*GTA 05-08-014

THE ENVIRONMENT AND PREDEPLOYMENT: UNIT PREDEPLOYMENT AND LOAD PLAN CONSIDERATIONS

A Soldier's guide to being prepared to deal with environmental concerns before unit deployment.



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PURPOSE

This graphic training aid (GTA) will assist in planning for deployment. When planning for deployment, environmental-protection measures conducted at home station may not be available where you are going. The deployment location is not likely to be developed and may be primitive. *So, be prepared!*

BE PREPARED

Being prepared means knowing what to expect and how to plan accordingly. Identify the actions required before deployment; know what resources are available; review the environmental considerations in Field Manual (FM) 3-34.5, *Environmental Considerations;* and know the constraints. Consider the following areas before deployment:

- Nonfunctioning government.
- Hostile and/or impoverished population.
- Poor highway and road systems.
- Foreign language that is difficult to translate.
- Severe weather.
- Rough terrain.
- Limited utilities, to include waste management.
- Unexploded ordnance.

Knowledge of environmental factors is one key to planning. This knowledge can assist to detect problem areas, reduce the risk of injury or death, reduce property damage, and help ensure compliance with host nation and federal environmental laws and regulations. More information on environmental considerations can be found in FM 3-34.5.

PLAN FOR ENVIRONMENTAL RISK

Planning for environmental risk reduces the impact to the environment, decreases the time spent cleaning up spills, and increases efficiency. To plan—

- Perform a composite risk management assessment to include environmental considerations (see FM 5-19, *Composite Risk Management*).
- Participate in rehearsals to ensure that all safety and environmental considerations are taken into account.
- Ensure that hazardous materials (HMs) are properly labeled and stored and that each has a material safety data sheet (MSDS) before transporting.
- Review the environmental protection portion of the unit standing operating procedure (SOP).
- Understand the responsibility to reduce the generation of wastes.
- Know the potential sources for transportation and disposal of the HW that will be generated.
- Seek the proper training for dealing with HM and HW.
- Know the unit environmental officer (EO) and the alternate to direct questions or concerns to as needed.
- Review the unit predeployment SOP and checklist.

PREPARE A DEPLOYMENT PACKING LIST

The result of planning will be a unit deployment packing list (refer to Figure 1). The list will include only the basic items needed for environmental protection in the areas previously identified. Stock numbers of many items that may be needed should be obtained as part of predeployment planning and kept for future reference. Adjust the quantities of each item based on the actual length and location of the mission. Bring sufficient amounts of supplies to combat environmental accidents at the base camp until the supply chain catches up.

If possible, contact logistics personnel already deployed to see about maturity of the logistics system. Try to find out how long the supply requisition process takes for expendable items.

ltem	National Stock Number (NSN)	Number Packed
Spill kits	4235-01-423-7221	
Rolls of black plastic sheeting	8135-00-579-6492	
MSDS sheets (for every HM)		
55-gallon drums	8110-00-823-8121	
Nonsparking tools (shovel and pick)		
Drip pans		
Drum funnels		
Rags		
Block-and-brace material		
Eye wash		
Used bladder material/canvas		
Wooden pallets		
Secondary containment pallets		
Locks		
Absorbent pads	4235-01-423-1463	
Absorbent socks	4235-01-423-1465	
Absorbent booms (10 inches x 10 feet)	4235-01-423-2787	

Figure 1. Sample Deployment Packing List

PACK AND PREPARE SUPPLIES

Proper packing may prevent running out of supplies or packing too many supplies. Consider the—

• **Type of mission.** During training, caring for the environment is always a high priority. There are certain potective measures that should always be taken to protect the environment (such as fueling areas and HW collection points). However, specific environmental preparation should be directly related to the mission. Implementation of these measures will change as the type of mission changes.

• Length of time. Contingency operations can last as little as a few months and, in some cases, be of unlimited duration. Pack and prepare to operate with supplies on hand for at least 2 months or until the supply system can catch up. Consider what environmental protection containers (refer to *Figure 2*) and HMs will be needed. Ease redeployment considerations by not taking too much.

• **Base camp.** Plan for the type of location where the base camp will be. Many operations make use of existing structures and facilities, making the job easier. The commander should be able to provide information from field or map reconnaissance efforts found in the environmental-baseline surveys (EBSs). If this information is unavailable, plan for the worst. A good reference to take with you is the *Commander's Handbook for Waste Management for Deployed Forces*, published in June 2010 by the United States Army Engineer School.

Environmental protective measures will have to be provided for the following areas:

- Vehicle fueling points and maintenance areas.
- HW collection points.
- HM storage and supply areas.

NSN	Item Description	
8105-00-848-9631	Bag, polyolefin, 5 millimeters, 36 by 54 inches	
8125-00-174-0852	Bottle, plastic, 1 gallon (polyethylene)	
8125-00-731-6016	Battle, plastic, 13 gallons	
8125-00-888-7069	Bottle, plastic, 5 gallons	
8110-00-254-5719	Drum, steel, 1 gallon	
8100-00-128-6819	Drum, steel, 1 gallon (17C)*	
8100-00-254-5722	Drum, steel, 4 gallons	
8110-00-282-2520	Drum, steel, 5 gallons (17C)*	
8110-00-254-5713	Drum, steel, 6 gallons (with ring)*	
8110-01-204-8697	Pail, shipping, steel, 5 gallons (Department of Transportation [DOT] 17E)*	
8110-00-519-5618	Drum, steel, 10 gallons (DOT 17C)*	
8110-00-735-4643	Drum, steel, 19 gallons (17C)*	
8110-00-366-6809	Drum, steel, 30 gallons (17C)*	
8110-00-030-7779	Drum, steel, 30 gallons*	
8110-00-030-7780	Drum, steel, 50 gallons (17C)* for petroleum, oils, and lubricants (POL) contaminated solids	
8110-00-823-8121	Drum, steel, 55 gallons (17M)*	
8110-00-030-9783	Drum, steel, 55 gallons (bung and vent) (DOT 17E)*	
8110-01-282-7615	Drum, polyethylene, 55 gallons*	
8110-01-101-4055	Drum, steel, disposal, 85 gallons (no lining)*	
8110-01-101-4056	Drum, steel, recovery, 85 gallons (epoxy phenolic lining)*	
8110-01-343-1697	Drum, plastic, 55 gallons* (for corrosive contaminated solids)	
8110-01-150-0677	Drum, plastic, 55 gallons* (for corrosive or broken batteries)	
8110-00-292-9783	Drum, steel, 55 gallons (for contaminated POL products)	
Note: * Open-top containers		

Figure 2. Containers

PERSONAL PROTECTIVE EQUIPMENT

Figure 3 shows a sample listing of personal protective equipment that could be considered a unit basic load. Determine the appropriate quantities based on the size of the unit and the duration of the deployment.

Figure 3. Sample Personal Protective Equipment

NSN	Description	
Aprons		
8415-01-189-6228	Rubber material, acid-resistant	
8415-01-100-7742	Plastic material, oil-resistant, and waterproof	
84515-00-82-6108	Apron, utility, impermeable	
Gloves		
8415-01-158-9453	Gloves, electrical work, type 1 (size 9)	
8415-01-158-9455	Gloves, electrical work, type 1 (size 10)	
8415-01-158-9457	Gloves, electrical work, type 1 (size 11)	
8415-01-092-3910	Gloves, heat protective, type 2 thermal protection (large)	
8415-00-266-8673	Gloves, rubber industrial, type 1 acid- and alkali-resistant (size 12)	
8415-00-266-8675	Gloves, rubber industrial, type 1 acid- and alkali-resistant (size 11)	
8415-00-266-8677	Gloves, rubber industrial, type 1 acid- and alkali-resistant (size 10)	
8415-00-266-8679	Gloves, rubber industrial, type 1 acid- and alkali-resistant (size 9)	
Eye and Face Protection		
6850-01-353-9947	Eyewash, self-contained, portable	
6850-01-444-3371	Eyewash solution	

Figure 3. Sample Personal Protective Equipment (continued)

NSN	Description	
4230-01-026-9305	Shower, emergency drench	
4240-00-202-9473	Face shield, industrial	
4240-01-292-2818	Goggle, industrial	
4240-00-052-3776	Molded plastic flexible frame with clear plastic lenses and adjustable headband	
4240-01-055-2310	Lightweight goggles with vinyl resin frame and saddle- type nose bridge	
4240-01-292-2818	Polycarbonate plastic lens with molded plastic frame (may be worn over glasses)	
Half Mask		
4240-01-301-0754	Respirator, air filtering (mask), small	
4240-01-301-0754	Filter, respirator, air filtering (acid mist, used with mask listed above)	
4240-01-231-7718	Cap, retainer, high efficiency (used with mask and filter listed above)	
Full Mask		
4240-01-314-2780 4240-01-342-5239 4240-01-301-3200	Respirator, air filtering (mask), small Respirator, air filtering (mask), medium Respirator, air filtering (mask), large	
4240-01-246-5411	Filter, respirator, air filtering (acid mist, used with mask listed above)	
4240-01-231-7718	Cap, retainer, high efficiency (used with mask and filter listed above)	

IMPLEMENT ENVIRONMENTAL CONTROLS

Implementing environmental controls requires informing all subordinates of any modified control measures. To do this, a leader defines the controls, states how each control will be implemented, and assigns responsibility for implementing the controls—all parts of the composite risk management worksheet.

Consider the shelf life extension possibilities for HM. The Defense Logistics Agency (DLA) has an online system that keeps current shelf life extension information available. This may prevent you from having to discard HM as HW when it is not necessary. It may also enable you to turn over HM to the unit replacing yours during a deployment. Additional information can be found at: <<u>https://headquarters.dla.mil/j-3/shelflife/</u>>.

CONSIDER REDEPLOYMENT

When conducting predeployment measures, consider redeployment issues: HMs that are used and generate

HW must be properly disposed of. Reducing the amount of HW generated will reduce the amount of disposal and cost. *Use only what is needed!* Consider the following:

• HM, HW, and medical waste disposal. Develop a plan for proper handling and disposal of these wastes.

- Barrier material recovery.
- Equipment cleaning and wash racks.
- Site closure inspection.
- Lifting and hauling equipment.
- Storage location security.