***GTA 05-08-014**
February 2014

THE ENVIRONMENT AND PREDEPLOYMENT:

UNIT PREDEPLOYMENT AND LOAD PLAN CONSIDERATIONS

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

DISTRIBUTION: U.S. Army Training Support Centers.

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

Headquarters, U.S. Army Engineer School

*This publication supersedes GTA 05-08-014, August 2010.

PURPOSE

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

BE PREPARED

Being prepared means knowing what to expect and planning accordingly. Identify the actions required before deployment (including what resources are available), review the environmental considerations in Field Manual 3-34.5, and understand the constraints. Consider the following environmental factors before deployment:

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

A knowledge of the environmental factors is one key to planning. This can detect problem areas, reduce the risk of injury and death, reduce property damage, and help ensure compliance with host nation and federal environmental laws and regulations.

PLAN IN ADVANCE

Advanced planning for environmental risks helps reduce the impact to the environment, decrease the time spent cleaning up spills, and increase efficiency. To plan in advance—

- Participate in rehearsals to ensure that all safety and environmental risks are considered.
- Ensure that each hazmat is properly labeled, stored, and has a safety data sheet (SDS) before transporting.
- Review the environmental protection portion of the unit standing operating procedure (SOP).
- Understand the responsibility to reduce waste generation.
- Know the potential sources for the transportation and disposal of hazardous waste (HW).
- Seek the proper training for dealing with hazmat and HW.
- Know the primary and alternate unit environmental officers so that you can direct questions or concerns to them.
- Review the unit predeployment SOP and checklist.

PREPARE A DEPLOYMENT PACKING LIST

The result of proper planning is a unit deployment packing list (Figure 1). This list includes only the basic items needed for environmental protection in the deployment area. Obtain the national stock numbers (NSNs) of required items during predeployment planning, and retain them for future reference.

Adjust the quantities of each item based on the anticipated length and location of the mission. Bring sufficient supplies to combat environmental accidents for at least 2 months or until the unit supply system is completely operational.

If possible, contact deployed logistics personnel to determine the maturity of the logistics system. Ascertain how long the supply requisition process takes for expendable items.

PACK AND PREPARE SUPPLIES

Proper packing may prevent supply shortages and excesses. Consider the—

- **Type of mission.** During training, environmental consideration is always a high priority. Environmental protection measures must be provided for vehicle fueling points and maintenance areas, HW collection points, and hazmat storage and supply areas. However, specific environmental protection measures required are directly related to the mission. The implementation of environmental protection measures will change as the mission changes.
- **Length of time.** Contingency operations can last a few months or, in some cases, can be of unlimited duration. Pack sufficient supplies to operate for at least 2 months or until the unit supply system is completely operational. Consider what hazmat and environmental protection items, including containers (Figure 2), will be needed.
- **Location of base camp.** Many operations use existing structures and facilities to make the job easier. The commander should be able to provide relevant information from field or map reconnaissance efforts found in the environmental baseline surveys. If this information is unavailable, plan for the worst.

Item Description
Spill cleanup kit, hazmat
Plastic sheet, black
MSDS for each hazmat
Drum, steel, 55-gal
Nonsparking tools (shovel, pick)
Drip pan
Drum funnel
Rags
Block-and-brace material
Eye wash
Used bladder material/canvas
Wooden pallet
Secondary containment pallet
Lock
Pillow, absorbent, hazmat
Sock, spill containment, hazmat
Boom, spill containment, hazmat

Figure 1. Sample deployment packing list

Item Description
Bag, polyolefin, 5-mm, 36 in x 54 in
Bottle, plastic, 1-gal (polyethylene)
Bottle, plastic, 13-gal
Bottle, plastic, 5-gal
Drum, steel, 1-gal
Drum, steel, 1-gal (DOT 17C)*
Drum, steel, 4-gal
Drum, steel, 5-gal (DOT 17C)*
Drum, steel, 6-gal (with ring)*
Pail, shipping, steel, 5-gal (DOT 17E)*
Drum, steel, 10-gal (DOT 17C)*
Drum, steel, 19-gal (DOT 17C)*
Drum, steel, 30-gal (DOT 17C)*
Drum, steel, 30-gal*
Drum, steel, 50-gal (DOT 17C) (for POL-contaminated solids)*
Drum, steel, 55-gal (DOT 17M)*
Drum, steel, 55-gal (bung and vent) (DOT 17E)*
Drum, polyethylene, 55-gal*
Drum, steel, disposal, 85-gal (no lining)*
Drum, steel, recovery, 85-gal (epoxy phenolic lining)*
Drum, plastic, 55-gal (for corrosive-contaminated solids)*
Drum, plastic, 55-gal (for corrosives or broken batteries)*
Drum, steel, 55-gal (for POL-contaminated liquids)
**Open-top containers*

Figure 2. Sample list of containers

DETERMINE PERSONAL PROTECTIVE EQUIPMENT

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

Item Description
Aprons
Apron, rubber material, acid-resistant
Apron, plastic material, oil-resistant, waterproof
Apron, utility, impermeable
Gloves
Gloves, electrical work, type 1 (size 9)
Gloves, electrical work, type 1 (size 10)
Gloves, electrical work, type 1 (size 11)
Gloves, heat-protective, type 2, thermal protection (large)
Gloves, rubber, industrial, type 1, acid- and alkali-resistant (size 9)
Gloves, rubber, industrial, type 1, acid- and alkali-resistant (size 10)
Gloves, rubber, industrial, type 1, acid- and alkali-resistant (size 11)
Gloves, rubber, industrial, type 1, acid- and alkali-resistant (size 12)
Eye and Face Protection
Eyewash, self-contained, portable
Eyewash solution
Shower, emergency drench
Face shield, industrial
Goggles, molded plastic, flexible frame with clear plastic lenses and adjustable headband
Goggles, lightweight with vinyl resin frame and saddle type nose bridge
Goggles, industrial, polycarbonate plastic lens with molded plastic frame (may be worn over glasses)
Half Mask
Respirator, air-filtering (mask)
Filter, respirator, air-filtering (acid mist, used with mask listed above)
Cap, retainer, high-efficiency (used with mask and filter listed above)
Full Mask
Respirator, air-filtering (mask)
Filter, respirator, air-filtering (acid mist, used with mask listed above)
Cap, retainer, high-efficiency (used with mask and filter listed above)

Figure 3. Sample list of personal protective equipment

IMPLEMENT ENVIRONMENTAL CONTROLS

To implement the environmental controls, the leader must inform the subordinates of modified control measures. The leader defines the controls, states how each control will be implemented, and assigns responsibility for implementing the controls identified on the composite risk management work sheet.

Consider the shelf life extension possibilities for a hazmat. This may prevent you from having to discard a hazmat as HW when it is not necessary. It may also enable you to turn over a hazmat to the replacement unit. The Defense Logistics Agency provides shelf life extension information at <*https://headquarters.dla.mil/j-3/shelflife/*>.

CONSIDER REDEPLOYMENT

When conducting predeployment measures, consider redeployment issues. Hazmat that is used and generates a HW must be properly disposed of before your return. Reducing the amount of HW generated will reduce the amount of disposal and the cost related to disposal. ***Use only what is needed!*** Consider the following:

- HW and medical waste disposal. Develop a plan for proper handling and disposal.
- Barrier material recovery.
- Equipment cleaning and washracks.
- Environmental site closure survey/inspection.
- Lifting and hauling equipment.