UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EMERGENCY HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT

Permittee:	**United States Department of the Army, as owner and operator**
Location of Permitted Facility:	**Iowa Army Ammunition Plant** **17571 Des Moines County Highway 79** **Middletown, Iowa 52638-5000**
EPA RCRA ID No.:	**IA7213820445**
Effective Date:	**November 13, 2026, 12:00 AM CST**
Expiration Date:	**February 11, 2027, 11:59 PM CST**

The U.S. Environmental Protection Agency (EPA) issues this Emergency Permit for Storage and Treatment ("Emergency Permit") to the U.S. Department of the Army (Permittee) to store and treat lead azide—a hazardous waste that exhibits the characteristic of reactivity (energetic) and the characteristic of toxicity for lead—at the Iowa Army Ammunition Plant (IAAAP). IAAAP encompasses approximately 19,000 acres located at 17571 Des Moines County Highway 79, Middletown, Iowa, and all contiguous property at this location under the control of the Permittee (hereinafter "Permitted Facility"). The recrystallization of the lead azide during long-term storage has increased the material's sensitivity to friction and shock, creating a highly unstable and dangerous situation. This Emergency Permit is issued upon the EPA's finding of an imminent and substantial endangerment to human health and the environment pursuant to the Solid Waste Disposal Act (Sections 3004(a), (u), (v), and 3005 of the Resource Conservation and Recovery Act, or RCRA (42 U.S.C. §§ 6924(a), (u), (v); 6925)) and regulations promulgated thereunder (Title 40 of the Code of Federal Regulations (C.F.R) Sections 264 – Subpart X, 270.61). Section 3005(c)(3) of RCRA requires that each Permit issued under Section 3005 shall contain such terms and conditions as the EPA determines necessary to protect human health and the environment.

Under the IAAAP's existing RCRA Permit, issued September 28, 2018 (2018 RCRA Permit), storage of reactive (energetic) waste, ignitable waste, toxicity characteristic waste, listed hazardous waste spent solvents, and listed hazardous waste from explosive operations are allowed to be stored in [redacted]. Pursuant to the 2018 RCRA Permit, the treatment of reactive hazardous waste munitions by open burning in the Open Burn Area shall only be conducted for munitions that are unstable and small explosive loaded munition items which are unsafe for continued storage, unsafe for transport off-site or for which no off-site treatment method exists. The treatment of reactive hazardous waste munitions that cannot be safely transported off-site to a treatment facility is allowed

in the following Subpart X Miscellaneous Treatment Units: Open Detonation area and 44MM Grenade Treatment Unit.

The 2018 RCRA Permit limits storage to no more than 35,000 pounds of hazardous waste and to no more than 35,000 pounds net of explosive weight (on a TNT basis) of reactive waste. The 2018 RCRA Permit limits the treatment of munitions to the following:

- Open burning of munitions in metal pans is limited to a maximum of 140 pounds per hour;
- Open detonation of munitions in pits dug into the ground or in a buried explosion module is limited to a maximum of 100 pounds per hour; and
- Open detonation of 40mm grenades is limited to a maximum of two grenades per detonation and 50 grenades per week in the steel tank detonation chamber.

On September 29, 2026, the EPA issued to the Permittee an Emergency Permit for Storage of the following hazardous waste in [redacted] within Earth Covered Magazines (ECMs) [redacted] and [redacted] (hereinafter "September 2026 Storage Permit"):

Name: Lead Azide
Hazardous Waste Codes: D003 (reactivity), D008 (toxicity characteristic for lead)
CAS Number: 13424-46-9
DOT Shipping Classification: Hazard Class 1.1A, UN0130
Quantity: There are 68 drums of Lead Azide, [redacted]

- [redacted]
- [redacted]

This referenced storage area is not covered for treatment, storage, or disposal of hazardous waste under the 2018 RCRA Permit.

The EPA's issuance of the September 2026 Storage Permit was based on the IAAAP's emergency permit request letter, dated September 2, 2026, including all associated attachments. The September 2026 Storage Permit is scheduled to expire December 26, 2026, at 11:59 pm CST. This Emergency Permit supersedes the September 2026 Storage Permit.

On September 4, 2026, the Permittee submitted a partial application for an Emergency Permit for Storage and Treatment of the hazardous waste subject to the September 2026 Storage Permit. Appendix A summarizes sections contained in the Army's initial permit application, the EPA's comments on those sections, and the Army's resubmission of revised permit application sections.

In addition, the Army submitted to the EPA correspondence dated August 12, 2026, and September 4, 2026, providing its analysis of potential alternatives and the Army's decision-making process that culminated in the Secretary of the Army's selection of intentional detonation for the treatment of lead azide (hereinafter "treatment activity"). The EPA's personnel also attended a briefing for Army decisionmakers in April 2026. Lastly, the Emergency Permit Application—specifically, Section 1 –

Introduction, 1.4 Alternative Treatment Technology Assessment—also includes information pertaining to the Army's evaluation of alternative treatment processes.

The hazardous waste container storage units are [redacted], which are located within [redacted] The locations of [redacted] are shown in Figure 1-2 of the IAAAP's Emergency Permit Application Section 1 – Introduction. Figure #4 of the Emergency Permit Application Section 1 – Introduction is the construction drawing and floor plan of [redacted].

This Emergency Permit is required to protect human health and the environment and to authorize the continued storage of this hazardous waste in place until the operating conditions, as outlined in this Emergency Permit, allow for the implementation of the treatment activity to safely manage the explosive hazard. To maximize protection of public health, the Emergency Permit requires the Permittee to model depositional impacts and airborne plume migration prior to any targeted detonation date. The required modeling must utilize a conservative coding input to ensure that the Permittee's modeling does not under-predict the extent of potential impact. Technical experts from both the EPA and the Army agree that the modeling on which public notifications will be based is not necessarily representative of actual conditions that may result from the treatment activity. The EPA acknowledges the Army's real-world experience and expert judgment, presented in its permit application, that the realistic airborne release of lead will, in fact, be less than 100 percent due to considerable measures the Permittee will implement to mitigate blast effects. However, considering technical uncertainty regarding a quantifiable reduction of the lead release produced by planned mitigation measures, the EPA has chosen a conservative Emission Factor to ensure that the prior notifications are maximally protective of the public.

This Emergency Permit further requires the Permittee to conduct work as described in the Emergency Permit Application dated October 28, 2026, and the EPA-approved Uniform Federal Policy – Quality Assurance Project Plan dated November 5, 2026 (hereinafter "Emergency Permit Application"). The Emergency Permit Application is incorporated by reference into this Emergency Permit. If a conflict exists between the Emergency Permit Application and the conditions listed in this Emergency Permit, then the permit conditions shall govern. The provisions of this Emergency Permit are severable. If any provision of this Emergency Permit or the application of any provision of this Emergency Permit to any circumstance is held invalid, then the application of such provision to other circumstances and the remainder of this Emergency Permit shall not be affected.

This Emergency Permit is being issued to temporarily allow for the storage and treatment activity of lead azide in the location and amount described above. In accordance with 42 U.S.C. §§ 6924(u)-(v), this Emergency Permit also requires the Permittee to take corrective action for releases of hazardous waste or hazardous constituents resulting from the treatment activity. Such action will be required both on the Permitted Facility and beyond the Permitted Facility boundary as necessary to protect human health and the environment. The duration of this Emergency Permit shall not exceed 90 days from issuance.

This Emergency Permit incorporates by reference all applicable regulations of 40 C.F.R. Parts 264, 266, and 270, and all terms and conditions of this Emergency Permit. Applicable regulations are those which are in effect on the date of issuance of this Emergency Permit, in accordance with 40 C.F.R. § 270.32(c).

I. Schedule of Compliance

A. Within five (5) days of the effective date of this permit, the Permittee shall revise and resubmit Permit Application, Section 13 – Exposure Pathway Analysis, in accordance with any EPA comments.

B. Within seven (7) days of approval by the Iowa Department of Natural Resources, the Permittee shall submit to the EPA any project-specific Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with applicable Iowa National Pollutant Discharge Elimination System (NPDES) stormwater requirements.

II. Standard Emergency Permit Conditions

A. Any management of hazardous waste not authorized in either this Emergency Permit or the 2018 RCRA Permit is prohibited.

B. Compliance with this Emergency Permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA, except for: 1) self-implementing statutory or regulatory requirements of RCRA, and 2) violations of RCRA that occurred prior to the effective date of this Emergency Permit.

C. The Permittee must comply with all conditions of its 2018 RCRA Permit, except to the extent and for the duration noncompliance is authorized in this Emergency Permit (40 C.F.R. § 270.30). Any noncompliance of the 2018 RCRA Permit, except under the terms of this Emergency Permit, constitutes a violation of federal law and is grounds for an enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

D. Compliance with the terms of this Emergency Permit does not constitute a defense to any order issued, or any action brought, under: (1) Sections 3008, 3013, or 7003 of RCRA; (2) Sections 106(a), 104, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601, *et seq.*); or (3) any other law providing for the protection of public health and/or the environment.

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

F. Any inaccuracies found in the Emergency Permit Application in support of this Emergency Permit may be grounds for the termination, revocation, reissuance, or modification of this Emergency Permit in accordance with 40 C.F.R. §§ 270.41-43 and for enforcement action. The Permittee must inform the EPA within 24 hours of any deviation from or changes in the information in the Emergency Permit Application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

G. The Permittee shall comply with all applicable regulations of 40 C.F.R. Parts 264, 266 and 270 not specifically referenced within this document. Failure to comply with any or all conditions specified within this Emergency Permit or the EPA's discovery that any material facts have been misrepresented by the Permittee may result in the termination of this Emergency Permit by the Director and/or the EPA pursuing an enforcement action for the Permittee's failure to comply with the conditions of this Emergency Permit or for the Permittee's misrepresentation.

H. This Emergency 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.

I. This Emergency Permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations.

J. The Permittee shall furnish to the EPA, within the time specified by the EPA, any relevant information which the EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Emergency Permit or to determine compliance with this Emergency Permit. The Permittee shall also furnish to the EPA, upon request, copies of records required to be kept by this Emergency Permit.

K. The Permittee shall allow the EPA, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

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

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Emergency Permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Emergency Permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

L. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Emergency Permit, the certification required by 40 C.F.R. § 264.73(b)(9) and records of all data used to complete the documentation for this Emergency Permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application. This period may be extended by request of the EPA at any time. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the Permitted Facility.

3. The monitoring records shall specify information in accordance with 40 C.F.R. § 270.30(j)(2) and (3).

4. The Permittee shall ensure its analytical data meet the Data Quality Objectives (DQOs) in the Uniform Federal Policy - Quality Assurance Project Plan (UFP-QAPP) submitted as Appendix 1 of the Emergency Permit Application.

M. Reporting Requirements

1. *Planned changes* – The Permittee shall give notice to the EPA as soon as possible of any planned physical alterations or additions to the Permitted Facility or treatment activity.

2. *Anticipated noncompliance* – The Permittee shall give advance notice to the EPA of any planned changes in the Permitted Facility which may result in noncompliance with requirements of this Emergency Permit.

3. *Transfers* – This Emergency Permit is not transferable to any person except after notice to and approval by the EPA. The EPA 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 RCRA.

4. *24-hour reporting* –

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

      a. Information concerning the release of any hazardous constituent and hazardous waste that may cause an endangerment to public drinking water supplies; or

      b. Any information of a release or discharge of hazardous constituent, hazardous waste or of a fire or explosion from the facility which could threaten the environment or human health outside the facility.

   ii. A written submission (hereinafter "24-hour Noncompliance Report") shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The 24-hour Noncompliance Report shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The EPA may waive the 5-day written notice requirement in favor of a written report within fifteen (15) days.

5. *Other information* – Where the Permittee becomes aware that it failed to submit any relevant facts in its Emergency Permit Application dated September 2, 2026 (storage), and September 4, 2026 (treatment), or subsequent submittals, or submitted incorrect information in the attachments to those submittals or in any report to the EPA, the Permittee shall submit such facts or information to the EPA within 24 hours from the time Permittee becomes aware of the circumstances.

N. Recordkeeping

1. The Permittee shall establish an Operating Record for this Emergency Permit that shall include, but not be limited to, this permit, the Emergency Permit Application, all inspection forms and logs, all information and records and reports required and generated to comply with this Permit, hazardous waste determinations, monitoring logs and reports, sampling analysis results, records, reports, final closure plan and closure certification report, and cleanup (corrective action) workplan(s) and report(s).

2. The Permittee shall maintain the Operating Record for a minimum of five (5) years from the effective date of this Emergency Permit. The Permittee shall comply with 40 C.F.R. § 267.74(a) (for the availability of records) and 40 C.F.R. § 267.74(b) (for the automatic extension of the five (5) year retention period during unresolved enforcement action).

III. Special Emergency Permit Conditions for Storage of Lead Azide

A. The storage of hazardous waste lead azide shall only be in containers in [redacted], which are located within [redacted], as shown in Emergency Permit Application Section 1 – Introduction, Figure 1-2. Lead azide being stored in the containers is D003 hazardous waste (reactivity) and D008 (toxicity characteristic for lead).

B. The Permittee shall comply with all the following special conditions for storage:

1. Access to [redacted] shall be limited to only those personnel that require access. Such personnel must have received appropriate training to safely manage the waste authorized under this Emergency Permit, respond to emergencies, and maintain regulatory compliance.

2. The Permittee shall maintain posting of advisory signage at the outermost perimeter gate(s) providing entrance to [redacted]. Such signage must include the following:

i. The EPA RCRA ID Number assigned to the Permitted Facility.

ii. Notice that [redacted] contains "Hazardous Waste" in [redacted], including the Hazardous Waste Codes, nature of the hazard, and the accumulation start date of such materials.

iii. Other appropriate signage including but not limited to "No Smoking."

C. The Permittee shall maintain posting of advisory signage placed on the entrance doors of [redacted].

D. The Permittee shall provide notice to the EPA immediately upon the IAAAP Environmental Coordinator's authorization to enter [redacted]. Within 24 hours of such authorization, containers shall be appropriately labeled in accordance with RCRA regulations.

E. The Permittee shall follow all Permitted Facility-established or newly established Standard Operating Procedures. This includes personnel training and safety requirements.

F. The Permittee shall take all necessary precautions to prevent accidental ignition or reaction of ignitable and/or reactive waste.

G. The Permittee shall immediately carry out the provisions of the Contingency Plan, which was submitted on September 9, 2026, and included in the Permittee's 2018 RCRA Permit (Permit Attachment III-5) if there is a fire, explosion, or release of hazardous waste or hazardous waste

constituents which could threaten human health or the environment. Any activation of the Contingency Plan requires prompt notification to the EPA.

H. The Permittee shall conduct weekly inspections of advisory signage, emergency equipment, and, when applicable, inspections of containers in [redacted]. The inspections shall be performed to confirm placement of advisory signage and emergency equipment, and when applicable, condition of emergency equipment, quantity of containers in [redacted], quantity of containers in [redacted], condition of containers, and note deteriorations and/or leakage from containers. The Permittee shall document observations on the inspection form, actions taken to correct deficiencies, the date and time of the action, and include the signature of the person conducting the inspection. Documentation of the weekly inspections shall be maintained in the Operating Record for this Emergency Permit.

IV. Special Emergency Permit Conditions for Treatment of Lead Azide

A. Treatment activity by intentional detonation shall only be conducted in [redacted] located in [redacted] of the Permitted Facility, as shown in, Emergency Permit Application Section 1 – Introduction, Figure 1-2. Open detonation shall only be conducted to treat the containers storing lead azide (reactive D003 hazardous waste and toxicity for lead D008 hazardous waste).

B. The containers of lead azide shall remain in place inside the referenced ECMs. Explosive charges and an accelerant will be placed on and near each container of lead azide, and the contents of [redacted] will be detonated simultaneously or in rapid succession under controlled conditions.

C. The Permittee shall not conduct the treatment activity authorized by Emergency Permit Condition IV.B. until it has completed the modeling and public notification activities required in Emergency Permit Condition IV.G.

D. The Permittee shall use reasonable best efforts to schedule and conduct the treatment activity authorized by Emergency Permit Condition IV.B. to minimize dust-lead deposition within the boundaries of 2020 Census Tracts 2, 3, 4, 5, 6, 8 and/or 9 of Des Moines County, Iowa, based on modeling performed pursuant to Emergency Permit Condition IV.G. 1.i. or IV.G. 1.ii. a.

E. The Permittee shall maintain the [redacted] to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste constituents to air, soil, groundwater or surface water, which could threaten human health or the environment.

F. The Permittee shall maintain the blast containment barriers that have been constructed around [redacted] to reduce and control potential treatment activity-related impacts to surface and subsurface soil, vegetation, surface water, and groundwater. The containment barrier configuration constructed around each referenced ECM includes a designated venting

area intended to direct the blast wave and associated debris release away from installation infrastructure and toward less populated areas if the activity results in material being released beyond the immediate treatment area. Emergency Permit Application Section 4, Figure 4-6, provides dimensional information for the blast containment barriers and identifies the [redacted] and [redacted] venting area. The as-built construction drawing and floor plan of [redacted] and [redacted] located within [redacted] is provided in Emergency Permit Application Section 1 – Introduction, Figure 1-4.

G. Plume Forecasting and Public Notifications

1. *Plume Forecasting* – In accordance with the requirements described in Appendix B, the Permittee shall develop air dispersion and dust deposition modeling to support public notifications on the following schedule:

   i. Preliminary Forecast – No later than five (5) days prior to the treatment activity, the Permittee shall develop and publicly distribute a preliminary plume impact estimate using forecasted weather conditions 48 hours prior to the treatment activity.

   ii. Subsequent Forecasting –

      a. No later than 48 hours prior to the treatment activity, the Permittee shall update and publicly distribute the plume impact estimate using forecasted weather conditions on the date of the treatment activity.

      b. Beginning 6 hours before the treatment activity and every hour thereafter until completion of the treatment activity, the Permittee shall update and publicly distribute the plume impact estimate using forecasted weather conditions at the time of the treatment activity.

   iii. Post-Detonation Plume Impact Estimate – Within 6 hours of completion of the treatment activity, the Permittee shall update and publicly distribute a final plume impact estimate using weather conditions documented at the time of the treatment activity.

2. *Public Notifications* –

   i. The Permittee shall implement the public notifications described in Emergency Permit Condition IV.G.1. in accordance with the requirements set forth in Appendix C.

   ii. The Permittee shall conduct other community engagement activities in accordance with Permit Application Section 5 – Community Engagement Plan.

3. Within 24 hours of publication of the plume impact estimates required in Emergency Permit Conditions IV.G. 1.i., IV.G. 1.ii. a., and IV.G. 1.iii., the Permittee shall submit to the EPA for review and approval an atmospheric dispersion modeling report documenting the parameters that were used and the imagery generated.

H. At a minimum, the Permittee shall maintain the equipment set forth in 40 C.F.R. § 264.32 and the Contingency Plan for Treatment, Emergency Permit Application Section 10 – Contingency Plan for Treatment. The minimum equipment required includes: 1) an internal communication or alarm system; 2) device, such as a telephone available at the scene to summon emergency assistance; 3) portable fire extinguisher or control equipment; and 4) water at adequate volume and pressure or foam producing equipment.

I. The Permittee shall test and maintain the equipment specified in Emergency Permit Condition IV.H as necessary to assure its proper operation in time of emergency, and as required by 40 C.F.R. § 264.33.

J. Whenever hazardous waste is being handled or treated, the Permittee shall maintain immediate access for all personnel to an emergency communication device or an internal alarm system as required by 40 C.F.R. § 264.34 and the Contingency Plan for Treatment, Permit Application Section 10 – Contingency Plan for Treatment.

K. The Permittee shall maintain arrangements with state and local authorities as required by 40 C.F.R. § 264.37 and as described in the Contingency Plan for Treatment, Emergency Permit Application Section 10 – Contingency Plan for Treatment. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the Operating Record and notify the Director in writing within five (5) days of such refusal.

L. <u>Contingency Plan for Treatment</u>

1. *Requirements for Treatment Contingency Plan* – The Permittee shall have a Contingency Plan for the activities associated with the treatment of lead azide and the cleanup resulting from the treatment of lead azide designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned or non-sudden release of hazardous waste or hazardous constituents to air, soil, groundwater or surface water. As applicable, the plan must cover the requirements of 40 C.F.R. § 264.50 through § 264.56.

2. *Implementation of Plan* – Upon conducting the treatment activity, the Permittee shall activate and implement the provisions of Emergency Permit Application Section 10 – Contingency Plan for RCRA Emergency Permit.

3. *Copies of Plan* – In accordance with the requirements of 40 C.F.R. § 264.53, a copy of the Contingency Plan for Treatment and all revisions to the plan must be maintained by the Permittee at the Permitted Facility and must be submitted by the Permittee to all local police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

4. *Amendment to Plan* – The Permittee shall review and, if needed, immediately amend the Contingency Plan for Treatment, as required by 40 C.F.R. § 264.54, and submit it to the EPA.

5. *Emergency Coordinator* – The Permittee shall have a trained emergency coordinator available at all times in case of an emergency. The emergency coordinator shall have the qualifications, responsibility and authority set forth in 40 C.F.R. § 264.55.

6. *Reporting* – The Permittee shall report in writing to the EPA within five (5) days of all instances within [redacted] no matter how minor, fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constitutes to air, soil, groundwater or surface water.

M. Training Requirements for Treatment – The Permittee shall conduct personnel training as required by 40 C.F.R. § 264.16. The training program for treatment shall follow the outline in Emergency Permit Application Section 9 – Training Requirements for Treatment. The Permittee shall maintain training documents and records, as required by 40 C.F.R. § 264.16(d)-(e).

N. Permitted and Prohibited Waste Identification

1. The Permittee shall only treat the following hazardous waste in accordance with this Emergency Permit

   Quantity: 68 drums of lead Azide, [redacted]

2. The Permittee is prohibited from treating any material containing, contaminated with or suspected of being contaminated with military chemical warfare agents such as choking agents, nerve agents, blood agents, blister agents, incapacitating agents, vomiting compounds, tear-producing compounds, herbicides, radioactive materials, smokes, incendiary devices or biological agents.

O. Operating Requirements

1. The Permittee shall implement the treatment activity in accordance with the Emergency Permit Application Section 4 Treatment Design and Implementation. The treatment will be a

phased implementation performed by Explosive Ordnance Disposal of pre-treatment preparations and safety, treatment, followed by post-treatment assessment.

2. The Permittee shall review, change, revise and/or update Emergency Permit Application Section 4 Treatment Design and Implementation, as necessary to ensure the safe management and treatment of the lead azide reactive (explosive) hazardous waste. Any change, revision or update specifically listed in Appendix I of 40 C.F.R. § 270.42 as a Class 1 modification shall require the Permittee to submit a Class 1 modification within seven (7) days of the revision or update. For all other classes of permit modifications (Class 1 prior Director approval, Class 2, Class 3, or other modifications), the Permittee shall submit the permit modification request in accordance with 40 C.F.R. §§ 270.42(a)(iii), 270.42(b), 270.42(c) or 270.42(d).

3. The Permittee shall conduct the treatment activity only if the following adverse meteorological conditions are not forecasted to be present at the time of detonation and for a period of 3 hours thereafter, based on and as outlined in Emergency Permit Application Section 4 – Treatment Design and Implementation:

   i. Precipitation or forecasted high probability of precipitation for the duration of treatment activity;

   ii. When surface wind speed is less than 1 mile per hour and more than 15 miles per hour;

   iii. Windspeeds aloft (1,000 to 3,000 feet) is more than 30 miles per hour;

   iv. Electrical storms or thunderstorms;

   v. Dense fog, blowing snow/sand, dust storms, or other situations that restrict visibility to 1,000 feet;

   vi. Extremely cloudy days, defined as overcast (more than 80% cloud cover) with a ceiling of less than 2,000 feet;

   vii. Dusk (30 minutes before sunset) to dawn (30 minutes after sunrise); or

   viii. During an inversion (air temperature increase with increasing altitude).

4. The Permittee shall follow all Permitted Facility-established or newly established Standard Operating Procedures, including procedures outlined in the Emergency Permit Application Section 4.1.1 – Donor Materials Handling and Storage, for handling and management of explosive materials (donor material).

P. Special Provisions for Ignitable, Reactive, or Incompatible Waste

1. The Permittee shall take all necessary precautions to prevent accidental ignition or reaction of ignitable and/or reactive wastes.

2. The Permittee shall not store, handle, or otherwise manage incompatible wastes together at [redacted].

Q. Operation, Monitoring, Reporting, and Response Actions

1. *Monitoring* –

i. The Permittee shall conduct monitoring of the treatment activities at [redacted] and [redacted], at the Permitted Facility, and at off-site locations to document potential migration of releases of hazardous waste and/or hazardous constituents to soil, surface water, sediment, groundwater, and/or air, which may have an adverse impact on human health or the environment.

ii. The Permittee shall implement the monitoring activities in accordance with the following sections of the Emergency Permit Application and in accordance with 40 C.F.R. § 264.602:

a. Section 6 – Environmental Monitoring

b. Section 11 – Treatment Area Closure Plan

c. Appendix 1 – UFP-QAPP

2. *Reporting* – Within thirty (30) days of completion of the treatment activity, the Permittee shall submit the Final Impact Area Report for the atmospheric dispersion and ground deposition plume to the EPA for review. The Final Impact Area Report shall summarize the atmospheric dispersion and ground deposition plume modeling and mapping of lead release resulting from the treatment activity. Such modeling shall use real-time data collected at the time of the treatment activity.

R. Management of Waste and Residues

1. The Permittee shall sample, analyze, and characterize all wastes and residues resulting from the treatment activity at the Permitted Facility and off-site as described in the Emergency Permit Application Section 7 – Waste Management Plan.

2. All wastes and residues generated from the handling of reactive wastes are considered to be reactive waste until such time that waste analysis demonstrates the waste and/or residue is not reactive.

3. All wastes and residues generated from the treatment activity of reactive wastes are considered to be reactive waste until such time that waste analysis demonstrates that such waste and/or residue is not reactive.

4. Wastes and residues generated from treatment activities under this permit are not considered to be newly generated wastes.

5. Scrap metal separated from wastes and residues must meet the Land Disposal Restriction standards for contaminated debris in 40 C.F.R. § 268.45 prior to disposal or release as non-hazardous scrap metal.

S. Inspections

1. Beginning 24 hours after the treatment activity, the Permittee shall conduct daily inspections for releases, discharges, malfunctions, or deterioration of structures (e.g., containment and fencing) or equipment (e.g., monitoring equipment, safety and emergency equipment, security devices) at the following locations within the [redacted]: waste holding areas, waste preparation areas, waste staging areas, treatment area and appurtenant equipment, residue handling areas, residue treatment areas, safety systems and industrial hygiene systems.

2. The Permittee shall record the completion of the inspections in a written daily inspection document, including the signature of the person who conducted the inspection, the date of inspection, and note the results of the inspection, including all repairs, recommendations for repairs, cleanups, and other activities taken in response to the inspection.

3. The Permittee shall maintain each daily inspection document in the Operating Record for this Emergency Permit.

T. Operating Record – The Permittee shall keep records of operations including, but not limited, to the following:

1. Description, quantity, and location of donor material (number and net explosive weight of each material) stored in [redacted];

2. Date and time of the treatment activity;

3. Meteorological conditions during and after the treatment activity;

4. Daily Inspection log or summary; and

5. Documentation of removal and disposition of treatment residues and debris from the [redacted].

U. Closure (Short-Term Cleanup)

1. *Performance Standard* – The Permittee shall close [redacted] in accordance with 40 C.F.R. §§ 264.111 and 264.601 to control, minimize, or eliminate hazardous constituents, post-closure escape of hazardous waste, leachate, contaminated run-off, or hazardous waste decomposition products to the ground, surface waters, groundwater, or atmosphere to the extent necessary to protect human health and the environment.

2. *Closure Implementation* –

   i. The Permittee shall implement the closure work in accordance with 40 C.F.R. Part 264, Subpart X, and the procedures outlined in the Emergency Permit Application Section 6 – Environmental Monitoring, Section 11 – Closure Plan, and in accordance with the schedule included in the Closure Plan, and Appendix 1 – UFP-QAPP.

   ii. As an additional requirement of Emergency Permit Application Section 6 – Environmental Monitoring, Phase 1 of the Closure Plan, and Appendix 1 – UFP-QAPP, within 24 hours of the treatment activity the Permittee shall initiate both soil sampling and wipe sampling of high-touch surfaces at all parks, public facilities, and private properties to which the Permittee has been granted Rights of Entry within the area of modeled dust-lead deposition ≥ 100 $\mu g/ft^2$ of the post-detonation plume impact estimate that is required under Emergency Permit Condition IV.G.1.iii. Within five (5) days of receipt of the validated analytical data resulting from such sampling, the Permittee shall submit the laboratory report and a proposed Closure Plan Phase 1 Remediation Work Plan (including implementation schedule) based on the analytical data.

3. *Amendment to Closure Plan* – The Permittee shall amend the Closure Plan in accordance with 40 C.F.R. § 264.112(c) whenever necessary. The Permittee shall request a modification of this Emergency Permit in accordance with 40 C.F.R. § 270.42.

V. Disposal, Treatment or Decontamination of Equipment, Structures, and Soils – The Permittee shall decontaminate and/or dispose of all contaminated equipment and structures and dispose

and/or treat contaminated soils in accordance with 40 C.F.R. § 264.114 and Emergency Permit Application Section 11 – Closure Plan.

W. Certification of Closure – The Permittee upon completion of closure shall submit to the EPA the Certification of Closure in accordance with 40 C.F.R. § 264.115 and Emergency Permit Application Section 12 – Closure Certification.

X. Remediation Work Plan (Long-Term Cleanup) – Within ninety (90) days of the EPA's approval of the Closure Report, the Permittee shall submit for the EPA's review and approval a Remediation Work Plan in accordance with Emergency Permit Application Section 11 – Treatment Area Closure Plan and Emergency Permit Application Section 12 – Closure Certification. Such work plan shall describe the long-term cleanup activities identified in the Closure Report, which shall be implemented pursuant to 42 U.S.C. §§ 6924(u)-(v). Such work plan shall include an implementation schedule for conducting the work and submission of a Long-Term Remediation Report for EPA review and approval.

V. Permittee Submittals Permit Conditions

A. The Permittee shall submit to the EPA written notification due on the day the Army formalizes a final decision on each of the following: "Order to Proceed," "Order to Execute," and the actual date and time of detonation.

B. No later than fifteen (15) days prior to the expiration date of this Emergency Permit, if Permittee expects to need additional time to store and/or treat the lead azide hazardous waste material in [redacted], the Permittee shall submit a new request and permit application in accordance with 40 C.F.R. § 270.61.

C. If implementation of Closure (Short-Term Cleanup) described in Emergency Permit Condition IV.U. is not completed prior to the expiration date of this Emergency Permit, the Permittee shall request a Class 1 Permit Modification requiring prior Director Approval of the 2018 RCRA Permit to complete such activity.

D. If the Permittee has submitted but the EPA has not approved the Certification of Closure and Closure Report described in Emergency Permit Condition IV.W. prior to the expiration date of this Emergency Permit, the Permittee shall request a Class 1 Permit Modification requiring prior Direct Approval of the 2018 RCRA Permit to complete such activity.

E. If the implementation of the Remediation Work Plan (Long-Term Cleanup) described in Emergency Permit Condition IV.X. is not completed prior to the expiration date of this Emergency Permit, the Permittee shall request a Class 1 Permit Modification requiring prior Director Approval of the 2018 RCRA Permit to complete such activity.

F. If the Permittee has submitted but the EPA has not approved the Long-Term Remediation Report described in Emergency Permit Condition IV.X. prior to the expiration date of this Emergency Permit, the Permittee shall request a Class 1 Permit Modification requiring prior Direct Approval of the 2018 RCRA Permit to complete such activity.

G. No later than the expiration date of this Emergency Permit, the Permittee shall submit for the EPA's review and approval a Final Report covering the time frame of this Emergency Permit in addition to the Emergency Permit for Storage issued on September 29, 2026. This Final Report shall include documentation supporting the storage and treatment of lead azide in [redacted], inspection reports, monitoring and sampling reports with validated laboratory analysis data packages, photographs/videos, and other information produced during the Permittee's implementation of activities described within the Emergency Permit Application.

H. If the submittal of the Final Report for this Emergency Permit described in Emergency Permit Condition V.G. is not completed by the expiration date of this Emergency Permit to the receipt of EPA's approval, the Permittee shall request a Class 1 Permit Modification requiring prior Director Approval of the 2018 RCRA Permit to complete such activity.

VI. Contacts

A. Submissions to the EPA – Submissions required by this Emergency Permit shall be sent to the following, who serves as the EPA's contact for this Emergency Permit:

Patricia Murrow
U.S. Environmental Protection Agency, Region 7
Land, Chemical, and Redevelopment Division
Corrective Action Branch
11201 Renner Boulevard
Lenexa, Kansas 66219
Email: murrow.patricia@epa.gov
Phone: (913) 551-7627

B. The Permittee's contact for this Emergency Permit is:

William J. Kehoe
Iowa Army Ammunition Plant
IAAAP Deputy to the Commander
17571 Des Moines County Highway 79
Middletown, Iowa 52638-5000
Email: william.j.kehoe.civ@army.mil

VII. Issuance

The Administrator of the EPA has delegated authority to perform all actions necessary to issue, deny, modify or revoke and reissue permits for owners and operators of hazardous waste treatment, storage and disposal facilities pursuant to Section 3005 of RCRA to the Regional Administrator of the EPA, Region 7, or the Regional Administrator's designated representative, by Delegation No. 8-6, dated June 9, 2026.

This Emergency Permit for Storage and Treatment is effective as of November 13, 2026, and will expire on February 11, 2027, unless terminated under 40 C.F.R. § 270.61(b)(4).

JAMES MACY

Digitally signed by JAMES MACY
Date: 2026.11.13 13:04:57 -06'00'

Jim Macy
Regional Administrator
U.S. EPA Region 7

November 13, 2026
Date

Appendix A
Summary of Emergency Permit Application and EPA Comments

A. Initial Permit Application – The Permittee submitted the following materials as a partial application for an Emergency Permit for Storage and Treatment:

1. *September 4, 2026 (Submittal 1 of 4)*:
   i. Section 1 – Introduction
   ii. Section 2 – Iowa Army Ammunition Plant Facility Description
   iii. Section 3 – Organization and Lines of Communication
   iv. Section 5 – Community Engagement Plan
   v. Section 9 – Training Requirements for Implementation of Treatment
   vi. Attachment 1-A – Safety Data Sheet Lead Azide
   vii. Attachment 1-B – Explosive Ordnance Disposal ECM Inspection
   viii. Attachment 1-C – USA (Army) and EPA Correspondence

2. *September 11, 2026 (Submittal 2 of 4)*: Section 6 – Environmental Sampling and Analysis Plan

3. *September 18, 2026 (Submittal 3 of 4)*:
   i. Section 4 – Treatment Design and Implementation
   ii. Section 7 – Waste Management Plan
   iii. Section 8 – Security Plan
   iv. Section 10 – Contingency Plan for RCRA Emergency Permit
   v. Section 12 – Closure Certification
   vi. Section 13 – Explosives Pathway Analysis
   vii. Section 14 – Financial Responsibility

4. *September 21, 2026 (Submittal 4 of 4)*: Section 11 – Treatment Area Closure Plan

5. *October 13, 2026*: Amended Section 6 – Environmental Sampling and Analysis Plan

6. *October 16, 2026*: Working draft Uniform Federal Policy – Quality Assurance Project Plan

7. *October 23, 2026*: Predictive plume model for the Iowa Army Ammunition Plant lead azide treatment (controlled detonation) project (slide deck)

B. EPA Review and Comment – The EPA reviewed the submissions listed above and provided written comments to the Permittee on the following dates:

1. *October 6, 2026* – Sections 1 and 2

2. *October 9, 2026* – Sampling and Analysis Plan

3. *October 21, 2026* – Sections 4, 7, 8, 10, 12, 13, and 14 (September 18, 2026 (Submittal 3 of 4)

4. *October 23, 2026* –
   i. Amended Emergency Permit Application Section 6 – Environmental Monitoring
   ii. Working Draft UFP-QAPP

5. *October 27, 2026* – Predictive plume model

6. *November 3, 2026* – Draft UFP-QAPP

7. *November 6, 2026* – Revised Section 13

C. Final Emergency Permit Application – The following revised permit application materials were subsequently submitted to the EPA in response to the EPA's comments:

1. *October 28, 2026* – Amended Emergency Permit Application, including updated (non-final) working draft of UFP-QAPP

2. *October 30, 2026* – Amended Emergency Permit Application Section 13 – Exposure Pathway Analysis

3. *November 3, 2026* –

   i. UFP-QAPP, Appendix C – Laboratory Certifications and Standard Operating Procedures
   ii. Supplemental predictive plume modeling information

4. *November 5, 2026* – Final UFP-QAPP, and UFP-QAA Appendix D

5. *November 9, 2026* – Amended Section 13 and 6

Appendix B
Air Dispersion and Dust Deposition Modeling Parameters

A. To develop the plume impact estimates required in Emergency Permit Condition IV.G., the Permittee shall utilize either the Specialized Hazard Assessment Response Capability (SHARC) model, the Hazard Prediction and Assessment Capability (HPAC) model, or another model available through the National Atmospheric Release Advisory Center (NARAC), with an Emission Factor of 1.00 to generate air dispersion and dust deposition modeling as follows:

1. *Air Dispersion* – Airborne lead shall be modeled to an outer concentration of 0.18 $\mu g/m^3$. The model shall be produced to present hourly estimations of the plume's location and extent, as calculated from the time of detonation. The hourly estimations shall also depict relative concentrations within the plume boundary.

2. *Dust-Lead Deposition* – Two dust-lead deposition isopleths shall be modeled to predicted deposition concentrations of $\geq 5\ \mu g/ft^2$ and $\geq 100\ \mu g/ft^2$. The dust-lead deposition isopleths shall be layered on a single figure to identify the relative extent of areas that will potentially be impacted by the treatment activity.

The isoconcentration maps generated through this modeling shall be appropriately labeled and of a resolution sufficient to provide members of the public prior knowledge of their potential for exposure to dust-lead surface deposition resulting from the treatment activity.

B. The isoconcentration map developed in accordance with paragraph A of this Appendix B shall be publicly distributed in conjunction with narrative advisory messaging consistent with paragraph B.2. of Appendix C and on the schedule required in Emergency Permit Condition IV.G.1.

Appendix C
Public Notification Requirements

A. The Permittee shall make reasonable best efforts to notify all members of the public who may be potentially affected by dust-lead exposure risks resulting from the treatment activity.

B. Public notifications issued by the Permittee in accordance with paragraph A. of this Appendix shall incorporate the dust-lead deposition and airborne concentration modeling developed in accordance with Emergency Permit Condition IV.G. and Appendix B.

1. *Informational Area Notification* – Using the isoconcentration map developed in accordance with paragraph A.1. of Appendix B, the Permittee's public notifications must identify an "Informational Area" within which the Permittee must communicate as follows:

i. General Information –

a. The planned date and approximate time of the treatment activity;

b. The purpose of the treatment activity is to manage an unsafe explosive hazard;

c. The purpose of the public notification is to provide members of the public sufficient time to alter activities to avoid exposure to the contaminant release resulting from the treatment activity; and

d. Directions to access and/or register for a public information hotline, website, listserv, or other electronically accessible communication platform to receive updates regarding plume status and recommended protective actions.

ii. Exposure Risks –

a. A short-duration airborne release of lead will occur as a result of the detonation;

b. Airborne lead particles may be present for a limited time after the detonation within certain areas affected by the detonation plume;

c. Deposition of lead-containing dust may occur after the detonation on surfaces within certain areas affected by the detonation plume;

d. All humans, but especially children, pregnant individuals, older adults, and other sensitive populations, should avoid outdoor activities within affected areas;

e. The geographic extent of potential exposure risks; and

f. The expected duration of potential exposure risks, including a clear projected start and end time, or other criteria, indicating when protective actions should be taken and when normal activities may resume (hereinafter "potential exposure period").

2. *Advisory Area Notification* – Using the isoconcentration map developed in accordance with paragraph A.2. of Appendix B, the Permittee's public notifications must identify an "Advisory Area" within which the Permittee must instruct as follows:

i. Within areas that are expected to be affected by dust-lead deposition exceeding 5 $\mu g/ft^2$, all members of the public who reside or work within this affected area should:

a. Remain indoors during the potential exposure period if they cannot evacuate beforehand;

b. Close all windows, exterior doors, and other openings during the exposure period;

c. Turn off or place heating, ventilation, and air conditioning (HVAC) systems in recirculation mode, minimize outdoor air intake, and maximize indoor air filtration during the potential exposure period; and

d. Avoid travelling through the affected area during the potential exposure period.

ii. Within areas that are expected to be affected by dust-lead deposition exceeding 100 $\mu g/ft^2$, all members of the public who reside or work within this affected area should:

a. Observe all protective actions listed in paragraph B.2.i. of this Appendix C; and

b. Wet-clean surfaces that may be contacted by children, including outdoor play equipment, toys, tables and chairs, handrails, patios, decks, exterior windowsills, and other high-contact surfaces. Such instructions shall include specific cleaning and dust mitigation procedures to address deposited and airborne lead particles which minimize overall human exposure to lead.

C. To the extent practicable, the Permittee shall coordinate with local emergency response authorities to distribute public notifications issued by the Permittee in accordance with paragraphs A and B of this Appendix C. The Permittee should inquire with such authorities regarding the most effective communication platforms to distribute notifications to the community.

D. *Plain Language Public Notice* – Public notifications issued by the Permittee shall include plain-language statements such as the following:

1. "A short-duration airborne lead release will occur during the detonation."

2. "Avoid breathing outdoor dust or airborne particles during the exposure period."

3. "Stay indoors until emergency authorities advise the public to resume normal activities."

4. "Keep windows and doors closed during the exposure period."

5. "If possible and safe, turn off or place heating, ventilation, and air conditioning systems in recirculation mode, minimize outdoor air intake, and maximize indoor air filtration during the potential exposure period."

6. "All humans, especially children and pregnant women, should remain indoors and avoid outdoor activities during the exposure period."

7. "Avoid unnecessary travel through the affected areas."

8. "Normal activities may resume once the advisory has been lifted and affected areas have been mitigated according to instructions from authorities."