



☆☆☆☆ WE ARE THE WARFIGHTER'S HOME ☆☆☆☆



**Environmental Operations Management (EOM) Course –
Refresher**

Introduction

Document Review

Hazardous Waste

Hazardous Materials

Clean Water

Clean air

Solid Waste

- You've been assigned duties related to Hazardous Material (HM) or Hazardous Waste (HW) Management
- Learn what requirements apply at JBLM to protect the environment
- Learn how to build an effective Environmental Compliance Binder
- Learn how you and your organization can support JBLM as a sustainable installation

Document Review



1. **HJB Form 948: Environmental Program Manager Documents Checklist**
2. **HJB Form 949: Facility Documents Checklist**
3. **HJB Form 950A*: Satellite Accumulation Area Checklist**
4. **HJB Form 951*: Facility Hazardous Material Checklist**
5. **HJB Form 952: Facility Operational Area Checklist**

To receive checklists/regulatory guidance, please contact the Environmental team at: usarmy.jblm.id-readiness.list.dpw-env-training@army.mil

- Best management practice to maintain a binder of checklists/ documentation

* - required

Who Keeps a Binder?

- Unit level keeps binder with all the applicable documentation.

ENVIRONMENTAL
COMPLIANCE
FACILITY
DOCUMENT FILES

Unit Level

(TYPE THE INDIVIDUAL UNIT NAME)

IMPORTANT: This book contains the Joint Base Lewis-McChord environmental compliance program supporting documents files IAW Federal, State and military regulations.

(Type in building number, office name and phone number)

**Your binder should be organized like this, the same order as the Form 949
Facility Document Checklist**

Tab 1: EOM Course Training Certificate

Tab 2: Customer Service Agreement (CSA)- (HJB Form 223)

- Update annually with DPW Environmental Services

Tab 3: HM Inspection Documentation (HJB Form 951)

- 1 year of quarterly HM Inspections

Tab 4: HW Inspection Documentation (HJB Form 950A)

- 3 years of weekly HW Inspections

Tab 5: Spill Prevention and Response Training Documentation

- Annual training
- Need contents of what was covered in the training and a roster of attendees

Tab 6: Environmental Operating Permit (EOP)

Tab 7: Completed JBLM Internal EPAS Assessments

Once set up, do periodic checks to keep it up-to-date.

The only two completed checklists that must be in the binder are at Tab 3 and Tab 4, to prove inspections are being done

Note: 7 required tabs that match the checklist requirements of HJB Form 949



This is an online annual refresher training. If your training expired, you must retake the 8hr initial training in person

TAB 1.

Are current Environmental Operations Management (EOM) class certificates of completion on file for appointed environmental personnel? Environmental Officer (EO), Waste and Materials Tech, Civilian Manager Appointee.

NOTE: (A Waste and Materials Tech must be appointed for those areas that control and maintain a Satellite Accumulation Area (SAA)).

*CRITICAL

*Anytime you see “**CRITICAL**” on an environmental checklist, it means the requirement is a legal requirement enforced by a non-DOD agency (i.e. EPA, Department of Ecology)

The CSA is an agreement between organization and Environmental Service techs for HazWaste pick up

TAB 2.

Is the facility Environmental Operations Customer Service Agreement (CSA) form current and dated as received by DPW ED?

NOTE: (CSA is only required for those facilities that control and maintain Satellite Accumulation Areas (SAA) or accumulate and manage universal waste in their area of operations.)

The CSA needs to be updated annually or if there is a change of command/leadership

POC for CSAs: DPW ED Hazardous Waste Environmental Protection Specialist



You are only required to maintain 4 quarterly HM inspection checklists at any one time in the binder. If you leave extra in your binder, they then become inspectable items.

TAB 3.

Are the facility hazardous material storage area inspections documented quarterly using HJB Form 951 and maintained for one year? Are pollution prevention approved HJB Form 953 quarterly inventories and memorandums of approval for all restricted chemicals on file when required?

If checklists have not been completed and filed for the allotted timeframe, write a memorandum for record explaining why the inspection(s) were missed.

Note: (Materials "NOT" procured or tracked through the EESOH-mis portal will have to submit an inventory HJB Form 953 to the Environmental Compliance office quarterly

POC for Quarterly Inventories: DPW ED, 253-966-6469

You are only required to maintain 36 HJB 950A checklists at any one time in the binder. If you leave extra in your binder, they then become inspectable items.

TAB 4.

Are the facility Satellite Accumulation Area (SAA) inspections documented weekly using HJB Form 950A, or an approved equivalent document and maintained on file for three years?

Note: (Weekly inspections are only required for those facilities that control and maintain a Satellite Accumulation Area (SAA)).

CRITICAL

If checklists have not been completed and filed for the allotted timeframe, write a memorandum for record explaining why the inspection(s) were missed.

POC for HW Inspections: DPW ED Hazardous Waste Environmental Protection Specialist



Anyone who works around Hazardous Material and Waste has a potential to spill it and needs spill training.

TAB 5.

Is spill prevention and response training documented annually and available for one year?

Spill Training must be renewed annually.

Note: (A document describing the content of response training completed along with a dated sign-in roster will satisfy this requirement.)

Reference: WAC 173-303-330

Training can be done via PowerPoint, through mock spill exercise, or by responding to a real-world spill and documenting the actions taken.

Need help with training?

Contact Environmental Compliance assistance at (253) 966-6453



Keep your Spill Contingency Plan Site Map in the binder, as well as posting in the required locations.

SPILL CONTINGENCY PLAN SITE MAP (Motor Pool)

IN CASE OF EMERGENCY:
(HAZMAT, SPILL, EXPLOSION, FIRE)

Date created _____

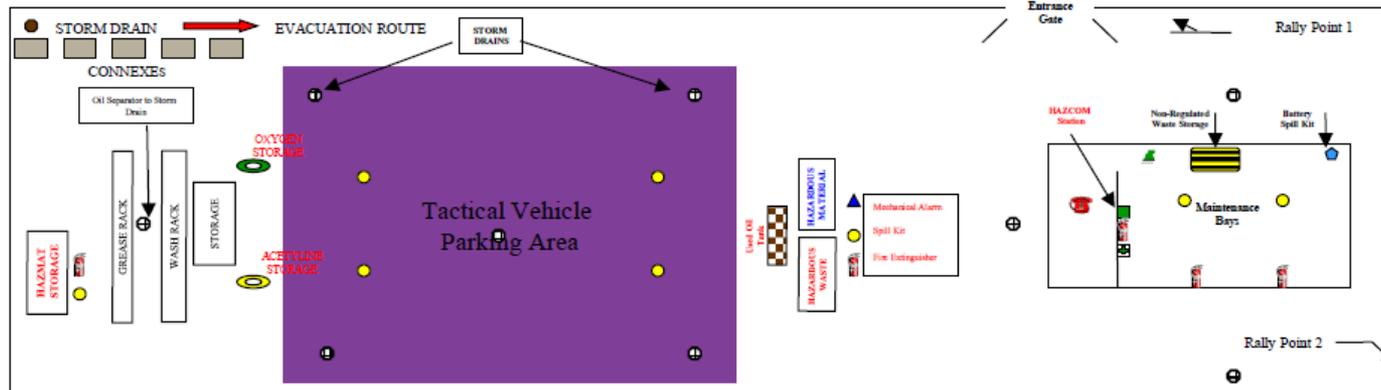
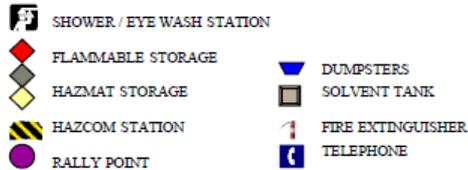
CONTACT:

EMERGENCY (FIRE/MEDICAL/POLICE): 911
 JBLM FIRE DEPARTMENT 911
 UNIT ENVIRONMENTAL OFFICER 967-XXXX
 NCOIC 967-XXXX
 COMMANDER/1SG: 967-XXXX
 AFTER DUTY HOURS (SDO/SDNCO) 967-XXXX
 JBLM ENV OPS RESPONSE TEAM 967-4786
 JBLM SAFETY OFFICE 967-3079

IMMEDIATE ACTION PROCEDURES

WARNING: Spill will always be approached from upwind where possible. Avoid physical contact with spilled chemicals/petroleum products.

- 1. PROTECT YOURSELF AND OTHERS FROM HARM.**
 - Evacuate the premises if necessary.
 - Use appropriate clothing.
 - Extinguish smoking material away from the spill.
 - Remove other sources of potential ignition.
- 2. STOP THE FLOW IF POSSIBLE (ONLY IF IT CAN BE DONE SAFELY)**
 - Close the valve.
 - Turn a ruptured or punctured container so the point of exit is up.
 - Place the leaking container in another container (over-pack drum)
- 3. NOTIFY THE FIRE DEPARTMENT, 911 AND THE UNIT CHAIN OF COMMAND.**
 - Contact the Fire Department, which has trained responders that can be immediately dispatched to the scene.
 - Report all spills, regardless of quantity.
- 4. CONFINE THE SPILL IF POSSIBLE (ONLY IF IT CAN BE DONE SAFELY)**
 - Protect floor or storm drains. (cover drains with a mat, surround with absorbent material)
 - Shovel sand, sawdust, sweeping compound, or place sandbags in path of flow.
 - Place sweeping compound, absorbent pillows, pad, or mats to confine the spill.



**EOPs are prepared and administered at the Battalion/Squadron level.
Only certain portions of the EOP are applicable to Company/Troop/
Flight operations.**

TAB 6.

Is the facility Environmental Operating Permit (EOP) current?

Note: (This question "IS NOT" applicable for certain facilities approved by the JBLM Environmental Management System (EMS) coordinator.)

What is EOP? A program to assist unit with environmental compliance by providing a unit specific packet of essential information, requirements, and guidance. It contains essential information in an easy to find format allowing personnel who are trained and untrained in environmental requirements to follow the right procedures.

Currently, only Military organizations have EOPs.
If you work for a civilian organization this tab can be left empty.

REQUIRED: Keep 3 years of past inspection documents

Compliance inspection/verification documents, and
miscellaneous documents



Hazardous Material (HM) Management



A product that requires special management due to hazardous characteristics (T**oxicity, **R**eactivity, **I**gnitability, **C**orrosivity (**TRIC**)) that could pose dangers to human health or the environment**

Hazardous Materials are categorized into two hazard types

Physical Hazards

Can cause explosions, fires, violent chemical reactions and other hazardous situations

- Compressed Gases
- Explosives
- Fire Hazards
- Unstable or Reactive Chemicals

Health Hazards

Can cause illness or injury when exposed to hazardous chemicals through breathing, swallowing, skin and/or eye contact

- Contact can be made in all 3 states: solid, liquid or a gas
- Dust, Fumes, Vapor and Mist

- Manufacturer issued a Safety Data Sheet (SDS)
- NSN has a “Y” HMIC Code in Fedlog
- Label lists one or more of the signal words:
 - **Caustic**
 - **Danger**
 - **Caution**
 - **Flammable**
 - **Poison**
 - **Warning**
 - **Corrosive**
 - **Volatile**
- Label has Globally Harmonized System (GHS) Symbols

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/ burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
<p>Flame over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment (Non Mandatory)</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

For more information:
 **OSHA** Occupational Safety and Health Administration
www.osha.gov (800) 321-OSHA (6742)



Safety Data Sheets are required by law! 29 CFR 1910.1200

A SDS provides users of hazardous materials with:

- The chemical components in the product
- How to store the product or what not to store with it based on pH
- How to safely handle the product
- What to do in case of a spill
- What to do and not to do if you are exposed
- What kinds of symptoms to watch for

SDS MUST MATCH the hazardous material product on site by:

- Name of Product (Trade Name)
- Manufacturer
- Date (Date of SDS cannot be after date of manufacture of product)
- Part Number, Product Code, Product Identifier – if indicated on SDS
- Container size (unit of measure) – if indicated on SDS

SDS MUST be on hand for each material stored or in use

SDS MUST be available to all personnel

Time is crucial ~

Use dividers to keep your SDS book organized by commodities for easy access in an emergency





HAZARDOUS MATERIAL CONTROL POINT (HMCP)



253-966-0472

Refer all vendors to the Pollution Prevention Program, Bldg 1210,
253-966-6469

Intent is to enhance mission readiness, reduce and prevent pollution by controlling and reducing the acquisition, use, handling, and disposition of HM.

- Identify all personnel responsible for lifecycle management of HM down to the unit/shop level
- Ensure training, and operate in compliance with HAZMIN including utilization of Enterprise Environmental Safety and Occupational Health Management Information System (EESOH-MIS)
- Procure all HM thru GCSS, HMCP, EESOH-MIS.
- Enforce prohibition from purchasing HM with GPC Card.
 - Exceptions to be approved by Garrison Commander on a case-by-case basis
- Ensure all HM is recorded quarterly in EESOH-MIS (or through submitting the HJB 953 inventory form), and material is properly rotated, stored, and bar-coded.

Purchasing HM on a government credit card is **NOT** authorized

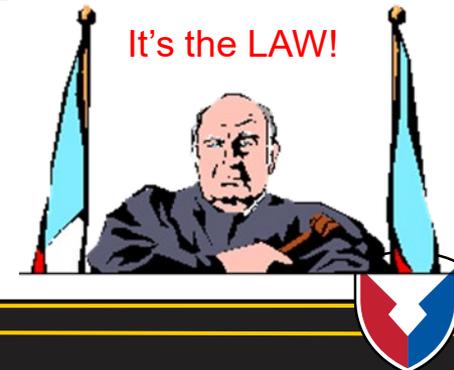
- Per DA Government Purchase Card (GPC) Operating Procedures and AR 200-1
- In an emergency type situation: *“Purchase of hazardous/toxic materials on a GPC **must be pre-authorized** by the local authority.”*
JBLM local authority is the DPW ED Pollution Prevention Program Manager
 - Authorization is only granted for emergency purchases or if the HMCP is unable to make the purchasing action
 - Authorization is generated using EESOH-MIS
 - An authorization report is required for each credit card purchase; copy is furnished to the applicable GPC requestor.



- Lists HM items authorized specifically for use at your location
- Per Army policy (DA Pam 710-7), all organizations that use hazardous materials on JBLM must comply with AUL requirements
- The ONLY HM authorized at your unit/activity are those found on your AUL
- AULs contain NSN, item description, unit of measure/unit of issue, and maximum quantities you are allowed to have on-hand
- Your AUL can be viewed and edited in EESOH-MIS
- AUL requests can be sent to the Environmental Compliance Office team.
- If you find material at your place of work that is not on your AUL, either request to add it to your AUL if you want it, or waste it out through its designated waste stream.

ALL hazardous materials must be tracked on JBLM. DO NOT BRING MATERIALS FROM HOME.

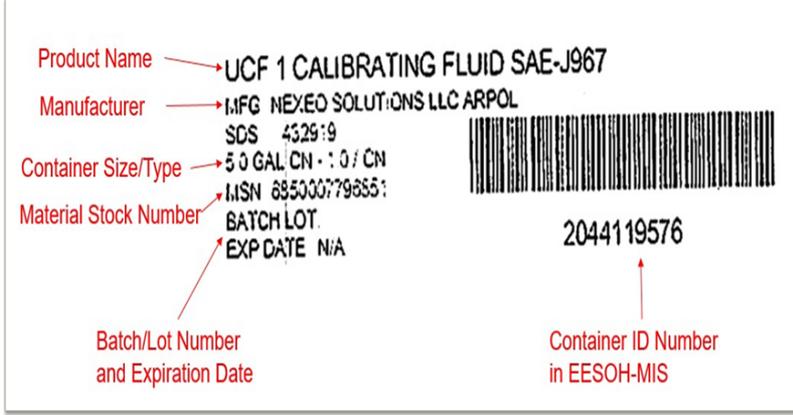
- Federal laws, Executive Orders and DoD/Army policies require purchase of environmentally preferable products (EPP)
- This DOES NOT apply to tactical equipment and materials used in or on tactical equipment unless specified in TM or other standardized documentation – re-refined engine oil and coolants are included in SA requirement
- DOES apply to ALL other purchases, to include items commonly purchased, such as office supplies
- Alternative fuel requirements apply to certain types of government vehicles, such as those leased under GSA. Many of them are E85 - Ethanol compatible and must be fueled as such



- Always store in containers with securable caps and lids and in secondary containment.
- Always store and segregate all hazardous materials IAW manufacture instructions (i.e., container label, SDS, etc.) to prevent reaction, contamination, spoilage or freezing.
- Always store all flammable materials in flammable storage lockers when not in use. Make sure to have a fire extinguisher nearby.
- Always have SDS's available for ALL products.
- Always ensure products are stored to ensure compatibility.

EESOH-MIS: Enterprise Environmental, Safety and Occupational Health- Management Information System

- **REQUIRED** HM tracking system for Army and Air Force
- **EESOH-MIS users must:**
 - Create an Air Force Portal account, then provide the Portal ID to DPW ED
 - Complete a DD2875 (SAAR); DPW ED will provide it partially completed
 - Be designated on the DA1687 (signature card) at HMCP
 - Attend an EESOH-MIS Introduction Course- Held 2nd Monday each month



Product Name → UCF 1 CALIBRATING FLUID SAE-J967

Manufacturer → MFG NEXEO SOLUTIONS LLC ARPOL
SDS 4329:9

Container Size/Type → 5.0 GAL CN - 1.0 / CN

Material Stock Number → MSN 8850007798551

Batch/Lot Number and Expiration Date → BATCH LOT
EXP DATE N/A

Barcode

Container ID Number in EESOH-MIS → 2044119576

DO NOT store bulk amounts of:

- Oils
- Fuel
- Hydraulic Fluid
- POL

**Anywhere except at the
Combat Repair Team (CRT) in
the Motor Pool**

NO Stockpiling:

Maintain only 7 to 15 day stock



YES!



Bulk Storage

Daily In-Use Storage



Storage Sheds



Stackable Totes



C-Shed



Poly-Pack



Corrosives Locker



Flammable Storage Locker

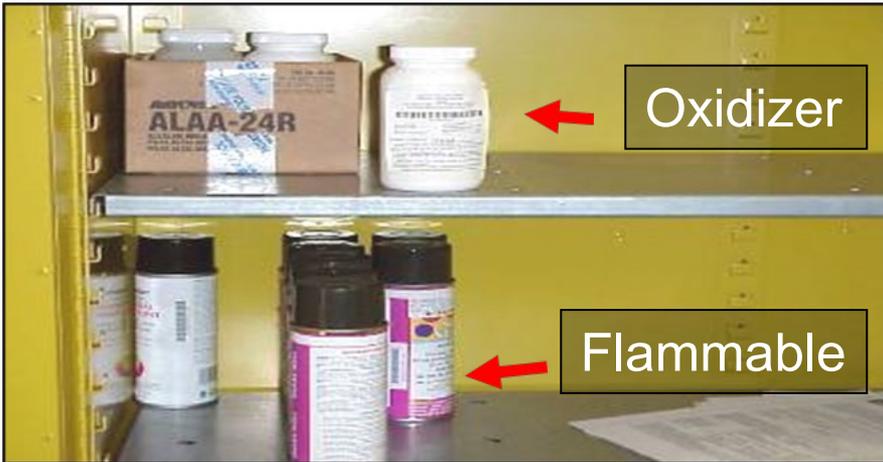




Corrosives and flammables stored together



Flammable gas cylinder stored with corrosive/reactive material



Oxidizer stored with flammable paints



Fertilizers and equipment with fuel stored together



YES!



This is the proper way to manage stored and/or in-use products – use good housekeeping and place pads under products.



NO!



No first-in, first-out inventory management and residue not wiped clean from top of 5-gallon pail. Change pads when saturated.

YES!



NO!



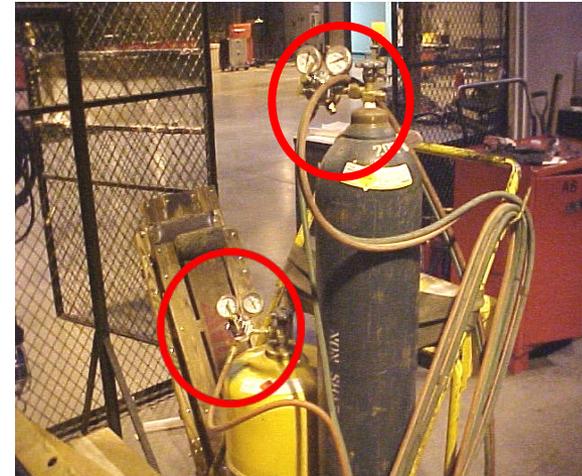
Proper Storage of Compressed Gas Cylinders:

- chained
- stored upright
- bottles properly capped
- duplex hose & regulators removed



NO!
Not secured

YES!



NO!
Gauges left on

NO containers with holes, missing caps, unreadable labels, rusty or leaking containers



HAZARDOUS CHEMICAL WARNING LABEL					
1. CHEMICAL/COMMON NAME					
2. HAZARD CODE		3. NSN/LSN			
4. PART NUMBER					
5. ITEM NAME					
6. HAZARDS <i>(X all that apply)</i>	(1) ACUTE <i>(Immediate)</i>				(2) CHRONIC <i>(Delayed)</i>
	NONE	SLIGHT	MODERATE	SEVERE	
	a. HEALTH				
	b. CONTACT				
	c. FIRE				
d. REACTIVITY					
7. SPECIFIC HAZARDS AND PRECAUTIONS <i>(Including target organ effects) (See MSDS for further information.)</i>					
<h1><u>YES!</u></h1>					
8. PROTECT <i>(X all that apply)</i>		EYES		SKIN	RESPIRATORY
9. CONTACT a. COMPANY NAME					
b. ADDRESS <i>(Street, P.O. Box, City, State, ZIP Code, Country)</i>					
c. EMERGENCY TELEPHONE NUMBER <i>(Include Area Code)</i>					
10. PROCUREMENT YEAR FOR HAZARDOUS CHEMICAL					



For Missing Labels:

- Fill out a DD Form 2522
- Form is on the class CD

DD FORM 2522, OCT 2000

Reset

PREVIOUS EDITION
MAY BE USED.
Adobe Professional 7.0

What are Ongoing HAZMIN Problems?

• Inspections Show:

- Excess material in POL lockers and storage rooms
- SDS not present or updated
- Inventories are not accurate, updated or do not contain enough information to be useful
- AULs are not accurate, updated or used as part of the ordering process
- Chemical incompatibility
- Expired items, which become waste
- Rotating stock, first-in-first-out or expiration date tracking is not performed
- Shelf-Life Extension is not performed
- Free Issue items are not being utilized

What are the HAZMIN Solutions?

- **Inventory Control**

- Know what you have and how much of it

- **Purchase Control**

- Know what is on order and what has been received

- **Minimization**

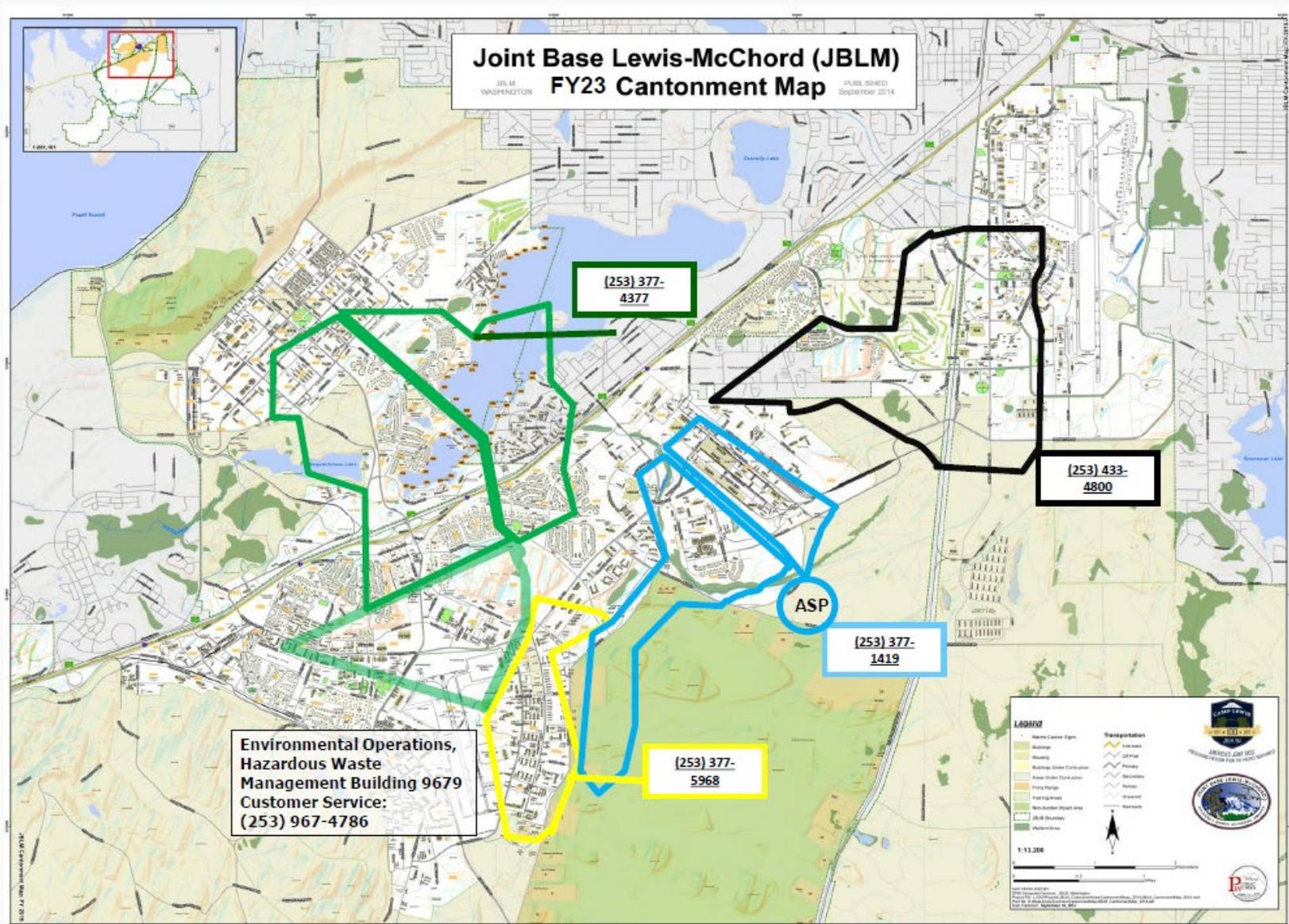
- Only order the size and quantity you need
- Only order a 14–30-day supply. (30-day supply only authorized for training/field events. 15-day supply authorized for normal activities.)
- Use the Shelf-Life Extension System to extend product life.

What's the Big Deal?

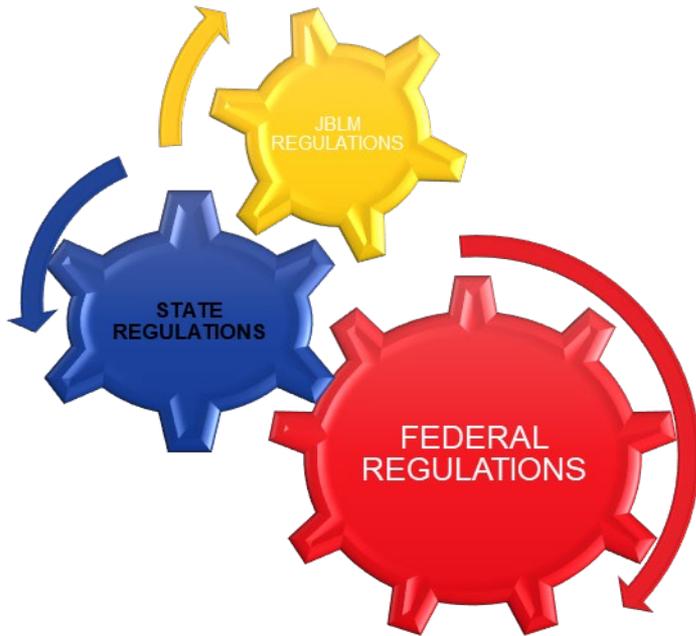
- **Don't Know What You Have**
 - Reordering items that have already been ordered or that are on-hand.
 - Over-ordering for routine maintenance and deployments.
- **Making Your Management Requirements More Difficult**
 - Ordering products that expire and cannot be extended.
 - Ordering products with hazardous vs. non-hazardous characteristics.
- **Potential Fines for Mismanagement**
 - OSHA violations = \$7,500 per violation, per day
 - EPA violations = \$72,115 per violation, per day

Hazardous Waste Management

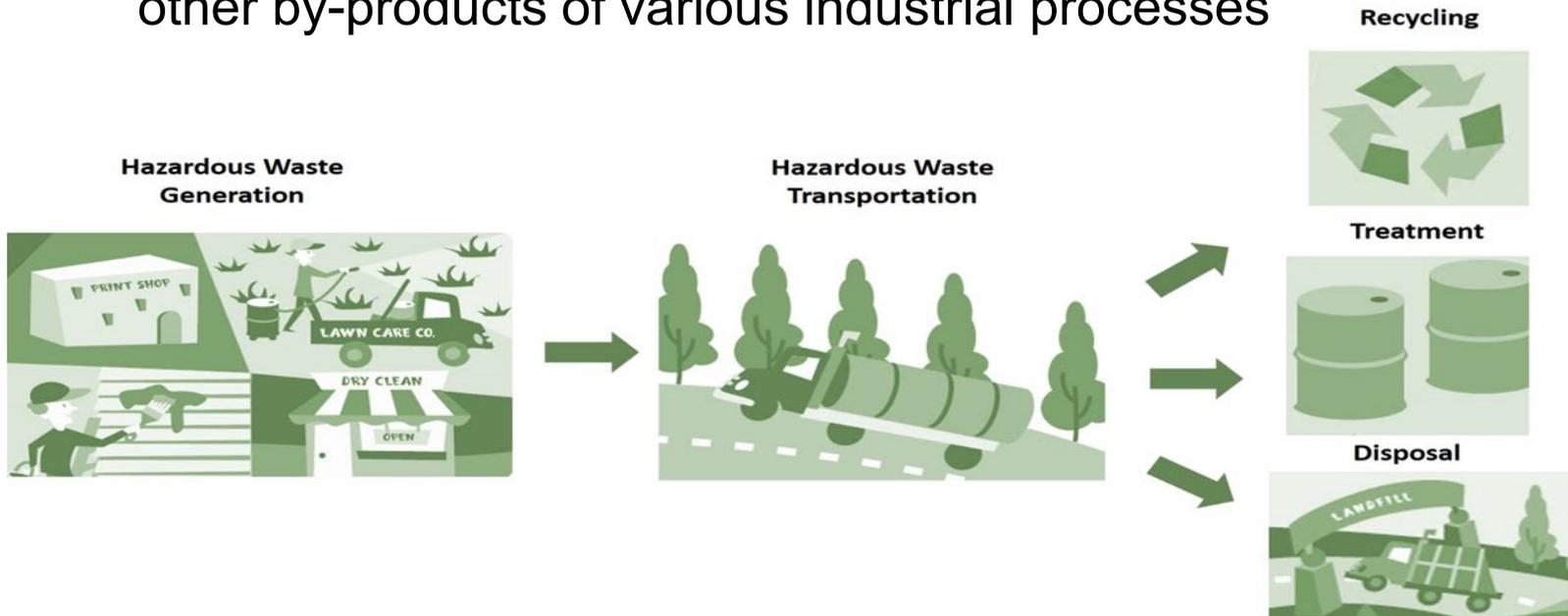




There are regulations and other special considerations that apply to the protection of the environment at JBLM



- Hazardous Waste (HW) is a waste that is dangerous, or has the potential to be harmful to our health or environment
- Hazardous wastes can be in the form of liquids, solids, gases, or sludge
- HW can be process generated, unused, or discarded commercial products; e.g. cleaning fluids, pesticides, or other by-products of various industrial processes



TOXIC

Toxic hazards can cause irreversible damage to specific organs or tissues in the body. They can be acute or chronic and have varied exposure routes of entry.



Examples are:

- Ethylene glycol (antifreeze)
- Asbestos
- Pesticides



REACTIVE

Reactive hazards are characterized by the words unstable, react violently, generate toxic gases, potentially explosive, reacts to or with other compounds and give off heat and fumes.



Examples are:

- Lithium batteries
- Rust removers
- Calcium Hypochlorite Solid > 60% available chlorine



FLAMMABLE – COMBUSTABLE

A solid waste exhibits the characteristic of ignitability capable of sustaining a fire at standard temperature or pressure



Examples are:

- Aviation fuel
- JP-8, JET-A
- Diesel
- Motor Gas (MOGAS)
- Most Aerosols



CORROSIVE

Corrosive hazards are capable of corroding steel, causing internal or external tissue damage. DOT defines corrosiveness in terms of skin damage.



Examples are:

- Strong acids such as battery acid
 - Strong bases such as ammonia, lye or household bleach
- Any product with a pH ≤ 2, or ≥ 12.5**



↓ ↓ State Label ↓ ↓

TOXIC



↓ ↓ Meaning ↓ ↓

"Toxic" means having the properties to cause or to significantly contribute to death, injury, or illness of man or wildlife

PERSISTENT



"Persistent" means the quality of a material that retains more than half of its initial activity after one year (365 days) under ambient conditions

SOLID CORROSIVE



"Solid Corrosive" means it is solid or semisolid which, upon testing, results in a pH less than or equal to 2, or greater than or equal to 12.5

Commander or activity supervisor establishes an account for environmental services by completing an Environmental Operations Customer Service Agreement (CSA) form HJB 223

Customer Service Agreement Hazardous Waste Management			
In order to provide the customer with excellent service, the information below is required. Please complete the form and have the Commander or Facility Supervisor sign for requested service level at each location. Submit the completed form to Public Works via the Environmental Operations Branch, building 1210.			
Parent Organization (MSC/Directorate):			UIC:
Requesting Organization or Activity:			DODAAC:
<i>Commander/Supervisor's Name</i> Last:		First:	
Grade/Rank/Title:	Email:		Phone:
<i>Budget Authority's Name</i> Last:		First:	
Grade/Rank/Title:	Email:		Phone:
Quarterly invoices for waste management services will be submitted to the supported unit or activity for reimbursement through the JBLM Resource Management Office based upon annual IMCOM funding guidance and AR 420-1. Mismanaged or down-graded hazardous materials will result in increased waste disposal charges required to process this waste for off site disposal IAW federal, state and local regulations. I understand that this delegation will supersede any currently on file for my unit or activity.			
I understand that the individuals listed below are the sole individuals authorized to request, adjust services, sign up for Pollution Prevention Equipment and container requirements for my unit or activity. This agreement will expire one year from the date signed and must be updated annually.			
Commander/Supervisor Signature		Date	



<i>Primary Environmental Officer</i>			
Last:	First:	Grade/Rank:	Phone:
<i>Primary Hazardous Waste Technician</i>			
Last:	First:	Grade/Rank:	Phone:
<i>Additional Authorized Personnel</i>			
Last:	First:	Grade/Rank:	Phone:
Last:	First:	Grade/Rank:	Phone:
Last:	First:	Grade/Rank:	Phone:

- All personnel listed are required to attend the EOM class
- Only personnel listed above will be authorized to request and sign for supplies

Hazardous Waste Containers are located in or in the vicinity of the following building(s) (also indicate the primary activity at the site):

Building Number:	Activity:		
<i>Container Site Type</i>	<i>Shed/Tank Number</i>	<i>Shed/Tank Number</i>	<i>Shed/Tank Number</i>
Hazardous Material Shed			
Hazardous Waste Shed			
Solvent Tank			
Used Antifreeze Tank			
Used Oil Tank			
Other (Specify)			
Other (Specify)			

- Make sure all information is accurate to reflect current shed and tank numbers
- All SAA's will be listed
- If organization has a can crusher, make sure that it is listed in the other block



All issued containers are tracked through the Waste Management System (WMS)
with bar-coded labels

Bar-coded labels are considered a legal document

DO NOT remove bar-coded labels!

DO NOT remove containers from their locations



- If you are going to YTC you will need to ensure that you have a current JBLM CSA to establish an account there
- All waste generated at YTC will remain at YTC
- For YTC questions call 253-967-2028, 509-577-3830

55 Gallons Max Per Satellite Accumulation Area (SAA)

Identifies the site location, shed number, and specific building number

States the unit to whom the container/label was issued

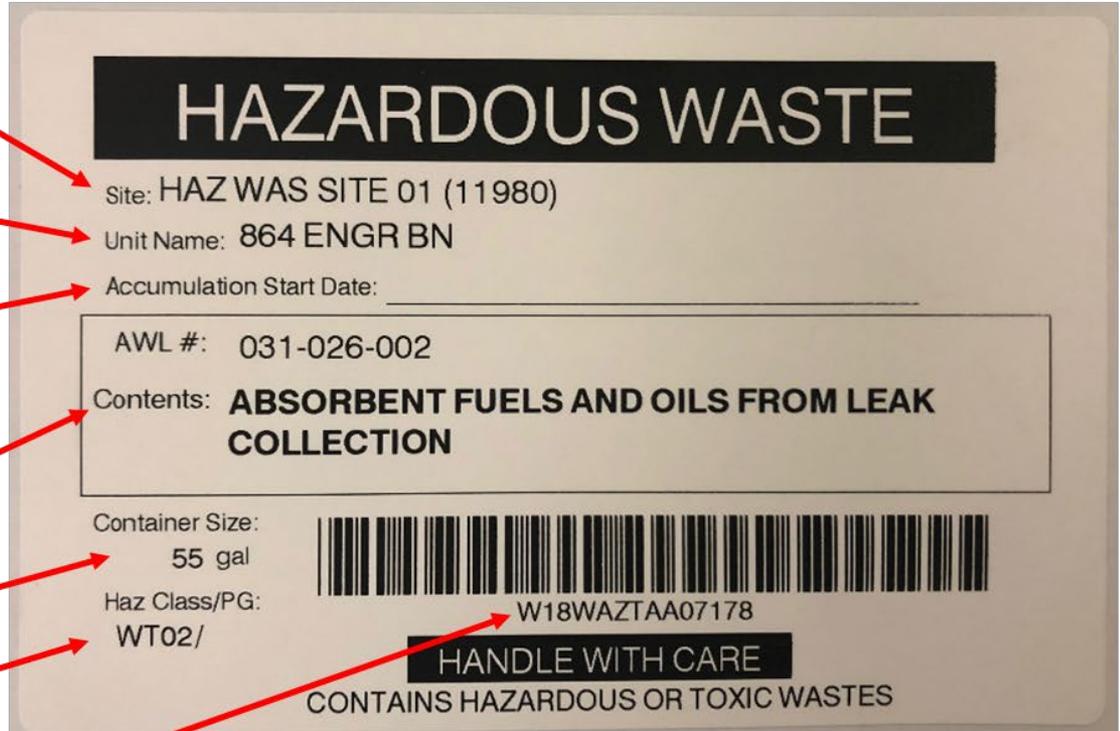
Has an entry blank for the accumulation start date

Names the contents of the generated waste stream

Lists issued container size

Hazard class labeling requirement

Container ID Number



HAZARDOUS WASTE

Site: HAZ WAS SITE 01 (11980)

Unit Name: 864 ENGR BN

Accumulation Start Date: _____

AWL #: 031-026-002

Contents: **ABSORBENT FUELS AND OILS FROM LEAK COLLECTION**

Container Size: 55 gal

Haz Class/PG: WT02/



W18WAZTAA07178

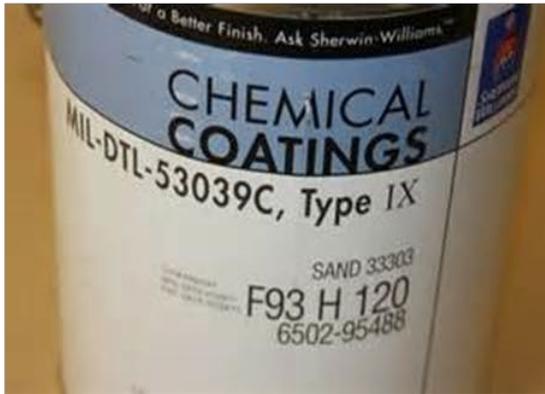
HANDLE WITH CARE

CONTAINS HAZARDOUS OR TOXIC WASTES

Notify your EPS as soon as your container is **at least 3/4 to completely full**; pick-up shall occur within three duty days.



- Solvent-based, oil-based, and CARC paint wastes must be managed as hazardous wastes
- These include thinners, clean-up solvents, waste paints, and some paint booth filters
- Waste streams for some paint profiles have the word “Debris,” this accounts for any absorbents, brushes, rollers, or PPE that may be included



- Aerosol cans are considered a hazardous waste and have a designated waste stream
- These are not to be discarded directly into the trash or dumpsters



Completely activate MRE heaters with water before disposal in the refuse containers

They are considered 'used' in the process and then can be discarded directly into municipal solid waste (trash/dumpster)

When consolidating enough un-used MRE heaters together, they must be managed as a hazardous waste because they have the potential to ignite a fire



1 Year Max Accumulation Time

UNIVERSAL WASTE

Site: HAZ WAS SITE 01 (11980)
Unit Name: 864 ENGR BN
Accumulation Start Date: 12/27/2018 Turn In Date: 12/27/2019

AWL #: 021-005-004

Contents: **NON-RECHARGABLE LITHIUM METAL BATTERY
UNIVERSAL WASTE**

Container Size: 5 gal
Haz Class/PG: 9/REACT/ II


W18WAZTAA07179

HANDLE WITH CARE
CONTAINS HAZARDOUS OR TOXIC WASTES

The accumulation start date is when the first item goes into the container.

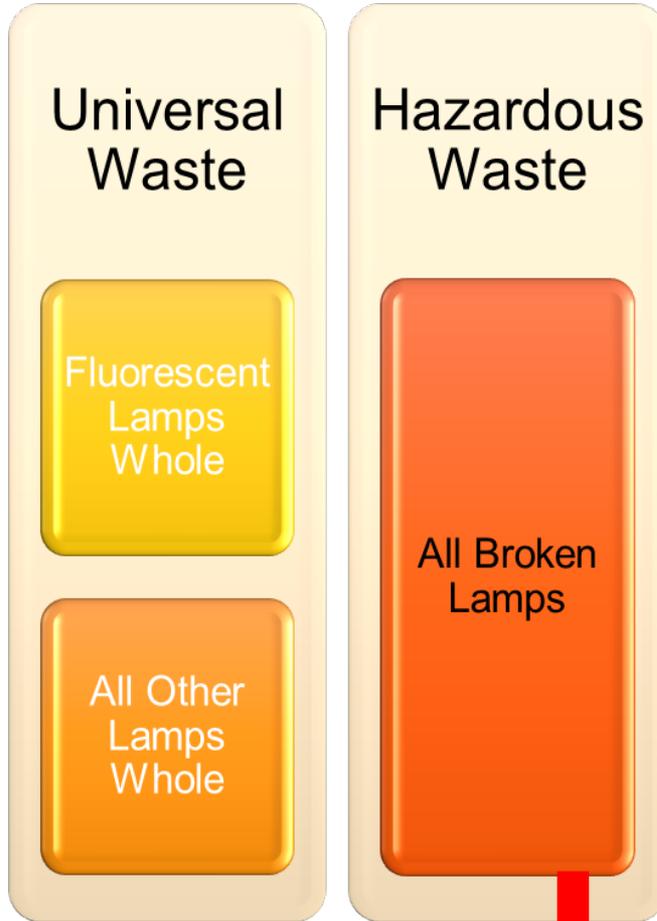
All Universal Waste containers will be turned in **60 DAYS PRIOR** to the turn in date as a proactive Better Management Practice to ensure and maintain compliance.

If the container is full before that date, contact your EPS to replace container.



Universal Waste:

- Incandescent
- CFLs
- Halogen
- High Pressure Sodium
- LED
- Mercury vapor
- Etc...

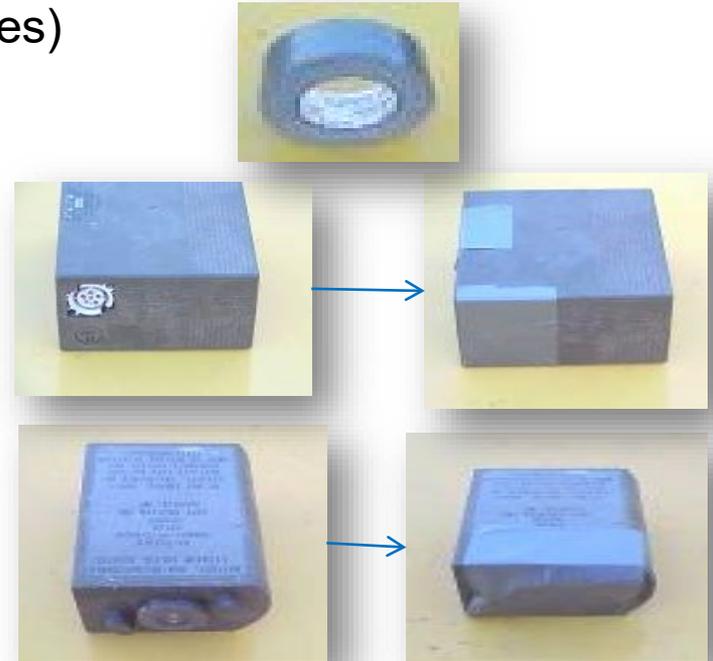


Hazardous Waste: All types of broken lights are considered Hazardous Waste and must be put in correct container

- All batteries are profiled as dangerous waste and will be managed as “Universal Waste” according to the following guidelines:
 - Segregated into separate waste containers by battery type e.g. NiCad Dry, NiCad Wet, Alkaline, NiMH, Lilon, LiMetal etc...
 - **Tape all terminal ends to prevent short circuits**
 - Accumulate UW batteries for up to one year maximum

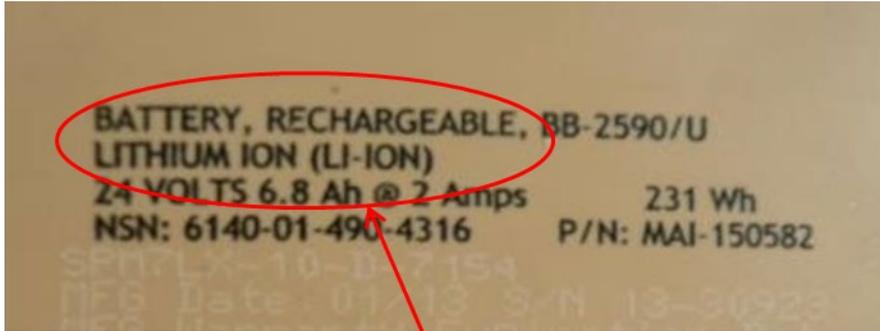


- Lithium batteries require special handling and packaging, due to the potential for violent thermal events (fires)
 - Open terminal ends or plugs must be taped and placed in a designated universal waste container
 - Do not discharge lithium batteries
 - **Due to new regulatory requirements, the segregation of rechargeable lithium ion & non-rechargeable lithium metal batteries is mandatory**

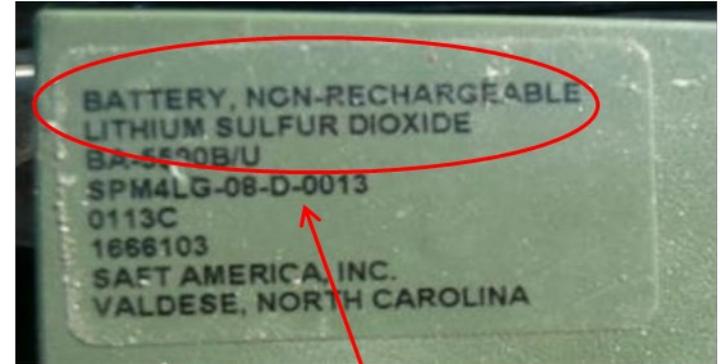


- Place a layer of approximately two inches of vermiculite at the bottom of the waste container, place alternating layers of batteries and vermiculite until the container is completely full
- When container is picked-up, generator will sign a Battery Verification Memo

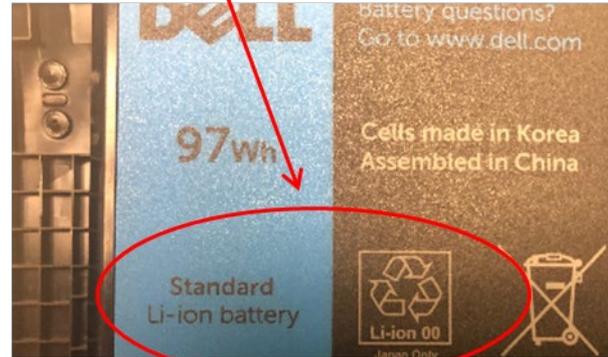
Segregation of Rechargeable Lithium Ion & Non-rechargeable Lithium Metal batteries is mandatory



Rechargeable Lithium Ion (Li-Ion)
AWL #021-005-006



Non-rechargeable Lithium Metal types
AWL #021-005-004



- Lithium batteries burn very hot @ 1,400°F, the fire will spatter and spit flames in a large radius
- Water may cause a lithium battery fire to burn hotter and faster
- Lithium batteries can catch fire or have been known to explode due to a “Thermal Runaway” reaction
- Overcharging lithium batteries may cause them to overheat
- Overheated lithium batteries do not cool easily and create an elevated fire hazard
- If you find warm lithium batteries, take them to a dry, well-ventilated area away from other hazardous materials, store them separated by three inches and allow to cool for at least 5 days





- Recycled battery sheds are placed in unit/org designated SSA or supply areas
- If your unit/org generates enough lead acid batteries to warrant a recycled battery container, contact Corporate Waste Solutions at (253) 982-3451.
- To schedule a pickup of the lead acid batteries, email Corporate Waste Solutions at www.jblmrecycling.com
- If a lead acid battery is broken it becomes a Hazardous Waste, contact your EPS.

NON-REGULATED WASTE

Site: HAZ WAS SITE 01 (11980)

Unit Name: 864 ENGR BN

AWL #: 032-002-004

Contents: **ABSORBENT PADS,RAGS,CARTRIDGES,CONTAM W/GREASE[GREASE 0-10%]**

Container Size: 55 gal



W18WAZTAA07181

HANDLE WITH CARE

THIS WASTE NOT REGULATED BY U.S. EPA 40CFR (RCRA)

HAZARDOUS MATERIAL

Site: HAZ WAS SITE 01 (11980)

Unit Name: 864 ENGR BN

AWL #: 040-011-003

Contents: **USED OIL FOR RECYCLING**

Container Size: 55 gal

Haz Class/PG: /



W18WAZTAA07180

HANDLE WITH CARE

CONTAINS HAZARDOUS OR TOXIC MATERIAL

- All Hazardous Material and Non-Regulated containers will not have a start or end date
- These containers are authorized to remain on site until the container is full
- There is no limit on the number of these containers that can accumulated at one time
- Once container is full, contact your EPS for removal
- If hazardous material becomes contaminated and/or cannot be recycled it may become a Hazardous Waste

- Dry or solidified cans of latex paint may be disposed as regular municipal solid waste (dumpster)
- Do not discharge paint or materials to storm drains, this is considered an “illicit discharge.” If discovered, will result in punitive action
- Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers, allow to dry, then dispose as regular municipal solid waste
- Waste containers will be provided for latex paints that are liquid and too full to be considered as regular municipal solid waste





- Used POL dry sweep is not regulated by Federal, State, or local authorities
- Process for used POL dry sweep is:
 - Double bag used dry sweep
 - Secure bags to avoid spillage
 - Place into your municipal solid waste (dumpster) for disposal
- Dry sweep that contains Gasoline, Antifreeze, and some other Non-POLs will be collected by your EPS

Contact your Environmental Protection Specialist for disposal information

55 Gal



55 Gal



15 Gal



10 Gal



Containers are considered “empty” when all contents have been removed by normal means (inverting and draining, shaking, scraping, or scooping) to ensure completely empty of all liquids

- All drums must have Bung Caps

ONLY for drum containers having a liner:

1. Remove the liner
2. Drain liner into respective container
3. Throw the liner in the Trash
4. Ensure the metal drum itself is free of any liquids and place in the scrap metal container



JBLM Clean Water Requirements

'Only Rain Down the Drain'



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The **Clean Water Act (CWA)** passed in 1972 stating all surface waters in the US should be “drinkable, swimmable and fishable”.

Federal Law applies to DoD Installations. In Washington, the Environmental Protection Agency (EPA) has authority to inspect all covered facilities, with or without notice.

Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action. Fines and imprisonment time vary depending on the violation.

JBLM discharges stormwater under the **National Pollution Discharge Elimination System (NPDES)** permits:

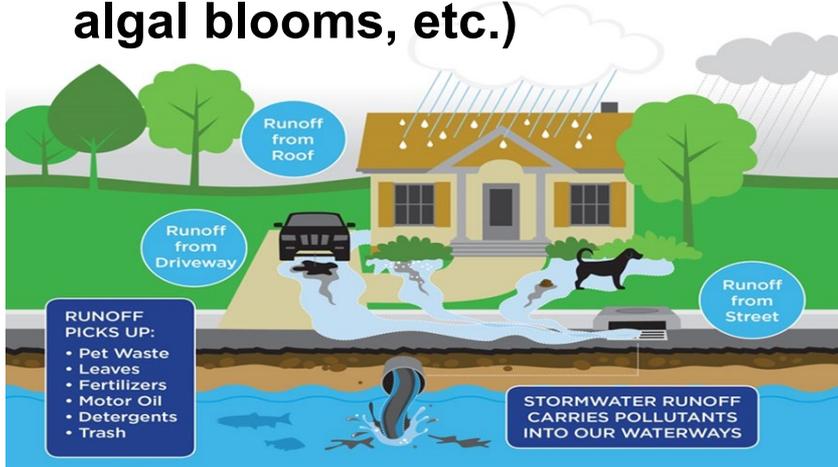
- **JBLM Multi-Sector General Permit (MSGP) for industrial stormwater**
- **JBLM Municipal Separate Storm Sewer Permit (MS4)**
- **EPA Construction General Permit (CGP), 2017**

- Units must have a current copy of the hazardous substance and POL spill posters displayed in areas
- Units must have recommended spill control material on hand, including absorbents compatible with your spill.
- **All spills and/or releases must be sufficiently cleaned immediately.**
- All 55-gallon drums containing liquids must be on secondary containment pallet.
- Equipment cannot be stored in secondary containment systems.
- All mobile facilities (fuel tankers, etc.) must be properly positioned and bermed to prevent ground or water contamination in the event of a leak
- Inspect and document all mobile facilities for leaks daily. Use drip pans to prevent leaks onto a surface.

Stormwater is leading contributor to water quality pollution in urban waterways.

Water quality issues if pollutants enter stormwater include:

- **Unsafe drinking water**
- **Polluted swimming/recreational areas**
- **Environmental harm (fish kills, algal blooms, etc.)**



Common pollutants include:

- **Oil and grease from parking lots and roads**
- **Heavy metals from roadways**
- **Pesticides from lawns and golf courses**
- **Sediment from construction sites**
- **Carelessly discarded trash (cigarette butts, paper, plastic bottles, etc.)**
- **Dirt and sediment that has accumulated around storm drains**

All substances, liquid or solid, added to stormwater are pollutants and called **ILLICIT DISCHARGES.**

What is a spill?

- Any unwanted release of materials or waste
- May include POL products and/or hazardous substances
- Might occur on pavement, asphalt, soil, water or air



Primary causes of spills

- Loading/unloading of vehicles and equipment
- Vehicle/equipment leaks or accidents
- Transferring materials or waste from one container to another
- Leaking containers or drip pans
- Poor planning
- Inadequate equipment maintenance
- Improper storage

Spill Prevention

- Use of secondary containment and other physical control measures
- Best management practices in handling, storing, transporting, and dispensing materials IAW SDS
- Review information contained in the Environmental Battle Book and in the SPCC plan (site-specific info)
- Planning and annual training
 - PowerPoint, mock spill, actual spill, and contacting DPW all satisfies spill training requirements

- **Discovery**
 - Identify spill source
 - Identify spilled material
- **Initial Response – Safety is first priority**
 - Initiate response if it is safe and adequate spill response material and PPE are available
 - If unsafe, then report to the JBLM Fire Department at 911 or Range Control when down range
- **Reporting**
 - Greater than 5 gallons or **any amount in a storm drain/waterway**
 - JBLM: Call 911
 - Downrange: Call Range Control
 - Less than 5 gallons
 - Proceed with spill clean up
 - Contact i-EPAAS or the Stormwater team to verify clean up is done sufficiently or to request guidance

- **Containment**

- Stop source of spill (turn off valves, etc.)
- Protect the environment (keep spill from entering drains or ditches using berms, socks, etc.)

- **Clean up**

- Utilize proper spill equipment (dry sweep, absorbent pads, etc.)
- Wear proper PPE (gloves, goggles, etc.)
- If you must dig, you need a dig permit

- **Disposal**

- Clean up and bag contaminated dry sweep, dirt, etc. and take to HWSF for disposal
- Contact i-EPAAS or HWSF personnel for spill debris disposal instructions or questions

- **Restoration**

- Return the area to pre-spill condition
- If contaminated dirt was removed, backfill with clean fill dirt

- **Leaks and spills must be rectified immediately**
- Change pads in drip pans when saturated or monthly
- Pads will deteriorate over time

*I'm a Gray Pad,
I'll Absorb
anything,*



*I'm a White Pad,
I absorb POLs and
I don't absorb
water*



*I'm here to flood
your outdoor
secondary
containment!*



*Mitigate leaks with
drip pans and white
absorbent pads*







JBLM Solid Waste Requirements

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- All recyclables, such as cardboard, paper, scrap metal, wood, plastic, oil, antifreeze and fuel will be placed in it's designated recycle container or collection area. Have personnel remove general trash from recycle containers or collection areas and dispose of it properly. Recycle containers will identify what type of recycle material will be placed in them. Both trash and recycle collection areas should be marked.
- Monitor and request pick-up of trash regularly to prevent overflow. Call Lemay for service: (253) 875-5886
- Monitor and request pick-up of recycling regularly to prevent overflow. Call (253) 377-6110
- Ensure that all refuse container lids are always closed.
- Oil, antifreeze and other POL recycle pick up (253) 967-4786
- Ensure sustainable acquisition policies are being adhered to
- Recycle program questions (253) 966-1734

Questions?



**LeMay will not service contaminated, blocked, or overfull containers
Contact LeMay coordinator (253) 875-5886:**

- Service-related issues
- Empty containers
- Email: JBLMLemay@wasteconnections.com

Contact JBLM Contract Officer Representative (253) 966-1733:

- To add, remove or exchange containers
- Adjust service and pickup frequency
- Closing a site and removing services



**Corporate Waste Solutions will not service contaminated, blocked, or overfull recycling containers.
Call for service 253-982-3451**

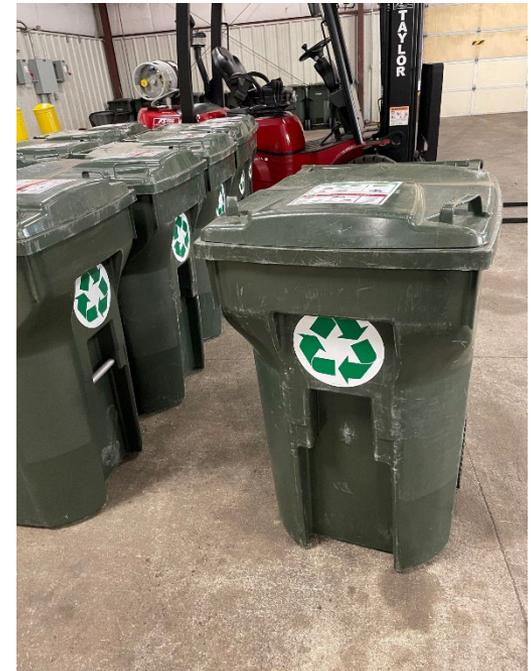
Contact JBLM Contract Officer Representative (253) 377-6110:

- To add, remove or exchange containers
- Adjust service and pickup frequency
- Closing a site and removing services

Questions?
Check out
our website



**Some containers
have been
replaced with totes
during the contract
transition.**



Everyone on JBLM Recycles!

- In your organization
- At home, schools, gyms, events, Exchange

What goes in the recycling bin?

- Don't Wishcycle!
- Take caps off your bottles
- Keep your recyclables Clean, Empty & Dry
- When in doubt, throw it out!

JBLM recyclables support MWR programs.

RECYCLING

PREPARATION
empty · clean (quick rinse) · no lids

PLASTIC

Recycle plastics by shape. Ignore numbers/symbols on packaging.



bottles (non-prescription ok) jugs tubs buckets (remove handle)

PAPER



mixed paper boxes and bags cardboard (flat)

METAL



aluminum cans metal cans

NO GLASS
NO PLASTIC BAGS OR WRAP
NO BAGGED RECYCLABLES

Revised 3/19

GARBAGE

Want to know why some things belong in the garbage? piercecountywa.gov/remindr



crinkly plastics all cartons plastic packaging foam trays and containers aluminum foil, pans and plates

SINGLE-USE ITEMS:



paper plates paper towels and napkins paper cups plastic cups utensils and straws coffee pods

NO ELECTRONICS
NO HAZARDOUS WASTE



all lids greasy pizza boxes shredded paper (use a shred event) prescription bottles

DROP-OFF

Bring glass, toner cartridges and electronics to our recycling centers (open Tue-Sat 0730-1600)
Find locations for these items plus options for electronics, appliances, mattresses, clothing, foam packaging and more: piercecountywa.gov/recyclemenu
JBLM-Main: Nevada Ave McChord Field: 516 South Gate (near commissary)



glass plastic bags and wrap (at participating grocery stores) household hazards

 **WASTE SUSTAINABLE** <https://home.army.mil/lewis-mcchord>
JOINT BASE LEWIS-McCHORD 253.966.6444

Are JBLM recycle, solid waste and sustainable acquisition policies being followed?



JBLM Air Quality Requirements

★★★★ WE ARE THE WARFIGHTER'S HOME ★★★★★



Requirements for portable and non portable generators

- **Generators are regulated by the EPA and Washington State**
- **Portable generators are not regulated under the Clean Air Act unless they are**
 - Used in one location for over 365 days used seasonally each year in the same location.
 - At that point they are no longer considered portable and fall under the category of “stationary”
- **Stationary generators over 19kW are divided into**
 - Emergency generators
 - Non-emergency
 - Strictly controlled
 - Require a permit from the state regulatory authority
 - You may not use or install a non-emergency generator without approval by the DPW Environmental Division.
 - Owners and operators of stationary generators must report usage to the DPW Air Program each month.
 - Generator maintenance depends on the size, type and year of manufacture.
 - The only exception are those with a “National Security” sticker that was placed on the engine by the manufacturer
- **Generator compliance can be very complex. We are here to help.**
 - Contact: usarmy.jblm.id-readiness.list.dpw-air1@army.mil



Requirements and Reporting

- **Solvents evaporate into the air**
- **JBLM must count emissions from solvents and include these in monthly and annual reports**
- **This includes solvents used:**
 - in parts washers
 - in solvent tanks
 - for spray gun cleaning
 - for handwipe cleaning such as cleaning of aerospace components
- **All solvents must be approved and on your AUL**
- **Reports must be submitted each month to the DPW Air Program* at:**
 - usarmy.jblm.id-readiness.list.dpw-air1@army.mil
 - *For parts washers and solvent tanks report only when solvent is changed out.

Requirements and Reporting

- All paints and coatings must be approved and on your AUL
- Coating and painting using aerosol cans is not required to be tracked or reported.
- The use of spray guns and/or spray booths **MUST** reviewed by the DPW Air Program to determine whether the process requires permitting with the state regulatory agency.
Contact us at usarmy.jblm.id-readiness.list.dpw-air1@army.mil

You have reached the end of the training. To receive your certificate, you need to receive an 80% on the exam. You will receive your certificate within 5 business days of passing the exam via email

Scan QR
Code to get to
quiz

