

# PART 1. BACKGROUND



## How To Use This Book

Protecting the environment is **the right thing to do**. First and foremost because your health and the success of your mission depend on it. Properly applied environmental **Prevention** and **Response** techniques are not only required by your Commander, but they help keep you and the environment fit. This handbook will guide you step-by-step through each deployment phase and assist you in protecting yourself and the environment.

This handbook is a basic guide for deploying and deployed soldiers. It is **NOT** a comprehensive reference for environmental protection. For example, the handbook will show you some of the proper ways to store hazardous materials (HM) and give you



some of the most important reasons for doing so.

The handbook will also show you how **NOT** to store hazardous wastes (HW).



The handbook is divided into two main sections:

### **Prevention & Response**

Each section is color coded in the above colors to help you reach your information destination. Use these sections to help you plan your environmental activities while bedding down, initiating, sustaining and redeploying in the field. Remember, the U.S. Army is counting on you.

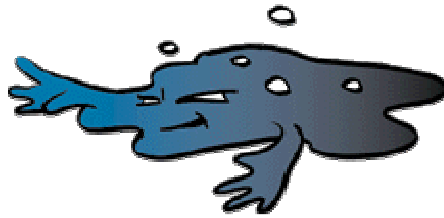


**DRIP**



**LEAK**

**To begin, this handbook takes you through some of the reasons you might want to prevent and respond to HM/HW drips, leaks, and spills.**



**SPILL**

## **Why Bother?**

In many contingency operations, you may be sent to a country where it seems that the local population cares little for the environment. Regardless of the behavior of locals, as a U.S. Soldier you are responsible for taking care of the environment.

**ITS THE RIGHT THING TO DO, BECAUSE...**

### ***It Protects Your Health***

Hazardous materials can make you sick and permanently damage your skin, eyes, nose and throat. Careless handling of dangerous materials can expose you to contamination which may



make you lose consciousness, cause brain damage, or lead to cancer.

***It Supports the Mission:***

The U.S. Army relies on the environment. The quality of the environment effects readiness, safety, military tactics, unit budgets, down time during field exeries, and relations with the local community.



***It Saves the U.S. Money:***

Pollution prevention can save the U.S. money by preventing medical bills and environmental clean-up costs. Money spent on clean-up leaves less money for training and equipment. Prevention ALWAYS costs less than clean up.



***It's an Order:***

As stated in your OPLANS, OPORD and FRAGOS, you are under orders to protect the environment. If you violate these orders, or if you allow others to do so, you may be prosecuted by military authorities under the Uniform Code of Military Justice (UCMJ).





### DID YOU KNOW...

- Up to FIVE MILLION gallons of water can be contaminated from ONE gallon of spilled solvent.
- In the U.S. alone, about 1,000 people die and 40,000 become sick each year from drinking water contaminated by HM that was improperly handled.

Environmental accidents damage the U.S. credibility abroad and can cost U.S. taxpayers millions of dollars in clean-up costs. The key is to plan ahead for each stage of deployment in order to be prepared to **PREVENT** and **RESPOND** to HM/HW accidents if they occur.

Your actions can have major adverse effects on the environment, your health, and the success of your mission. Protecting the environment goes beyond the protection of water and fish -- it could mean saving your life and the lives of your buddies!



## What Are HM's & HW's?

**Hazardous Materials:** Any material that is a health or physical hazard or any material that, based on either chemical or physical characteristics (for example, it exhibits one of the characteristics in the table on the next page), is capable of posing a risk to human health or the environment if improperly disposed of, handled, stored or transported. An HM is also any material regulated by host nation authorities or specified by DA or USAREUR as hazardous, "special," or toxic.



### **Hazardous Waste:**

**Any discarded material (solid, liquid or gas) that:**

- 1. Has no further value and cannot be reused or recycled; and**
- 2. Is harmful to human health or the environment due to its quantity, concentration, or biological, chemical or physical characteristics; and/or**
- 3. Exhibits one or more of the characteristics shown below.**



Characteristic	Description	Examples
Ignitable	Catches fire at less than 140 degrees F	Thinner or kerosene
Corrosive	pH less than or equal to 2, or greater than or equal to 12.5	Sulfuric acid or spent bleach
Reactive	Violent chemical change	Lithium batteries
Toxic	Poses a health hazard	Photographic Chemicals or insecticide

Contaminated or unusable fuel is a typical HM/HW common to deployment operations and should be handled, stored and disposed of properly.



Other common types of HM/HW can be found below.

**TOP TEN**

Ten of the most common HM/HW that you will encounter during deployment operations include:



**Fuel**  
**Engine Oil**  
**Bleach or DS-2**  
**Solvent**  
**Anti-Freeze**  
**Cherry Juice or Transmission Fluid**  
**Used Oil Filters or Batteries**  
**Empty POL Containers**  
**Brake Fluid**  
**Grease**



**These materials should be handled, stored and disposed of properly.**