevent the unknowing entry and minimize the possibility for unauthorized entry, of persons or livestock onto the active portion of the Facility. [6 CCR 1007-3 §264.14(a)]
- II.D.3. The Permittee shall control entry at all times through fences, gates, doors, and other entrances to the Facility. During non-operating hours, the Permittee will ensure compliance with 264.14(b)(1) or (2) to prevent unknowing entry, and minimize the possibility for unauthorized entry, of persons or livestock onto the active portions of the facility. [6 CCR 1007-3 §264.14(b)]
- II.D.4. The Permittee shall maintain the fence surrounding the facility, including all secured gates to prevent unauthorized access. Entry to the Facility shall be controlled by security gates, and all entry into the Facility will be verified by security personnel. Any visitors to the Facility must obtain passes and be escorted by Facility personnel as required by site security measures while inside the Facility. [6 CCR 1007-3 §264.14(b)]
- II.D.5. The Permittee shall maintain 24 hour surveillance of the Facility, ensuring security of Facility structures including but not limited to fences, gates, buildings, and roads. Compliance of this will be achieved with manned patrols conducted by Facility security forces. [6 CCR 1007-3 § 264.14(b)]
- II.D.6. The Permittee shall post and maintain warning signs at the entry gates and along the perimeter fence in sufficient number to be seen from any approach to the active portion of the facility and the signs shall be legible from a distance of at least 25 feet. [6 CCR 1007-3 §264.14(c)]

## **II.E. GENERAL INSPECTION REQUIREMENTS**

- II.E.1. The Permittee must follow the inspection procedures required by 6 CCR 1007-3 §264.15, and those set out in Procedures to Prevent Hazards, Permit **Attachment 2**, and comply with the following requirements.
- II.E.2. The corrective action taken shall be transcribed on or with the original Inspection Log on which an item was first noted as requiring correction. The

Permittee must remedy any deterioration or malfunction discovered by an inspection to ensure that the problem does not lead to an environmental or human health hazard. The Permittee shall remedy any deterioration or malfunction of equipment or structures no later than fourteen (14) calendar days after the inspection in which the problem is first identified, except as provided in Permit Conditions II.E.5 and II.E.6. [6 CCR 1007-3 §264.15(c)]

- II.E.3. The Permittee shall immediately initiate remedial actions to remedy any health or safety hazards and actual or imminent releases from the Facility into the environment of solid or hazardous wastes, hazardous waste constituents, potentially contaminated runoff, or precipitation runoff which has contacted solid or hazardous waste. Remedial action required by this Permit Condition II.E.3 must be completed within twenty-four (24) hours after the problem is identified. [6 CCR 1007-3 §264.15(c)]
- II.E.4. The Permittee must record the date and time of the inspection and all inspection observations on the appropriate Inspection Log Sheet provided in Permit **Attachment 2**. The Permittee must require facility inspectors to indicate the status of the items inspected and to sign and print their names on each hardcopy Inspection Log Sheet. Inspectors will sign and clearly define sections of the Inspection Log Sheet that they completed, if different inspectors complete different sections of the same Inspection Log Sheet. The Permittee must place completed inspection logs in an inspection book. Records of inspections shall be maintained as part of the operating record for at least three years from the date of the inspection. [6 CCR 1007-3 §264.15(d)]
- II.E.5. The Permittee may submit either a verbal or written request to extend the time limits specified in Permit Conditions II.E.2 and II.E.3, on a case-by-case basis. The request must include an explanation of the unforeseen or uncontrollable circumstances that have resulted in the need for additional time to complete such remedial action(s) and must be received at the Department prior to the time limit expiration. The request must be documented in the Operating Record.
- II.E.6. During the time prior to completion of final remedial actions, the Permittee shall implement interim mitigation measures as necessary to prevent or minimize continuing deterioration of structures or equipment, safety hazards, or releases of wastes.

## **II.F. PERSONNEL TRAINING**

- II.F.1. The Permittee must maintain qualified and competent personnel in key facility positions (such as management, supervisors, chemist and waste management personnel).

- II.F.1.a. The Permittee shall conduct personnel training as specified in the Personnel Training Plan, **Attachment 5** of this Permit and as required by 6 CCR 1007-3 §264.16.
- II.F.1.b. All persons involved in the handling of hazardous waste, even if only on an occasional basis, shall be trained in areas appropriate to their function.
- II.F.1.c. The Permittee shall maintain training documents and records as required by 6 CCR 1007-3 §264.16(d) and (e).
- II.F.2. No employee assigned to the hazardous waste management facility shall be allowed to work without direct supervision until he or she has completed the training program. New personnel shall be required to complete the training program within six months of their assignment to the hazardous waste management areas.
- II.F.3. Facility personnel must take part in an annual review of the initial training required in Permit Condition II.F and described in the personnel Training Plan, **Attachment 5**. Annual training requirements must be completed within thirteen months of previous annual or initial training. [6 CCR 1007-3 §264.16(c)]
- II.F.4. The Permittee must maintain the following documents and records at the Facility:
- The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.
  - A written job description for each position listed in the personnel Training Plan, **Attachment 5**. This description may be consistent in its degree of specificity with descriptions for other similar positions at the Facility, but must include the requisite skill, education, or other qualifications, and duties of employees assigned to each position.
  - A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed in the personnel Training Plan, **Attachment 5**.
  - Records that document that the training or job experience required under Permit Condition II.F has been given to, and successfully completed by, Facility personnel. [6 CCR 1007-3 §264.16(d)]

**II.G. SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE**

- II.G.1. The Permittee must follow the procedures for handling ignitable, reactive, and incompatible wastes set forth in Parts III and V of this Permit, Procedures to

Prevent Hazards, Permit **Attachment 2**; the WAP, Permit **Attachments 3 and 10**; and the Contingency Plan, Permit **Attachment 4** and as required by 6 CCR 1007-3 §264.17.

- II.G.2. The Permittee must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting, and welding, hot surfaces, frictional heat, sparks (static, electrical, mechanical), incompatible chemicals or wastes, spontaneous ignition (e.g., from heat producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the Permittee must confine smoking and open flames to specifically designated locations. “No Smoking” signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste. Smoking shall be confined to designated locations at all times. [6 CCR 1007-3 §264.17(a)]
- II.G.3. When storing or treating ignitable or reactive waste, the Permittee must take precautions to prevent reactions which:
- Generate extreme heat or pressure, fire or explosions, or violent reactions;
  - Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;
  - Produce uncontrolled flammable fumes or gases in sufficient quantities to pose risk of fire or explosions;
  - Damage the structural integrity of the device or Facility;
  - Through other like means that threaten human health or the environment. [6 CCR 1007-3 §264.17(b)]
- II.G.4. The Permittee must document compliance with Permit Conditions II.G.2 and II.G.3 in the Operating Record. This documentation may be based on references to published scientific or engineering literature, data from trial tests (bench scale or pilot scale tests), or waste analysis. [6 CCR 1007-3 §264.17(c)]
- II.G.5. The Permittee must comply, at a minimum, with all applicable standards specified in NFPA 30 - Flammable and Combustible Liquids Code, 2012 Edition.
- II.G.6. The Permittee must follow the procedures for handling ignitable, reactive, and incompatible wastes set forth in Parts III and V and **Attachments 2, 4, 7 and 8** of this Permit.

## **II.H. PREPAREDNESS AND PREVENTION**

The Facility must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface or ground water which threaten human health or the environment. [6 CCR 1007-3 §264.31]

### **II.H.1. Required Equipment**

At a minimum, the Permittee must provide at the facility the necessary equipment specified in Procedures to Prevent Hazards, Permit **Attachment 2**, Contingency Plan, Permit **Attachment 4**, and meet all other requirements of 6 CCR 1007-3 §264.32.

### **II.H.2. Testing and Maintenance of Equipment**

The Permittee must test and maintain the equipment specified in Permit Condition II.H.1 according to the frequencies and schedule described in the Procedures to Prevent Hazards, **Attachment 2** of this Permit, and as required by 6 CCR 1007-3 §264.32, as necessary to assure its proper operation in time of emergency as required by 6 CCR 1007-3 §264.33. Documentation of this testing and maintenance must be maintained in the operation record.

### **II.H.3. Access to Communications or Alarm System**

II.H.3.a. The Permittee must maintain access to the communications and alarm system described in Procedures to Prevent Hazards, Permit **Attachment 2**, the Contingency Plan, Permit **Attachment 4**, and meet all other requirements of 6 CCR 1007-3 §264.34.

II.H.3.b. Whenever hazardous waste is being poured or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee. [6 CCR 1007-3 §264.34(a)]

### **II.H.4. Required Aisle Space and Roadways**

II.H.4.a. At a minimum, the Permittee must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation, and as required by conditions set forth in Part III of this Permit. [6 CCR 1007-3 §264.35]

II.H.4.a.1) The Permittee must maintain aisle spaces of at least 3 feet between the unit walls and pallets of wastes, and between rows of palletized wastes in Permitted Units G203, G1009, G1107, G1109, G1110, H1102,

and H1103. The Permittee must maintain aisle spaces of at least 4 feet between roll-off containers on the Roll-Off Container Storage Area adjacent to H1103.

II.H.4.a.2) In Permitted storage Building 540 the Permittee must maintain aisle spaces of at least 3 feet between the unit walls or berms and hazardous waste storage containers. Secondary aisle space at least 3 feet wide between each row must be maintained, with rows not wider than two drums or one 4-foot by 4-foot pallet.

II.H.4.b. The roadways to all permitted hazardous waste management areas must be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in an emergency.

#### II.H.5. Arrangements with Local Agencies

II.H.5.a. The Permittee must maintain arrangements with state and local agencies, familiarizing the agencies with the properties of the hazardous wastes handled at the Facility. The Permittee must document a written agreement with each agency outlining the agencies' responsibilities should emergency services be required. [6 CCR 1007-3 §264.37]

II.H.5.b. The Permittee must maintain emergency response arrangements with the following agencies and meet all other requirements of 6 CCR 1007-3 §264.37.

- Pueblo Rural Fire Department
- Transportation Technology Center, Inc.
- U.S. Army, Fort Carson CO
- American Medical Response of Colorado, Inc.
- Boone Volunteer Fire Department
- St. Mary Corwin Hospital
- Parkview Episcopal Medical Center

II.H.5.c. If the local agencies terminate or decline to enter into emergency response arrangements with the Permittee, the Permittee must document this termination or declination in the operating record, notify the Director in writing within 10 days specifying alternative emergency response arrangements, and comply with 6 CCR 1007-3 §264.31(b). [6 CCR 1007-3 §264.37(b)]

## **II.I. CONTINGENCY PLAN**

The Permittee must follow the procedures required by 6 CCR 1007-3 Part 264 Subpart D; the Contingency Plan, Permit **Attachment 4**; and the following requirements.

### **II.I.1. Implementation of Plan**

The Permittee must immediately carry out the provisions of the Contingency Plan, Permit **Attachment 4**, whenever there is a fire, explosion, release of hazardous waste or hazardous constituents that could threaten human health or the environment, or as specified in the Contingency Plan, Permit **Attachment 4**. [6 CCR 1007-3 §264.51(b)]

### **II.I.2. Copies of Plan**

The Permittee must keep a copy of the Contingency Plan and all revisions to the plan at the facility, and must submit the plan, with relevant maps and figures, to all local fire departments, hospitals, and local emergency response teams that may be called to provide emergency services. [6 CCR 1007-3 §264.53]

### **II.I.3. Amendments to Plan**

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by 6 CCR 1007-3 §264.54.

### **II.I.4. Emergency Coordinator**

A trained emergency coordinator must be available at all times in case of an emergency as required by 6 CCR 1007-3 §264.55.

### **II.I.5. Reporting**

The following occurrences shall be verbally reported to the Director within 48 hours even if they do not exceed the thresholds defined in the Contingency Plan, Permit **Attachment 4**, for implementation of the Contingency Plan, and do not require reporting under Permit Condition I.E.18:

- Any fire or explosion.
- Any spill or release of hazardous waste or hazardous constituent outside of a permitted hazardous waste unit.
- Any spill or release of hazardous waste or hazardous constituent inside a secondary containment system.

## **II.J. MANIFEST SYSTEM**

The Permittee shall comply with the manifest requirements of 6 CCR 1007-3 Part 264 Subpart E, including §264.71 regarding the use of the manifest system, §264.72 regarding manifest discrepancies, and §264.76 regarding unmanifested waste reports.

## **II.K. OPERATING RECORD**

The Permittee shall maintain a written operating record at the facility in accordance with 6 CCR 1007-3 §264.73 and Part 264 Appendix I. The operating record is not required to be maintained in a single location at the facility. However, all records contained in the operating record must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of CDPHE who is duly designated by the Director. At a minimum the following items must be maintained in the operating record:

- II.K.1. The quantity and a description of each hazardous waste received, and the date(s) of its storage in Building 540 and in Igloos G203, G1009, G1107, G1109, G1110, H1102, H1103 and the H1103 Roll-Off Container Storage Area as required by Part 264 Appendix I; [6 CCR 1007-3 §264.73(b)(1)]
- II.K.2. The location of each hazardous waste within the facility and the quantity at each location; [6 CCR 1007-3 §264.73(b)(2)]
- II.K.3. Records and results of waste analyses and waste determinations performed, and records of all samples and measurements taken for the purpose of monitoring; [6 CCR 1007-3 §264.73(b)(3)]
- II.K.4. Records and results of inspections as required by §264.15(d). These records need to be kept for three years; [6 CCR 1007-3 §264.73(b)(5)]
- II.K.5. Summary reports and details of all incidents that require implementing the contingency plan as specified in 6 CCR 1007-3 §264.56(j); [6 CCR 1007-3 §264.73(b)(4)] Within five days after an incident, the Permittee must submit a written report on the incident to the Department. The report must include:
  - Name, address, and telephone number of the Permittee
  - Name, address, and telephone number of the Facility
  - Date, time, and type of incident (e.g. fire, explosion, spill, release)
  - Type and quantity of material(s) involved
  - An assessment of actual and/or potential hazards to human health or the environment
  - Estimated quantity and disposition of recovered material that resulted from the incident
  - Remediation techniques and equipment employed
  - Duration of incident
  - Weather conditions at the time of the incident, including but not limited to, wind speed and direction, temperature, and precipitation
- II.K.6. After the Contingency Plan is implemented and upon resumption of operations at the Facility, the Emergency Coordinator shall notify all agencies as specified in the Contingency Plan, which were contacted about the incident, and document the notification in the operating record.

II.K.7. The Permittee shall report to the Department any noncompliance with the Permit, which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall be documented in the operating record and shall include the following:

II.K.7.a. Information concerning the release from the site of any hazardous waste constituents via air, soil, surface water, or groundwater.

II.K.7.b. Information concerning the release or discharge of any hazardous waste, including but not limited to fire, explosion, spill, flood, precipitation events, escape of contaminated run-off, which could threaten human health or the environment outside the Facility. The description of the occurrence and its cause shall include:

- Name, address, and telephone number of the Permittee
- Name, address, and telephone number of the Facility
- Date, time, and type of incident
- Name and quantity of material(s) involved
- The extent of injuries, if any
- An assessment of actual and/or potential hazard to human health or the environment outside the Facility
- Estimated quantity and disposition of recovered material that resulted from the incident
- Remediation techniques and equipment employed
- Duration of incident
- Weather conditions including, but not limited to, wind speed and direction, temperature and precipitation

A written submission shall also be provided within 5 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 noncompliance (including exact dates and times); and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five-day written notice requirement if the Director waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

Documentation of the notification must be maintained in the operating record.

II.K.8. A written program to reduce the volume or quantity and toxicity of the hazardous waste generated by the Permittee to the maximum degree determined by the Permittee to be economically practicable, and use treatment, storage, or disposal methods currently available to the Permittee which minimize the present and future threat to human health and the

environment. The Permittee must certify annually in the operating record that the above described waste minimization practices are being implemented at the facility. [6 CCR 1007-3 §264.73(b)(9)]

- II.K.9. The Permittee must maintain, as part of the operating record, a written job description for each position listed in the Personnel Training Plan, Attachment 5, and a record of the individuals employed in each of those positions. These descriptions must include the requisite skill, education or other qualifications, and duties of employees assigned to each position.
- II.K.10. The Permittee shall maintain records that document that the training required by this Permit has been given to, and completed by the appropriate personnel. [6 CCR 1007-3 §264.16(d)(4)]
  - II.K.10.a. The Permittee shall maintain as part of the Operating Record training records of current personnel until closure of the facility. The Permittee shall maintain training records for former employees for 3 years from the date the employee last worked at the facility.
  - II.K.10.b. The Permittee must maintain training records of emergency response training.
- II.K.11. Copies of all monitoring and measurements that are taken during the closure period including monitoring to determine the level of decontamination. The Permittee shall maintain copies of all closure notices, certifications, and documents required during the Closure Care period.
- II.K.12. Summary reports and details of all incidents that require the implementation of the contingency plan as specified in §264.56(j); [6 CCR 1007-3 §264.73(b)(4)]
- II.K.13. Documentation of termination of any arrangement with a local emergency response agency.
- II.K.14. The initial determination of the average concentration of volatile organic compounds in a container, plus any review and update of the determination.
- II.K.15. For wastes generated on-site which are stored at the Facility, the information contained in the notice, except for the manifest number, and the certification and demonstration if applicable, required by the generator or owner or operator under 6 CCR 1007-3 §267.8 or 40 CFR 268.8.
- II.K.16. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to activities conducted under Parts III, IV, and V of this Permit.

## **II.L. ADDITIONAL RECORD KEEPING AND REPORTING REQUIREMENTS**

In addition to the record keeping and reporting requirements specified elsewhere in this Permit, the Permittee must comply with the following:

- II.L.1. The Permittee must comply with the biennial reporting requirements of 6 CCR 1007-3 §264.75
- II.L.2. Waste Minimization
  - II.L.2.a. The Permittee must maintain a written program to reduce the volume or quantity and toxicity of hazardous waste generated by the Permittee to the maximum degree determined by the Permittee to be economically practicable, and use treatment, storage, or disposal methods currently available to the Permittee which minimize the present and future threat to human health and the environment. A copy of the waste minimization program will be maintained at the Facility as part of the operating record.  
[6 CCR 1007-3 §264.73(b)(9)]
  - II.L.2.b. The Permittee must certify annually in the operating record that the above described waste minimization practices are being implemented at the Facility. The certification shall be submitted to the Department by December 31 of each year.
- II.L.3. The Permittee must also report to the Department:
  - II.L.3.a. Releases, fires, and explosions as specified in this Permit and 6 CCR 1007-3 §264.56(j).
  - II.L.3.b. Facility closures as specified in this Permit and 6 CCR 1007-3 §264.115.
  - II.L.3.c. All reports otherwise required by 6 CCR 1007-3 §264 Subpart CC.
  - II.L.3.d. Annual report information for the purpose of assessing facility annual fees in accordance with 6 CCR 1007-3 §100.31.  
[6 CCR 1007-3 §264.77]

## **II.M. GENERAL CLOSURE REQUIREMENTS**

- II.M.1. Performance Standard  
The Permittee must close the facility as required by 6 CCR 1007-3 Part 264 Subpart G and in accordance with the Closure Plan, Permit **Attachment 6**.

II.M.2. Amendment to Closure Plan

The Permittee must amend the Closure Plan as needed in accordance with 6 CCR 1007-3 §264.112(c), following the modification procedures in §100.63.

II.M.3. Notice of Closure

The Permittee shall notify the Department at least 45 days prior to the date he expects to begin partial or final closure activities, as required by 6 CCR 1007-3 Section 264.112(d)(1).

II.M.4. Time Allowed for Closure

After receiving the final volume of hazardous waste, the Permittee must remove from the unit or facility all hazardous waste, and must complete closure activities in accordance with 6 CCR 1007-3 §264.113 and the schedules specified in the Closure Plan, Permit **Attachment 6**.

II.M.5. Disposal or Decontamination of Equipment, Structures, and Soil

The Permittee must decontaminate or dispose of all contaminated equipment, structures, and soil, as required by 6 CCR 1007-3 §264.114 and the Closure Plan, Permit **Attachment 6**. Adequacy of the nature and extent of the proposed investigation will be part of the Department's approval process.

II.M.6. Certification of Closure

The Permittee and an independent, qualified, Colorado-registered Professional Engineer must certify that the facility has been closed in accordance with the specifications in the Closure Plan, Permit **Attachment 6** as required by 6 CCR 1007-3 §264.115. The certification must be submitted to the Department within 60 days after completion of partial or final closure.

**II.N. LAND DISPOSAL RESTRICTIONS**

The Permittee must comply with all applicable requirements of 6 CCR 1007-3 Part 268. Compliance includes but is not limited to the following:

II.N.1. The hazardous waste storage prohibitions specified in 6 CCR 1007-3 Part 268 Subpart E.

II.N.2. The marking requirements for owners and operators specified in 6 CCR 1007-3 § 268.50(a)(2).

The Permittee must not treat or ship off-site any land disposal restricted hazardous waste until the generator of the waste provides the Permittee with all applicable notification and certifications specified in 6 CCR 1007-3 §268.7(a).

## PART III – STORAGE IN CONTAINERS

### III.A. UNIT DESCRIPTION

The Permittee is allowed to store hazardous waste in containers following the requirements of 6 CCR 1007-3 Part 264, Subpart I and in the following manner:

#### III.A.1. Storage Igloo G203

Storage Igloo G203 is located in the G Block of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. Igloo G203 is permitted for the storage of both solid-phase and liquid-phase mustard agent waste. The solid-phase wastes stored are mustard agent-contaminated waste, such as debris, metal parts, dunnage, plastic, used PPE, filters, solid-phase laboratory waste, equipment, sorbents, media, and energetic components. The Permittee may store in containers only the mustard agent-contaminated hazardous waste streams identified in the WAP, Permit **Attachments 3 and 10**. The maximum capacity of Igloo G203 is 300 rounds, equivalent to a maximum of 330 gallons. Each round contains less than 1.10 gallons of agent. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete. An air filtration system shall also be maintained at the unit.

#### III.A.2. Storage Igloo G1009

Storage Igloo G1009 is located in the G Block of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. Igloo G1009 is permitted only for the storage of liquid-phase mustard agent waste and related solid-phase wastes. The maximum capacity of Igloo G1009 is 300 rounds, equivalent to a maximum of 330 gallons. Each round contains less than 1.10 gallons of agent. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete. An Air Filtration System (AFS) shall also be maintained at the unit.

#### III.A.3. Storage Igloo G1107

Storage Igloo G1107 is located in the G Block of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. Igloo G1107 is permitted only for the storage liquid-phase mustard agent waste and related solid-phase wastes. The maximum capacity of Igloo G1107 is 300 rounds, equivalent to a maximum of 330 gallons. Each round contains less than 1.10 gallons of agent. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete. An AFS shall also be maintained at the unit.

#### III.A.4. Storage Igloo G1109

Storage Igloo G1109 is located in the G Block of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. Igloo G1109 is permitted only for the storage liquid-phase mustard agent waste and related solid-phase wastes. The

maximum capacity of Igloo G1109 is 300 rounds, equivalent to a maximum of 330 gallons. Each round contains less than 1.10 gallons of agent. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete. An AFS shall also be maintained at the unit.

III.A.5. Storage Igloo G1110

Storage Igloo G1110 is located in the G Block of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. Igloo G1110 is permitted for the storage of both solid-phase and liquid phase agent contaminated wastes. The solid-phase wastes stored are mustard agent-contaminated waste, such as debris, metal parts, dunnage, plastic, used PPE, filters, solid-phase laboratory waste, equipment, sorbents, media, and energetic components. The Permittee may store in containers only the mustard agent-contaminated hazardous waste streams identified in the WAP, Permit **Attachments 3 and 10**. All wastes stored in the unit shall be in RCRA- or Department of Transportation (DOT)-permitted containers that are stored on pallets. The maximum capacity of this unit is 7,920 gallons, which includes a maximum of 300 rounds (equivalent to 330 gallons of the 7,920 gallons of total capacity for this unit). The Igloo consists of two end-walls with a door on one, an arched roof, and a floor all constructed of concrete. An AFS shall also be maintained at the unit.

III.A.6. Building 540

Building 540 is located in the Southern Industrial Parcel of PCD as shown in **Figure 1-2** to **Attachment 1** of this Permit. This unit is permitted only for the storage of nonagent hazardous wastes that are generated at the facility. All waste must be stored in RCRA- or DOT-approved containers, and be stored in a manner that prevents commingling of incompatible materials. The unit consists of 4 walls, a roof, and a concrete pad. The pad is divided into 4 equal storage compartments. The maximum capacity of Building 540 is 13,200 gallons.

III.A.7. Storage Igloo H1102

Storage Igloo H1102 is located in the H Block of PCD as shown in **Figure 1-3** to **Attachment 1** of this Permit. Igloo H1102 is permitted for the storage of liquid-phase mustard agent wastes and related solid-phase wastes. The maximum capacity of Igloo H1102 is 300 rounds, equivalent to a maximum of 330 gallons. Each round contains less than 1.10 gallons of agent. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete. All wastes stored in the unit shall be in RCRA- or DOT-permitted containers that are stored on pallets or are overpacked mustard agent rounds. An AFS shall also be maintained at the unit.

III.A.8. Storage Igloo H1103

Storage Igloo H1103 is located in the H Block of PCD as shown in **Figure 1-3** to **Attachment 1** of this Permit. Igloo H1103 is permitted for the storage of treated solid and liquid-phase mustard agent wastes that no longer

exhibit the D003 characteristic (i.e., the wastes do not possess container headspace concentrations greater than 1 vapor screening level (VSL) (.003 mg/cubic meter) mustard). The solid-phase wastes stored are mustard agent-contaminated waste, such as debris, metal parts, dunnage, plastic, used PPE, filters, solid-phase laboratory waste, equipment, sorbents, and media. Liquid-phase wastes are neutralized mustard wastes, rinsates, decontamination fluids and laboratory wastes resulting from the treatment of mustard agent wastes, including munitions in the EDS Units or as generated from treatment of liquid wastes in the Environmental Enclosures. All wastes stored in the unit shall be in RCRA- or DOT-permitted containers that are stored on secondary pallets with secondary containment. The maximum capacity of this unit is 13,640 gallons. The Igloo consists of two end-walls with a door on one, an arched roof, and floor all constructed of concrete.

#### III.A.9. Igloo H1103 Roll-off Container Storage Area

Igloo H1103 Roll-off Container Storage Area is located adjacent to Igloo H1103 in the H Block of PCD as shown in **Figure 1-3 to Attachment 1** of this Permit. The Roll-off Container Storage Unit is permitted for the storage of non-hazardous solid wastes (i.e., solid wastes that never came into contact with liquid mustard agent), and metal munitions bodies and parts and metal overpack containers that have been treated in the EDS or Environmental Enclosures and that no longer exhibit the D003 characteristic (i.e., the wastes do not possess container headspace concentrations greater than 1 VSL (.003 mg/cubic meter) mustard). The solid-phase wastes stored are debris, metal parts, dunnage not exposed to liquid agent, plastic, used PPE, pre-filters and HEPA filters from the AFS and empty containers. All the wastes stored in the area will be stored in 25-cubic yard roll-off containers, which are lined and covered. The Roll-off Container Storage Area is a concrete pad that has a maximum capacity of two (2) 25-cubic yard roll-off containers.

### **III.B. PERMITTED WASTE IDENTIFICATION**

III.B.1. Permitted Waste for each unit is listed below.

III.B.1.a. The following table lists the approved waste codes for storage in containers in Igloos G203, G1009, G1107, G1109, G1110 and H1102. The waste contained in the units specified must be listed as P909, P910, K901 and/or K902 in addition to any D listings:

<b>D Codes</b>	<b>F Codes</b>	<b>K Codes</b>	<b>P Codes</b>	<b>U Codes</b>
D002-Corrosive D003-Reactive D004-Arsenic D005-Barium D006-Cadmium D007-Chromium D008-Lead D009-Mercury D010-Selenium D011-Silver D022-Chloroform D028-1,2-Dichlorethane D029-1,1-Dichlorethylene D030-2,4-Dinitrotoluene D034-Hexachloroethane D037- Pentachlorophenol D039-Tetrachlorethylene D040-Trichloroethylene D043-Vinyl Chloride		K901-Waste Chemical Weapons  K902- Soil, water, debris or containers contaminated through contact with waste chemical weapons	P909-HD Mustard Agent P910-HT Mustard Agent	

III.B.1.b. The following table lists the approved waste codes for storage in Building 540:

<b>D Codes</b>	<b>F Codes</b>	<b>K Codes</b>	<b>P Codes</b>	<b>U Codes</b>
D001-Ignitable	F001-Solvents			U002-Acetone
D002-Corrosive	F002-Solvents			U044-Chloroform
D003-Reactive	F003-Solvents			U154-Methanol
D004-Arsenic	F004-Solvents			
D005-Barium	F005-Solvents			
D006-Cadmium	F039-Leachate			
D007-Chromium				
D008-Lead				
D009-Mercury				
D010-Selenium				
D011-Silver				
D012-Endrin				
D013-Lindane				
D014-Methoxychlor				
D015-Toxaphene				
D016-2,4-D				
D017-2,4,5,-TP				
D018-Benzene				
D019-Carbon Tetrachloride				
D020-Chlordane				
D021-Chlorobenzene				
D022-Chloroform				
D023-o-Cresol				
D024-m-Cresol				
D025-p-Cresol				
D026-Cresol				
D027-1,4-Dichlorobenzene				
D028-1,2-Dichlorethane				
D029-1,1-Dichlorethylene				
D030-2,4-Dinitrotoluene				
D031-Heptachlor				
D032-Hexachlorobenzene				
D033-Hexachloro-1,3-butadiene				
D034-Hexachloroethane				
D035-Methyl ethyl ketone				
D036-Nitrobenzene				
D037-Pentachlorophenol				
D038-Pyridine				
D039-Tetrachlorethylene				
D040-Trichloroethylene				
D041-2,4,5-Trichlorophenol				
D042-2,4,6-Trichlorophenol				
D043-Vinyl Chloride				

III.B.1.c. The following table lists the approved waste codes for storage in containers in Igloo H1103:

D Codes	F Codes	K Codes	P Codes	U Codes
D001-Ignitable D002-Corrosive D004-Arsenic D005-Barium D006-Cadmium D007-Chromium D008-Lead D009-Mercury D010-Selenium D011-Silver D018-Benzene D019-Carbon Tetrachloride D022-Chloroform D028-1,2-Dichlorethane D029-1,1-Dichlorethylene D030-2,4-Dinitrotoluene D034-Hexachloroethane D037- Pentachlorophenol D039-Tetrachlorethylene D040-Trichloroethylene D043-Vinyl Chloride	F003-Spent non-halogenated solvents (e.g., acetone)	K901-Waste Chemical Weapons  K902-Soil, water, debris or containers contaminated through contact with waste chemical weapons	P909-HD Mustard Agent P910-HT Mustard Agent	U002-Acetone U080-Methylene Chloride U154-Methanol

III.B.1.d. Solid non-hazardous waste or materials may be stored in roll-off containers on the Roll-Off Container Storage Area adjacent to igloo H1103 in compliance with all requirements of this Permit. The following table lists the approved waste codes for storage in Roll-Off Container Storage Area adjacent to igloo H1103:

D Codes	F Codes	K Codes	P Codes	U Codes
D002-Corrosive D004-Arsenic D005-Barium D006-Cadmium D007-Chromium D008-Lead D009-Mercury D010-Selenium D011-Silver D018-Benzene D022-Chloroform D028-1,2-Dichlorethane D029-1,1-Dichlorethylene D030-2,4-Dinitrotoluene D034-Hexachloroethane D037- Pentachlorophenol D039-Tetrachlorethylene D040-Trichloroethylene D043-Vinyl Chloride		K901-Waste Chemical Weapons  K902- Soil, water, debris or containers contaminated through contact with waste chemical weapons		

III.B.2. In addition the following wastes are specifically prohibited from storage in the respective units:

III.B.2.a. Igloos G203, G1009, G1107, G1109, G1110, H1102

- Non-agent related wastes

III.B.2.b. Igloo H1103

- D003 explosive wastes and agent wastes with container headspace concentrations greater than 1 VSL

III.B.2.c. Igloo H1103 Roll-off Container Storage Area

- K901 or K902 agent related wastes, except metal (non-porous) munitions bodies and fragments that have been treated in the EDS Unit and metal (non-porous) overpack containers that have been treated in the Environmental Enclosure
- D003 Explosive wastes and agent wastes with container headspace concentrations greater than or equal to 1 VSL
- Wastes with free liquids

III.B.2.d. Building 540

- Agent-related wastes

**III.C. CONDITION OF CONTAINERS**

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste from such container to a container that is in good condition within 24 hours from the time the problem was first discovered, overpack the container, or otherwise manage the waste in compliance with the conditions of this permit.

[6 CCR 1007-3 §264.171]

**III.D. COMPATIBILITY OF WASTE WITH CONTAINERS**

The Permittee must use a container made of, or lined with, materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired. [6 CCR 1007-3 §264.172]

**III.E. MANAGEMENT OF CONTAINERS FOR STORAGE**

III.E.1. The Permittee shall keep all containers closed during storage, except when it is necessary to sample the container contents, or add or remove waste. The Permittee shall not open, handle, or store containers in a manner that may rupture the container or cause it to leak. [6 CCR 1007-3 §264.173]

III.E.2. The Permittee must store hazardous waste in containers which meet the Colorado Department of Transportation (CDOT), or equivalent specifications found in 49 CFR Subchapter C Part 173. Containerized material must be stored in containers which are in good condition and appropriate for the type of material. Container requirements for individual units are as follows:

III.E.2.a. Storage Igloos G1009, G1107, G1109 and H1102

Approved containers include overpack containers, DOT bottles, steel ammunition boxes, drums, Single Round Containers (SRCs), and propelling charge containers. Containers must not be stacked.

III.E.2.b. Storage Igloos G203 and G1110

Approved containers include SRCs, propelling charge containers, DOT- and RCRA-approved drums, and DOT bottles. Containers must not be stacked. Other containers may be used where appropriate and in accordance with the requirements of 6 CCR 1007-3 Part 264 Subpart I and DOT specifications in 49 CFR 173.24, 178, and 179. Containers shall be selected for each type of waste in accordance with the Hazardous Materials Table in 49 CFR 172.101.

III.E.2.c. Igloo H1103

DOT- and RCRA-approved drums and containers. Other containers may be used where appropriate and in accordance with the requirements of 6 CCR 1007-3 Part 264 Subpart I and DOT specifications in 49 CFR 173.24, 178, and 179. Containers shall be selected for each type of waste in accordance with the Hazardous Materials Table in 49 CFR 172.101. Containers must not be stacked.

III.E.2.d. Igloo H1103 Roll-Off Container Storage Area

The Permittee shall store hazardous waste in the H1103 Roll-Off Container Storage Area on a concrete pad in 25 cubic yard roll-off containers with a liner and lockable lid to prevent any accumulation of precipitation. The 25 cubic yard roll-off containers will be designed with a 4-inch space between the bottom of the roll-off and the concrete pad and the area around the pad will be graded away from the pad.

III.E.2.e. Building 540

Approved containers include DOT- and RCRA-approved drums, and DOT bottles. Containers must not be less than 5-gallon capacity, or more than 95-gallon capacity. Containers with less than 30-gallon capacity must not be stacked. Containers with 30- through 95-gallon capacity may be stacked, but must not be stacked more than 2 high, and pallets must be placed between the first and second levels.

III.E.3. The Permittee must maintain adequate aisle space inside all container storage units so that each container can be easily inspected and removed if necessary. Aisle spaces shall be as follows:

III.E.3.a. In Building 540

III.E.3.a.i) A main aisle a minimum of 3 feet wide must be maintained to allow access to the center forklift ramp.

III.E.3.a.ii) Primary aisle space at least 3 feet wide must be maintained between each row, with rows not more than 2 drums or 1 pallet wide, and stacks no more than 2 drums high.

III.E.3.a.iii) Aisle space between rows of containers and berms or walls around the containment area must be at least 3 feet wide.

- III.E.3.b. In Storage Igloos G203, G1009, G1107, G1109, G1110, H1102 and H1103 aisle space between rows of containers and berms or walls must be at least 3 feet wide.
- III.E.3.c. At the Igloo H1103 Roll-off Container Storage Area aisle space between containers at least 4 feet wide.
- III.E.4. All containers of hazardous waste must be marked with the following information, once they have been received for storage:
  - III.E.4.a. Clearly marked “Hazardous Waste.”
  - III.E.4.b. Clearly marked with at least one major waste code, United Nations (UN) code or other DOT shipping label, which indicates the primary hazardous characteristic of the material (ignitable/flammable, corrosive, reactive, toxic) or the compatibility grouping of the material. Alternatively, signs containing this information may be placed in the immediate area of the containers for each hazard class or compatibility grouping.
  - III.E.4.c. Site-specific number or identification which can be cross referenced with the manifest or shipping papers accompanying waste to the facility and which can be correlated to the date placed in storage.
  - III.E.4.d. All containers which are sampled per waste analysis requirements must be marked with a unique, site specific number or identification, which correlates to waste analysis records in the operating record, once they have been received for storage.
  - III.E.4.e. Overpacked munitions may be marked with a unique alphanumeric identifier rather than a hazardous waste label. The hazardous waste label must then be placed on the pallet holding the munitions and the label must indicate which munitions are stored on that pallet by using the alphanumeric code. A schematic diagram of the current location of each container within each respective Container Storage Igloos G203, G1009, G1107, G1109, and G1110 shall be kept up-to-date and maintained in the facility operating record. A written inventory list of wastes will be maintained in the facility operating record at Container Storage Units (CSUs) H1102 and H1103. An inventory list will also be kept in the operating record of wastes placed in the H1103 roll-off containers.
- III.E.5. The Permittee must inspect Building 540 and Igloos G203, G1009, G1107, G1109, G1110, H1102, H1103 and the H1103 Roll-off Container Storage Area in accordance with the inspections schedule described in Procedures to Prevent Hazards, Permit **Attachment 2**. [6 CCR 1007-3 §264.174]

### **III.F. CONTAINMENT SYSTEMS**

The Permittee must construct and maintain containment systems in accordance with 6 CCR 1007-3 §264.175, the attached plans and specifications, and the following requirements:

- III.F.1. Storage Igloos G203, G1009, G1107, G1109, G1110, H1102 and H1103:  
All containers must be stored on secondary containment pallets. Secondary containment pallets have a containment capacity of 43, 66, or 350 gallons.
- III.F.2. Igloos G1009, G1107, G1109, G203, G1110, H1102 and H1103 are permitted for storage of solid-phase and liquid-phase waste. Secondary containment for liquid wastes shall consist exclusively of polyethylene secondary containment pallets in Igloos G203, G1009, G1107, G1109, G1110, and H1102: Secondary containment pallets in H1103 may be polyethylene or steel.
  - III.F.2.a. Secondary containment pallets must be impermeable to mustard agent and associated contaminants and breakdown products.
  - III.F.2.b. Prior to use, each secondary containment pallet must be inspected to ensure structural integrity of the pallet is sufficient for load bearing and for secondary containment.
  - III.F.2.c. Each secondary containment pallet for Igloos G203, G1009, G1107, G1109, G1110, and H1102 must have a load bearing capacity rating of 6,000 pounds. Containment pallets in H1103 will have load bearing capacities of: 6,000 pounds for the polyethylene 66-gallon spill pallets; 8,500 pounds for the 360-gallon polyethylene spill pans; 3,500 pounds for the 350-gallon steel spill pans; and 8,000 pounds for the 748-gallon steel spill pans.
  - III.F.2.d. Secondary containment pallets must have the capacity to contain at least 10 percent of the total volume of all containers or the volume of the largest container on that containment system, whichever is greater.
  - III.F.2.e. If holes, gaps, cracks, or other damage, deformation, or deterioration is observed at any time on any secondary containment pallet such that its structural integrity for load-bearing or its secondary containment capacity is affected, the secondary containment pallet shall not be used for hazardous waste storage.
  - III.F.2.f. In the event of a release of hazardous waste onto any portion of a secondary containment pallet (including the grating), the secondary containment pallet shall be either:
    - III.F.2.f.i) Removed from service, containerized, and managed appropriately as hazardous waste; or

- III.F.2.f.ii) Decontaminated within 24 hours in accordance with a plan submitted by the Permittee and approved by the Division. If the secondary containment pallet was contaminated with mustard agent, the decontamination must be verified and accepted by the Division before the secondary containment pallet can be returned to use.
- III.F.3. At a minimum, the floors of the Igloos must be maintained free of cracks greater than 1/2-inch in width. Cracks greater than 1/2-inch in width shall be repaired within 14 days of discovery.
- III.F.4. Building 540
  - III.F.4.a. The concrete pad is surrounded by an 8-inch high berm. The pad is divided into four quadrants, each of which are separated by a 6-inch high berm. The containment capacity of each quadrant is 5,050 gallons which exceeds the minimum containment requirement of 1,320 gallons for the unit.
  - III.F.4.b. The concrete pad is also surrounded by a drainage ditch with 2:1 side slopes, which diverts run-off away from the storage area and precludes the potential for run-on. Run-on into the containment system must also be prevented by the berms. Each compartment must be sloped to the outer corner, which contains a drain. The drain shall consist of a capped polyvinyl chloride (PVC) pipe. Drains must remain capped or plugged at all times.
  - III.F.4.c. The Permittee must visually inspect all containment berms in Building 540, and berms must not be obscured by equipment or structures.
- III.F.5. The concrete base underlying all permitted container storage areas shall be sufficiently impervious to contain leaks, spills, and accumulated precipitation until detected and removed. Secondary containment pallets will be used for all waste storage in the permitted container storage areas except for the H1103 Roll-Off Container Storage Area.
- III.F.6. All spills, leaks, or accumulated precipitation in Building 540 and Igloos G203, G1009, G1107, G1109, G1110, H1102 and H1103 must be removed and transferred to a proper container immediately upon discovery (which must not be longer than 24 hours after identification of the spill, leak, or accumulated precipitation). Any liquid that, based on chemical analyses or generator knowledge, meets the definition of a hazardous waste, as specified in 6 CCR 1007-3 Part 261, must be treated as a generated hazardous waste, and managed according to the conditions of this permit and all requirements of 6 CCR 1007-3 Part 262.

### **III.G INSPECTION PROCEDURES**

- III.G.1. Building 540, Igloo H1103 and Igloo H1103 Roll-Off Container Storage Area  
Inspections of Building 540, Igloo H1103 and Igloo H1103 Roll-Off Container Storage Area must be conducted at least weekly when containers are present, or quarterly (not to exceed 120 calendar days between inspections) when containers are not present. Additional inspection requirements and an inspection logs for Building 540, Igloo H1103 and Igloo H1103 Roll-Off Container Storage Area are provided in Procedures to Prevent Hazards, Permit **Attachment 2**.
- III.G.2. Storage Igloos G203, G1009, G1107, G1109, G1110 and H1102  
Air monitoring within the Container Storage Igloos shall be conducted on a weekly basis when containers are present. After all containers have been removed from a Container Storage Igloo and air monitoring has been conducted, continual air monitoring within a Container Storage Igloo(s) does not need to be conducted. The exterior of the Container Storage Igloos shall be inspected monthly, and the interior shall be inspected quarterly. Additional inspection requirements and inspection logs for Igloos G203, G1009, G1107, G1109, G1110 and H1102 are provided in Procedures to Prevent Hazards, Permit **Attachment 2**.

### **III.H RECORD KEEPING**

The Permittee must place the results of all waste analyses, trial tests, and any other documentation showing compliance with the requirements of this Part of the permit, in the facility operating record in accordance with 6 CCR 1007-3 §264.73.

### **III.I OPERATIONAL PROCEDURES**

- III.I.1. The Environmental Coordinator representing PCD must check and properly identify each container prior to accepting the container for storage. Containers must be properly labeled and closed. The containers must be placed in the appropriate compartment within Building 540.
- III.I.2. After a container is placed in a Container Storage Igloo, it must be logged into the facility record book that lists lot number, description of waste, hazardous waste number, analysis number (if any), number of containers, and date put in storage. The logs shall become part of the facility operating record.
- III.I.3. Upon receipt all containers and/or pallets of hazardous waste must be marked or labeled with the following information:
- III.I.3.a. The following statement: “Hazardous Waste - Federal Law Prohibits Improper Disposal. If Found, Contact the Nearest Police or Public Safety Authority or the U.S. Environmental Protection Agency.”
- III.I.3.b. Generator’s Name and Address.

- III.I.3.c. Manifest Document Number (if being transported).
- III.I.3.d. EPA identification number.
- III.I.3.e. Appropriate state and federal waste codes.
- III.I.3.f. Date accumulation of the waste began.
- III.I.4. Storage Requirements for Igloos G203, G1009, G1107, G1109 and H1102.
  - III.I.4.a. Overpacking of leaking mustard agent munitions must be conducted. When a leaking chemical munition is detected, it must be placed inside a specially designed container and transferred to a Container Storage Igloo. The nature of the leak must be noted in a leaker report. A magazine data card or an equivalent label must be prepared with information describing the type of leak, type of munition, the identification number, and date filled.
  - III.I.4.b. Liquid-phase mustard agent waste shall be stored in Igloos G203, G1009, G1107, or G1109 until transferred to Igloo H1102 or directly to an Environmental Enclosure for subsequent treatment in the EDS or a chemical demilitarization facility for treatment and disposal.
  - III.I.4.c. Liquid-phase mustard agent-related waste, such as laboratory waste, shall be stored in Igloos G203, G1009, G1107, G1109, G1110, or H1102 until transferred to a chemical demilitarization facility or other permitted facility for treatment and disposal.
  - III.I.4.d. All containers must be stored on pallets.
  - III.I.4.e. Overpacked munitions and containers on secondary containment pallets must not be stacked.
- III.I.5. Storage Requirements for Igloos G203, G1110 and H1103:
  - III.I.5.a. Igloos G203, G1110 and H1103 are permitted for storage of solid-phase and liquid-phase waste. Mustard agent contaminated PPE, dunnage, or other solid-phase waste associated with the leaking rounds that has gone through the decontamination process shall be stored in Igloos G203, G1110, or H1103 awaiting disposition. Decisions on whether a material contaminated with agent is a hazardous waste are made by using the decision trees found in the WAP, **Attachment 3** of this Permit. Agent contaminated wastes which possess container headspace concentrations greater than or equal to 1 VSL cannot be stored in Igloo H1103 and must be transferred to Igloos G203 or G1110 until transferred to a permitted facility for treatment and disposal.

- III.I.5.b. Solid-phase mustard agent contaminated materials shall be stored in Igloos G203 and G1110 until transferred to a chemical demilitarization facility or other permitted facility for treatment and disposal.
- III.I.5.c. All containers must be stored on pallets.
- III.I.5.d. Overpacked munitions and containers on secondary containment pallets must not be stacked.

### **III.J CLOSURE**

At closure of Building 540 and Igloos G203, G1009, G1107, G1109, G1110, H1102, H1103 and the H1103 Roll-Off Container Storage Area the Permittee must remove all hazardous waste and hazardous waste residues from the unit and containment systems in accordance with the procedures in the Closure Plan, Permit **Attachment 6**, and comply with all requirements of 6 CCR 1007-3 §264.178.

### **III.K SPECIAL PROVISIONS FOR IGNITABLE OR REACTIVE WASTE**

- III.K.1. The Permittee must not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line. [6 CCR 1007-3 §264.176]
- III.K.2. The Permittee must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, follow the procedures specified in Procedures to Prevent Hazards, Permit **Attachment 2**, and comply with all requirements of 6 CCR 1007-3 §264.17.

### **III.L SPECIAL PROVISIONS FOR INCOMPATIBLE WASTES**

- III.L.1 The Permittee must identify containers of potentially incompatible wastes and must not place incompatible wastes, or incompatible wastes and materials, in the same containment area, and must segregate wastes as specified in the Procedures to Prevent Hazards, Permit **Attachment 2**. [6 CCR 1007-3 §264.177(c)]
- III.L.2 The Permittee must not place incompatible wastes, or incompatible wastes and materials, in the same container. [6 CCR 1007-3 §264.177(a)]
- III.L.3 The Permittee must not place hazardous waste in an unwashed container that previously held an incompatible waste or material. [6 CCR 1007-3 §264.177(b)]
- III.L.4 A container that is incompatible with the waste material it contains must be immediately overpacked or have its contents transferred to a container that is compatible with the waste.
- III.L.5 A container holding hazardous waste that is incompatible with any other waste or materials stored nearby in other containers or open tanks must be physically separated from the other materials or protected from them by means of a dike, berm, wall, or other device. Lab packs are considered to be compatible with other

containers for purposes of this requirement, provided that all individual containers within a lab pack contain compatible materials. Lab pack compatibility grouping will be determined by the wastes contained in the lab pack container.

- III.L.6 In Building 540 incompatible wastes must be stored in separate compartments. Determination of compatibility shall be made according to A Method for Determining the Compatibility of Hazardous Wastes, EPA-6001 2-80-076. **Attachment 7** shows the storage compartments and waste types stored in each.
- III.L.7 Incompatible wastes must be stored in separate compartments within a container storage igloo. Determination of compatibility shall be made according to A Method for Determining the Compatibility of Hazardous Wastes, EPA-6001 2-80-076 or by generator knowledge. Temporary secondary containment compartments may be used to store incompatible wastes and each compartment must be placed at least 5 feet from any incompatible waste.

### **III.M. ORGANIC AIR EMISSION STANDARDS**

The Permittee shall control air pollutant emissions from each container in accordance with the standards specified in 6 CCR 1007-3 §264.1086 and §264.1087.

- III.M.1. A container is exempt from the standards specified in Permit Condition III.M.3 and 6 CCR 1007-3 §264.1086 and §264.1087 provided that the container is one of the following:
- III.M.1.a. A container for which all hazardous waste entering the container has an average volatile organic (VO) concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in Permit Condition III.N.2. The Permittee shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the containers entering the container storage units. The initial review shall be conducted within 30 days of the effective date of this Permit. The reviews shall be documented in the Operating Record.
  - III.M.1.b. A container for which the organic content of all hazardous waste entering the container has been reduced by an organic destruction method or removal process that achieves any one of the conditions contained in 6 CCR 1007-3 §264.1082(c)(2).
  - III.M.1.c. A container for which all hazardous waste placed in the container either:
    - III.M.1.c.i) Meets the numerical concentration limits for organic constituents, applicable to the hazardous waste, as specified in 6 CCR 1007-3 Part 268 - Land Disposal Restrictions

under Table “Treatment Standards for Hazardous Waste” in §268.40; or

III.M.1.c.ii) Has been treated by the treatment technology established by EPA for the waste in 6 CCR 1007-3 §268.42(a), or treated by an equivalent method of treatment approved by the Division in 6 CCR 1007-3 §268.42(b).

III.M.1.d. The Director may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a container exempted from using air emission controls following the provisions of 6 CCR 1007-3 §264.1082(d).

### III.M.2. Waste Determination Procedures

III.M.2.a. Waste determination procedures to determine average VO concentration at the point of waste generation:

III.M.2.a.i) The Permittee shall determine the average VO concentration at the point of waste origination for each waste placed in the container storage units exempted under the provisions of 6 CCR 1007-3 §264.1082(c)(1) from using air emission controls in accordance with standards specified in 6 CCR 1007-3 §264.1082 through §264.1086 as applicable to the container storage units.

III.M.2.a.ii) The average VO concentration of a hazardous waste at the point of waste origination may be determined in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(a)(2) through (a)(4).

III.M.2.b. Waste determination for treated waste:

III.M.2.b.i) The Permittee shall perform the applicable waste determination for each treated waste placed in the container storage units exempted under the provisions of 6 CCR 1007-3 §264.1082(c)(2) from using air emission controls in accordance with standards specified in 6 CCR 1007-3 §264.1082 through §264.1086 as applicable to the container storage units.

III.M.2.b.ii) The average VO concentration of a treated hazardous waste may be determined in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(b)(2) through (b)(9).

III.M.2.c. The procedure for determining no detectable organic emissions for the purpose of complying with this section of the Permit shall be conducted

in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(d).

III.M.3. The Permittee shall control air emissions from each of the containers stored at the container storage units in accordance with the applicable provisions of 6 CCR 1007-3 §264.1082 and §264.1086.

III.M.3.a. For containers in the container storage units having a design capacity greater than 0.1 cubic meter (m<sup>3</sup>) (about 26 gallons) and less than or equal to 0.46 m<sup>3</sup> (about 119 gallons), the Permittee shall control air pollutant emissions from the container in accordance with Container Level 1 standards [6 CCR 1007-3 §264.1086(c)].

III.M.3.b. Containers using Level 1 controls must be one of the following:

III.M.3.b.i) A container that meets the applicable U.S. DOT regulations on packaging hazardous materials for transportation, as specified in Permit Condition III.D. and 49 CFR Part 178 - Specifications for Packaging, the applicable requirements of 49 CFR Part 107 Subpart B - Exemptions; 49 CFR Part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements, 49 CFR Part 173 - Shippers - General Requirements for Shipments and Packages; and 49 CFR Part 180 - Continuing Qualification and Maintenance of Packaging. No exceptions to the 49 CFR Part 178 regulations are allowed, except for lab packs managed in accordance with 49 CFR Part 178 may comply with the exceptions for combination packaging specified in 49 CFR 173.12(b). [6 CCR 1007-3 §264.1086(c)(1)(i) and §264.1086(f)]

III.M.3.b.ii) A container that is equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position, there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, or may be an integral part of the container structural design. [6 CCR 1007-3 §264.1086(c)(1)(ii)]

III.M.3.b.iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. [6 CCR 1007-3 §264.1086(c)(1)(iii)]

- III.M.3.c. A container complying with permit conditions III.M.3.b.(ii) or III.N.3.b.(iii) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere, and to maintain the equipment integrity for as long as it is in service. [6 CCR 1007-3 §264.1086(c)(2)]
- III.M.3.d. Whenever a hazardous waste is in a container using Level 1 controls, the Permittee shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position, except as follows:
  - III.M.3.d.i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material.
    - III.M.3.d.i.aa) When filling the container to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation [6 CCR 1007-3 §264.1086(c)(3)(1)(A)];
    - III.M.3.d.i.bb) When filling the container with batches of material, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container after 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first. [6 CCR 1007-3 §264.1086(c)(3)(i)(B)];
  - III.M.3.d.ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
    - III.M.3.d.ii.aa) Opening of the closure device or cover is allowed at any time if the container is empty as defined in 6 CCR 1007-3

§261.7(b). [6 CCR 1007-3  
§264.1086(c)(3)(ii)(A)];

III.M.3.d.ii.bb) Opening of the closure device or cover is allowed for the purpose of removing hazardous waste from the container. If batches of material are removed from the container, the Permittee must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first. [6 CCR 1007-3 §264.1086(c)(3)(ii)(B)];

III.M.3.d.iii) Opening of a cover or closure device is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container. [6 CCR 1007-3 §264.1086(c)(3)(iii)]

III.M.3.d.iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations, for the purpose of maintaining the internal pressure of the container in accordance with the design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. [6 CCR 1007-3 §264.1086(c)(3)(iv)]

III.M.3.d.v) Opening of a safety device, as defined in 6 CCR 1007-3 Section 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition. [6 CCR 1007-3 §264.1086(c)(3)(v)]

#### III.M.4. Monitoring and Inspection Schedules and Procedures

III.M.4.a. The containers at the container storage units must be inspected daily in accordance with the Inspection Plan and Schedules contained in **Attachment 2** of this Permit.

III.M.4.b. The Permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. Notwithstanding the requirements of Permit Condition III.E., if a defect is detected, the Permittee shall make first attempts at repair no later than 24 hours after detection and the repair shall be completed as soon as possible, but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired. [6 CCR 1007-3 §264.1086(c)(4)]

## PART V – TREATMENT IN MISCELLANEOUS UNITS

### V.A. UNIT DESCRIPTIONS

The Permittee is allowed to store and treat hazardous waste in miscellaneous units following the requirements of 6 CCR 1007-3 Part 264 Subpart X and in the following manner:

- V.A.1. EDS Phase 2 Unit R (P2R) is contained in an Environmental Enclosure located between G and H Blocks of PCD as shown in **Attachment 1, Figure 1-3**. The EDS P2R is permitted for the treatment of overpacked mustard agent munitions, agent contaminated explosives, including propellants and bursters, and DOT containers of waste mustard agent.

The EDS P2R is a trailer mounted unit with a Containment Vessel and a 166-gallon secondary containment pan. The Containment Vessel can withstand a detonation of up to 9 pounds of trinitrotoluene equivalent explosive and is equipped with a 9-inch thick door. The door is sealed closed with two Grayloc<sup>®</sup> clamp halves attached to four threaded steel rods with hydraulic nuts. The EDS P2R is also equipped with an intermediate holding tank and two liquid waste containers. The waste containers are provided with separate secondary spill containment.

The Environmental Enclosure around the EDS P2R consists of a stretched, weather-tight fabric over a steel frame. The Enclosure is anchored to a concrete pad and has two AFSs to maintain a cascading, negative pressure in the structure. Temporary storage of mustard agent and explosive wastes is permitted within the Environmental Enclosure for less than 24 hours to stage wastes prior to treatment in the EDS P2R.

Mustard agent munitions and other agent wastes and explosives are placed in the EDS P2R and configured with shaped donor charges. Once closed and sealed, the charges are initiated, breaking apart the munitions and detonating any explosive components. Following detonation, Monoethylamine reagent along with steam is introduced to the Containment Vessel while being agitated (rotated) to neutralize the agent. Once the neutralization process is completed as determined through analysis of the liquid in the EDS P2R, the wastes are flushed and removed from the unit, it is rinsed, and prepared for subsequent treatments.

- V.A.2. EDS Phase 2 Unit A (P2A) is contained in an Environmental Enclosure located between G and H Blocks of PCD as shown in **Attachment 1, Figure 1-3**. The EDS P2A is permitted for the treatment of overpacked mustard agent munitions, agent contaminated

explosives, including propellants and bursters, and DOT containers of waste mustard agent.

The EDS P2A is a skid mounted unit with a Containment Vessel and a 166-gallon secondary containment pan. The Containment Vessel can withstand a detonation of up to 9 pounds of trinitrotoluene equivalent explosive and is equipped with a 9-inch thick door. The door is sealed closed with three-piece Grayloc clamp with support plate and pneumatic drive screw. The EDS P2A is also equipped with an intermediate holding tank and two liquid waste containers. The waste containers are provided with separate secondary spill containment.

The Environmental Enclosure around the EDS P2R consists of a stretched, weather-tight fabric over a steel frame. The Enclosure is anchored to a concrete pad and has two AFSs to maintain negative pressure in the structure. Temporary storage of mustard agent and explosive wastes is permitted within the Environmental Enclosure for less than 24 hours to stage wastes prior to treatment in the EDS P2A.

Mustard agent munitions and other agent wastes and explosives are placed in the EDS P2A and configured with shaped donor charges. Once closed and sealed, the charges are initiated breaking apart the munitions and detonating any explosive components. Following detonation, monoethanolamine (MEA) reagent, along with steam, is introduced to the Containment Vessel while being agitated (rotated) to neutralize the agent. Once the neutralization process is completed as determined through analysis of the liquid in the EDS P2A, the wastes are flushed and removed from the unit it is rinsed, and prepared for subsequent treatments.

**V.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION**

V.B.1. The Permittee may treat the following wastes in the EDS Units subject to the terms of this Permit and as described below:

D Codes	F Codes	K Codes	P Codes	U Codes
D001 – Ignitable D002-Corrosive D003-Reactive D004-Arsenic D005-Barium D006-Cadmium D007-Chromium D008-Lead D009-Mercury D010-Selenium D011-Silver D018-Benzene D022-Chloroform D028-1,2-Dichlorethane D029-1,1-Dichlorethylene D030-2,4-Dinitrotoluene D034-Hexachloroethane D037- Pentachlorophenol D039-Tetrachlorethylene D040-Trichloroethylene D043-Vinyl Chloride		K901-Waste Chemical Weapons  K902- Soil, water, debris or containers contaminated through contact with waste chemical weapons		

V.B.2. The Permittee is prohibited from treating hazardous waste in the EDS Units that is not mustard agent waste related to the stockpile of waste chemical weapons at the facility.

**V.C. DESIGN, CONSTRUCTION AND OPERATING REQUIREMENTS**

V.C.1. Each EDS will be constructed according to Facility Construction Certifications (FCCs). FCCs for all phases of the construction of the EDS shall be submitted to the Department. No wastes shall be placed in the EDS treatment units or storage units, until the Department has approved, in writing, the Final FCC documentation package for each construction phase as well as a comprehensive certification of the entire EDS unit

V.C.1.a. The EDS will be constructed in accordance with specifications detailed in the **Attachment 8**, PCAPP EDS Site Support Equipment Figures identified below and the specifications and design information provided in the PCD Recovered Chemical Materiel Directorate (RCMD) Notice of Deficiency (NOD) response.

Figure Appendix 8-1-1 Layout for Environmental Enclosures,

Figure Appendix 8-1-2 EDS within an Environmental Enclosure,  
 Figure Appendix 8-1-5 Foundation and Slab Plan,  
 Figure Appendix 8-1-6 Concrete Foundation Sections and Details,  
 Figure Appendix 8-1-7 Foundation Sections and Details,  
 Figure Appendix 8-1-8 Baseplate Layout,  
 Figure Appendix 8-1-9 Isometric View,  
 Figure Appendix 8-1-10 Elevation Views,  
 Figure Appendix 8-1-11 Tunnels,  
 Figure Appendix 8-1-13 Explosive Storage Magazine,  
 Figure 10 Site Layout from Geotechnical Report

V.C.1.b. At a minimum, the FCC documentation package for each construction element will include: (a) list of reference documents inclusive of applicable project specifications and design drawings; (b) list of verification documents, reports and observations; (c) summaries of all construction activities; (d) observation logs and testing data sheets including locations of all sample location plans; (e) a discussion of any changes from design and material specifications; (f) applicable in-process records or drawings; (g) as-built drawings; (h) a summary statement sealed and signed by a Professional Engineer registered in the State of Colorado that construction quality assurance was conducted in accordance with the data elements and observations required in each set of FCC matrices as well as visual observations and data generated in accordance with the requirements of the matrices. In addition, an attached comprehensive certification statement will attest that the overall EDS was constructed in accordance with the project specifications and standards outlined in the FCC matrices

V.C.1.c. The FCCs and certification statement will be submitted in accordance with the matrices contained in **Table V-1**.

**Table V-1. FCC Matrix**

FCC	MATRIX					
	Responsible Org.	POC	POC Phone	POC email	Submitted	Approved
Foundation	USACE	Schanke	(719) 526-4925	<a href="mailto:Robert.R.Schanke@usace.army.mil">Robert.R.Schanke@usace.army.mil</a>	2/28/2014	4/7/2014
Lightning Protection System	USACE	Schanke	(719) 526-4925	<a href="mailto:Robert.R.Schanke@usace.army.mil">Robert.R.Schanke@usace.army.mil</a>	4/21/2014	6/10/2014
Environmental Enclosure	USACE	Schanke	(719) 526-4925	<a href="mailto:Robert.R.Schanke@usace.army.mil">Robert.R.Schanke@usace.army.mil</a>	4/21/2014	5/15/2014
*P2R Vessel V-25 Construction	Leidos	Blevins	(443) 402-9303	<a href="mailto:jerry.l.blevins@leidos.com">jerry.l.blevins@leidos.com</a>	5/8/2014	6/5/2014
P2R Vessel Installation	Leidos	Blevins	(443) 402-9303	<a href="mailto:jerry.l.blevins@leidos.com">jerry.l.blevins@leidos.com</a>	5/8/2014	6/5/2014
**EE1 Air Filtration System Fabrication	Leidos	Blevins	(443) 402-9303	<a href="mailto:jerry.l.blevins@leidos.com">jerry.l.blevins@leidos.com</a>	6/10/2014	7/16/2014
***EE1 EDS Ventilation & Filtration Systems Install	BESECX	Merola	(719) 494-4822	<a href="mailto:kmerola@besecx.com">kmerola@besecx.com</a>	6/10/2014	7/16/2014
<b>Future</b>						
EE3 Air Filtration System Fabrication	Leidos	Blevins	(443) 402-9303	<a href="mailto:jerry.l.blevins@leidos.com">jerry.l.blevins@leidos.com</a>	6/10/2014	7/16/2014
EE3 EDS Ventilation & Filtration Systems Install	BESECX	Merola	(719) 494-4822	<a href="mailto:kmerola@besecx.com">kmerola@besecx.com</a>	6/10/2014	7/16/2014

- V.C.2. The Permittee shall design and construct the EDS units in accordance with the design plans and specifications contained in **Attachment 8** of this Permit.
- V.C.3. The Permittee shall operate and maintain the EDS units in accordance with the operating plans and procedures contained in **Attachment 8** of this Permit. The maximum number of waste munitions to be treated in each EDS unit is six (6) rounds per day not to exceed nine (9) pounds Net Explosive Weight (NEW).
- V.C.4. The Permittee shall not place hazardous wastes in the EDS units if they could cause the Units, their ancillary equipment, or containment system to rupture, leak, corrode or otherwise fail.
- V.C.5. Treatment residues, byproducts, and other hazardous wastes from the EDS units or Environmental Enclosures shall be managed in accordance with the plans and procedures in this Permit. The Permittee must use a container made of, or lined with, materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired. [6 CCR 1007-3 §264.172]
- V.C.6. The Permittee shall operate and test the EDS Units in accordance with the Operations and Maintenance Manual and shall record the results of these tests in the facility Operating Record.
- V.C.7. The Permittee shall maintain a log in the Operating Record of the quantity and type of munitions processed, including the time processed and any pertinent observations as described in **Attachment 8** of this Permit.
- V.C.8. In accordance with **Attachment 2** of this Permit, the Permittee shall transport agent-contaminated wastes from permitted storage igloos G203, G1009, G1107, G1109, and G1110 directly to an Environmental Enclosure and EDS unit for treatment or the wastes may be transferred to H1102 where they will be temporarily stored pending transfer to the Environmental Enclosures for EDS treatment. If transported directly to an Environmental Enclosure, only the amount that will be treated that day will be delivered to the enclosure, including the associated required donor charges.

**V.D. SECONDARY CONTAINMENT REQUIREMENTS**

- V.D.1. The Permittee shall operate the secondary containment system for the EDS units in accordance with the operating and design plans, descriptions, figures and drawings contained in **Attachment 8** of this Permit.
- V.D.1.a. Each secondary containment system for the EDS units must have a capacity of at least 166 gallons.

- V.D.1.b. The secondary containment system for the EDS units must be constructed of or lined with materials that are compatible with the wastes treated and generated in the EDS units.
- V.D.2. The Permittee shall not store or stage any containers of liquid hazardous waste in the Environmental Enclosure without secondary containment in accordance with **Attachment 8** of this Permit.
- V.D.2.a. The secondary containment system for each container of hazardous waste shall be sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed.
- V.D.2.b. Secondary containment systems for containers shall provide loading capacity sufficient to support the weight of any hazardous wastes contained.
- V.D.2.c. The secondary containment systems for each container of hazardous waste shall be sloped or otherwise designed and operated to drain and remove liquids resulting from leaks, spills or accumulated precipitation unless the containers are elevated or are otherwise protected from contact with any accumulated liquids.
- V.D.2.d. The secondary containment systems for each container of hazardous waste shall have sufficient capacity to contain 10% of the volume of containers or volume of the largest container in it, whichever is greater.
- V.D.3. The Permittee shall not store or treat any hazardous waste in tanks or ancillary equipment to the EDS units without secondary containment.
- V.D.3.a. The secondary containment must be sufficient to contain 100% of the volume of the ancillary equipment.
- V.D.3.b. The secondary containment for any ancillary equipment must be made of or lined with materials compatible with the wastes managed in the EDS units.
- V.D.4. All spills or leaks in the secondary containment areas described in Permit Conditions V.D.1 – V.D.4 must be cleaned up within 24 hours of discovery. Any spills or leaks outside secondary containment must be cleaned up immediately upon discovery. A waste determination must be conducted for any material removed from the secondary containment collection systems or the H1103 Roll-Off Container Storage Area in accordance with 6 CCR 1007-3 Section 262.11.

**V.E. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the EDS units and Environmental Closures in accordance with the Inspection Plan and Schedules contained in **Attachment 2** of this Permit.

**V.F. PRECAUTIONS TO PREVENT IGNITION OR REACTION OF WASTES**

The Permittee shall follow the procedures and take the precautions contained in **Attachment 2** and **Attachment 8** of this Permit to prevent the unintended ignition or reaction of wastes.

**V.G. MONITORING AND RISK ASSESSMENT REQUIREMENTS**

V.G.1. The Permittee shall perform stack emissions sampling and analysis for the first EDS unit operated in accordance with the EDS Stack Sampling and Analysis Plan, **Attachment 13** of this Permit. The EDS Stack Sampling and Analysis Plan includes sampling and analysis of the EDS emissions both prior to and after treatment of the off-gas with carbon filtration for the following:

V.G.1.a. Mustard agent and explosives associated with the munitions to be treated in the EDS units

V.G.1.b. The duration of at least four shots (detonations) to include:

1. 1 DOT 3A container filled with various lots of HD
2. 1 DOT 3A container filled with various lots of HT
3. 6-pack of HD-filled 155mm projectiles
4. 6-pack of 4.2-inch HD-filled mortars contaminated with mercury.

V.G.1.c. All 6 CCR 1007-3 Part 261 Appendix VIII compounds and MEA, except where the Director has approved an alternate list of compounds that are not in the mustard agent and that are not likely generated during the treatment process

V.G.2. The results of the sampling and analysis must be provided to the Director within 45 days of completing a stack sampling event.

V.G.3. The Permittee must compare the results of the measured emissions from the sampling and analysis with the emission rates for the Constituents of Potential Concern (COPCs) evaluated in the 2012 EDS Multi-pathway Health Risk Assessment (MPHRA) as amended by the July 10, 2014 Supplemental Information.

- V.G.4. If the results of the sampling and analysis indicate that any additional hazardous waste constituents are present in the EDS emissions besides the COPCs, or that the modeled concentration of any COPC in the MPHRA is less than the measured emission rate, then the Permittee must perform a Post MPHRA of the measured emissions in accordance with 6 CCR 1007-3 §100.28. A draft MPHRA Report will be provided to the Director within 60 days of completing the stack sampling.
- V.G.5. If the results of the sampling and analysis indicate that the measured emissions were less than the emission rate for each COPC in the MPHRA and that no additional hazardous waste constituents were present above the method detection levels in the Sampling and Analysis Plan, a Post MPHRA of the measured emissions is not required.
- V.G.6. If a Post MPHRA of the measured emissions from the EDS indicates that an unacceptable risk to human health or the environment results from operation of the EDS, the Director may impose additional operating or design Permit requirements for treatment of hazardous wastes in the EDS. Such requirements may include but are not limited to stack emission standards in accordance with 6 CCR 1007-3 §264.346(k), carbon filter change-out requirements, limited waste feed rates, or other conditions as may be necessary to protect human health and the environment.

#### **V.H. CLOSURE AND POST CLOSURE**

At closure, partial closure or temporary closeout of an EDS, the Permittee shall comply with the procedures in the Closure Plan, **Attachment 6** of this Permit. If hazardous waste treatment in any EDS units will not recommence operation within 1 year, the EDS must undergo temporary closeout in accordance with the Closure Plan, **Attachment 6** of this Permit and 6 CCR 1007-3 §264.113.

#### **V.I. RECORD KEEPING**

The Permittee shall develop and maintain all records associated with operation of the EDS units and Environmental Enclosures to comply with 6 CCR 1007-3 §264.73 and §264.602 and **Attachment 8** of this Permit.

#### **V.J. AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS**

- V.J.1. The EDS units manage wastes with an organic concentration of at least 10 percent by weight as determined by generator knowledge. Therefore, equipment in the EDS unit utilized for the treatment of hazardous waste shall be operated in compliance with 6 CCR 1007-3 Part 264 Subpart BB.
- V.J.2. The EDS equipment to which Subpart BB applies is listed in **Table Appendix 8-3-1**. Additionally, the method of compliance, location, state (liquid or vapor) and percent by weight organics are listed.

- V.J.2.a. For leak detection monitoring points, using Reference Method 21 is required by 6 CCR 1007-3 §264.1063(a). The Permittee has demonstrated that MINICAMS are significantly more sensitive than the equipment utilized in Method 21. The MINICAMS must detect at levels below 200 parts per million (ppm); therefore, the MINICAMS may be used to demonstrate compliance with Subpart BB. If conditions or equipment are altered, however, the Permittee must then comply with Subpart BB and use Referenced Method 21.
- V.J.2.b. This equipment list in **Table Appendix 8-3-1** must be maintained and updated within 30 days of the addition of any new piece of equipment or change in status of existing equipment. Existing equipment will be monitored and inspected; these inspections shall be recorded on the form in **Table Appendix 8-3-2** which will be maintained in the Operating Record.
- V.J.3. Each piece of equipment listed in **Table Appendix 8-3-1**, and to which Subpart BB applies shall be marked (tagged) in such a manner that it can be distinguished readily from other pieces of equipment.
- V.J.3.a. The location and tag identification of each piece of equipment for EDS Unit P2R shall be shown in a Figure to be provided in accordance with Permit Condition I.J.1.
- V.J.3.b. The location and tag identification of each piece of equipment for EDS Unit P2A shall be shown in **Figure Appendix 8-3-3**. The Permittee shall submit this figure in accordance with Permit Condition I.J.2.
- V.J.4. The materials involved in the treatment process in the EDS units consist of treatment reagent MEA which has a vapor pressure of 0.0117 KPa<sup>2</sup>, and mustard agent which has a vapor pressure of 0.00896 kPa<sup>2</sup>. The EDS treatment equipment is considered to be in “heavy liquid service.”
- V.J.4.a. Equipment listed in **Table Appendix 8-3-1** of **Appendix 8-3** will be monitored within five days by the method specified in 6 CCR 1007-3 §264.1063(b) if evidence of a potential leak is found by MINICAMS, DAAMS, helium leak tests, or routine maintenance.
- V.J.4.b. All suspected leaks will be verified and repaired within five calendar days but no later than prior to processing the next munition batch or other EDS feed. Post repair testing will be conducted on the affected area of the system and documented in the Operating Record.

- V.J.4.c. Equipment leak testing (i.e., visual equipment inspection) after completion of routine preventive maintenance is not required except when routine maintenance results in replacement of seals, valves, O-rings or other EDS-related equipment that prevent releases exterior to the EDS unit. Leak testing is defined as vacuum decay rate testing and/or helium leak testing with the appropriate test(s) depending on equipment replaced.

**V.K. AIR EMISSION STANDARDS FOR THE EDS SYSTEM**

The Permittee shall control air pollutant emissions from the EDS in accordance with the Procedures to Prevent Hazards, **Attachment 2** of this Permit, and the standards specified in 6 CCR 1007-3 §264.1084 and §264.1087.

- V.K.1. The EDS System is exempt from the standards specified in Permit Condition IV.K.3. and 6 CCR 1007-3 §264.1084 and §264.1087 provided that the component of the EDS is one of the following:

- V.K.1.a. A component of the EDS for which all hazardous waste entering the component has an average VO concentration at the point of waste origination of less than 500 ppmw. The average VO concentration shall be determined using the procedures specified in Permit Condition IV.N.2. The Permittee shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for each component. The initial review shall be conducted within 30 days of the effective date of this Permit. The reviews shall be documented in the Operating Record.
- V.K.1.b. A component of the EDS for which the organic content of all hazardous waste entering the component has been reduced by an organic destruction method or removal process that achieves any one of the conditions contained in 6 CCR 1007-3 §264.1082(c)(2).

- V.K.1.c. A component of the EDS System for which all hazardous waste placed in the component either:
  - V.K.1.c.i) Meets the numerical concentration limits for organic constituents, applicable to the hazardous waste, as specified in 6 CCR 1007-3 Part 268 - Land Disposal Restrictions under Table “Treatment Standards for Hazardous Waste” in §268.40; or
  - V.K.1.c.ii) Has been treated by the treatment technology established by EPA for the waste in 6 CCR 1007-3 §268.42(a), or treated by an equivalent method of treatment approved by EPA in 6 CCR 1007-3 §268.42(b).
- V.K.1.d. The Director may at any time perform or request that the Permittee perform a waste determination for a hazardous waste managed in the EDS exempted from using air emission controls following the provisions of 6 CCR 1007-3 §264.1082(d).

V.K.2. Waste Determination Procedures

- V.K.2.a. Waste determination procedures to determine average VO concentration at the point of waste generation:
  - V.K.2.a.i) The Permittee shall determine the average VO concentration at the point of waste origination for each waste placed in the EDS exempted under the provisions of 6 CCR 1007-3 §264.1082(c)(1) from using air emission controls in accordance with standards specified in 6 CCR 1007-3 §264.1082 through §264.1086 as applicable to the EDS.
  - V.K.2.a.ii) The average VO concentration of a hazardous waste at the point of waste origination may be determined in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(a)(2) through (a)(4).
- V.K.2.b. Waste determination for treated waste:
  - V.K.2.b.i) The Permittee shall perform the applicable waste determination for each treated waste placed in the EDS exempted under the provisions of 6 CCR 1007-3 §264.1082(c)(2) from using air emission controls in accordance with standards specified in 6 CCR 1007-3 §264.1082 through §264.1086 as applicable to the EDS.

- V.K.2.b.ii) The average VO concentration of a treated hazardous waste may be determined in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(b)(2) through (b)(9).
- V.K.2.c. The procedure for determining no detectable organic emissions for the purpose of complying with this section of the Permit shall be conducted in accordance with the procedures specified in 6 CCR 1007-3 §265.1084(d).
- V.K.3. The Permittee shall control air emissions from the EDS in accordance with the applicable provisions of 6 CCR 1007-3 §264.1082, §264.1084, and §264.1087.
  - V.K.3.a. The Permittee shall control air emissions in accordance with the Tank Level 1 controls and shall maintain the following management activities:
    - V.K.3.a.i) The maximum organic vapor pressure limit for the EDS is 76.6 kPa.
    - V.K.3.a.ii) The hazardous waste in the EDS is not heated by the Permittee to a temperature that is greater than the temperature at which the maximum organic vapor pressure of hazardous waste is determined for the purpose of complying with Permit Condition V.K.3.a.i).
    - V.K.3.a.iii) The hazardous waste in the EDS is not treated by the Permittee using a waste stabilization process, as defined by 6 CCR 1007-3 §265.1081.
  - V.K.3.b. The Permittee, using Tank Level 1 controls, shall meet the following requirements:
    - V.K.3.b.i) The Permittee shall determine the maximum organic vapor pressure for each hazardous waste to be managed in the EDS, before the first time the hazardous waste is placed in the EDS. The maximum organic vapor pressure shall be determined using the procedures specified in 6 CCR 1007-3 §264.1083(c). Thereafter, the Permittee shall perform a new determination whenever changes to the hazardous waste managed in the EDS could potentially cause the maximum organic vapor pressure to increase to a level equal to or greater than the maximum organic

vapor pressure specified in Permit Condition V.K.3.a.i).

V.K.3.b.ii) The EDS shall be equipped and maintained with a fixed roof design meeting the following requirements:

V.K.3.b.ii.aa) The fixed roof, which is an integral part of the EDS, forms a continuous barrier over the entire surface area of the hazardous waste in the EDS.

V.K.3.b.ii.bb) The fixed roof shall be maintained such that there are no visible cracks, holes, gaps, or other open spaces between the roof section joints or between the roof edge and the EDS wall.

V.K.3.b.ii.cc) Each opening in the roof and any manifold system associated with the fixed roof is connected by a closed vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and it shall be operating whenever hazardous waste is managed in the EDS, except as provided below:

V.K.3.b.ii.cc)1) During periods when it is necessary to provide access to the EDS for performing the activities of Permit Condition V.K.3.b.ii.cc.2., venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and

removal of the fixed roof is allowed. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

V.K.3.b.ii.cc)2) During periods of routine inspection, maintenance, or other activities needed for normal operations, or for removal of accumulated sludge or other residues from the bottom of the EDS.

V.K.3.c. Whenever a hazardous waste is in a EDS, the fixed roof shall be intact and each closure device secured in the closed position except as follows:

V.K.3.c.i) Opening of the closure device is allowed at the following times:

V.K.3.c.i.aa) To provide access to the EDS for performing routine inspection, maintenance or other activities needed for normal operations. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position.

- V.K.3.c.i.bb) To remove accumulated sludge or other residues from the bottom of the EDS.
- V.K.3.c.ii) Opening of the pressure relief device which vents to the atmosphere following filtration through activated carbon, is allowed during normal operations for the purpose of maintaining the EDS internal pressure in accordance with the EDS design specifications. The device is designed to operate with no detectable organic emissions when the device is in the secured closed position. The settings at which the device opens shall be as established in Permit Condition V.E.2.c.
- V.K.3.c.iii) Opening of a safety device, as defined in 6 CCR 1007-3 §265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.
- V.K.3.d. The Permittee shall inspect the air emission control equipment in accordance with the following requirements:
  - V.K.3.d.i) The fixed roof and its closure devices shall be visually inspected by the Permittee, as specified in the Procedures to Prevent Hazards, **Attachment 2** of this Permit, to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the EDS wall; broken, cracked or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
  - V.K.3.d.ii) The Permittee shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the EDS accepts hazardous waste. Thereafter, the Permittee shall perform the inspections at least once every year except under the special conditions provided for in Permit Condition V.K.6.
  - V.K.3.d.iii) In the event a defect is detected, the Permittee shall repair the defect in accordance with the requirements of Permit Condition V.K.5.

- V.K.4. The Permittee shall transfer hazardous waste to the EDS in accordance with the following requirements:
- V.K.4.a. Transfer of hazardous waste, except as provided in Permit Condition V.K.4.b., to one component from another component of the EDS shall be conducted using continuous hard piping or another closed vent system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this Permit Condition, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR Part 63 Subpart RR - National Emission Standards for Individual Drain Systems.
  - V.K.4.b. The requirements of Permit Condition V.K.4.a. do not apply when transferring a hazardous waste to the EDS under any of the following conditions:
    - V.K.4.b.i) The hazardous waste meets the average VO concentrations specified in Permit Condition V.K.1.a. at the point of origination.
    - V.K.4.b.ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements of Permit Condition V.K.1.b.
- V.K.5. The Permittee shall repair each defect detected during an inspection performed in accordance with the requirements of V.K.3.d. as follows:
- V.K.5.a. The Permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Permit Condition V.K.5.b.
  - V.K.5.b. Repair of a defect may be delayed beyond 45 calendar days if the Permittee determines that repair of the defect requires emptying or temporary removal from service of the component of the EDS and no alternative capacity is available at the site to accept the hazardous waste normally managed in the component of the EDS. In this case, the Permittee shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the EDS stops operation. Repair of the defect shall be completed before the process or unit resumes operation.
- V.K.6. Following the initial inspection and monitoring of the cover as required by the Permit Condition V.K., subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

- V.K.6.a. In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other “unsafe conditions then the Permittee may designate a cover as an unsafe to inspect and monitor cover” and comply with all of the following requirements.
- V.K.6.b. Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.
- V.K.6.c. Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in Permit Condition V.K. as frequently as practicable during those times when a worker can safely access the cover.

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