ATTACHMENT 1-3
CHWSF INSPECTION SCHEDULE

1.0 INTRODUCTION

1.1 This attachment presents inspection requirements and the inspection schedule for the Central Hazardous Waste Storage Facility (CHWSF) as required by Utah Administrative Code (Utah Admin. Code) R315-264-15 and R315-264-33. This attachment is organized in the following sections:

- General inspection requirements,
- Specific process inspection requirements, and
- References.

2.0 GENERAL INSPECTION REQUIREMENTS: 40 CODE OF FEDERAL REGULATIONS (CFR) 264.15, 264.33; UTAH ADMIN. CODE R315-264-15, R315-264-33

2.0.1 U.S. Army Dugway Proving Ground (DPG) has developed a written inspection schedule (Table 1) for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that is important for preventing, detecting, or responding to environmental or human health hazards Copies of the inspection schedule and completed inspection logs shall be maintained for each building or hazardous waste management unit that is subject to regular inspection or contains equipment that is subject to regular inspection. Inspection schedules and inspection logs are included as figures in this attachment. They shall be retained for a period of at least three years as required by Utah Admin. Code R315-264-15(d).

2.0.2 Sumps in the Container Storage Building shall be inspected every working day. All spills, leaks, or other problems shall be cleaned up and corrected as soon as possible, but not later than 24 hours after the spill, leak, or problem is discovered. If substances are found in a sump, the source of the release will be located.

2.1 TYPES OF PROBLEMS: 40 CFR 264.15(b)(3); UTAH ADMIN. CODE R315-264-15(b)(3)

2.1.1 The types of problems which are looked for during the inspection are listed in the various inspection schedules in this attachment.

2.2 FREQUENCY OF INSPECTIONS: 40 CFR 264.15(b)(4); UTAH ADMIN. CODE R315-264-15(b)(4)

2.2.1 The frequency of inspection of each item is listed in the inspection schedule. The inspection frequency is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections.

3.0 SPECIFIC PROCESS INSPECTION REQUIREMENTS: 40 CFR 264.15(b)(1); UTAH ADMIN. CODE R315-264-15(b)(1)

3.0.1 This section presents inspection requirements for the following equipment or facilities:

- Containers,
- Tank Systems,

- Waste Piles,
- Surface Impoundments, and
- Incinerators.

3.1 CONTAINER INSPECTION: 40 CFR 264.174; UTAH ADMIN. CODE R315-264-174

3.1.1 Inspection of the CHWSF will be conducted as outlined in Table 1 and the results will be filed in the operating record. Workday and weekly inspections of the storage facility shall be conducted. The containers and containment system shall be examined weekly for leaks, spills, and deterioration caused by corrosion or other factors. Examples of inspection logs used by the operator of the CHWSF for inspection of the CHWSF buildings, security devices, safety equipment, emergency devices and are provided in Figure 1 through Figure 5.

Table 1.
Inspection Schedule for the Central Hazardous Waste Storage Facility

Frequency	Item	Types of Problems
Each Workday	Loading/unloading area	Check for spills, debris; check for accessibility, obstructions
Each Workday	Exterior site appearance	Check for spills, debris
Each Workday	Fences, gates, locks	Check for unsecured gates, fences, and locks
Each Workday	Interior site appearance	Check for spills, debris, disorganized stacking or arrangement
Weekly	Building construction	Check for damage to building, i.e., corrosion, cracks, leaks
Weekly	Fences, gates and locks	Check for corrosion, damage
Weekly	Surrounding area	Check for leakage from building, waste, stressed vegetation
Weekly	Warning signs	Check for damage, illegibility, absence of signs
Weekly	Ventilation system	Check for inoperability or improper functioning
Weekly	Concrete Floor Slab	Check for cracks or spalling, evidence of leakage
Weekly	Containment Curbs	Check for cracks or spalling
Weekly	Pallets	Check for damage, i.e. warping, broken wood, nails missing
Weekly	Aisle space	Check for blocked aisles, inadequate aisle space
Weekly	Drums	Check for leakage, corrosion, damage, dents
Weekly	Drum labels	Check for improper identification, missing date
Weekly	Use of pallets	Check for drums not stacked on pallets
Weekly	Sealing of containers	Check for improperly sealed containers
Weekly	Height of drums	Check for drums stacked too high
Weekly	Drum bays	Check drum labels for incompatible wastes stored in the same bay
Weekly	Self-contained breathing apparatus	Check for sufficient pressure, defects, accessibility
Weekly	Respirators	Check for inadequate inventory, damage
Weekly	Goggles	Check for inadequate inventory, damage
Weekly	Face shield	Check for inadequate inventory, damage
Weekly	Rubber gloves	Check for inadequate inventory, damage
Weekly	Coveralls	Check for inadequate inventory, damage
Weekly	Spill response equipment: Self-contained breathing apparatus Spill control pillows Chemical absorbent material Various sized drum plugs Recovery drums Drum bung wrench (non-sparking) Teflon thread sealant	Check for inadequate inventory, damage

Table 1. Inspection Schedule for the Central Hazardous Waste Storage Facility		
Frequency	**Item**	**Types of Problems**
	Tape first-aid kit ABC fire extinguisher (dry-chemical) Eye was bottle Broom, rubber dust pan Paper towels Flashlight Stop-leak putty Shovel (non-sparking)	
Weekly	Fire Extinguishers A,B,C: Exit at north end of warehouse A,B,C: South end of warehouse Dry Chem type: North end of warehouse Dry Chem type: South end of warehouse Type A: office trailer	Check for adequate charge and pressure, deterioration damage, proper location
Weekly	Eye wash station	Check for sufficient pressure, malfunctions, leaking seals, damage. Fluid will be changed periodically.
Weekly	Emergency shower station	Check for adequate water pressure, adequate volume (tank at least ½ full), capacity of septic tanks adequate, drains operational
Weekly	First aid kit	Check for missing supplies, damage
Weekly	Telephones: 1. South warehouse entrance 2. North fence entrance inside compound 3. Inside office 4. Stark Road	Check for power failure
Weekly	Alarm system: 1. South warehouse entrance 2. North warehouse entrance 3. Center of warehouse	Check for power failure
Weekly	Wind directional device	Check for damage, interference

3.2 TANK SYSTEM INSPECTION: 40 CFR 264.195; UTAH ADMIN. CODE R315-264-195

3.2.1 DPG will not operate tank systems at the CHWSF and is, therefore, exempt from these requirements.

3.3 WASTE PILE INSPECTION: 40 CFR 264.254(b); UTAH ADMIN. CODE R315-264.254(b)

3.3.1 DPG will not operate a waste pile at the CHWSF and is, therefore, exempt from these requirements.

3.4 SURFACE IMPOUNDMENT INSPECTION: 40 CFR 264.226(b); UTAH ADMIN. CODE R315-264.226(b)

3.4.1 DPG will not operate a surface impoundment at the CHWSF and is, therefore, exempt from these requirements.

3.5 INCINERATOR INSPECTION: 40 CFR 264.347; UTAH ADMIN. CODE R315-264-347

3.5.1 DPG will not operate a hazardous waste incinerator at the CHWSF and is, therefore, not regulated under these requirements.

Figure 1. Facility Design, Maintenance, and Operation Inspection for the Central Hazardous Waste Storage Facility Container Storage Buildings

DATE: _____
TIME: _____

SIGNATURE OF INSPECTOR: _____ SIGNATURE OF SUPERVISOR: _____

FACILITY DESIGN, MAINTENANCE & OPERATION INSPECTION

Inspection items for compliance with UAC R315-264-31. Facility Design & Operation = Must be designed, constructed, maintained and operated to minimize possibilities of releases of hazardous waste into ground, air or water which could threaten human health or the environment

Items Inspected	Problems to Look For	Problems Found	Notations/Observations	Action Taken & Date
Structure and physical operations of facility outside and inside	CHECK FOR THE FOLLOWING:			
ITEM #1	Obvious building damage to sides and top.			
ITEM #2	Doors functional. No signs of damage or deterioration.			
ITEM #3	Monitoring equipment is functional. No apparent defects of damage. No indications from monitoring equipment of possible releases.			
ITEM #4	Floors are in proper condition to withstand storage of hazardous waste.			
ITEM #5	Ventilation system is manually or electronically functional.			
ITEM #6	Emergency hardware is in place and operational. No signs of malfunction or damage in deterioration.			
ITEM #7	Fire suppression system installed with sufficient water supply and adequate volume and pressure, where applicable.			
ITEM #8	Adequate electrical power supply to facility.			
ITEM #9	Properly identified breaker box easily located in emergency.			
ITEM #10	Leaks, deterioration, damage deficiencies.			
ITEM #11	Decontamination station with shower and eyewash 10 seconds from Corrosive Area.			
ITEM #12	Unloading and loading area accessible and unobstructed.			
ITEM #13	Security devices, safety devices and emergency equipment properly inspected.			

UAC Utah Administrative Code

Figure 2. Inspection of Storage Areas at the Central Hazardous Waste Storage Facility

DATE: ____
TIME: ____

SIGNATURE OF INSPECTOR: _____ SIGNATURE OF SUPERVISOR: _____

Note: This inspection is performed routinely on a weekly basis or daily when used to ensure leaks or deterioration of containers do not go undetected.

Areas Subject to Spills are inspected weekly or daily when used.

Types of Problems – Deterioration, leaks, rust, dikes, ice, discoloration, damaged containers, pallet condition, bung and cap fittings, and other obvious problems, which could lead to a release of hazardous waste or pose a threat to human life.

Container Storage Building

Items Inspected	Hazard Class	No. of Drums	Problems Found	Notations/Observations	Action/Date
Bay 1					
Bay 2					
Bay 3					
Bay 4					
Bay 5					
Bay 6					
Bay 7					
Bay 8					
Bay 9					
Bay 10					
Bay 11					
Bay 12					
Bay 13					
Bay 14					
Bay 15					
Bay 16					

TOTAL INVENTORY_____

No. Number

DATE: _____
TIME: _____

SIGNATURE OF INSPECTOR: _____ SIGNATURE OF SUPERVISOR: _____

Note: This inspection is performed routinely on a weekly basis or daily when used to ensure leaks or deterioration of containers do not go undetected.

Areas Subject to Spills are inspected weekly or daily when used.

Types of Problems – Deterioration, leaks, rust, dikes, ice, discoloration, damaged containers, pallet condition, bung and cap fittings, and other obvious problems, which could lead to a release of hazardous waste or pose a threat to human life.

Loading and Unloading Areas

Items Inspected	Hazard Class	No. of Drums	Problems Found	Notations/Observations	Action/Date
Outside Container Storage Building					
Inside Container Storage Building					

No. Number

Figure 3. Inspection of Security Devices and Safety Equipment at the Central Hazardous Waste Storage Facility

DATE: _____
TIME: _____
SIGNATURE OF INSPECTOR: _____ SIGNATURE OF SUPERVISOR: _____

INSPECTION OF SECURITY DEVICES AND SAFETY EQUIPMENT

Note: This inspection is performed routinely on a weekly basis to ensure security devices are operational. These items are tested and maintained as necessary to assure proper operation in time of emergency.

Items Inspected	Types of Problems to Look For	Problems Found	Notations/Observations	Remediation Taken and Date
INTERNAL ALARM & COMMUNICATION SYSTEMS: A. Air pressure horns 1. South warehouse entrance 2. North warehouse entrance 3. Center of warehouse	Alarms functional, signs of rust or deterioration or possible damage. Easily accessible to inside or outside situations.			
TELEPHONES OR HAND-HELD RADIOS: 1. South entrance to warehouse 2. North fence entrance outside compound 3. Inside office 4. Stark Road	Telephone working, radio has adequate power source. Located in easy access for inside or outside activity. PA system functional.			
GATES, LOCKS AND CHAINS: 1. North gate 2. South gate 3. Container Storage Building 4. PCB Storage Building 5. Control of unauthorized entry to area 6. Adequate outside lighting	Gates easily opened freely with no extra effort. Keys open locks with no undue resistance. Locks are free from rust, deterioration, damage, ice other matter which prohibit easily releasing lock and chain. Apparent signs of forced entry by unauthorized persons. Fencing is intact and no presence of defects prohibiting its purpose.			
SIGNS POSTED AS REQUIRED: Posted on all entrances of compound.	Signs have not been removed. Signs are legible and clearly explain hazards present and required actions in case of emergency and other rules of entry.			

PA Public Address
PCB Polychlorinated Biphenyls

Figure 4. Inspection of Safety Equipment at the Central Hazardous Waste Storage Facility

DATE: _____
TIME: _____
SIGNATURE OF INSPECTOR: _____ SIGNATURE OF SUPERVISOR: _____

INSPECTION OF SECURITY DEVICES AND SAFETY EQUIPMENT

Note: This inspection is performed routinely on a weekly basis to ensure security devices are operational. These items are tested and maintained as necessary to assure proper operation in time of emergency.

Items Inspected	Types of Problems to Look For	Problems Found	Notations/Observations	Remediation Action Taken & Date
SELF CONTAINED BREATHING APPARATUS: 1-North entrance trailer	Sufficient pressure, deterioration of rubber pieces, defects in operation, easily accessible to inside or outside needs.			
EMERGENCY EYEWASH STATION: Portable, 4-gallon capacity unit	Sufficient pressure, malfunctions, leaking seals, rust, deterioration, damage which prohibits proper use, located in correct place.			
PORTABLE FIRE EXTINGUISHERS: (FIRE CONTROL EQUIPMENT) 1-A,B,C Exit, North end of warehouse 1-A,B,C, South end of warehouse 1-Dry Chemical type, North end of warehouse 1-Type A office trailer	Adequate charge and pressure, deterioration of hoses or moving parts, damage or defects which could prohibit proper use, easily accessed for inside or outside use.			
EMERGENCY SHOWER STATION: Southeast corner Building 6672 1-Emergency shower 1-Emergency eyewash	Operational within 10 seconds of corrosive storage, water pressure adequate (pump operating), water supply at adequate volume, (water tank 55-gallon capacity at least ½ full), drains are operational, remaining capacity of septic tank is adequate.			
ALARM SYSTEMS: 3-Air pressure horns 1-South warehouse exit 1-North warehouse exit 1-Center of warehouse	Capable of operating automatically or manually, smoke detection or fire alarm system incorporated in alarm system, will alert people within a 2-mile radium of emergency situation.			
TELEPHONE OR EMERGENCY COMMUNICATION DEVICES: 4-Telephones 1-South exit of warehouse 1-North gate compound 1-Inside office 1-Stark Road	Telephone functioning properly, communication device has adequate power source, accessible to inside or outside activity, PA system able to alert people inside compound and warehouse facility at sufficient sound levels.			

Items Inspected	Types of Problems to Look For	Problems Found	Notations/Observations	Remediation Action Taken & Date
MATERIAL HANDLING EQUIPMENT: 1-Diesel-powered forklift 1-Drum lifting device 1-Drum handling cart	Forklift has been inspected and is readily operational (fuel supply, fluid levels, electrical charge, water level, current), rust, damage, deteriorating or defects prohibiting proper use of drum-handling equipment.			
EXITS/PANIC HARDWARE: Personal door (manual) 1-South end of warehouse 1-North end of warehouse	Easily opened, no obstruction in path leading from exits, panic hardware in and operational, no deterioration or defects prohibiting proper use.			
LIGHTING SOURCES: 1-Emergency lighting installed on east and west walls inside facility 1-Explosion proof lighting throughout inside of facility	Emergency lights work when tested, lighting is adequate enough to see possible problems inside storage facility, sufficient for normal activity, bulbs need replacement, no rust, deterioration, or defects with switches.			
VENTILATION SYSTEMS: Manually operated side vents along east and west sides of facility.	Functions with automatic or manual operation device, no defects with opening device, rust, deterioration, damage, air exchange not prohibited from adequately ventilating facility flow.			
LOADING & UNLOADING AREAS:	Clear from obstructions, foreign matter, ice, snow, etc.			
PROTECTIVE CLOTHING: Rubber gloves Safety goggles Full face shield Full face respirator Aprons Rubber boots Safety shoes Safety coated coveralls Hard hats	PPE deterioration, dirty, defects, tears, damage, properly located for easy access inside or outside facility (located 3 sets of items in PPE cabinet in warehouse, 2 sets of items in office trailer, 1 set per employee) excess replacement protective gear will be located in trailer.			
WIND DIRECTIONAL DEVICE:	Operates constantly without interruption, defect, damage clearly visible from all angles, no deterioration which could prevent proper operation.			

PA Public Address
PPE Personal Protective Equipment

Figure 5. Inspection of Emergency Devices at the Central Hazardous Waste Storage Facility

DATE: _____
TIME: _____

SIGNATURE OF SUPERVISOR: _____

INSPECTION OF EMERGENCY DEVICES

Note: This inspection is performed routinely on a weekly or daily basis when used to ensure emergency devices are operational. These items are tested and maintained as necessary to assure proper operation in time of emergency.

Items Inspected	Types of Problems to Look For	Problems Found	Notations/Observations	Remediation Action Taken & Date
SPILL RESPONSE EQUIPMENT: 1. Self-contained breathing apparatus 2. Spill control pillows 3. Chemical absorbent material 4. Various sized drum plugs 5. Recovery drums 6. Drum bung wrench 7. Teflon thread sealant tape 8. First-aid kid 9. ABC fire extinguisher (dry chemical) 10. Eye wash bottle 11. Broom, rubber dust pan 12. Paper towels 13. Flashlight 14. Stop leak putty	Deterioration, rust, malfunction, sufficient quantity, properly located and easily accessed for emergency use, other obvious problems which could prohibit proper use of these items in time of emergency.			
TELEPHONES OR HAND-HELD RADIOS:	All telephones located in the area need to be operational and available for use in time of emergencies (see security device inspection).			
ALARM SYSTEMS:	Alarm systems in CHWSF should be operational when tested and available to inside or outside emergencies, operated either automatically or manual when needed.			
MONITORING SYSTEM:	None installed.			
DECONTAMINATING STATIONS:	Shower located inside container storage building, must check for adequate pressure and volume in tank, locate eyewash when handling hazardous waste items.			
FIRE SUPPRESSION SYSTEMS:	None installed.			

CHWSF Central Hazardous Waste Storage Facility