

Umatilla Chemical Agent Disposal Facility

ATTACHMENT 3

INSPECTION SCHEDULE

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Umatilla Chemical Agent Disposal Facility

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ATTACHMENT 3

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UMCDF INSPECTION SCHEDULE

1. GENERAL INSPECTION REQUIREMENTS [40 CFR 264.15, OAR 340-105-0140]

The Umatilla Chemical Agent Disposal Facility (UMCDF) will be inspected according to a prescribed inspection schedule designed to detect equipment deterioration and prevent possible equipment malfunctions that will cause a release of hazardous wastes to the environment or pose a threat to human health. Inspection logs and documents will be available as part of the UMCDF operating record, which is located in the UMCDF Document Control Center (DCC).

Inspection frequencies have been developed from operational knowledge gained at the UMCDF. Manufacturers' recommendations, Army standing operating procedures (SOP), Occupational Safety and Health Administration (OSHA) regulations, and specific regulated unit requirements must be adhered to by the UMCDF.

The UMCDF will have no landfill units, land treatment units, surface impoundments, or waste pile units. The UMCDF will not operate any distillation/fractionation, thin-film evaporation, or solvent extract units, and will not conduct air or steam stripping operations. The requirements for inspections of these units and activities are not applicable to the UMCDF and are not included in this inspection schedule.

1.1. INSPECTION FREQUENCIES AND METHODS [40 CFR §264.15(A), (B)]

The inspections for various systems/areas are provided in Tables 1 through 12 of this inspection schedule. The frequency of inspection is based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. When applicable, alarms and/or waste feed cut-offs occurring during normal operations will count toward the inspection frequency of the applicable inspection item (i.e., sump level indicators and automatic waste feed cut-offs [AWFCO]). Except for those inspections that require a system to not be operating (i.e., some furnace inspections), all inspections will take place while the system is operating or in use. Also, prior to a system being brought back on-line, applicable inspections will be conducted (i.e., daily inspection of furnaces).

1.1.1. Inspection Frequencies

The frequency of inspection is how often (at a minimum) an inspection must be performed. For the purposes of this inspection schedule, the various inspection frequencies have been established with sufficient conservatism to be protective of human health and the environment. The inspection frequencies most frequently used in this plan are outlined below.

Inspection Frequencies	
Frequency	Definition
<i>Daily</i>	Once per calendar day
<i>Weekly</i>	Once per calendar week
<i>Monthly</i>	Once per calendar month
<i>Bimonthly</i>	Once every other calendar month
<i>Quarterly</i>	Once per calendar quarter
<i>Semiannually</i>	Once per 6-month calendar period
<i>Annually</i>	At least once during a 12-month period +/- 30 days

1.1.2. Inspection Methods

The method of inspection is how an inspection is to be performed. The three primary methods of inspection identified and required by this inspection schedule are described below.

Methods of Inspections	
<i>Physical</i>	An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection. Due to accessibility limitation, physical inspections may be conducted with the aid of instruments (e.g., boroscope, mirrors).
<i>Remote</i>	An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be “daily,” “weekly,” etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
<i>Functional</i>	An inspection to determine if equipment/instrument is capable of performing or is operational.

1.1.3. Suspended Inspections

For situations when an entire system is inactive and there is no useful purpose in performing the inspection, the inspection will be suspended until the system is placed back into operation. The inspections identified in Tables 2.1, 3.1, 3.2, 3.3, 3.4 (except the stack and carbon filter system inspections), 4.1, 4.2, 4.3, 4.4, and 4.8 may be suspended if the system is not in operation. All suspended inspections will be documented on the log sheets described in Section 2. In addition, an initial inspection will be conducted when the system is brought back on-line and regularly scheduled inspections are resumed.

- In the case of suspended daily inspections, the initial (restart) inspection will satisfy the daily inspection requirement for that day.
- In the case of inspections that have been suspended prior to expiration of the next scheduled inspection, the inspection requirement will be satisfied by the conduct of the initial inspection performed when the system is brought back on-line.

When a hazardous waste management unit is no longer receiving and managing or treating wastes, the unit-specific inspections may be suspended. However, inspections necessary to maintain the integrity of and/or operate the building, secondary containment, and any other systems necessary to prevent a release to the environment must be continued.

1.2. CHANGES TO THE INSPECTION SCHEDULE

1.2.1. Temporary Inspection Modifications

The inspections listed in Table 1 through Table 12 will be adhered to. However, under extreme conditions, Table 1 through Table 11-inspection(s) may be temporarily reduced, condensed, or eliminated to prevent unnecessary risks to the inspector and/or facility workers, provided that the reduced inspection does not endanger facility

safety and is protective of human health and the environment. In no case, will an inspection be changed to accommodate daily operation of the facility.

The Environmental Manager or delegate will decide changes in the inspection method and/or frequency on a case-by-case basis. If an inspection is reduced or eliminated, the inspection will be considered a priority on the Inspection Schedule and will be conducted as soon as the inspector can safely do so. The decision to temporarily reduce, condense, or eliminate an inspection will be documented and maintained in the operating record in accordance with Section 2.

The change in the Inspection Schedule will also be included in the quarterly noncompliance report.

1.2.2. Allowed Inspection Schedule Changes (Permit Modification not Required)

The following changes may be made to the Inspection Schedule without first obtaining a Permit modification:

- Upon DEQ receipt of the UMCDF's notice to start closure of an individual waste management unit, any portion of the Inspection Schedule specific to the operation of that unit may be deleted except for any inspections necessary to maintain the integrity of and/or operate the building, secondary containment, and any other systems necessary to prevent a release to the environment.
- Inspection parameters may be added to an existing inspection form, table, or figure in cases where such an addition will result in a more comprehensive inspection schedule.
- Additional inspection forms, tables, or figures may be created to address inspection parameters for equivalent or superior replacement equipment, which must be routinely inspected.

2. INSPECTION RECORDS [40 CFR §264.15(d)]

Inspection log sheets, including calibration logs, will be kept at the UMCDF. These will be the records of the items contained in the Inspection Schedule and will be kept as a hardcopy or an electronic copy. The inspection records will record at a minimum, the date and time of inspection, inspector's name, a notation of the observation made, date and nature of any repairs or other remedial actions, and, if appropriate, the reason for reduction/suspension of a regularly scheduled inspection. The records will be kept for a minimum of three years from the date of inspection.

3. REMEDIAL ACTION [40 CFR §264.15(c)]

If inspections show that nonemergency maintenance is needed, it will be completed as soon as possible to prevent further damage and to reduce the need for subsequent emergency response. If it is found during an inspection, including, but not limited to, unsatisfactory tank nondestructive test results, or between inspections that a hazardous situation is imminent or has already occurred, remedial action measures will be undertaken immediately.

A detailed description of remedial action measures and notification procedures for incidents resulting from an explosion, fire, or hazardous waste release is provided in the UMCDF Contingency Plan (Permit Attachment 9). Section 3 provides initial response actions, including notification; Section 5 provides emergency response procedures; and Section 6 provides postincident activities after implementation of the Contingency Plan.

4. TON CONTAINER PERMITTED STORAGE AREA INSPECTIONS

The Container Handling Building (CHB) and the Munitions Demilitarization Building (MDB) both include areas that are permitted for storage of ton containers and enhanced on-site containers (EONC), referred to in the Inspection Schedule as “containers.”

The containers in the permitted storage areas will be counted per the Inspection Schedule. The number of EONCs that may be stored in the CHB permitted storage areas is given in Permit Condition III.B.3. The number of ton containers that may be stored in the permitted storage areas is given in Permit Condition III.B.4.

Table 1 provides the inspection frequencies and methods that will be conducted in the permitted storage areas. Some physical inspections, as applicable, will be conducted during scheduled entries.

4.1. CHB PERMITTED EONC AND TON CONTAINER STORAGE AREAS

This section includes the EONCs, CHB lower level, and CHB Unpack Area.

The CHB permitted storage areas include the following:

- CHB Lower Level (CHB)
- CHB Upper Level (CHB UPA)

NOTE: Ton containers will be stored in the permitted storage areas of the CHB only when contained within an EONC.

4.1.1. EONCs

Inspection of the EONCs includes leak testing and observing the condition and number of containers stored in the area. The inspections are as follows:

- A seal leak test will be performed on EONCs upon receipt from the Umatilla Chemical Depot (UMCD).
- The EONCs stored in the CHB will be monitored for chemical agent. If any of the EONCs are found to contain leaking munitions or bulk items, they will be processed on a priority basis and chemical agent monitoring of the area will be performed continuously while the suspect EONC is present.
- The EONCs will be inspected for leaks, secured closures, and deterioration.
- A count of EONCs stored in the area will be performed. The EONCs will be coded for tracking purposes.
- A nondestructive examination (NDE) including visual testing will be conducted on EONCs. The NDE will be used to determine the structural integrity and ability of the EONC to contain vapors.

4.1.2. CHB General Area and Load/Unload Areas

The inspections in the CHB include both the general area and the load/unload areas as follows:

- The floors in the CHB will be inspected. The inspection will be to determine structural integrity and for areas exhibiting excessive wear. The inspection will also be to determine if there are drips, spills, or leaks in the area.
- When the load/unload areas are in use, they will be inspected for leaks, spills, and fugitive emissions.

4.1.3. CHB UPA

The secondary containment system, containers, and the general areas of the CHB UPA will be inspected as follows:

- The secondary containment system, which consists of the sump, trenches, and flooring, will be inspected.
- All containers stored in the CHB UPA will be inspected for deterioration.
- The number of containers stored in the area will be counted to ensure maximum inventory is not exceeded.
- The general area of the CHB UPA will be inspected for structural integrity.
- The load/unload areas will be inspected for leaks, spills, and fugitive emissions.

4.2. MDB PERMITTED EONC AND TON CONTAINER STORAGE AREAS

Permitted ton container storage in the MDB will be in the following areas:

- Unpack Area (MDB UPA)
- Explosive Containment Vestibule (ECV)
- Upper Munitions Corridor (UMC)
- Munitions Processing Bay (MPB)
- Lower Buffer Storage Area (LBSA)
- Lower Munitions Corridor (LMC)
- Toxic Maintenance Area (TMA) "C" Airlock (TMA "C" Airlock)
- TMA "A/B" Decontamination Area (TMA Decon Area)

4.2.1. MDB UPA

The secondary containment system, containers, and the general areas of the MDB UPA will be inspected as follows:

- The secondary containment system, which consists of the sump system, will be inspected.
- All containers stored in the MDB UPA will be inspected for deterioration.
- The containers stored in the area will be counted.
- The general area of the MDB UPA will be inspected for structural integrity.
- When the load/unload area is in use, it will be inspected for leaks, spills, and fugitive emissions.

4.2.2. TMA "C" Airlock

The secondary containment system, containers, and the general areas of the TMA "C" Airlock will be inspected as follows:

- The secondary containment system, which consists of the sump system, will be inspected.
- All containers stored in the TMA "C" Airlock will be inspected for deterioration.
- The number of containers stored in the area will be counted.
- The general area of the TMA "C" Airlock will be inspected for structural integrity.
- The load/unload area will be inspected for leaks, spills, and fugitive emissions.

4.2.3. ECV, ECR, UMC, MPB, LBSA, LMC, and TMA Decon Area

Inspections in these areas will include primary containment, secondary containment, containers, and the general area. Except for the inspections that can be performed remotely from the Control Room—level switches and transmitters, interstitial probe, material in sump—weekly visual (physical) inspection of the sump components identified in Table 1.6 will be performed.

The inspections are as follows:

- All containers stored in the above-listed areas will be inspected for deterioration.
- The containers stored in the area will be counted.
- The general area will be inspected. The inspection will cover the floors, walls, and ceilings.
- The designated primary containment within the permitted portions of the MDB will be inspected. Cameras and/or level indicator information can be utilized to fulfill this requirement to ensure the integrity of the primary containment is not compromised. Physical inspection of the sump systems will be performed during scheduled entries, until the initial decontamination for that area has been completed in accordance with the Closure Plan (Permit Attachment 8).
- The interstitial probe for the secondary containment areas will be inspected. Before the start of closure activities, the interstitial probes will be checked for functionality. The metal sump liner will be inspected for signs of deterioration. If deterioration of the primary metal sump liner is identified, the UMCDF will conduct a functional check of the interstitial probe within five days of documentation of the deficiency. The probe will continue to be functionally inspected monthly until the liner is repaired (the remote inspections will also be continued).

5. DEMILITARIZATION (DEMIL) MACHINES

The only remaining demilitarization machines are the ton container processing equipment.

The inspection frequencies are based on manufacturers' recommendations, operational experience, and lessons learned from the UMCDF, JACADS, and TOCDF.

Maintenance and physical inspection activities will be conducted during scheduled Level A (DPE) entries. Inspections for correct operations will be done via the control room panel and remote closed-circuit television cameras. When possible, inspections will occur during processing (i.e., functional inspection).

For specific demil machine items to be inspected and inspection frequencies, refer to Table 2.

6. INCINERATOR INSPECTIONS

The incinerators permitted at the UMCDF include the Deactivation Furnace System (DFS)/DFS pollution abatement system (PAS), Liquid Incinerators (LIC1 & LIC2)/LIC PASs, and the Metal Parts Furnace (MPF)/MPF PAS.

For a detailed list of inspection items and frequencies refer to Table 3.

The incinerators, PASs, and associated equipment will be inspected for leaks, spills, fugitive emissions, and signs of tampering. Some of the incinerator inspections require DPE entries and/or shutdown of the furnace in order to be conducted physically. The UMCDF will conduct daily remote inspections of the incinerator hardware within the furnace rooms visible by CCTV, followed by weekly physical inspections. Thus, in addition to the physical

inspections, which will be conducted at the stipulated frequencies during normal operations and maintenance entries, more-frequent remote inspections of the incinerators and associated equipment are conducted to prevent unnecessary entries.

Calibration and maintenance of incinerator process monitoring and recording equipment are addressed in Module VII of the *UMCDF Hazardous Waste Permit* as follows:

- LICs see Table 7-1a and 7-1b
- MPF see Table 7-3
- DFS see Table 7-5

The AWFCO system and associated alarms for each incinerator will be tested to verify operability. The AWFCO for the furnaces are designated in Modules VI and VII. The tables for the AWFCO are as follows:

- LICs see Tables 6-3 and 7-2
- MPF see Tables 6-7 and 7-4
- DFS see Tables 6-11 and 7-6

Positive verification that the AWFCO system and associated alarms are operable will be conducted using the PLC software.

The incinerators will be taken off-line in order to perform a detailed inspection/maintenance operation.

The mercury monitoring system is used to verify sulfur-impregnated carbon (SIC) bed life during HD operations. Table 3 lists the inspection items and frequencies. Calibration and maintenance of the mercury monitoring system is performed in accordance with the requirements of Permit Attachment 7 and Permit Attachment 11.

7. MISCELLANEOUS TREATMENT UNITS

7.1. BRINE REDUCTION AREA (BRA)

This section includes the brine feed pumps, BRA evaporator packages, BRA drum dryers, BRA PAS, BRA transfer line, and the associated secondary containment systems. For additional inspection items and frequencies, refer to Table 4. BRA surge tank inspection requirements are discussed in Section 8, Permitted Hazardous Waste Tank Systems, and in Table 4 of this attachment.

The frequency of inspections for the BRA and all associated equipment is based on operational knowledge and lessons learned from the UMCDF, JACADS, and TOCDF and on manufacturers' recommendations. Inspections will include:

- All the overflow/spill control equipment will be checked for evidence of corrosion, erosion, and leaking seams or fixtures. The tanks level switches and transmitters will also be inspected for proper operation.
- The secondary-containment system, general area, and sump system of the BRA drum dryers and evaporator packages will be inspected.
- The brine salt loading area will be inspected for leaks, spills, and fugitive emissions.

The AWFCO system and associated alarms for the appropriate components of the BRA will be tested to verify operability. The AWFCOs for the BRA are designated in Table 5-5 of Module V.

Positive verification that the AWFCO system and associated alarms are operable will be conducted using the PLC software.

7.2. DEPRESSURIZATION GLOVE BOX

This section includes the depressurization glove box, associated secondary containment system, and associated exhaust filter system. The glove box and its associated systems will be inspected in accordance with the inspections and frequencies listed in Table 4. The inspection frequencies for the glove box and secondary containment are based on operational experience from the UMCDF and Deseret Chemical Depot (DCD). For the exhaust filters, the inspection frequency and type of inspection is based on the manufacturer's recommendations and UMCDF operational experience with similar units (i.e., the MDB HVAC units). Inspections will be conducted for integrity; evidence of drips, spills, or leaks; proper operation; and equipment malfunctions or plugging. The filter units will be inspected for proper operation and integrity.

Maintenance and physical inspection activities do not require Level A (DPE) entries. Daily physical inspections are performed when the unit is in use.

8. PERMITTED HAZARDOUS WASTE TANK SYSTEMS

The permitted hazardous waste tank systems include the agent collection system (ACS) tanks, spent decontamination system (SDS) tanks (including the spill tanks), the HD rinsate feed collection system (RCS), and BRA surge tanks. For ACS, RCS, and SDS tank system inspection activities and frequencies refer to Table 5. Inspection requirements for the BRA surge tanks are described in Table 4.

Each tank system will be thoroughly inspected. The inspection will address the tanks overflow and spill-control equipment, data gathered from monitoring and leak-detection equipment, construction materials, the area immediately surrounding the externally accessible portion of the tank, as well as the secondary containment system.

Since none of the tanks to be permitted will be underground tanks or underground portions of the aboveground tanks, the regulatory requirements for inspection of the cathodic protection system are not applicable.

Due to safety concerns and the unnecessary risks that may be encountered during vessel entry for internal inspection, a variance from any requirements [40 CFR §264.193(i)(2)] to empty the agent holding tank, agent surge tank, and spent decontamination holding tanks to allow entry and inspection of the interior to detect corrosion or erosion of the tank sides and bottom has been granted to the permittees. The DEQ-approved nondestructive test (NDT) method for the structural integrity inspection of the permitted hazardous waste tanks is ultrasonic wall thickness testing. Personnel performing the inspection will be knowledgeable and experienced in relevant inspection methodologies and will be qualified and certified in accordance with project requirements and to applicable industry standards. The results of the NDT inspections will be documented in a report, maintained in the UMCDF operating record, and submitted to the Department within 60 calendar days of the performance of the assessment.

8.1. BRA SURGE TANKS

The BRA surge tank inspections will be performed in accordance with Table 4.5. The annual tank condition inspections require vessel entry for internal inspection. Inspectors visually inspect the walls and floor of the tanks for damage (signs of erosion, corrosion, holes, cracks, and leaks). If the coating is determined to be intact by

visual examination and dry film thickness measurements, no additional NDT is performed. If the coating has failed, ultrasonic wall thickness testing will be performed utilizing NDT methods on the exposed tank surfaces.

8.2. ACS TANKS, SPILL TANKS, SDS, AND RCS TANKS

The ACS holding tank, spill tank, SDS, and RCS holding tank inspections will be performed in accordance with Tables 5.1, 5.2, and 5.3 respectively. Visual and NDT inspections for signs of erosion, corrosion, cracks, leaks, and wall thinning to less-than-sufficient shell strength of the ACS, spill, SDS, and RCS tanks will be performed from the exterior of the tanks.

The ACS holding tanks, spill tanks, SDS, and RCS holding tanks and associated sump systems are in toxic (chemical agent-contaminated) areas of the MDB. Therefore, except for the inspections that can be performed remotely—level switches and transmitters and the portions of the tank area visible via closed-circuit television—weekly visual (physical) inspections of the tank and secondary containment components to identify corrosion, erosion, and leaks will be performed.

9. 90-DAY HAZARDOUS WASTE STORAGE

For specific inspection items and frequencies for the 90-day hazardous waste storage tanks and areas, refer to Table 6.

9.1. 90-DAY STORAGE TANKS

The inspection will include the tanks overflow/spill-control equipment, corrosion of tank, releases of waste, data gathered from monitoring equipment, the construction materials, and the area immediately surrounding the externally accessible portion of the tank system including secondary containment.

9.2. 90-DAY CONTAINER STORAGE AREAS

Inspections of these areas will include the hazardous waste containers, secondary containment, and emergency-response spill kits.

10. PERMITTED SECONDARY WASTE STORAGE UNITS

10.1. J-BLOCK

J-Block igloos will be used to store secondary waste. The visible portion of the neoprene seals used to seal the igloo openings and the containers and spill pallets within the J-Block igloos being used for secondary-waste storage will be inspected. For specific inspections and frequencies, refer to Table 7.

10.2. TMA “A/B” DECON AREA, TMA “A” AREA, TMA “C” AREA

Inspections in these areas will include the following:

- Inspect container and its cover and closure devices to check for visible cracks, holes, gaps, or other container defects. Visually inspect permitted secondary waste storage area for leaking containers and container corrosion or deterioration.
- Ensure that secondary containment for liquid waste containers (consisting of the coated concrete floor) is not cracked or otherwise deteriorated.

11. MDB AND LABORATORY VENTILATION

The accessible, external components of the MDB and laboratory general ventilation systems will be inspected for physical integrity. The MDB carbon filter system will be continuously monitored for chemical agent breakthrough in accordance with Table 2-2 and Permit Attachment 2 (Waste Analysis Plan), and the carbon will be replaced in accordance with criteria presented in Condition II.O of the Permit (Module II). The laboratory carbon filter system will also be continuously monitored for chemical agent breakthrough in accordance with Table 2-3 and Permit Attachment 2 (Waste Analysis Plan) and the carbon will be replaced in accordance with criteria presented in Condition II.O of the Permit (Module II).

Pressure gauges and airflow will be checked to ensure proper operating range.

The MDB and laboratory HVAC secondary containment vestibules will be monitored for chemical agent breakthrough in accordance with Tables 2-2 and 2-3 and Permit Attachment 2 (Waste Analysis Plan) and inspected for physical integrity. The high-efficiency gas absorber (HEGA) filters will be replaced per Table 8.

For specific inspections and frequencies for the ventilation systems, refer to Table 8.

12. CHEMICAL AGENT MONITORS

Chemical agent monitors include the Automatic Continuous Air Monitoring System (ACAMS), the Depot Area Air Monitoring System (DAAMS), and Real-Time Analytical Platforms (RTAPs). The ACAMS, DAAMS, and RTAPs will be checked for proper operation.

For detailed inspections and frequency of inspections for the chemical agent monitors, refer to Table 9.

13. SUPPORT SYSTEMS

The support systems at the UMCDF include the uninterruptible power supply (UPS), emergency generators, communication system, security, fire protection system, and transportation vehicles. For specific inspections and frequencies refer to Table 10.

13.1. UPS

The UPS will be checked for proper voltage, current, and frequency.

13.2. EMERGENCY GENERATOR

The emergency generator and the standby emergency generator specific to the MDB HVAC filter units will be inspected for mechanical integrity and operability.

A loss of off-site power will be simulated to verify the functional ability of the emergency generator.

13.3. COMMUNICATION

The control room alarm panels will be checked for the integrity of the audible/visual alarms.

The emergency radios, Control Room emergency telephone, and the public-address system will be checked for proper operation of audibility.

13.4. PERIMETER SECURITY

The perimeter fences and warning signs will be inspected for appearance and signs of tampering.

13.5. FIRE PROTECTION SYSTEM

The fire protection system will be checked for signs of deterioration, proper operation, and/or leaks.

13.6. TRANSPORTATION VEHICLES

The hazardous waste transportation vehicle(s) and emergency vehicle will be inspected for proper operability. The hazardous waste transportation vehicle(s) will be inspected when in use.

14. SAFETY AND EMERGENCY EQUIPMENT

This section includes inspections of protective clothing, the butyl rubber storage area, emergency decontamination stations (EDS), HAZMAT truck, and decontamination trailer. The inspections of safety and emergency equipment will detect items with excessive wear and depleted stock. For specific inspection items refer to Table 11.

14.1. PROTECTIVE CLOTHING

Protective clothing includes Level A (Demilitarization Protective Ensembles [DPE]), butyl gear, outer garments, life support system (LSS) air, and self-contained breathing apparatus (SCBA). Inspections include the following:

- The Level A (DPE) and outer garments will be checked for sufficient inventory.
- The LSS air system will be checked to ensure operability.
- A user function test on SCBAs will be performed prior to donning. Per manufacturer's recommendation, a monthly inspection will also be performed.

14.2. BUTYL RUBBER GEAR STORAGE AREA

The butyl rubber gear storage areas will be checked to ensure sufficient inventory is maintained, and the expiration dates on butyl rubber gear will be checked.

14.3. EMERGENCY DECONTAMINATION STATION (EDS)

The EDSs will be located throughout the MDB. Locations will vary depending on chemical activity. At a minimum an EDS will be located in the following areas:

- TMA "C" Area
- Lower Observation Corridor
- Upper Observation Corridor

When the EDS is opened to verify the inventory, a new seal will be placed on the container.

14.4. HAZMAT TRUCK AND DECONTAMINATION TRAILER

The HAZMAT truck and decontamination trailer will be inspected to ensure sufficient inventory of emergency response equipment.

14.5. ADDITIONAL EMERGENCY EQUIPMENT

Chemical antidote kits and stretchers will be inspected to ensure they are in the proper locations and in good condition. The chemical antidote kits inspected are those that are stationed throughout the UMCDF. Personally issued chemical antidote kits are not covered by this Inspection Schedule.

15. ORGANIC AIR EMISSION STANDARDS INSPECTION REQUIREMENTS

Organic air emission standards for tank and container hazardous waste storage are found in 40 CFR 264 Subpart CC; process equipment leaks are governed by 40 CFR 264 Subpart BB. UMCDF activities to maintain compliance with 40 CFR 264 Subparts BB and CC are described in Permit Modules II and IX. Refer to Tables 1, 5, 6, and 7 of this attachment for applicable tank system and container inspection details. Refer to Table 12 for inspection details on equipment subject to 40 CFR 264 Subpart BB.

TABLE 1. MUNITIONS/BULK CONTAINERS PERMITTED STORAGE AREA INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
1.1. MDB OUTSIDE BUILDING			
Outside Perimeter	Inspect the outside of containment building and check that there are no signs of leakage.	Weekly	Physical
1.2. CHB			
Load/Unload Areas	Inspect for leaks, spills, and fugitive emissions.	Daily	Physical
EONCs/Overpacks	Leaks, closures are secured, deterioration, rust, corrosion Number of containers in storage and duration		
	Monitor for chemical agent.	Within 24 hours of receipt Every 7 days while in storage	ACAMS
	Seal leak test	Upon receipt	Functional
	Container labels	Weekly	Physical
EONCs	Structural Integrity	Annually	Nondestructive Examination
General Area in CHB	Examine floors for drips, spills, or leaks.	Weekly	Physical
Bridge Crane System	Deterioration of hoist, excessive wear. Inspect lift area for leaks from EONCs/overpacks.		
Monorail Hoist System			
Lift System (Elevators)			
Pneumatic Roller Track Conveyor			
1.3. CHB UPA			
Secondary Containment	Inspect flooring for cracks, flaking, chips, or areas with excessive wear. Check the sump system for corrosion, erosion, leaking seams or fixtures, and deterioration of coating.	Daily	Physical
	Check the sump pump glands and connections for evidence of leakage.		
	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Upon installation, and annually	Functional
	Inspect coated metal sump for signs of deterioration.	Annually whichever is more frequent	Physical
Load/Unload Areas	Inspect for leaks, spills, and fugitive emissions.	Daily	
Containers ³	Count number of containers stored.		
		Inspect for deterioration and check labels.	
General Area	Inspect roof and walls with regard to structural integrity. Examine floors for drips, spills, or leaks.	Weekly	
Bridge Crane System	Deterioration of hoist, excessive wear. Inspect lift area for leaks from EONCs/overpacks.		
Lift System (Elevator, scissor lift)	Deterioration or excessive wear. Inspect for drips, spills, and leaks.		
Pneumatic Roller Track Conveyor			
1.4. MDB UPA			
Secondary Containment	Check the sump system for corrosion, erosion, leaking seams or fixtures, and deterioration of coating.	Daily	Physical
	Check the sump pump glands and connections for evidence of leakage.		
	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Upon installation and annually	Functional
	Inspect coated metal sump for signs of deterioration.	Annually	Physical
Load/Unload Area	Inspect for leaks, spills, and fugitive emissions.	Daily	
Containers ³	Count number of containers stored in area.		
		Inspect for deterioration	
General Area	Inspect roof and walls with regard to structural integrity. Examine floors for drips, spills, or leaks.	Weekly	
Conveyor Systems	Clean and inspect chain guard, fittings, bearing houses, seals, and check for proper alignment.	Monthly	
Airlock Gates	Clean and inspect chain guard, chain sprockets, sprocket teeth and chain, and for alignment between sprockets.	Quarterly	

TABLE 1. MUNITIONS/BULK CONTAINERS PERMITTED STORAGE AREA INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
1.5. TMA "C" AIRLOCK			
Load/Unload Area	Inspect for leaks, spills, and fugitive emissions.		
Secondary Containment	Check the sump system for corrosion, erosion, leaking seams or fixtures, and deterioration of coating.	Daily	Physical
	Check the sump pump glands and connections for evidence of leakage.		
	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Annually	Functional
	Inspect coated metal sump for signs of deterioration.	Annually	Physical
General Area	Inspect floor and curbing for cracks, flaking, chips, gouges, and areas with excessive wear. Inspect roof and walls with regard to structural integrity. Examine floors for drips, spills, or leaks.	Weekly	Physical
1.6. ECV, ECR, UMC, MPB, LBSA, LMC, and TMA Decon Area			
Sump System			
• Sump Structure	Corrosion, erosion, leaking seams or fixtures, and deterioration of coating.	Weekly ⁴	Physical
• Trench Structure			
• Piping and Valves			
• Level Switches and Transmitters	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Annually	Functional
• Interstitial Probes	Check for proper operation.	Daily	Remote
	Check to see if interstitial probe is in alarm.		
	Check for proper operation.	Before the start of closure activities	Functional
	Check for proper operations if deterioration of the primary metal sump liner is identified.	Within 5 days of documentation of metal sump liner deficiency and monthly thereafter until the liner is repaired	Functional
• Sump Conditions	Inspect metal sump liner for signs of deterioration.	Annually	Physical
• Material in Sump	Review that no sump accumulated liquid for longer than 24 hours.	Daily	Remote
Containers ³	Count number of containers stored in area.	Weekly	Physical
	Deterioration of containers.		
General Area ⁴	Inspect floor and curbing for cracks, flaking, chips, gouges, and areas with excessive wear. Inspect roof and walls with regard to structural integrity. Examine floors for drips, spills, or leaks.		

Notes:

¹**Inspection Frequencies**

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

²**Inspection Methods**

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

³**Containers:** Includes chemical munitions, EONCs/overpacks, and bulk containers only. Hazardous waste container inspections are addressed in Table 6.2.

⁴ Physical inspections of these items in the ECR, MPB, and LBSA will be conducted if scheduled entries are made. Level A (DPE) entries may not be scheduled for the sole purpose of conducting an inspection. The inspections will be conducted at the specified frequency, at a minimum; but if conditions warrant that they be performed remotely, the temporary inspection modification (Section 1.2.1) will be documented in accordance with Section 2.

TABLE 2. DEMIL MACHINES INSPECTIONS³

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
2.1. TON CONTAINER PROCESSING SYSTEM			
Computerized Automatic Control System Interlocks	Access diagnostic screens and verify system integrity.	Daily	Remote
Monorail w/Lifting Device	Inspect bearings and electrical connections.	Monthly	Physical
	Perform functional test for correct operations.		
Bulk Drain Stations	Test for correct operation of agent drain tube system (including spring tips, encoders, and sensors).	Daily	Functional
Conveyor Systems	Test lift cylinders and load cell/weighing system for correct operation. Test lift cylinders for drift and hydraulic pressure leaks.		
Lift Station	Test for correct operations.		
Conveyor Systems	Inspect lift cylinders for damage, excessive wear, hydraulic leaks	Weekly	Physical
Bulk Drain Stations	Inspect punch for chipping or damage, replace if necessary; inspect agent drain tube for bending or damage or plugging, replace if necessary; inspect bolts, clamps, nuts, and screws for looseness, tighten as necessary; inspect all sensor mountings to assure mounting brackets are secure, adjust and tighten as necessary. Check for hydraulic leaks.		
	Inspect load cells, summing board, and weight-indicator box for excessive wear, and correct operation.		
Conveyor Systems	Check gear reducer unit for leaks and oil condition, replace or refill as necessary; check for excessive vibration or unusual noises during operation, repair as necessary.	Quarterly	Physical
	Remove and clean chain guard; clean around grease fittings and vent fittings as necessary; inspect chain for adequate lubrication; clean bearing housings; inspect seals for integrity and excessive lubricant leakage. Reinstall chain guard and inspect for proper alignment. Inspect lift cylinders and other equipment associated with the weighing system for cleanliness, adequate lubrication, and excessive leakage.		
Conveyor Systems	Remove and clean chain guard; clean around grease fittings and vent fittings as necessary; inspect chain for adequate lubrication; clean bearing housings; inspect seals for integrity and excessive lubricant leakage. Reinstall chain guard and inspect for proper alignment. Inspect lift cylinders and other equipment associated with the weighing system for cleanliness, adequate lubrication, and excessive leakage.	Semiannually	
Heel Transfer System	Inspect high-pressure spray wand and rinsate drain tube for bending, damage, or plugging and correct operation. Inspect rinsate pumps and associated equipment for evidence of excessive wear, corrosion, or leakage; check for excessive noise or vibration; inspect for adequate lubrication; inspect seals, and test for proper operation. Inspect expansion joint for damage, excessive wear, corrosion, or leakage.	Weekly	Physical
High-Pressure Hot Water System	Inspect high pressure hot water spray skid, heaters, purge valve, and pump for evidence of excessive wear, corrosion, or leakage, check for excessive noise and vibration, and check for proper operation.	Daily	

Notes:

¹ **Inspection Frequencies**

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

² **Inspection Methods**

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

³ Inspections will take place during the respective munition campaign. Inspections will occur during processing, when possible.

TABLE 3. INCINERATOR INSPECTIONS³

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ⁴ 40 CFR 264.15(b)(4)	METHOD ²
3.1. DEACTIVATION FURNACE SYSTEM			
Combustion System (Exterior)	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Physical
Flame Safeguard Ultraviolet Sensors	Check for proper output at local control panel		Remote
High-Temperature Safety Shutdown and Temperature Controls	Observe temperature readouts while in operation.		
Heated Discharge Conveyor	Inspect general area for leaks, structural damage, and signs of wear.	Weekly ⁴	Physical
	Inspect accessible areas for loss of lubrication, check for vibration, inspect bearings for overheating, inspect conveyor belt for physical integrity and alignment, and inspect shafts and gears for signs of binding.	Quarterly	
Incinerator Hardware within Furnace Rooms	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Remote
Ash Collection Containers (HDC bin, cyclone drum)	Inspect for leaks, spills, fugitive emissions, and containers out of place	Weekly	Physical
Load/Unload Area	Inspect for leaks, spills, and fugitive emissions.	Daily when storing hazardous waste	Physical
Combustion Air Blowers ⁴	Inspect for lubrication, overheating, and vibration		
Rotary Retort Drive ⁴	Inspect for lubrication, overheating, vibration, and bindings.		
Automatic Waste Feed Cut-Off Mechanism (AWFCO)	Test control circuits and document waste feed cut-off.		Remote
Blast Gates ⁴	Inspect gate gasket and closure surfaces; inspect gate latch assembly for proper operation; inspect gate opening and closing mechanism for proper operation; clean closure surfaces, as necessary, to hold a tight seal; and repair and replace components showing signs of corrosion and wear.	Weekly	Physical
Isolation Dampers	Check for operability via the PLC.		Remote
Overall Incinerator	Detailed inspection/maintenance.	Annually	Physical
3.2. LIQUID INCINERATOR 1 & 2			
Combustion System (Exterior)	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Physical
Flame Safeguard Ultraviolet Sensors	Check for proper output at local control panel	Daily	Remote
High Temperature Safety Shutdown and Temperature Controls	Observe temperature readouts while in operation.		
Secondary Chamber SDS Atomizing Nozzle	Observe pressure of atomizing air and pressure of SDS. Check that low-pressure switches show closed contacts.		
Primary Chamber Burner Block Atomizing Nozzle	Observe pressure of atomizing air and pressure of liquid chemical agent. Check that low-pressure switches show closed contacts.		
Incinerator Hardware within Furnace Rooms	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Remote
AWFCO Mechanism	Test control circuits and document waste feed cut-off.	Weekly	Physical
			Remote
Combustion Air Blowers ⁴	Lubrication, overheating, and vibration	Weekly	Physical
Overall Incinerator	Detailed inspection/maintenance.	Annually	Physical

TABLE 3. INCINERATOR INSPECTIONS³

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²	
3.3. METAL PARTS FURNACE				
Combustion System (Exterior)	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Physical	
Burnout Chamber	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Remote	
Flame Safeguard Ultraviolet Sensors	Check for proper output at local control panel	Daily	Remote	
High Temperature Safety Shutdown and Temperature Controls	Observe temperature readouts while in operation.	Daily	Remote	
Incinerator Hardware within Furnace Rooms	Inspect for leaks, spills, fugitive emissions, and signs of tampering.	Daily	Remote	
		Weekly	Physical	
AWFCO Mechanism	Test control circuits and document waste feed cut-off.	Weekly	Remote	
			Physical	
Combustion Air Blowers ⁴	Lubrication, overheating, and vibration	Weekly	Remote	
			Physical	
Overall Incinerator	Detailed inspection/maintenance.	Annually	Physical	
3.4. PASs FOR LIC #1&2, MPF, and DFS				
Exhaust Blowers	Lubrication, overheating, and vibration	Daily	Physical	
Venturi Plug Valve	Check to assure that valve operates freely		Remote	
Stack ⁵	Observe opacity		Physical	
Thermocouple on Gas Stream Entering Venturi Scrubber	Check for proper operation			
Pressure Drop Across Venturi Scrubber	Check for calibration of differential pressure devices	Weekly	Physical	
Scrubber Tower	Inspect shell for corrosion.			
Quench Tower				
Mist Eliminator Vessel				
Carbon Filter System⁵:				
• Pressure Gauges	Check for pressure drop.	Daily	Physical	
• Air Flow	Check that monitor is reading in appropriate range.	Weekly		
• Instrumentation	Check for calibration of pressure and airflow instrumentation.			
• General System	Inspect for evidence of corrosion, malfunctions, leaks, or excessive wear.	Annually		
• Damper	Check elastomeric seals and bearings for excessive wear.	Upon change out of carbon		
• Carbon Filters	Perform leak testing.			
• Mercury Monitoring System (VEN-MERC-001)	Calibration	VEN-MERC-001A/B		Daily
		VEN-MERC-001C		Daily and/or before each use
	System Leak/Flow Check	VEN-MERC-001C		Daily and/or before and after each sorbent trap sampling interval
		VEN-MERC-001D		
Performance Audit	VEN-MERC-001A/B/C/D	Quarterly		
Overall PAS	Inspect for leaks, spills, fugitive emissions, and signs of tampering	Daily		
	Detailed inspection/maintenance	Annually		

Notes:

¹ Inspection Frequencies

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

² Inspection Methods

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

³Some of the incinerator inspections require DPE entries and/or shutdown of the furnace in order to be conducted physically. Thus, in addition to the physical inspections, which will be conducted at the stipulated frequencies during normal operations and maintenance entries, more-frequent remote inspections of the incinerators and associated equipment are conducted to prevent unnecessary DPE entries.

⁴Physical inspections of these items will be conducted if scheduled entries are made. Level A (DPE) entries may not be scheduled for the sole purpose of conducting an inspection. The inspections will be conducted at the specified frequency, at a minimum; but if conditions warrant that they be performed remotely, the temporary inspection modification (Section 1.2.1) will be documented in accordance with Section 2.

⁵These inspections may not be suspended in accordance with Section 1.1.3.

TABLE 4. MISCELLANEOUS TREATMENT UNIT INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
4.1. BRINE FEED PUMPS			
Brine Feed Pumps	Inspect glands and connections for evidence of leakage. If on-line pump is operating, check for excessive noise and vibration. Check oil level.	Daily	Physical
BRA Strainers	Inspect differential pressure gauge to see if differential pressure is greater than manufacturer's recommended value.		
4.2. BRA EVAPORATOR PACKAGES			
Overfill/Spill Control Equipment	Inspect for evidence of corrosion, leakage, or other physical damage.	Daily	Physical
Level Switches and Transmitters	Check for proper operation.		Remote
Evaporator/Heat Exchanger Structure	Inspect for corrosion, erosion, and leaking of seams or fixtures.		Physical
Evaporator/Heat Exchanger	Inspect for corrosion, erosion, and leaking of seams or fixtures.		
Piping and Valves	Inspect for evidence of corrosion and leakage.		
Circulation Pumps and Desuperheater Pumps	Inspect glands and connections for evidence of leakage; if pump is operating, check for excessive noise and vibration.		
Skid Supports	Inspect for visible signs of deterioration.		Weekly
AWFCO Mechanism	Test control circuits and document waste feed cut-off.	Annually	Nondestructive testing
4.3. BRA DRUM DRYERS			
Overfill/Spill Control Equipment	Inspect for evidence of corrosion, leakage, or other physical damage.	Daily	Physical
Level Switches and Transmitters	Check for proper operation.		Remote
Drum Dryer Housing	Inspect for evidence of corrosion, leakage, or other physical damage.		Physical
Drum Dryer Area	Inspect for evidence of corrosion and leakage on floor.		
Piping and Valves	Inspect for evidence of corrosion and leakage.		
Drum Dryer Conditions	Inspect for corrosion, cracks, wear, or other damage.		
Drum Dryer Drip Oil Feeders	Check operation, oil level, drip rate, and cleanliness; check that all lines are receiving oil.		
Drum Dryer Knife Blades	Inspect for appearance of a heel and any other abnormalities.	Daily prior to start up	
Endscrapers	Check that endscrapers are keeping drum ends clean.	Daily	
Endboards	Check condition, damage.		
Augers	Check auger sleeve and blades for signs of wear and brine salt buildup.		
Drum Dryer Catch Pans	Inspect for accumulated liquids and condition of pans.	Daily and always as part of shutdown	
AWFCO Mechanism	Test control circuits and document waste feed cut-off.	Weekly	Remote

TABLE 4. MISCELLANEOUS TREATMENT UNIT INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
4.4. BRA PAS			
Exhaust Blower	Inspect lubrication, vibration, and for overheating.	Daily	Physical
Stack	Observe opacity	Weekly	Remote
	Test ACAM and document waste feed cut-off		
Dryer Knockout Box	Inspect manway cover, knife gate, and flashing for salt residue buildup. Inspect discharge container for proper labeling. Inspect transfer hose for cracks or tears. Inspect outside of container and area around container for salt residue.	Daily	Physical
Ductwork that Connects Evaporators and Drum Dryers to the Baghouses ³	Inspect for presence of liquid or salt buildup. Inspect for obstructions or dust buildup per pounds of salt processed for GB: 150,000 lbs., HD: 300,000 lbs., and VX: 250,000 lbs.	Per pounds of salt processed or semiannually, whichever is more frequent	
Ductwork ³			
Baghouses:			
• Baghouse Bags	Check the Delta P across bags for indications of system deterioration	Weekly	Remote
• AWFCO Mechanism	Test control circuits and document waste feed cut-off.		
• Thermocouple on Gas Stream to Baghouse	Check for proper operation.		
• Pressure Drop Across Baghouse	Verify pressure reading and check calibration of differential pressure devices.	Daily during operation	Physical
• Pulse Timer	Proper operation	Daily	
• Cleaning Air Pressure	Check that pressure is 80-85 pounds per square inch for Ryton bags.		
• Rotary Valve	Inspect for dust discharge in normal fashion		
• Rotary Valve Motor	Check for visible signs of wear, broken parts, and leakage.		
• Clean Air Plenum (top of baghouse)	Inspect for signs of dust or moisture.		
• Baghouse Pad Sump (BRA-SUMP-105)	Presence of liquid.		
• Ductwork ³	Inspect for obstructions or dust buildup per pounds of salt processed for GB: 150,000 lbs., HD: 300,000 lbs., and VX: 250,000 lbs.	Per pounds of salt processed or semiannually, whichever is more frequent	
• Baghouse Flange Joints	Inspect for leaks.	Annually	Physical
• Structural Steel Connections	Inspect for tightness of bolts.		
• Mechanical Equipment	Inspect for rust or corrosion.		
• Support Steel			
• Baghouse			
• Baghouse			
4.5. BRA SURGE TANKS			
Overfill/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.	Daily	Physical
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Area	Inspect for evidence of leakage on floor of diked area.		
Piping and Valves	Inspect for corrosion and leakage.		
Tanker Unload Transfer Pump	Inspect glands and connections for evidence of leakage; if pump is operating check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion.		
Level Switches and Transmitters	Check for proper operation.	Remote	
Tank Conditions	Structural integrity.	Annually	Nondestructive Testing

TABLE 4. MISCELLANEOUS TREATMENT UNIT INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
4.6. BRINE TRANSFER LINE			
Piping and Associated Equipment	Inspect for evidence of corrosion, leakage, or other physical damage.	Daily	Physical
Pipe Supports			
Pipe Area			
4.7. BRA SURGE TANKS, DRUM DRYERS, AND EVAPORATOR PACKAGES SECONDARY CONTAINMENT SYSTEM			
General Area	Inspect floor and curbing for structural integrity (cracks, flaking, chips, gouges) and areas with excessive wear. Examine floors for drips, spills, or leaks.	Daily	Physical
Sump System:			
<ul style="list-style-type: none"> • Sump Structure • Piping and Valves 	Corrosion, erosion, leaking seams or fixtures, and deterioration of coating.	Daily	Physical
<ul style="list-style-type: none"> • Sump Pump 	Inspect glands and connections for evidence of leakage; if pump is operating, check for excessive noise and vibration. Check for proper operation.		
<ul style="list-style-type: none"> • Level Switches and Transmitters 	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Annually	Functional
<ul style="list-style-type: none"> • Sump Conditions 	Inspect coated metal sump for signs of deterioration.	Annually	Physical
4.8. BRA SALT LOADING AREA			
Load/Unload Area	Inspect for leaks, spills, and fugitive emissions.	Daily	Physical
4.9. PROCESS AND UTILITY BUILDING (PUB)			
Fans	Check for salt buildup.	Weekly	Physical
PUB Roof	Check for salt residue or buildup		
4.10. DEPRESSURIZATION GLOVE BOX			
Decontamination Strainer (on bottom of glove box)	Inspect decontamination strainer for evidence of plugging.	Daily (when in use)	Physical
Rubber Gloves	Inspect gloves for integrity.		
General Area	Inspect glove box exterior and equipment for integrity and evidence of corrosion. Inspect exterior floor for drips, spills, and leaks to detect any releases of waste. Inspect work platform and glove area for integrity. Inspect airlock for condition and proper operation. Inspect inlet filter unit for filter housing integrity and proper operation.		
SDS Return Pump	Inspect connections for evidence of leakage. If pump is operating, check for excessive noise and vibration.		
Drain Pan	Inspect for presence of standing liquid and evidence of corrosion.		
Airlock	Inspect for presence of standing liquid.		
Roof Panel	Inspect integrity of roof panel gasket (joint between the roof panel and glove box) and roof panel clamps for evidence of deterioration.	Weekly	
Glove Ports and Windows	Inspect gasket integrity.		
Pressure Relief Device	Inspect for physical integrity.		
Service Connections	Inspect connections for plant air, decontamination solution, process water, and nitrogen gas for physical integrity and leaks.	Annually	Physical
Overall Glove Box System (glove box, roof panel, and roof panel clamps)	Inspect the glove box, roof panel, and roof panel clamps to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the roof panel (cover) and roof panel clamps (closure devices) are secured in the closed position for evidence of deterioration.		

TABLE 4. MISCELLANEOUS TREATMENT UNIT INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
4.11. DEPRESSURIZATION GLOVE BOX EXHAUST FILTER UNITS			
Filter system	Monitor filter system continuously for breakthrough.	Daily	Remote
Exhaust filter units	Check for physical integrity and leaks. Inspect blower for vibration and for overheating. Inspect curbed area for standing liquid.		
Stack	Check for visible emissions.		
Pressure Gauges	Check for pressure drop.		
Air Flow	Check that monitor is reading within appropriate range.	Weekly	Physical
General System	Inspect for evidence of corrosion, malfunctions, leaks, spills, or excessive wear and signs of tampering.		
Carbon filters	Perform leak testing.		
Exterior Ductwork	Check for physical integrity.	Monthly	
Overall System	Perform detailed inspection/maintenance. Inspect internal components for evidence of corrosion, and excessive wear. Inspect blowers for loss of lubrication and bearing overheating. Inspect curbed area for integrity.	Annually	

Notes:

¹ **Inspection Frequencies**

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

² **Inspection Methods**

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

³ Due to accessibility limitations, physical inspections may be conducted with the aid of instruments (e.g., boroscope, mirrors).

TABLE 5. PERMITTED HAZARDOUS WASTE TANK SYSTEMS INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
5.1. AGENT HOLDING TANKS AND THE SECONDARY CONTAINMENT SYSTEMS			
General Area	Inspect floor and curbing for cracks, flaking, chips, gouges, and areas with excessive wear. Inspect roof and walls with regard to structural integrity. Examine floors for drips, spills, or leaks.	Weekly ³	Physical
Tank Overflow/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Level Switches and Transmitters	Check for proper operation.	Daily	Remote
Tank Area	Inspect for evidence of leakage on floor of diked area.	Weekly ³	Physical
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Piping and Valves	Inspect for corrosion and leakage.		
Pump	Inspect seals and connections for evidence of leakage. If pump is operating, check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion.	Annually	Nondestructive testing
Tank Conditions	Structural integrity.		
Sump System:			
<ul style="list-style-type: none"> • Sump Structure • Piping and Valves 	Inspect for evidence of corrosion, erosion, leaking seams or fixtures, or deterioration of coating.	Weekly ³	Physical
<ul style="list-style-type: none"> • Level Switches and Transmitters 	Check for proper operation at control panel Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.		
<ul style="list-style-type: none"> • Sump Conditions 	Inspect metal liner for signs of deterioration.	Annually	Physical
<ul style="list-style-type: none"> • Sump Pump 	Visually inspect glands and connections for evidence of leakage. With pump operating, check for excessive noise and vibration.	Weekly ³	
5.2. SPENT DECONTAMINATION SYSTEM, SPILL TANK SYSTEM, AND SECONDARY CONTAINMENT SYSTEM			
General Area	Inspect floor and curbing for cracks, flaking, chips, gouges, or areas that indicate excessive wear or deterioration of protective coating. Also, examine floor and sump area for drips, spills, or leaks.	Weekly	Physical
Tank Overflow/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Level Switches and Transmitters	Check for proper operation.	Daily	Remote
Tank Area	Inspect for evidence of leakage on floor of diked area.	Weekly	Physical
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Piping and Valves	Inspect for corrosion and leakage.		
Pump	Inspect seals and connections for evidence of leakage. If pump is operating check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion.	Annually	Nondestructive Testing
Tank Conditions	Structural integrity.		
Sump System:			
<ul style="list-style-type: none"> • Sump Structure • Piping and Valves 	Inspect for evidence of corrosion, erosion, leaking seams or fixtures, or deterioration of coating.	Weekly	Physical
<ul style="list-style-type: none"> • Level Switches and Transmitters 	Check for proper operation at control panel Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.		
<ul style="list-style-type: none"> • Sump Conditions 	Inspect metal liner for signs of deterioration.	Annually	Physical
<ul style="list-style-type: none"> • Sump Pump 	Visually inspect glands and connections for evidence of leakage. With pump operating, check for excessive noise and vibration.	Weekly	
5.3. HD RINSATE FEED COLLECTION SYSTEM			
General Area	Inspect floor and curbing for cracks, flaking, chips, gouges, or areas that indicate excessive wear or deterioration of protective coating. Also, examine floor and sump area for drips, spills, or leaks.	Weekly	Physical
Tank Overflow/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		

TABLE 5. PERMITTED HAZARDOUS WASTE TANK SYSTEMS INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
Tank Level Switches and Transmitters	Check for proper operation.	Daily	Remote
Tank Area	Inspect for evidence of leakage on floor of diked area.	Weekly	Physical
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Piping and Valves	Inspect for corrosion and leakage.		
Pump	Inspect seals and connections for evidence of leakage. If pump is operating check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion		
Tank Conditions	Structural integrity.	Annually	Nondestructive Testing
Sump System:			
• Sump Structure	Inspect for evidence of corrosion, erosion, leaking seams or fixtures, or deterioration of coating.	Weekly	Physical
• Piping and Valves			
• Level Switches and Transmitters	Check for proper operation at control panel	Daily	Remote
	Inspect level switches for proper operability. To meet the inspection requirements for the functional test, liquid may be added to the sump.	Annually	Functional
• Sump Conditions	Inspect metal liner for signs of deterioration.	Annually	Physical
• Sump Pump	Visually inspect glands and connections for evidence of leakage. With pump operating, check for excessive noise and vibration.	Weekly	

Notes:

¹**Inspection Frequencies**

Daily	Once per calendar day
Weekly	Once per calendar week
Monthly	Once per calendar month
Bimonthly	Once every other calendar month
Quarterly	Once per calendar quarter
Semiannually	Once per 6-month calendar period
Annually	At least once during a 12-month period +/- 30 days

²**Inspection Methods**

Functional	An inspection to determine if equipment/instrument is capable of performing or is operational.
Remote	An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
Physical	An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

³Physical inspections of these items will be conducted if scheduled entries are made. Level A (DPE) entries may not be scheduled for the sole purpose of conducting an inspection. The inspections will be conducted at the specified frequency, at a minimum; but if conditions warrant that they be performed remotely, the temporary inspection modification (Section 1.2.1) will be documented in accordance with Section 2.

TABLE 6. 90-DAY HAZARDOUS WASTE STORAGE INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
6.1. 90-DAY STORAGE TANKS			
Level Switches and Transmitters	Check for proper operation.	Daily	Remote
Overfill/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		Visual from open hatch
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Area	Inspect for evidence of leakage on floor of diked area.		
Piping and Valves	Inspect for corrosion and leakage.		
Pump	Inspect glands and connections for evidence of leakage; with pump operating check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion.	Monthly	
Overfill/Spill Control Equipment	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Structure	Inspect for evidence of corrosion, erosion, or leaking seams or fixtures.		
Tank Area	Inspect for evidence of leakage on floor of diked area.		
Piping and Valves	Inspect for corrosion and leakage.		
Pump	Inspect glands and connections for evidence of leakage; if pump is operating check for excessive noise and vibration.		
Tank Supports	Inspect for corrosion.	Annually	Nondestructive testing
Tank Conditions	Structural integrity.		
6.2. 90-DAY CONTAINER STORAGE AREAS			
Hazardous Waste Containers	Inspect for leaks, corrosion, and deterioration. Count the number of containers and check the inventory list for accuracy and ensure it is up to date. Check for proper labeling and duration containers have been in storage for 90-day areas.	Weekly	Physical
General Area	Inspect floors for drips, spills, and leaks. Inspect roof and walls for integrity.		
Spill Pallets	If present, inspect pallets for deterioration.		
Emergency Response	Check for spill kit, fire extinguisher (except in the A, A/B, B areas of the MDB), Point of Contact identification, appropriate signs.		

Notes:

¹ **Inspection Frequencies**

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

² **Inspection Methods**

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

TABLE 7. PERMITTED SECONDARY WASTE STORAGE UNITS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
7.1. SECONDARY WASTE J-BLOCK STORAGE IGLOOS			
Igloos Containing Secondary Hazardous Waste	Inspect container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container. Inspect igloos for leaking containers and container corrosion or deterioration.	Weekly	Physical
Spill Pallets	Inspect spill pallets to ensure they are not cracked or otherwise deteriorated.		
Neoprene Gasket Seals	Inspect visible portions of gaskets for obvious signs of deterioration such as tears, punctures, blisters, cracks, etc.	Quarterly	
7.2. TMA "A/B" Decon Area, TMA "A" Area, TMA "C" Area			
Permitted Secondary Waste Storage Areas	Inspect container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container. Visually inspect permitted secondary waste storage areas for leaking containers and container corrosion or deterioration. Inspect coated concrete floor for cracks or other deterioration.	Weekly	Physical

Notes:

¹**Inspection Frequencies**

Daily	Once per calendar day
Weekly	Once per calendar week
Monthly	Once per calendar month
Bimonthly	Once every other calendar month
Quarterly	Once per calendar quarter
Semiannually	Once per 6-month calendar period
Annually	At least once during a 12-month period +/- 30 days

²**Inspection Methods**

Functional	An inspection to determine if equipment/instrument is capable of performing or is operational.
Remote	An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
Physical	An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

TABLE 8. MDB AND LABORATORY VENTILATION INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
Exhaust Filter Units (Exterior)	Check for physical integrity and leaks around filter unit doors	Weekly	Physical
Ductwork (Exterior)	Check for physical integrity	Monthly	
Pressure Gauges	Check for pressure drop.	Daily	Remote
Air Flow	Check that monitor is reading appropriate range.		
Filter Vestibules	Inspect for physical integrity.	Weekly	Physical
	Inspect for separation of liner panel joints, flashing joints, sealant bead from the substrate, and verify door seal and door sweep integrity.	Quarterly	
	Replace HEGA filters	After confirmation of agent ≥ 0.2 VSL in the vestibules and prior to being returned to service	
Internal Mechanical	Inspect for evidence of corrosion, excessive wear, loss of lubrication, and bearing overheating.	Annually	

TABLE 9. CHEMICAL AGENT MONITORS INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
9.1. ACAMS			
Chemical Agent Monitor	Agent challenge. Check diagnostic indicators on front panel and ancillary ACAMS equipment (sample line and chart recorder).	Daily	Physical
9.2. DAAMS			
Chemical Agent Monitor	Check DAAMS tubes and inspect ancillary DAAMS equipment (sample line and sequencer) for proper operability.	Daily	Physical
9.3. RTAPs			
UMCDF Chemical Agent Monitor	Agent challenge. Check diagnostic indicators on front panel and ancillary ACAMS/MINICAMS equipment (sample line and chart recorder).	Prior to use	Physical

Notes:

¹ **Inspection Frequencies**

Daily	Once per calendar day
Weekly	Once per calendar week
Monthly	Once per calendar month
Bimonthly	Once every other calendar month
Quarterly	Once per calendar quarter
Semiannually	Once per 6-month calendar period
Annually	At least once during a 12-month period +/- 30 days

² **Inspection Methods**

Functional	An inspection to determine if equipment/instrument is capable of performing or is operational.
Remote	An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
Physical	An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

TABLE 10. SUPPORT SYSTEMS INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
10.1. UPS			
Input Voltage	Check meter for proper voltage, current, and frequency.	Weekly	Physical
Input Current			
Battery Voltage			
Output Voltage			
Output Frequency			
10.2. EMERGENCY GENERATOR			
Emergency Generator	Inspect for loose drive belts, oil leaks, coolant leaks, lube oil level, mechanical integrity, and crankcase containment.	Monthly	Physical
	Start up using remote control from the Control Room. Verify voltage, frequency output, engine lube oil pressure, engine coolant level, fuel level, and air filter differential pressure. Shut down using remote control from the Control Room.	Bimonthly	Functional
	Simulation of loss of off-site power	Annually	
MDB HVAC Filters Standby Emergency Generator	Inspect for loose drive belts, oil leaks, coolant leaks, lube oil level, mechanical integrity, and crankcase containment.	Monthly	Physical
	Start up and shut down. Verify voltage, frequency output, engine lube oil pressure, engine coolant level, fuel level, and air filter differential pressure.	Bimonthly	Functional
10.3. COMMUNICATION			
Control Room Alarm Panels	Check integrity of audible/visual alarm.	Daily	Functional
Radio (Security)	Check proper operation of audibility.	Weekly	
Control Room Emergency Telephone			
Public-Address System			
Closed-Circuit Television Cameras	Check for proper operation, i.e., visual clarity, and tilt/pan/zoom function.		
10.4. PERIMETER SECURITY			
Fences	Check for appearance and signs of tampering.	Daily	Physical
Warning Signs			
10.5. FIRE PROTECTION SYSTEM			
Alarms	Check for signs of deterioration, proper operability and/or leaks.	Daily	Remote
Fire Detectors		Monthly	Physical
Extinguishers			
Dry Chemical Fire Protection System in Toxic Cubicle			
Fire Extinguishing Medium for Control Room		Semiannually	Physical
UMCDF Site Fire Pump		Weekly	
UMCDF Site Fire Pump/system		3 times/year	Functional
Sprinkler System		Annually	Physical
10.6. TRANSPORTATION VEHICLES			
Hazardous Waste Transport Vehicles	Check fluid levels, operability, and signs of needed maintenance.	Weekly	Physical
Emergency Vehicle	Parked at proper location, operability, and gas tank more than one-half full.	Weekly	

Notes:

¹ Inspection Frequencies

Daily	Once per calendar day
Weekly	Once per calendar week
Monthly	Once per calendar month
Bimonthly	Once every other calendar month
Quarterly	Once per calendar quarter
Semiannually	Once per 6-month calendar period
Annually	At least once during a 12-month period +/- 30 days

² Inspection Methods

Functional	An inspection to determine if equipment/instrument is capable of performing or is operational.
Remote	An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
Physical	An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

TABLE 11. SAFETY AND EMERGENCY EQUIPMENT INSPECTIONS

ITEM 40 CFR 264.15(b)(1)	TYPES OF PROBLEMS/INSPECTIONS 40 CFR 264.15(b)(3)	FREQUENCY ¹ 40 CFR 264.15(b)(4)	METHOD ²
Level A (DPE) Suits	Check for sufficient quantity for entries, and ensure emergency air bottles stored in the DSA are filled.	Daily	Physical
LSS Air	Ensure the LSS air system is operational.	Prior to use	Remote
SCBA	Perform user function test		Functional
	Perform inspection per manufacturer recommendation.	Monthly	Physical
Butyl Rubber Gear Storage Area	Check for sufficient inventory, expiration date, and excessive wear.	After use or annually, whichever is more frequent	Physical
Emergency Decontamination Stations	Check storage container for sufficient content inventory, check expiration and condition of chemical antidote kits, and place a new seal on the container.		Physical
HAZMAT Truck	Check that the truck is parked at proper location, operability, and its gas tank more than one-half full.	Weekly	Physical
	Check for sufficient content inventory.	After use or annually, whichever is more frequent	
Decontamination Trailer	Check for sufficient content inventory.		Physical

Notes:

¹**Inspection Frequencies**

- Daily Once per calendar day
- Weekly Once per calendar week
- Monthly Once per calendar month
- Bimonthly Once every other calendar month
- Quarterly Once per calendar quarter
- Semiannually Once per 6-month calendar period
- Annually At least once during a 12-month period +/- 30 days

²**Inspection Methods**

- Functional An inspection to determine if equipment/instrument is capable of performing or is operational.
- Remote An inspection conducted by any one or all of the following methods: closed-circuit television, process data acquisition and recording (PDAR) system, programmable logic controller (PLC), control panel, level probes, interstitial probes, advisor screen, or any other inspection that is not conducted physically in person. Although stated inspection frequencies may be "daily," "weekly," etc., many of the pieces of equipment that provide the information for these inspections feeds the information continuously to the PDAR, which creates an electronic record.
- Physical An inspection conducted physically in person (e.g., maintenance). A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection.

TABLE 12. EQUIPMENT REGULATED UNDER 40 CFR PART 264 SUBPART BB

Hazardous Waste Management Unit (P&ID Number)	Location at the UMCDF	Type of Equipment	Equipment Identification Number ^b	Method of Compliance ^a
Originally transferred liquid chemical agent from ACS-TANK-103 to agent holding tanks. Line now isolated and does not contain or contact agent. (UM-01-D-503)	Explosive Containment Room A (03-211) in the MDB	Ball valve	V-8	ACAMS
		Closed spec blind	SP-256	
	Munitions Corridor in the MDB	Control valve	XV-43	
Originally transferred liquid chemical agent from ACS-TANK-104 to agent holding tanks. Line now isolated and does not contain or contact agent. (UM-01-D-502)	Explosive Containment Room B (03-0212)	Ball valve	V-18	ACAMS
		Closed spec blind	SP-256	
	Munitions Corridor	Control valve	XV-46	
Transfers liquid chemical agent from the Bulk Drain Station 101 to the agent holding tank (UM-01-D-514)	Munitions Processing Bay	Check valve	V-24	ACAMS
		Ball valves (7)	V-21, V-22, V-23, V-73, PDIT-67-941, PDIT-67-942, PIT-39-911	
		Control valves (4)	FV-20, XV-496, XV-401, XV-402	
		Hose connection assembly (2)	SP-130(2)	
		Flexible hose assembly (4)	SP-159(2), SP-238, SP-159A, SP-159B	
		Pump	ACS-PUMP-115	
		Open spec blind	SP-256	
Transfers liquid chemical agent from the Bulk Drain Station 102 to the agent holding tank (UM-01-D-515)	Munitions Processing Bay	Check valves	V-44	ACAMS
		Control valves (4)	FV-120, XV-396, XV-301, XV-302	
		Hose connection assembly (2)	SP-130(2)	
		Flexible hose assembly (5)	SP-159(2), SP-159A, SP-159B, SP-238	
		Ball valves (7)	V-41, V-42, V-43, V-115, PIT-58-911, PIT-66-941, PIT-66-942	
		Open spec blind	SP-256	
		Pump	ACS-PUMP-114	
Agent Collection System from multipurpose demilitarization machines. Lines now isolated and equipment removed. (UM-01-D-521)	Munitions Processing Bay	Blind flanges (2)	No equipment number	ACAMS
Agent Collection System spill tanks (UM-01-D-522)	Munitions Processing Bay	Ball valves (10)	V-54, V-55, V-56, V-57, V-9800, V-9801, V-9802, V-9803, V-9804, V-9805	ACAMS with supplemental visual inspection by closed-circuit television as needed
		Check valve	V-59	
		Control valves (2)	LV-9848, HV-9835	
		Pressure safety valves (2)	PSE-9849, PSV-9849	
		Hose connections (2)	SP-130(2)	
		Flexible hose assemblies (2)	SP-159(2)	
		Pump	ACS-PUMP-105	
		Open spec blind	SP-256	
Tank	ACS-TANK-401A/B			

TABLE 12. EQUIPMENT REGULATED UNDER 40 CFR PART 264 SUBPART BB

Hazardous Waste Management Unit (P&ID Number)	Location at the UMCDF	Type of Equipment	Equipment Identification Number ^b	Method of Compliance ^a
Agent Holding Tank (UM-01-D-536)	Toxic Cubicle	Ball valves (74)	V-78, V-79, V-80, V-81, V-82, V-83, V-84, V-85, V-86, V-87, V-88, V-89, V-91, V-94, V-95, V-98, V-99, V-100, V-101, V-102, V-103, V-104, V-105, V-106, V-107, V-108, V-109, V-113, V-114, V-116, V-117, V-9003, V-9004, V-9005, V-9006, V-9007, V-9008, PDIT-099-561, PDIT-099-562, PDIT-104-561, PDIT-104-562, PI-43-1421, PI-101-1421, PI-118-1421, PI-739-1421, PI-742-1421, V-9800, V-9801, V-9803, V-9804, V-9805, V-9806, V-9807, V-9808, V-9809, V-9810, V-9811, V-9812, V-9813, V-9814, V-9815, V-9816, V-9817, V-9818, V-9819, V-9820, V-9821, V-9822, V-9823, V-9824, V-9825, V-9826, V-9827, V-9828	ACAMS
		Check valves (12)	V-76, V-77, V-90, V-92, V-93, V-96, V-97, V-110, V-112, V-115, V-9849, V-9853	
		Control valves (13)	LV-84, LV-86, LV-97, LV-105, LV-244, XV-736, XV-737, HV-775, LV-9811, LV-9812, LV-9821, LV-9822, HV-9850	
		Pressure Safety Valves (10)	PCV-43, PSV-102, PSV-103, PSV-738, PSV-161, PSV-160, PSV-026, PSE-162, PSE-159, PCV-735	
		Hose Connections (2)	SP-130 (2)	
		Pumps (3)	ACS-PUMP-101, ACS-PUMP-102, ACS-PUMP-201	
		Tanks (2)	ACS-TANK-101, ACS-TANK-102	
		Filters (7)	ACS-FILT-108A&B ACS-FILT-109A&B, ACS-FILT-9001, SP-304 (2)	
Transfers agent spill (UM-01-D-010)	Toxic Cubicle	Control valves (2)	LV-249 and HV-9851	ACAMS
		Blind flange	(1)	
Transfers liquid chemical agent to LIC1 furnace (UM-01-D-546)	Toxic Cubicle	Ball valves (3)	V-70, PIT-732-911, PSLLL-733-1321	ACAMS
	Munitions Corridor	Control valve	FV-731	
		Blind flange	No equipment number	
	Liquid Incinerator Room	Ball valves (7)	V-71, V-73, V-74, V-72, PI-760-1421, PIT-761-911, PSL-760-1321	
		Control valves (4)	XV-761A, XV-761B, XV-204, XV-9816	
Flexible hose		No equipment number		
Transfers liquid chemical agent to LIC2 furnace (UM-01-D-526)	Toxic Cubicle	Ball valves (3)	V-20, PIT-119-911, PSLLL-115-1321	ACAMS
		Control valve	FV-127	
	Munitions Corridor	Blind flange	No equipment number	
		Ball valves (7)	V-21, V-22, V-23, V-24, PI-112-1421, PIT-113-911, PSL-112-1321	
	Liquid Incinerator Room	Control valves (4)	XV-104, XV-134A, XV-134B, XV-9813	
		Flexible hose	No equipment number	

TABLE 12. EQUIPMENT REGULATED UNDER 40 CFR PART 264 SUBPART BB

Hazardous Waste Management Unit (P&ID Number)	Location at the UMCDF	Type of Equipment	Equipment Identification Number ^b	Method of Compliance ^a
Agent Holding Tank (UM-01-D-535)	SDS Room	Ball or plug valves (34)	V-51, V-138, V-9645, V-9829, V-9830, V-9831, V-9838, V-9839, V-9840, V-9841, V-9842, V-9843, V-9844, V-9846, V-9848, V-9850, V-9852, V-9854, V-9855, V-9856, V-9857, V-9858, V-9859, V-9867, V-9868, V-9869, V-9871, V-9872, V-9873, V-9874, V-9875, V-9876, LIT-64-1971, LIT-64-1972	ACAMS
		Check valves (5)	V-56, V-9847, V-9851, V-9866, V-9870	
		Control valves (5)	LV-9839, LV-9845, LV-9846, HV-9847, LV-9852	
		Pressure safety valves (5)	PSV-025, PSV-9841, PSV-9842, PCV-9843, PCV-9844	
		Hose connection	SP-130	
		Pumps (2)	ACS-PUMP-401, ACS-PUMP-402	
		Tank	ACS-TANK-108	
		Filter	ACS-FILT-9002A	
Heel Transfer System (UM-01-D-593)	Munitions Processing Bay of the MDB	Check valves (2)	V-9113, V-9213	ACAMS
		Plug valves (8)	V-9101, V-9104, V-9105, V-9106, V-9201, V-9204, V-9205, V-9206	
		Pumps (2)	HTS-PUMP-9101, HTS-PUMP-9201	
		Control valves (2)	XV-9107, XV-9207	
		Flex hose assemblies (3)	SP-368 (2), SP-369 (1)	
		Expansion joints (4)	SP-370 (4)	
Rinsate Tank (UM-01-D-597)	Explosive Containment Vestibule	Ball valves (7)	V-9866, V-9867, V-9868, V-9854, V-9853, V-9859, V-9858,	ACAMS
		Plug valves (27)	V-9843, V-9845, V-9857, V-9839, V-9839, V-9831, V-9837, V-9829, V-9833, V-9834, V-9851, V-9830, V-9838, V-9832, V-9841, V-9842, V-9862, V-9848, V-9846, V-9852, V-9836, V-9835, V-9826, V-9828, V-9826, V-9828, V-9827	
		Gate valves (5)	V-9865, V-9849, PI-9873-, PI-9874-, V-9850,	
		Check valves (6)	V-9844, V-9855, V-9856, V-9847, V-9860, V-9861	
		Control valves (16)	XV-9816, XV-9848, XV-9818, XV-9845, XV-9904, XV-9849, XV-9851, XV-9866, XV-9846, XV-9905, XV-9850, XV-9852, XV-9867, XV-9843	
		Pressure Safety Valves (5)	PSE-9860, PSV-9863, PCV-9868, PCV-9869, PCV-9870	
		Flexible hose assemblies (6)	SP-369 (4) SP-111 (2)	
		Hose Connections (2)	SP-109 (2)	
		Pumps (2)	RCS-PUMP-101, RCS-PUMP-102	
		Tanks (2)	RCS-TANK-101A, RCS-TANK-101B	
		Agitator (2)	RCS-AGIT-101A, RCS-AGIT-101B	
		Heater (2)	RCS-HTR-101A, RCS-HTR-101B	
		Transfers rinsate to LIC1/LIC2 furnace (UM-01-D-598)	Explosive Containment Vestibule (ECV)	
Ball valves (13)	V-9878, V-9879, V-9882, V-9883, V-9880, V-9881, V-9884, V-9885, PI-9884-, V-9897, PI-9886, V-9886, V-9919, V-9877			
Gate Valve (2)	V-9896, V-9920			
Check valves (2)	V-9891, V-9894,			
Control valves (4)	LV-9878, LV-9877, XV-9888, XV-9889			
Pressure Safety Valves (2)	PSV-9885, PSV-9887,			
Pumps (2)	RCS-PUMP-101, RCS-PUMP-102			
Filter (2)	RCS-FILT-102A, RCS-FILT-102B			

TABLE 12. EQUIPMENT REGULATED UNDER 40 CFR PART 264 SUBPART BB

Hazardous Waste Management Unit (P&ID Number)	Location at the UMCDF	Type of Equipment	Equipment Identification Number ^b	Method of Compliance ^a
Transfers rinsate to LIC2 furnace (UM-01-D-546, UM-01-D-598)	Lower Munitions Corridor (LMC) /Liquid Incinerator Room	Plug valves (2)	V-9899, V-9911	ACAMS
		Gate valves (1)	XY-9900-181	
		Ball valves (11)	V-9926, V-9927, V-9930, V-9929, V-9828, V-9902, V-9903, PIT-9893, PSLLL-9893, PI-9907, PIT-9905	
		Check valves (2)	V-9900, V-9901	
		Control valves (5)	XV-9900, XV-9897, FV-9895, XV-9891, XV-9902,	
Transfers rinsate to LIC1 furnace (UM-01-D-526, UM-01-D-598)	Lower Munitions Corridor (LMC) /Liquid Incinerator Room	Plug valves (2)	V-9916, V-9904	ACAMS
		Gate valves (1)	XY-9899-181	
		Ball valves (11)	V-9922, V-9921, V-9925, V-9923, V-9924, PIT-9914, PSLLL-9915, PI-9906, PIT-9904, V-9907, V-9908	
		Check valves (2)	V-9905, V-9906	
		Control valves (5)	XV-9899, XV-9897, FV-9894, XV-9890, XV-9901	
Heel Transfer System to filters (UM-01-D-593)	Munitions Processing Bay (MPB)	Plug valves (1)	V-9931	ACAMS
		Control valves (1)	XV-9898	
		Flex hose assemblies (2)	SP-369 (2)	
Rinsate Tank Filters (UM-01-D-596)	Munitions Processing Bay (MPB)	Ball Valves (11)	V-9898, V-9872,, V-9875, V-9876, V-9871, V-9825, V-9869, V-9874, V-9870, V-9873, V-9869	ACAMS
		Plug Valves (6)	V-9823, V-9820, V-9821, V-9819, V-9822, V-9818	
		Gate Valves (1)	V-9824	
		RCS Filters (4)	RCS-FILT-101A, RCS-FILT-101B, RCS-FILT-101C, RCS-FILT-101D	
		Hose Connections (6)	SP-109	
		Control Valves (24)	XV-9830, VX-9829, XV-9828, XV-9827, XV-9817, XV-9815, XV-9831, XV-9836, XV-9832, XV-9837, XV-9833, XV-9838, XV-9834, XV-9826, XV-9822, XV-9825, XV-9821, XV-9824, XV-9820, XV-9823, XV-9819, XV-9813, XV-9814, XV-9835	
Rinsate Collection BDS Interface (UM-01-D-595)	Discharge from Filters	Ball Valves (3)	V-9933, V-9932, V-9817	ACAMS
		Plug Valves (10)	V-9800, V-9801, V-9802, V-9804, V-9807, V-9808, V-9809, V-9811, V-9814, V-9815	
		Gate Valves (4)	V-9805, V-9806, V-9812, V-9813,	
		Check Valves (2)	V-9803, V-9810	
		Hose Assembly (8)	SP-111 (2), SP-368 (2), SP-369 (4)	
		Air Motors (2)	RCS-AMTR-9102, RCS-AMTR 9204	
		Control Valves (8)	XV-9810, XV-9807, XV-9808, -9811, XV-9812, XV-9800, XV-9801, XV-9802	

Notes:

^a Automatic Continuous Air Monitoring System will provide continuous monitoring.

^b Flexible hose assemblies and slip-on flange connections for pipe spool fit-up do not have equipment identification numbers

ACAMS = Automatic Continuous Air Monitoring System

MDB = Munitions Demilitarization Building

P&ID = Piping & Instrumentation Diagram