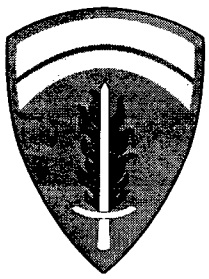
USAREUR COMMANDER'S GUIDE TO ENVIRONMENTAL MANAGEMENT



USAREUR COMMANDER'S GUIDE TO ENVIRONMENTAL MANAGEMENT

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About this Guide . . .

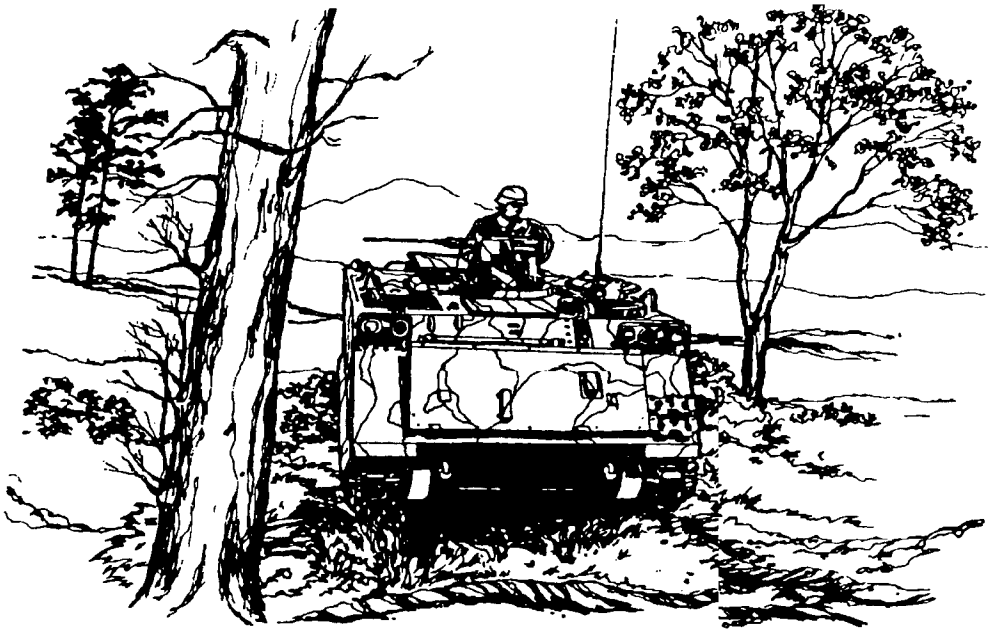
The USAREUR Commander's Guide to Environmental Management is designed to meet the environmental information needs of Area Support Group (ASG) and Base Support Battalion (BSB) Commanders. In addition, the guide will also be a useful tool for unit commanders, other staff officers and personnel who are likely to find themselves confronted with or held responsible for environmental problems or issues. Intended as a "primer" on the environment, this Guide presents questions that commanders are likely to face in USAREUR and offers suggested information sources for addressing those questions. The information provided offers a level of detail needed for basic knowledge of key environmental issues. This basic knowledge will better enable commanders to work with their environmental personnel in developing and maintaining an effective environmental program.

The term "Installation" has a definite connotation to most within the Army system. It relates to a specific geographic location where numerous activities are centrally located. Installations are common in the U. S. and generally are referred to by name, i.e. Fort Sill, OK. Facilities and operations in USAREUR are generally not centrally co-located and their names frequently take the name of the cities within which they reside. Until recently, these facilities were referred to as Military Communities (MILCOMs). MILCOMs may have several functional areas scattered throughout the host city, wherever space was available when the function was established. Although the term installation is not the most desirable, it will be used throughout this guide when discussing any geographic grouping of facilities which is operated and maintained by and for the support of U. S. Army Europe. For example, Heidelberg installation refers to all U. S. Army functional areas that report to the ASG Commander in Heidelberg, Germany: (Mannheim BSB, Karlsruhe BSB, Kaiserslautern BSB, Pirmasens AST, Heidelberg BSB, Tompkins Barracks, Hammonds Barracks, Stem Caserne).

CONTENTS:

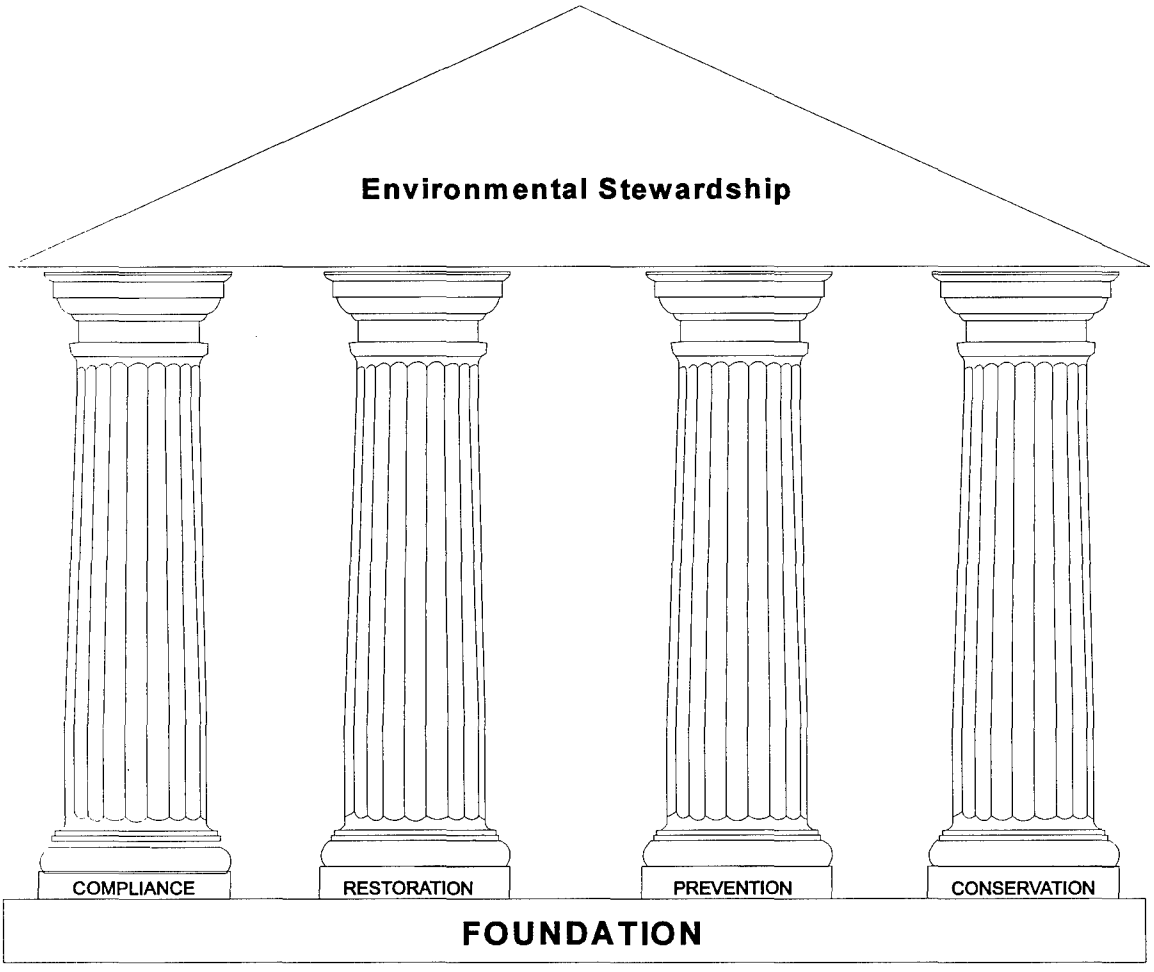
What is Environmental Management and Why is It Important?

While your command extends across all individual aspects of the mission, there is one area of responsibility that impacts virtually every action and operation: **the environment**. Environmental Management is conserving and protecting natural and cultural resources while accomplishing the military mission. Active environmental management and coordination at USAREUR installations is necessary to comply with Host Nation laws and U. S. Army regulations. Improper environmental management can be detrimental to your overall mission by creating operational time delays, fostering poor public relations and spending additional training and readiness funds unnecessarily in future years. The USAREUR environmental program must reflect a proactive stance directed not only at current operations but also address possible conflicts between future actions and their environmental impacts.



The Army's Environmental Strategy:

It is an integral part of the Army's mission into the 21st century, to protect our environment and conserve natural resources for present and future generations. This strategy is illustrated by a model of a building with a foundation and pillars supporting the overall vision of environmental stewardship. The strategy is supported by a foundation of shared values. Central to the foundation is the Army's tradition of leadership. This integrates the foundation blocks to provide a sound footing for the four pillars:



As a USAREUR Commander:

It is your responsibility to insure that all necessary and reasonable steps are taken to achieve the objectives of the four pillars described below.

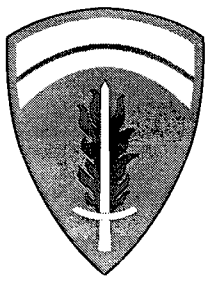
The **compliance pillar** includes all activities which ensure that current operations at Army installations meet applicable host nation environmental requirements. These requirements include laws and regulations in the areas of wastewater discharge, endangered species, noise abatement, air quality attainment, and solid and hazardous waste management and disposal.

The **restoration pillar** includes the USAREUR Environmental Restoration Program (UERP). This program provides procedures for the identification, investigation, and cleanup of soil and groundwater contamination resulting from current USAREUR/DA activities. The objective of the UERP is to protect the public health and safety and to protect the quality of the environment by providing resources and projects for contaminated site assessment, remediation and prevention of future contamination.

The **prevention pillar** goal is to eliminate pollution to the greatest extent possible and to implement good management practices in facilities and in training areas to prevent pollution emissions. This includes reducing hazardous material use, reducing hazardous waste generation, instituting spill prevention plans, conducting training, and constructing facilities that will reduce the risk of pollution.

The **conservation pillar** includes conservation and preservation of natural and cultural resources. Conservation focuses on responsibly managing Army used lands to ensure long-term productivity of the natural resources. Preservation focuses on endangered species habitats, forests, training area maintenance and renewal, and historic and cultural properties.

The **foundation** of the illustration represents your environmental management program. It is a foundation that supports all other aspects of your environmental management policies. It is incumbent upon you, as commander, to insure that this foundation is solid. The foundation of your environmental management program should include adequate staff, careful planning and programming of future resource requirements and strong emphasis on executing current year projects.



You Need to Know

Your community environmental program will consist of four general components:

Environmental Compliance — Current operations, such as wastewater discharge, sewage treatment, noise abatement, asbestos, air quality, and hazardous waste/materials management are regulated. In accordance with our responsibilities under the Status of Forces Agreement (SOFA), UR 200-1 requires compliance with host nation environmental standards when those activities impact areas off the installation. USAREUR Commanders **are not** required to comply with U.S. Federal Environmental Protection Agency regulations or U.S. statutes mandating specific environmental responses. Those authorities are limited to CONUS installations.

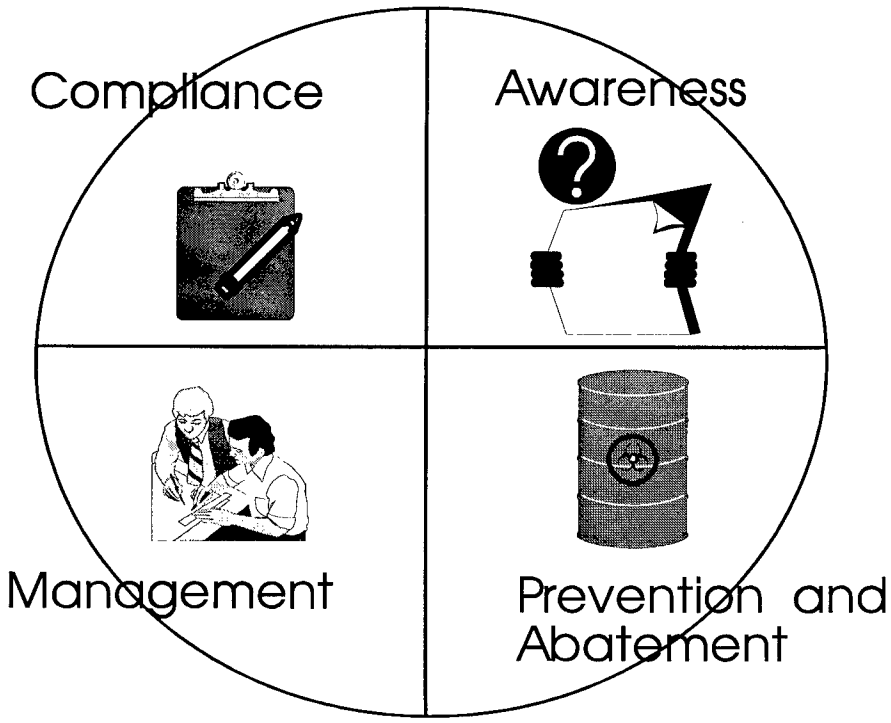
Environmental compliance is expensive, but it's a responsibility you must accept as a cost of doing business. Since there is no separate funding account for environmental compliance, you must plan, budget and pay for your environmental programs as a BASOPS expense. Requirements for planning, programming and budgeting are outlined later in this guide.

Environmental Awareness - Achieving environmental compliance requires an environmental awareness among those who live and work at USAREUR installations. We must all be aware of these impacts and promote measures that lessen the detrimental impact on the environment and increase the positive contributions. As Commander of your installation, it is your responsibility to promote environmental awareness among all of your functional elements.

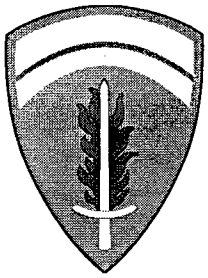
Environmental Management - Components of environmental management are not always discrete elements of your program. Often there will be conflicts with operational plans. Environmental management requires proper planning, training, and adequate

staffing and resources. Successful environmental management requires a team approach and the active involvement and leadership of the Commander and his representatives. A typical environmental management team includes: Tactical or Installation Commander, DEH/DPW, PAO, Environmental Program Coordinator, and representatives of each major staff section, e.g., preventive medicine, operations, safety, range management, staff judge advocate, resource management, logistics, real estate.

Pollution Prevention and Abatement - Recognizing problems and initiating management actions to prevent pollution without impacting the overall mission. Many of the environmental problems that exist at USAREUR installations are recurring. Every effort must be made to identify those problems and to seek management measures to halt or minimize the pollution as much as possible. This approach requires an awareness of the environmental impacts caused by military activities.



Environmental Program Components



Summary: Keep These Things in Mind

As a USAREUR commander, **you** are ultimately responsible for compliance with applicable environmental laws and regulations within your command. USAREUR Regulation 200-1, USAREUR Environmental Quality Program, requires you to maintain cooperative relationships with the regulatory agencies in the host countries or jurisdictions and to maintain a quality environmental program.

UR 200-1 prescribes USAREUR responsibilities, policies, and procedures to preserve and maintain the quality of the environment. It identifies requirements for: legal and regulatory compliance; water resources management; air pollution abatement; hazardous materials management; solid and hazardous waste management; noise management; petroleum, oils and lubricants (POL) and hazardous substances spill contingency planning and response; restoration; asbestos management; radon reduction; environmental impact analysis; environmental actions for installations being returned to the Host Nation (HN); and other environmental programs. UR 200-1 provides reference to applicable portions of AR 200-1, Environmental Protection and Enhancement.

New language in the NATO SOFA Supplemental Agreement (SA) requires Commanders to consider environmental consequences, not only of construction activities, but also training activities, waste disposal, and worker safety.

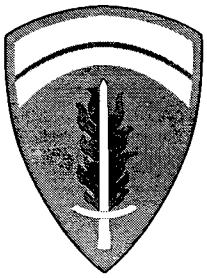
A recent DOD Directive (DODD 6050.1), Overseas Environmental Baseline Guidance Document (OEBGD), provides guidance, for environmental compliance at DOD installations outside the United States. The OEBGD requires each Executive Agent (EA) will develop "final governing standards" (FGS) to be used at DOD facilities in the host nations in Europe. The EA for Belgium, The Netherlands, and Germany is CINC USAREUR; for Italy it is CINC NAVEUR. The FGS reflects the more protective of either host nation laws and regulations or the OEBGD.

The command emphasis you place on the installation environmental program will determine its overall success. An effective tool for implementing an environmental program is to establish an Environmental Management Team in conjunction with the Environmental Quality Control Committee as described in UR 200-1.

The consequences of not complying with applicable host nation environmental laws and regulations can be disruptive to U.S. readiness, and may result in either host nation criminal and civil liabilities or loss of training and facilities maintenance resources.

Moving on....

Accomplishing the mission always has been and always will be the first priority. However, the military mission now includes an environmental security component. Conserving and protecting natural and cultural resources is the first line of defense for the continued freedom to live and train in countries in Europe.



What Is the Army's Environmental Management Policy?

The Army's Environmental Management Policy*, as stated below, has been endorsed by the Army Chief of Staff and the Secretary of the Army. The CINC, USAREUR also endorses this policy.

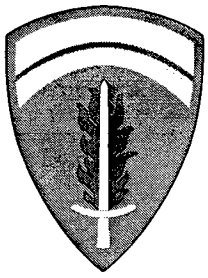
"Protection of precious environmental resources is the duty of every member of the Total Army. Charged with the stewardship of over 20 million acres of land, we must never lose sight of our responsibility to preserve and protect the resources entrusted to our care....

The guiding principle is that military training and readiness actions must be environmentally sustainable, meeting current needs without compromising the integrity of the environment in host nation rations. As a basis to our Environmental Management Policy we must:

- Integrate environmental consideration into all of our activities.
- Allocate resources and training to protect our environment.
- Ensure that installation operations are environmentally acceptable and enhance the life of military and civilian members.
- Minimize generation of waste.
- Clean up sites of past contamination.

All of us, Total Army members and leaders, military and civilian, must ensure that we are well aware of our responsibilities as we set the standard for the Department of Defense and the Nation in meeting the environmental challenges of the 1990s and beyond."

* from U. S. Army Environmental Strategy Into the 21st Century, December 1991.



What About USAREUR Installations?

The environmental situation at a USAREUR installation or facility will depend on requirements and standards set by the SOFAs, UR 200-1 and the Final Governing Standards. Commanders must develop a program for USAREUR installations and activities to ensure that environmental considerations are addressed in the installation management process, as well as in all tenant unit operations.

Several major regulatory documents that apply to or specifically address USAREUR issues are:

- Department of the Army Regulation 200-1, "Environmental Protection and Enhancement"; Chapter 14.
- Department of the Army Regulation 200-2, "Environmental Effects of Army Actions;" Chapter 8.
- Department of the Army Regulation 200-3, "Army's Policy and Guidance on Military Activities."
- Department of Defense Directive 6050.16, DOD Policy for Establishing and implementing Standards at Overseas Installations.
- USAREUR Regulation 200-1, "USAREUR Environmental Quality Program;"
- Executive Order 12114, "Environmental Effects Abroad of Major Federal Actions."

If you are a USAREUR ASG, BSB or Tactical Unit Commander in Germany, it is important to familiarize yourself with specific regulations issued by the host country and the specific state within that country where you are located. The U.S. Forces Liaison Office (USFLO) for your area will be able to assist you with obtaining specific host nation regulations pertaining to your area of operations. Similar steps should be taken for installations in Belgium, Italy, and The Netherlands.

What Are the "Final Governing Standards"?

The DOD Directive 6050.1, Overseas Environmental Baseline Guidance Document (OEBGD), provides guidance and procedures for environmental compliance at DOD installations outside the United States (OCONUS).

The OEBGD was issued in October 1992 and distributed to all OCONUS installations and commands. The purpose of the OEBGD was to establish a baseline from which DOD designated Executive Agents (EA), [for Europe this is CINC USAREUR] could develop the Final Governing Standards. The FGS is a set of standards for all environmental media and conditions. FGS incorporates particular provisions of either US standards on DOD installations or the more protective requirements of the Host Nation, including those delegated to regional or local governments. These are normally the standards and procedures applied to the Host Nation military forces.

Commanders are responsible for ensuring compliance with the Final Governing Standards. Detailed guidance will be furnished to ASG/BSB Commanders and Environmental Coordinators by the USAREUR Environmental Office, Office of the Deputy Chief of Staff, Engineer.

U.S. Department of Defense

ENVIRONMENTAL
FINAL GOVERNING STANDARDS

Germany

Prepared by: Environmental Office, Office of Deputy Chief of Staff, Engineer, Headquarters, United States Army, Europe
Heidelberg, Germany

What is Environmental Compliance?

Environmental Compliance is an installation's performance in following the environmental requirements of UR 200-1. For activities that impact areas off the installation, it would be compliance with host nation environmental laws or the FGS.

Environmental Compliance **is the Commander's responsibility.** The Commander must identify all environmental impacts of command activities. By identifying areas impacted, the Commander will be able to identify the proper environmental response. For example, complying with USAREUR environmental criteria may be insufficient when activities impact areas off the installation. In those instances, host nation regulations must be considered. Compliance with UR 200-1 and local standards is a goal; each case must be evaluated on its circumstances.

Compliance is normally evaluated through inspections. Conducting inspections is a command, NOT host nation, responsibility. A comprehensive and self-regulating environmental program, together with documented inspections, is the best way to ensure a Commander effectively manages the installation environmental program. Without such program management, Host Nation officials may attempt to exercise control over installation activities by asserting environmental regulatory authority.

Your most important tool for achieving and maintaining compliance is a strong, active, environmental awareness program in all units, supported by the ASG Environmental Quality Control Committee that has your full support.

The most important actions you can take to achieve and maintain compliance are as follows:

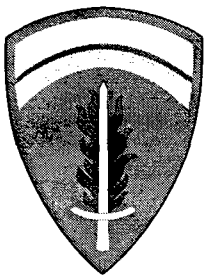
- provide proactive command guidance to all tenant unit commanders

- establish internal review and evaluation mechanisms
- establish standard operational procedures which incorporate environmental considerations
- submit timely and accurate 1383 Reports
- ensure environment management positions are fully staffed
- support an active environmental training program.

To assist commanders and their staffs to achieve and maintain compliance, support agencies are available to assist with technical support and guidance. The USAREUR Environmental Office annually requests environmental compliance project funds for meeting regulatory requirements. Environmental compliance can be costly and time-consuming, but it is a **necessary cost of doing business**.

ENVIRONMENTAL COMPLIANCE CHECK LIST

- **Drinking Water** ✔
- **Wastewater Treatment** ✔
- **Training Operations** ✔
- **Noise Management** ✔
- **Hazardous Waste Management** ✔
- **Air Quality** ✔
- **Solid Waste Management** ✔
- **Pesticides and Pest Management** ✔
- **Asbestos Management** ✔
- **Under and Aboveground Storage Tanks** ✔



What Has to be Done at My Installation?

FIRST, as Commander, you must determine your scope of responsibility. As an ASG Commander, your responsibility includes all of the physical areas, e.g., BSBs, ASTs, LTAs, etc. used by tenant units in your command as well as those areas used for training purposes by tactical units. The BSB and Tactical Unit Commanders share your responsibility in managing the environmental program. Insure that all officers within your command know and understand the importance of environmental quality management. Experience suggests that when short comings exist in the program, they most often stem from a lack of coordination and understanding of responsibility among the many levels of command that exist in USAREUR.

Ensure a strong, active environmental program is maintained at your ASG/BSBs by providing adequate staffing and resources to your DEH environmental office, and emphasizing the environmental program at all levels of your staff. The execution and success of your environmental program will require full commitment from all activities on the installation, not just the environmental office.

Your responsibilities for directing your environmental program are outlined in UR 200-1. Additional technical information is included in AR 200-1 and DA PAM 200-2.

Here is a checklist of things you should do:

- **Meet with your Environmental Management Team:** the DEH and his environmental coordinator, public affairs office, SJA, health and safety, preventive medicine, and land management. Have them brief you on the environmental program. Questions to ask are provided in the Section, "What Are the Questions I Should Ask My Environmental Management Team?"

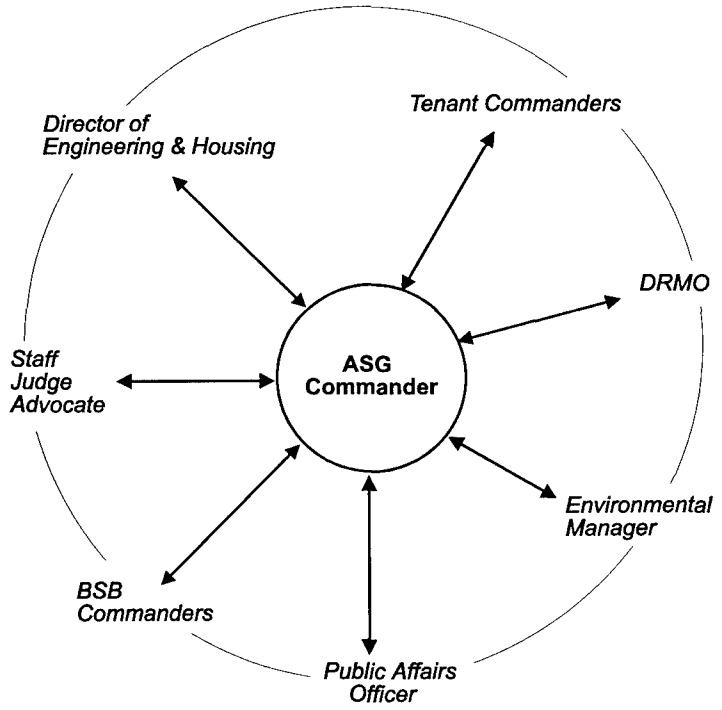
- **Establish an Environmental Quality Control Committee.** Chair it personally.

- **Get copies of UR 200-1, SOFA, AR 200-1, DA PAM 200-2, and TC 5-400.** Become familiar with them. These documents explain in more detail the range of functions in environmental management. Also familiarize yourself with related regulations in the AR 420 series (i.e., ARs 420-40, -74 and -76), which are DEH functions.

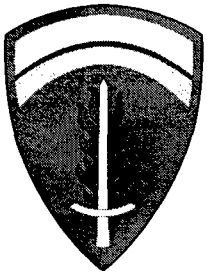
- **Ask for briefings on inspection results from IG, AAA, and GAO reports, and request copies of the environmental audit reports.**

- **Meet with USFLO and Host Nation regulatory officials to discuss any potential or ongoing environmental problems.**

- **Meet with tenant commanders.** Seek their support and involvement in the program. Encourage their attendance at and participation in the Environmental Quality Control Committee meetings. Tactical unit commanders must understand their responsibilities with regard to environmental management and they must be held accountable. The following section is a recommended checklist of issues for review with unit commanders.



Environmental Quality Control Committee



Unit Commanders Checklist

Unit Commanders Responsibilities: Unit Commanders are legally liable for pollution caused by their units. The following checklist will be helpful for unit commanders.

- Ensure that environmentally sound planning is integrated into all operations. Review the environmental management plan or SOP and discuss it with the EQCC.
- Ensure full command emphasis is placed on environmental awareness and pollution prevention training.
- Ensure that appropriate measures are taken to avoid hazardous materials/wastes leaks and spills. Perform field inspections and discuss management measures with unit staff officers and senior NCOs.
- Ensure that all hazardous materials/wastes (HM/HWs) spills are reported and cleaned up immediately.
- Ensure that Separate or Recycle Trash (SORT) program is properly implemented.
- Ensure that no trash or hazardous material/waste is buried or left behind upon unit departure.
- Appoint an Environmental Officer, and NCOIC, at appropriate organizational levels, to coordinate and control environmental compliance measures.

Many of the environmental problems associated with military activities and operations can be eliminated with careful handling and management of Hazardous Materials/Wastes (HM/HW).

Hazardous Materials (HM) include: all POL products, battery acids, dry cell batteries (military and civilian), antifreeze and other glyceride, paints, thinners and cleaning agents.

Hazardous Waste (HW) include: all products listed above which are no longer suitable for their intended purpose. Correct handling of HM/HW is a must. The following requirements should be clearly stated in your environmental management plan. All individuals required to handle these materials should have a copy of the requirements. All soldiers involved in handling HM/HW **must** receive the required training.

HM/HW Handling Requirements:

- HM/HWs are not allowed to drain/leak onto the ground or into sewer lines.
- Any spills of HM/HWs are reported to the ASG and cleaned up immediately.
- During refueling operations away from hard stands, a tarp will be utilized to prevent possible spillage onto bare ground.
- All fuel trucks must have 100 lbs. clean dry "dry-sweep," plastic bags, and drip pans on hand at all times.
- Drip pans are placed so as to catch all leaking HM/HW from vehicles, tent stoves, fuel cans, etc.
- Drip pans must not be allowed to overflow.
- Serviceable dry-sweep is readily available wherever HM/HW is stored or used.
- All HM/HWs containers are closed unless being filled or emptied. [Open containers set outside, will soon fill with rain and spill any HM/HW on the ground.]
- Batteries are not mixed with non-hazardous waste.
- HM/HW containers are inspected daily for leakage.

Separate or Recycle Trash (SORT):

- Non-hazardous trash sorting categories are:

  Paper (no carbon paper)

  Glass

  Household hazardous waste

  Metal (steel and aluminum go in the same container)

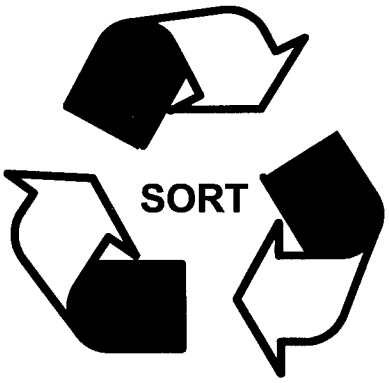
  All other non-hazardous trash

- Units are responsible for sorting trash in their respective areas. Trash will be transported to the nearest available recycling containers if there are none in the immediate vicinity.

Inspections and Deficiency Reporting:

- DEH, installation management and range control personnel conduct daily inspections of life support and tactical operations areas.

- Deficiencies in compliance will be noted by the inspection personnel, and forwarded up the tactical and community chains of command.



SEPARATE OR RECYCLE TRASH

Read and Approve Those Reports

Within USAREUR, and in fact, the entire Army, there is one environmental report that must be provided to DA through USAREUR HQ. This report is the Environmental Program Requirements Report, A106. **The A106 Report** is critical for identifying your environmental program resource requirements to higher headquarters. Your environmental office should be keenly aware of this because it is **the** basis for environmental programming and budgeting of environmental projects.

Another reporting requirement concerns reporting spills of hazardous substances. If an official complaint from a Host Nation regulatory agency is received or whenever there is a reportable hazardous substance spill, the incident **must** be reported to the ASG, DEH immediately, as outlined in the ASG's Spill Prevention and Cleanup Plan. Once notified of a complaint or a spill, the ASG is responsible for reporting to HQ USAREUR within 48 hours of its occurrence in accordance with UR 200-1 (Chap. 8-4).

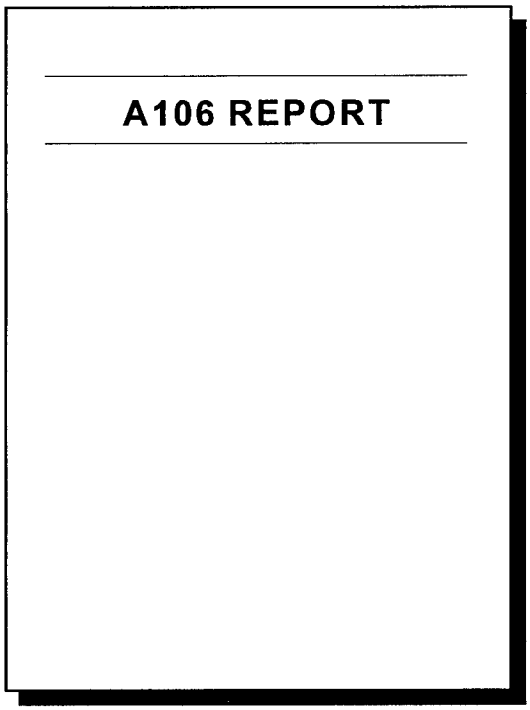
Your environmental coordinator has detailed information on these and other reporting requirements. Additional background on these reports is provided in the Supplementary Reading section.

Environmental Program Requirements Report:

RESPONSIBILITIES: Commanders at All Levels: Must develop an aggressive program to ensure potential problem areas are properly identified, and corrective actions are programmed, budgeted, funded, and executed. Commanders must use the EPR Report as the data source for programming and budgeting resources consistent with The Army Plan (TAP), POM preparation and command budget instructions, and Program Budget Guidance (PBG). This is imperative in order to reduce or eliminate the risk of legal liability. They must review the EPR Report submission to verify projects are properly classified and

executable. Commanders at each level must approve the EPR Report and indicate approval by signing a transmittal memorandum to accompany the report to the next higher headquarters.

SOURCE: "Policy and Guidance for Identifying U.S. Army Environmental Program Requirements," HQDA, ACSIM, Office of the Director, Environmental Programs, 20 December 1995.



How Do I Know If I'm In Compliance?

Your environmental compliance status can be determined in three principal ways:

1) through a formal inspection by the Army Audit Agency, Government Accounting Office, or Inspector General team;

2) through a Host Nation regulatory agency inspection which is allowed under NATO SOFA, but is subject to consideration of military security; and

3) through a self inspection, an internal Army event called an Environmental Compliance Assessment System (ECAS) "audit." The ECAS for USAREUR will be based on the FGS.

Regulatory inspections

The U.S. auditing team will always notify you through the DEH of their intent to inspect your installation. Specific focus may be placed on hazardous waste storage areas, underground tank inspections, stripping yard inspections and pollution abatement projects, or project management. Once the inspection is completed, the auditing team/agency will normally provide you with an exit briefing summarizing their findings.

Host Nation inspections

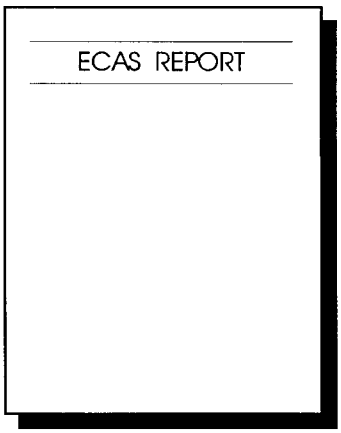
Local water quality agencies (Wasserwirtschaft Amt) or Federal Assets Offices (BVA) may conduct "Walk-throughs" to examine certain aspects of environmental management. After a walk-through, Installation commanders may or may not receive an exit briefing. Instead, commanders may receive a letter (normally within one to three months after the inspection) defining any non-compliance situations. This letter will document the compliance status, based on the inspection, and request a response detailing a corrective action plan. If the regulatory agency finds the facility in compliance, a written response may or may not be received. After three to four months, the inspection agency may be contacted to determine the installation's compliance status.

Self Inspection

The Army's Environmental Compliance Assessment System (ECAS) is an effective means of identifying environmental problems and addressing the necessary corrective actions before a regulatory inspection. An ECAS is an examination of your installation's environmental program. As such, it generally encompasses the full range of operations that affect or potentially affect environmental quality at an installation. The environmental areas addressed during the course of an ECAS range from air emissions to underground storage tanks; natural and cultural resources to spill response plans.

USAREUR policy (AR 200-1) requires that installations conduct an external ECAS audits at least once every three years. Selective internal ECAS audits (performed by installation personnel) are to be performed annually unless the community is scheduled for the external ECAS. In future years, the Installation Status Report (Part II) will eliminate the need for annual internal audits.

All external ECAS audits will be arranged by HQ USAREUR and performed by various Army activities, e.g., U.S. Army Corps of Engineers EUD or contractors. Consult your environmental coordinator to ensure that ECAS audits will include your concerns or interests in the program.

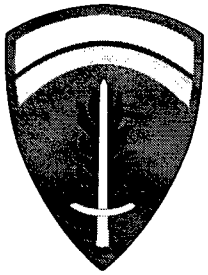


What Happens If I'm Not In Compliance?

Non-compliance discovered through a Host Nation Regulatory inspection. Non-compliance during off-post operations (during transport or mobilization exercises) or on-post with permission to inspect, may be determined as a result of a regulatory inspection. The regulatory agency will issue an official letter of complaint. The letter will state the extent of the violation and will request information on the remedial actions planned to bring the violation into compliance.

Resolution of non-compliance. Generally most violations can, and should be negotiated and resolved between the installation and the host community. It is recommended that you coordinate all inspections with U. S. Forces Liaison Officer (USFLO) as soon as a request for a walk-through is requested.

Non-compliance discovered as a result of an internal ECAS. Deficiencies discovered through ECAS will be reported directly to HQ USAREUR. Coordination with HQ USAREUR is required to determine a course of corrective action. Army policy is not to provide Host Nation regulators with copies of internal ECAS reports.



What is an Environmental Compliance Action?

Environmental Compliance Actions are those actions that are necessary to correct a deficiency and would qualify for Environmental Compliance (VENC) Funds. These projects are ranked as Class I, Class II, and Class III actions. The following definitions apply:

Class I actions are those actions necessary to prevent or correct situations where a member or employee of the U.S. Forces could be held liable for noncompliance with Host Nation environmental standard under SOFA limits, and where the deadline for compliance has passed. This includes necessary corrective action (studies, site surveys, construction projects, etc.) to:

(1) define suspected violations of standards;
(2) develop a plan of action to resolve the noncompliance situation; and
(3) request funding for surveys or designs.

Examples of Class I actions are:

- groundwater cleanup in a water protection area;
- friable asbestos removal in the work place;
- removal of leaking underground fuel storage tanks.

Class I actions are those necessary to:

a. correct deficiencies where a statutory or regulatory deadline has passed (to include self-identified violations);

b. support compliance with legally binding agreements, U.S. or HN law;

c. correct deficiencies cited in an inspection report completed by a HN agency;

d. execute Class II requirements which will become Class I in the next FY.

Class II actions: Class II requirements are those projects or actions needed at installations which are NOT YET out of compliance, but WILL BE by the following year.

Examples of Class II actions are:

- upgrade of air pollution abatement equipment on heating plants to meet a future HN law

Class III actions are those actions not covered under Class I or II definitions. Projects or actions needed for managing programs and operations which meet current standards, but need replacement or expansion to avoid obsolescence or going out of compliance. Class III also includes projects or actions which demonstrate leadership and/or reduce future risks or costs (e.g., hazardous waste minimization). (NOTE: hazardous waste disposal is a Class III requirement but one which must be funded each fiscal year.)

Examples of Class III actions:

- routine environmental surveys;
- training not legally mandated; and
- asbestos removal projects (non-friable).
- radon remediation in buildings with levels above the acceptable (IAW DA Pam 200-1)

Class III Must Fund

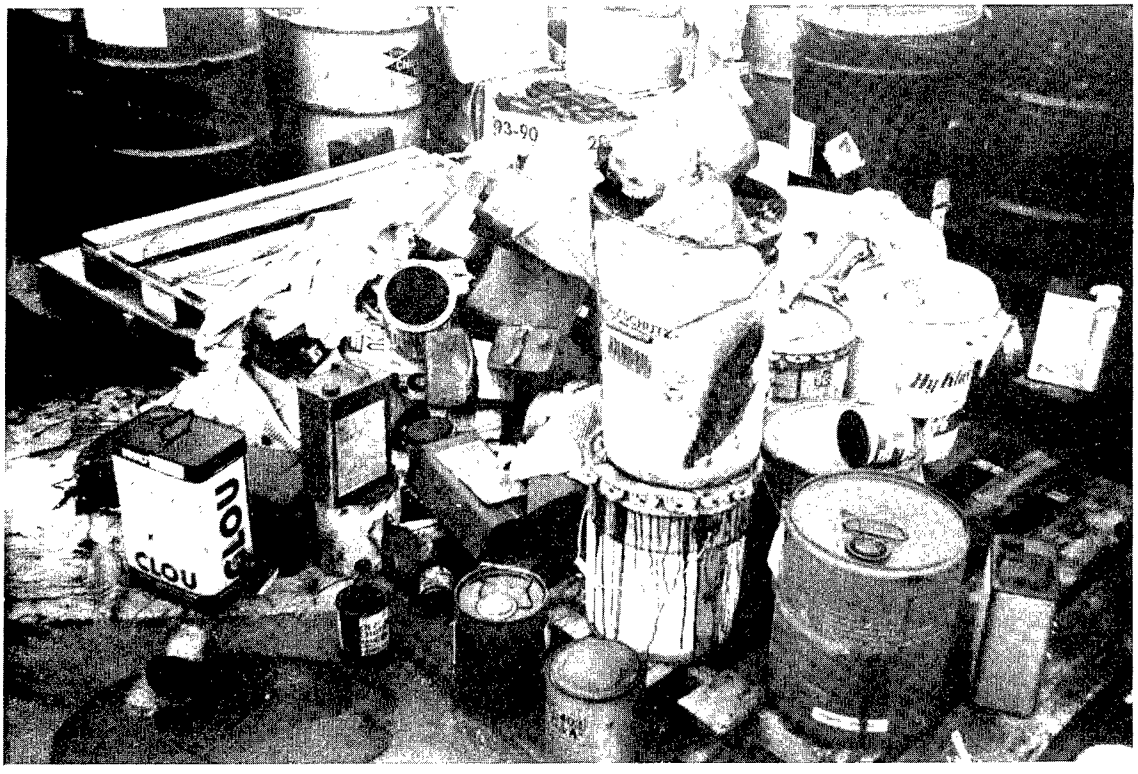
MUST FUND: Projects/actions that must be funded within the current FY regardless of classification. This includes such actions as:

a. all hazardous waste disposal;

b. Class II actions which, if not funded in current FY, will become Class I;

c. all "Class I" actions/projects.

d. Other items as determined by HQ USAREUR budget guidance, e.g., training required by regulation; lab analyses; surveys; internal compliance audits.



Hazardous waste storage problem. No separation or labeling. Collection point is a safety and health threat, and a threat to underground water.

What Can I Do to Meet Host Nation Environmental Standards?

1. Review A106 Environmental Program Requirements Report twice a year to be sure all required projects are included. Be prepared to defend this document at CINC USAREUR Commanders Call.

2. If you have been notified that you are not meeting Host Nation Environmental Standards, you should:

- Ensure your Environmental Management Office is informed and keeps you informed.
- Discuss with the Host Nation agency the compliance requirements not met and timetables to comply.
- Develop a corrective action plan.
- Prepare and submit each project requirement in the A106 Report. Informing USAREUR HQ of program requirements is critical to receiving the resources necessary to achieve and maintain compliance. The A106 Report should be personally reviewed and signed by you before it is forwarded to USAREUR HQ. Funding requirements identified in the A106 Report form the basis for future year VENC funding.
- Take action to implement your corrective action plan.
- Seek help from support agencies as required (USACHPPM, USFLO, etc.)

What Are My Legal Liabilities?

Commanders are responsible for insuring compliance with the USAREUR Reg 200-1, and Final Governing Standards (FGS). Current law and the SOFA shields commanders and all "Army - Green-Suiters" from direct prosecution by Host Nation authorities, a protection derived from the Status of Forces Agreement (SOFA). However, it is anticipated that under the revised SOFA and Supplemental Agreements, commanders may be more liable for enforcement of Host Nation environmental laws and standards.

U.S. Department of Defense

ENVIRONMENTAL
FINAL GOVERNING STANDARDS

Germany

Prepared by: Environmental Office, Office of Deputy Chief of Staff,
Engineer, Headquarters, United States Army, Europe
Heidelberg, Germany

Who Are The Members Of My Environmental Quality Control Committee (EQCC)?

In accordance with UR200-1, each ASG commander WILL have an EQCC. Members of the EQCC will include representatives of all BSB and major satellite installations and tenant activities. Membership of the EQCC will include at a minimum:

(1) The ASG commander or a designated representative will serve as the chair.

(2) The DEH, who will act as the executive secretary.

(3) The environmental program manager.

(4) The director of each major staff section of the ASG/BSB (including medical, operations, safety, range management, staff judge advocate, resource management, logistics, public affairs, and senior tactical commander's representative). At the discretion of the ASG commander, other offices and staffs may be represented.

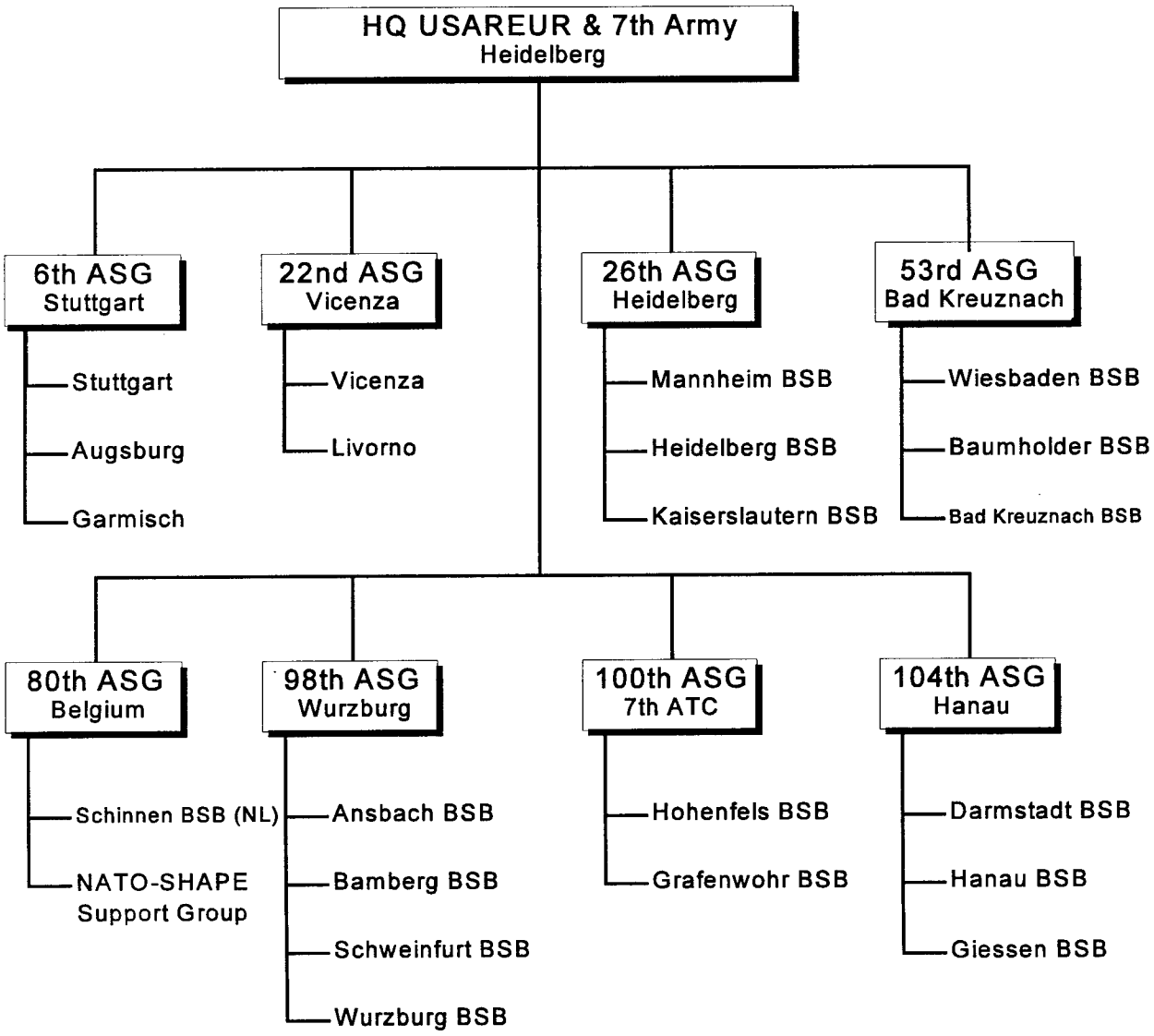
(5) Command representatives from each tenant organization.

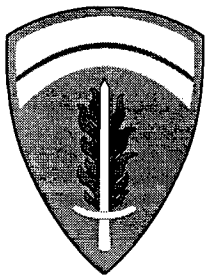
(6) BSB commanders and others deemed appropriate by the ASG commander.

(7) DRMO field office representatives (invited).

Why Should We Enforce Recycling in USAREUR?

The issue of recycling has become important world wide. In the United States, where land is plentiful, recycling has become a national effort with everyone participating: school children, scout troops, government (including DOD), and businesses alike. The issue in the U. S. stems from the lack of available land that is





Why Should We Enforce Recycling in USAREUR?

The issue of recycling has become important world wide. In the United States, where land is plentiful, recycling has become a national effort with everyone participating: school children, scout troops, government (including DOD), and businesses alike. The issue in the U. S. stems from the lack of available land that is suitable for landfills.

In USAREUR, the problem is much more acute. In the Federal Republic of Germany for example, there are some 85 million people living in a country that is approximately one and a half times the size of the State of Oregon (which has a population of 2 million). Population pressures on the land far exceed any area of the U. S. These population pressures and the small land area have led the German government to adopt very strict laws to help reduce the impact of human activities on the environment. A subset of these laws addresses solid waste disposal.

RECYCLING PAYS. For example, in the area of Wuerzburg there are three sets of fees for solid waste disposal as of December 1994. Sorted waste is disposed of at a rate of 350dm per ton. Unsorted waste cost 650dm per ton. Unsorted waste containing styrofoam cost 1000dm per ton. With these kinds of fees, there are strong incentives to recycle and the U.S. Army in Wuerzburg is making every attempt to maximize this effort. The USAREUR Separate or Recycle Trash (SORT) program was established in 1992 by the DCSENGR. The Operation and Maintenance Office at each DEH is responsible for insuring adequate containers, pickup contracts, etc. The SORT Programs Coordinator plays a key role in public awareness and education about SORT.

Questions For Your Environmental Management Team

Questions for your Environmental Coordinator/Manager:

Overall Installation Program

- What is our compliance status?
- Does the environmental management program have sufficient staff and resources to ensure environmental compliance?
- What official complaints have we received in the past year?
- Are any official complaints still waiting action?
- Do we currently have agreements to take corrective action?
- What is our working relationship with Host Nation officials?
- What are our Class I actions, and what is their status?
- What A106 Report requirements have we submitted?
- What is the current FY funding status?
- What environmental projects are ongoing?
- What projects are scheduled?
- What is our environmental training program?
- Has an ECAS been performed? By whom?
- What deficiencies were found?
- What is being done to correct those deficiencies?
- Do we have an Environmental Quality Control Committee?
- When was the EQCC's last meeting? Next meeting?
- What Environmental Compliance (VENC) Funds have we received this fiscal year?
- What amount of Environmental Compliance (VENC) Funds have been committed or obligated?
- Do we have a Recycling Program? How effective is it?

Hazardous Waste Management Program

- How much hazardous waste do we generate each month?
- What is the status of our hazardous waste inventory?
- What units generate hazardous waste within the installation?
- Do we have an Installation Hazardous Waste Management Board?
- What is the status of the Installation Hazardous Waste Management Plan and when was it last updated?
- Are there any problems with tenant organizations complying with our installation requirements?
- Are there adequate hazardous waste collection points throughout the installation?
- Are we programming adequate funding requirements for hazardous waste disposal?
- Have charge-back procedures to support agreements been set up for Non-USAREUR tenant organizations?
- Are we using the Defense Reutilization and Marketing Office (DRMO) disposal contracts?
- Have there been any problems with hazardous waste disposal?
- What are our hazardous waste disposal costs?

Hazardous Waste Minimization Program

- What is the status of our HAZMIN Plan?
- What is the status of our "Pharmacy" operation for managing HM/HW and reducing HW disposal costs?

Other Programs

a. Do we have a current, approved Spill Contingency Plan?

- When was the Spill Contingency Plan last exercised?
- What deficiencies were noted during the test?
- What is the status of corrective actions?
- How many reportable spills have we had in the past year?
- Were all spills reported properly?

b. How many underground storage tanks (USTs) do we have?

- How many USTs are single-walled?
- Have they all been tested?
- How many tanks are leaking?
- What is the status of corrective actions for leaking tanks?
- Have funds been budgeted for testing/removing tanks and possible cleanups?

c. Do we have any environmental noise problems?

d. Do we have landfills in operation?

- Are they adhering to current Host Nation requirements?

e. Have all our people been properly trained to do their jobs?

- Has all mandated training been completed and records retained?
- How many people need training?

f. Do we have an environmental awareness training program?

g. Have all buildings been inspected for asbestos?

- What is the status of our asbestos management plan?
- Do any buildings require asbestos abatement?

h. Have required buildings been tested for radon?

- Do any require remediation?

Other Programs (cont.)

i. Are we currently receiving environmental support from other Army agencies?

- Do we need support?
- How do we obtain support?

j. Is there a current Environmental Annex to the Installation Master Plan?

- Does the Environmental Manager have access to sit in on the Master Planning Board? ...the Range Planning Committee?

k. Is any part of the community located in a water protection zone?

Questions for your Public Affairs Office

- How is our environmental program perceived in the community?
- What is our relationship with local officials regarding environmental issues?
- What is our relationship with the media?
- How does the media perceive our environmental program?
- What types of communication tools are being used to inform surrounding neighborhood communities?
- Are there good news stories from the Environmental Office that can be released to the local newspaper?
- How is the Public Affairs Office (PAO) promoting environmental awareness within our installation?
- Does the "new comers" briefing cover Environmental Programs?
- Are any organized environmental groups interested in our installation?
- Who are they and what is our relationship with them?
- Are there any bad news stories I need to be aware of?

Questions for your Legal Office

- Has an Environmental Law Specialist been appointed from your servicing Staff Judge Advocate Office?
- What environmental training has the legal office received?
- What technical support does the legal office have available?
- In what way is the servicing Environmental Law Specialist actively involved in the planning, execution, and monitoring of our environmental programs?
- How is the servicing Environmental Law Specialist involved in integrating environmental protection and preservation activities into the planning and execution of our mission?
- Is there coordination with key environmental personnel (i.e., BSB environmental managers, HQ USAREUR environmental office, USFLOs) to ensure timely coordination of environmental issues?
- How are our environmental projects reviewed by the Staff Judge Advocate?

Questions for your Safety Office

- Is there a respirator protection program in effect?
- Have hazardous waste handlers and transporters received adequate safety training?
- Do we have means (contract or other) of obtaining Air Quality Samples (i.e. Asbestos) quickly?
- Is the safety office part of the Environmental Quality Control Committee?
- Has the installation HAZCOM Program been fully implemented?
- Are periodic inspections conducted of areas using hazardous materials?

Questions for the Preventive Medicine Activity

- Do Preventive Medicine (PVNTMED) Activity Personnel need environmental health training?
- Do we have a medical monitoring program?
- Are we experiencing any work-related health problems?
- Is the PVNTMED regularly involved in the Technical Review Committee?
- Are personnel protection requirements adequate?
- Are we in compliance with the medical requirements of Technical Medical Bulletins?
- Is the Preventive Medicine Activity responsible for environmental health, occupational health, and industrial hygiene?

Questions for the Occupational Health and Industrial Hygiene Activity

- Do we have a medical monitoring program?
- Are we experiencing any work-related health problems?
- Is the OHIHA regularly involved in the Technical Review Committee (or the EQCC)?
- Are personnel protection requirements, training, and equipment for all organizations on the installation currently meeting Army standards?
- Are all units/organizations in compliance with medical Technical Bulletin requirements and standards?

Questions for your Land Manager

- Do we have a current Land Management Plan?
- Do we have any land usage agreements?
- Do these agreements conflict with training requirements?
- Where are the training areas located, if any?
- Are they documented/undocumented?
- How can they be used?
- Does the Land Management Plan/SOP support training and long term land use requirements?
- Is there a training area development program within the Installation Master Plan?
- Are endangered species identified within the installation?
- Are there mission conflicts with endangered species?
- If so, could these conflicts significantly interfere with the training mission?
- Do we have soil erosion or sediment pollution problems at our local training areas (LTAs)?
- Do we have an Erosion Control Plan?
- Do we have an Integrated Training Area Management (ITAM) Program?
- Do we have an Integrated Natural Resources Management Plan, approved by USAREUR?
- Are we stressing environmental awareness during field training exercises?

How Do I Handle Public Relations?

Actually, Public Affairs (PA) in USAREUR's environmental programs is really "Public Involvement (PI)."

Public Involvement is a conscious effort to inform citizens of the decision-making process and to prevent or resolve citizen conflict through mutual two-way communication. PI differs from what we typically mean by PR. Through the PAO we are trying to initiate a process of mutual education and information exchange so that environmental program goals can be accomplished, while taking local concerns and issues into account, rather than trying to "sell" a particular point of view to the Host Nation public.

The importance of public involvement as an integral part of the installation environmental program cannot be overemphasized. Many tough lessons have been learned in past years, the results of which have included negative news coverage, citizen-generated state and local government interest, and public reaction to the reduced need for military training, all of which reflect inadequate or nonexistent public involvement.

While negative news coverage, irate political representatives, and adverse public reaction are distasteful, these aspects are not justification for the Army to cease active public involvement.

We need active public involvement because ...

It's critical for mission accomplishment. Whether the environmental issue is storage of hazardous waste or building a conforming storage facility, the goal is to get the job done.

The public can significantly impact your ability to get the job done.

An important consideration from your standpoint is that when adverse public reaction occurs, the resources and expertise that

should be dedicated to accomplishing the task are diverted to addressing public outcry, resulting in, at a minimum, delays in the project.

Because public involvement requires a mastery of communications skills, the activities should be managed by the Public Affairs Officer (PAO), in close coordination with other members of the Environmental Management Team.

The PAO is responsible for identifying and preparing plans for meeting public involvement requirements of USAREUR environmental programs.

Remember Planning and implementation of the plans requires command involvement and participation.

Tips for working with the local community

- Understand that the environment belongs to everyone.
- Understand the difference between public relations and public involvement.
- Understand that the average citizen distrusts the U.S. Army's representation of controversial issues, so openness and honesty from the beginning is crucial.
- Don't take criticism personally.
- Establish a contact (preferably the PAO) and make him/her an expert.
- Become aware of past environmental agreements made by prior commanders and ensure that you live up to these or else explicitly change them.
- Be prepared — release requested information from the beginning of a project.
- Understand that you're striving for objective, accurate, but not necessarily positive, news coverage.
- Never, ever, selectively release information.
- Never, lie or even stretch the truth.
- Be prepared by maintaining current fact sheets in question/answer format and provide them when requested.
- Don't be afraid to say "I don't know," and be prepared to have your environmental management team search for answers.

Elected Officials

Many citizens will first turn to their elected officials when they have a complaint or concern about the community. Typically, these contacts serve to point out a need for more information and a mechanism for two-way communication. The two best methods for managing environmental issues with elected officials are:

Plan and implement a progressive public awareness program that provides citizens with information they may otherwise seek from elected representatives, who will then seek it from you; and

Provide methods for keeping elected officials informed of the overall environmental program, and particularly of proposed actions or operations that may have environmental consequences. Such methods may include:

- Regularly prepare fact sheets or news releases about installation environmental activities.
- Providing a contact person at the installation to expedite answers to questions they receive from constituents.
- Providing tours/briefings on environmental programs so that they will better understand the issues.
- Being personally involved in the communications process. Elected officials appreciate personal attention from the commander. Face-to-face communication with elected officials increases credibility and cements working relationships.

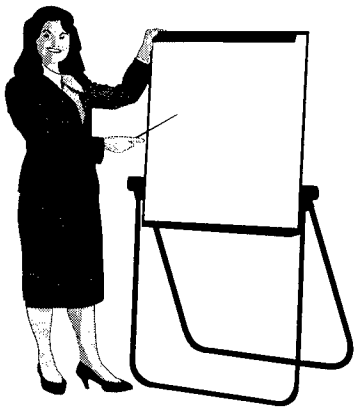
What About Training?

As in any endeavor, knowing how to go about completing a given job is essential to success. Achieving and maintaining good environmental practices is no different. Almost everyone wants to protect the environment and tries to respect applicable laws and regulations. In fact, there are very few cases that involve intentional disrespect. There are, however, a large number of environmental enforcement actions based on mistakes or accidents. **Remember, ignorance of the law is no excuse, so ensure that personnel on your installation are well-informed and trained.**

Your employees need to know how to accomplish their tasks in such a way that they comply with environmental regulations. This can be done by on-the-job training and by following standard operating procedures that address environmental requirements in detail.

Some specific training may be required by Host Nation law or Army regulations. Safety and Health regulations delineate training requirements for some of your personnel. Find out who needs such training and see that they are trained. All such personnel should have up-to-date training files.

Your supervisors need to know the DEH Environmental Coordinator is the person to go to for help in managing their operations consistent with applicable environmental laws and regulations. With his/her help they can identify actions needed to comply with environmental laws and regulations. In addition, some training may be necessary to help them understand what is required and how to meet the requirements.



In nearly all cases involving environmental problems or issues, the appropriate place to go for help outside of your command is through the normal channels, to the Environmental Office, HQ, USAREUR. The environmental office will assist in determining the appropriate experts in making the initial contacts.

HQUSAREUR — U.S. Army Europe Environmental Office is located at Headquarters, USAREUR/7th Army, Campbell Barracks, Heidelberg, Germany. Telephone is: DSN - 370-7328/8125; Commercial - 06221-577328. FAX: 370-8693.

ASBESTOS
USA Center for Health Promotion and Preventive Medicine-Europe, Landstuhl, Germany (formerly 10th Medical Laboratory); CMR 402, APO 09108 Phone: DSN: 486-8556; COMMERCIAL: 06371-578556

ENVIRONMENTAL NOISE
USACHPPM, Bio-Acoustics Division (Phone - SEE ABOVE)

HAZARDOUS AND TOXIC WASTE AND MATERIALS MANAGEMENT
USACHPPM-E, (formerly 10th Medical Laboratory) SEE ABOVE ADDRESS

RESOURCING, DOCUMENTING, REPORTING [A106 Report, Defense Environmental Management Information System (DEMIS)]
USAAEC — Environmental Data Systems Branch
(301) 671-1650, DSN 584-1650
ALSO: HQ USAREUR, Envir. Office 370-7328/8125

DRINKING WATER QUALITY
USACHPPM-E, Address above.

What Additional Information Would I Find Useful?

The Supplementary Reading section can be read at your leisure — it is designed to provide you with background knowledge on each major environmental program and provide information on current regulations and references.

The programs are organized in the same order that they are presented in UR 200-1. A contents page is included at the beginning of the section. Other topics, such as a legislative overview and further information on resourcing and reporting, are also included.

Supplementary Reading Table of Contents

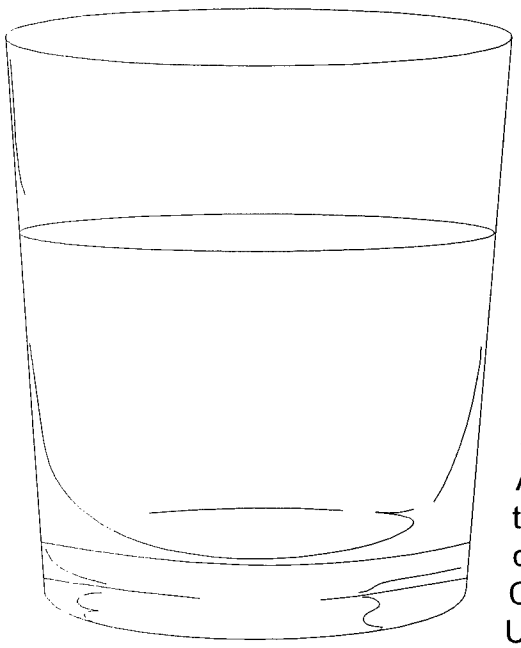
Water Resources Management

Drinking Water

Background

Drinking water is obtained from two general sources. Around 90 percent of USAREUR drinking water is derived from ground water. The remainder comes from rivers, streams, and other forms of "surface" water.

The quality of ground and surface water supplies is a function of geography as well as the effects of human activity. Natural contaminants include suspended matter, sulfates, chlorides, calcium, nitrates, fluoride, and radionuclides. Fortunately, modern technology can manage and/or remove these natural contaminants from drinking water. The majority of the water in USAREUR is considered hard.



In addition to natural pollutants, there are over 60,000 possible manmade drinking water contaminants. These chemicals are used by both industry and agriculture and range from solvents to pesticides. When these chemicals are used or discarded improperly, they can pollute ground and surface waters, in turn contaminating drinking water sources. Additionally, disinfectants used at water treatment plants to purify drinking water can also create potentially hazardous byproducts. Chlorine, the standard chemical used in the United States to remove bacteria from raw water supplies, can react with natural and man-made chemicals in the water to form undesirable by-products known as trihalomethanes.

Drinking water is piped from treatment plants to consumers via water distribution systems where it can potentially become

contaminated by corrosion by-products from rusting pipes and by lead from lead-soldered pipes. It is important that water distribution systems be inspected regularly by the DEH so they will not contribute contamination to purified drinking water.

Current Regulations

Although the EPA has no jurisdiction in USAREUR, the EPA standards are used as guidelines based on the Safe Drinking Water Act (SWDA) of 1974, as amended in 1986. There are currently 27 pollutants for which EPA has set primary drinking water maximum contaminant levels (MCLs): 10 organic chemicals, 11 inorganic chemicals, four radio nuclides, and two micro biological contaminants. There are restrictions on the use of lead in drinking water distribution systems.

The Lead Contamination Control Act of 1988 requires lead monitoring programs for school, day care, hospital and housing drinking water systems. The Final Governing Standards (FGS) and USAREUR regulations establish similar programs/guidelines as those established by EPA and HN.

The USAREUR Program

Objectives...

- Provide drinking water that meets all regulatory standards; and
- Conserve all water resources through implementation of water conservation plans.

Commanders should...

- Ensure adequate supplies of drinking water which meet all applicable standards;
- Ensure sampling and analysis programs comply with standards (water quality tests are the responsibility of the Preventive Medicine Office and 10th MEDLAB);
- Ensure treatment facility operators obtain/maintain required certifications;
- Obtain HN permits for new or modified drinking water facilities;
- Operate U.S. controlled water treatment facilities in accordance with Host Nation standards; and

- Ensure testing of lead (Pb) and copper (Cu) is conducted for, DODD schools, Child Development Centers, and Family Housing, in accordance with USAREUR guidelines.

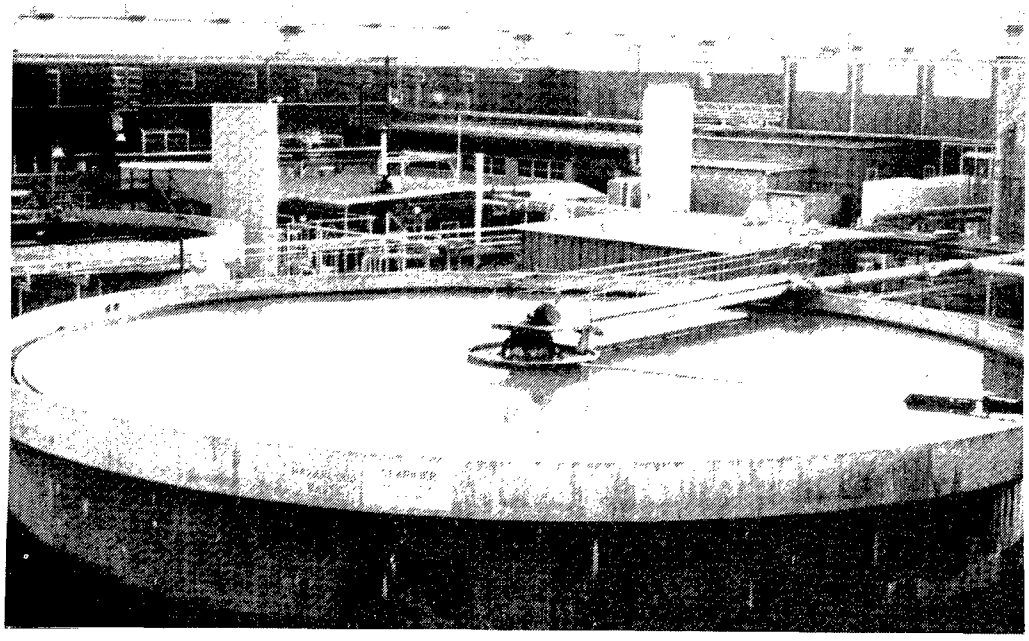
References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).
AR 420-46, "Water and Sewage," (1 June 1992).
TB MED 576, "Sanitary Control and Surveillance of Water Supplies at Fixed Installations," (March 1982).

Wastewater Management

Background

Because water is one of the most significant natural resources used in both the home and the work place, preserving this resource is important. A typical installation generates wastewater from both sanitary and industrial uses. Adequate treatment and discharge of wastewater ensures this resource is renewed and the quality of the water receiving the treated effluent is not impacted. Although most of the waste water generated throughout USAREUR is treated at local host nation facilities, there are a few installations that have treatment facilities.



The USAREUR Program

Objectives...

- Control or eliminate sources of pollutants discharged to surface or ground by conventional or innovative treatment systems;
- Demonstrate leadership in minimizing the amount of water pollutants discharged;
- Cooperate with HN regulatory authorities in implementing water pollution control plans; and
- Control or eliminate runoff and erosion through sound vegetative and land management practices.

Commanders should...

- Ensure wastewater monitoring programs comply with the FGS or HN permits;
- Obtain operating permits for treatment facilities where applicable;
- Ensure maintenance of facilities for storing, producing, treating, and handling water endangering substances;
- Notify HQ USAREUR (AEAEN-ENVR) when new permits are received or new regulations are proposed (or issued) which require modification of existing treatment facilities;
- Submit copies of official letters of complaint immediately to the HQ USAREUR and cooperate with HN agencies in providing information on wastewater systems and/or water quality;
- Ensure operators of USAREUR controlled wastewater treatment plants are certified and receive adequate training; and
- Ensure measures are taken to insure that POL, Hazardous Material, and Hazardous Waste are not discharged into receiving waters or HN treatment facilities.

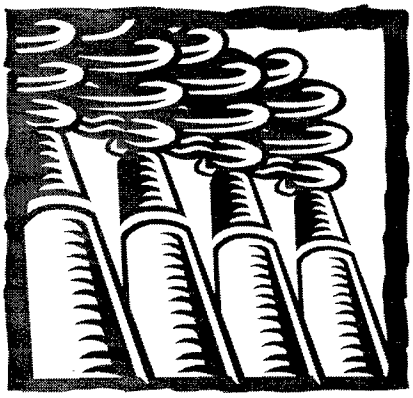
References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).
AR 420-46, "Water and Sewage", (1 June 1992).

Air Pollution Abatement

Background

Maintaining air quality on USAREUR installations provides direct economic and health benefits to the on and off-post population. Air quality management requires prevention and/or control of emissions from installation sources.



Current Regulations

The USAREUR Air Pollution Abatement Program is based on a combination of HN law and UR 200-1.

The USAREUR Program

Objectives...

- Identify, inventory and monitor air pollutant emissions;
- Reduce pollutants to regulatory levels;
- Procure control equipment that meets regulatory standards; and
- Ensure operation of military equipment and facilities are in accordance with HN or DA regulations.

Commanders should...

- Ensure smog alert plans are maintained where required;
- Identify, monitor, and maintain an up-to-date inventory of emission sources;
- Obtain permits and provide reports for emission sources as required by regulations;
- Promote awareness of HN air pollution requirements;
- Maintain programs to train air emissions utility personnel;
- Conduct motor vehicle maintenance to ensure reduced air pollution emissions; and

- Notify ASG, DEH and HQ USAREUR Environmental Office immediately whenever an official complaint is received.

References

UR 200-1, "USAREUR Environmental Quality Program Chapter 4", (9 December 1993).
AR 40-5, "Preventive Medicine," Chapter 11, August 1986.

Ozone-Depleting Substances

Background

Ozone depleting substances (ODS) are halogenated hydrocarbons that contain fluorine, bromine, and chorine atoms. Chlorine and fluorine have the potential to destroy the protective ozone layer. ODS are categorized as either Class I or Class II substances depending on the ozone depletion potential. Class II ODS are generally considered safer than class I ODS because they contain fewer halogen atoms and, therefore, have a shorter atmospheric lifetime.

ODS also include chlorofluorocarbons (CFC) and halons. CFCs are used in the Army primarily as refrigerants and solvents. CFCs were used as aerosol propellants until they were banned in the United States in 1978. Halons have been used in the United States since the late 1970s as a fire fighting agent. Although CFCs and halons are highly stable molecules, they can break down in the stratosphere when exposed to solar radiation. This releases a chlorine or bromine that destroys the ozone. With reduced ozone, the surface of the earth is exposed to harmful ultraviolet radiation, which can cause adverse health effects such as skin cancer and cataracts.

Current Regulations

Concerns about ODS hazards resulted in the Montreal Protocol in 1988, an international agreement to protect the stratospheric ozone layer. It was ratified by the Senate and became effective on January 1, 1989. The Montreal Protocol places progressively tighter restrictions on the annual consumption (i.e., production plus imports) of ozone-depleting substances. The most recent additions are carbon tetrachloride and methyl chloroform. These recent amendments also speed up the

phase out process of CFCs and halons by requiring an end to their use by the year 2000.

DOD Directive 6050.9 was issued in February 1989, requiring the military services to establish procedures to eliminate unnecessary releases of ozone-depleting substances into the atmosphere. Limited exceptions are granted for the U.S. Forces in Germany. They include crew compartments of tactical vehicles which contain automatic explosion fire suppression systems.

The USAREUR Program

Objectives...

- Continue control measures and annual usage reporting;
- Allow procurement only in absence of suitable alternatives;
- Phase out over the next few years through replacement;
- Modify training, maintenance and testing procedures;
- Promote recycling and other conservation practices;
- Revise military specifications where necessary to minimize use;
- Prohibit disposal of ozone depleting substances by direct release to the atmosphere (i.e., venting during maintenance); and

Commanders should...

- Modify existing operational procedures, as necessary, to eliminate or minimize emissions and use of ozone-depleting substances;
- Ensure that recycling of ozone-depleting substances and other conservation practices are employed to the maximum extent possible;
- Comply with the acquisition reporting requirements; and
- Ensure Final Governing Standards are implemented.

References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).

Hazardous Materials and Hazardous Waste Management

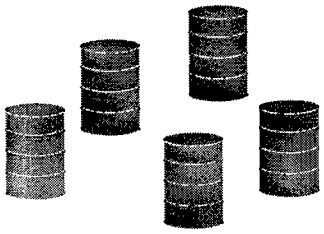
Hazardous Waste and Materials

Background

The terms "hazardous waste" and "hazardous material," have specific legal and scientific definitions. Hazardous materials and hazardous wastes (HM/HW) are chemicals that, due to their chemical or physical properties, pose an unreasonable risk to the health, of humans, or the environment, if improperly handled, stored, transported, labeled or disposed. Each country has its own classification system for these types of substances. Chemicals are classified as Hazardous Wastes, Hazardous Substances, or as Water Endangering Substances in Germany. In Italy HM/HW are classified as either Special, or Toxic and Noxious Substances.

Current Regulations

Hazardous Materials are defined and regulated by Army Regulations and Host Nation standards. In USAREUR, commanders must adhere to hazardous waste regulations in UR 200-1, Chapters 6 and 8.



Hazardous Waste is a solid or liquid waste, or combination of wastes, which because of its quantity, concentration, physical, chemical or infectious characteristics may

(l) Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or

(2) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Hazardous waste is typically taken offsite to commercial treatment and disposal facilities. All personnel involved in hazardous waste activities must receive annual training on safety and operational requirements.

Hazardous Waste may also result from hazardous material whose shelf life has expired, been contaminated, or no longer serves a useful purpose. HW disposal in the Host Nation is regulated by Host Nation law, which establishes the handling, labeling, transportation, and disposal requirements.

Examples of HM/HW are:

- Paint
- Brake Fluid
- Anti-freeze
- Grease solvents
- POL
- Photo developer chemicals

Others

Polychlorinated biphenyls (**PCBs)** are also a major type of hazardous material. PCBs are most commonly used in electrical transformers. PCBs require special management requirements for record keeping, reporting, notification, labeling, safe storage, inspection for leaks, rapid cleanup of spills, inventory, and disposal.

Infectious Waste is defined as any waste capable of producing infectious disease. Such waste is usually associated with medical or health care facilities. Potential risk to human health and the environment has made infectious waste management an area of substantial concern. Commanders should ensure a proactive waste management program exists. The Preventive Medicine office is your team member for technical advice.

The USAREUR Program

Objectives...

Hazardous Materials

- Ensure best management practices for all hazardous materials;
- Comply with the FGS, Chapter 5 and USAREUR Regulation 200-1;

- Use non hazardous substitutes to the maximum extent practicable;
- Minimize use through recovery, recycling and reuse;
- Comply with DA provisions related to phase out of hazardous materials, to include PCBs;
- Maintain an inventory of all hazardous materials used on the installation.
- Provide for prompt, coordinated response to contain and clean up oil and hazardous substances spills;
- Cooperate with HN agencies to contain POL and hazardous substances spills;
- Prepare and implement a Spill Prevention, Control, and Countermeasure Plan (SPCCP) and a CSCP; and
- Provide personal protective equipment (PPG) and hazardous communications (HAZCOM) to personnel who are in contact with HM.

Hazardous Waste

- Ensure that all installations have current Hazardous Waste Management Plans (HWMP);
- Comply with Chapter 6 of the FGS and Army and USAREUR Regulation 200-1;
- Dispose of pesticides, hazardous chemicals, medical supplies, radioactive materials, or explosive ordnance IAW UR 200-1 or HN standards;
- Correct all violations within the time allotted by the Host Nation agencies and higher headquarters;
- Provide hazardous waste management training to applicable personnel;
- Dispose of all hazardous waste through Defense Reutilization and Marketing Region, Europe (DRMR-E) using:
  1) direct removal contracts,
  2) direct DRMO, or
  3) recycling contracts;
- Provide for prompt, coordinated response to contain and clean up spills;
- Cooperate with Host Nation agencies to contain spills;
- Prepare and implement a Spill Prevention, Control, and Countermeasure Plan (SPCCP) and a CSCP; and
- Ensure storage areas are properly marked, maintained, and operated.

Commanders should...

Hazardous Materials

- Ensure procurement and management procedures for hazardous materials are implemented IAW UR 200-1;
- Establish procedures to identify/correct management deficiencies; and
- Ensure that all involved personnel are properly trained in HM/HW handling.

Hazardous Waste Management Program

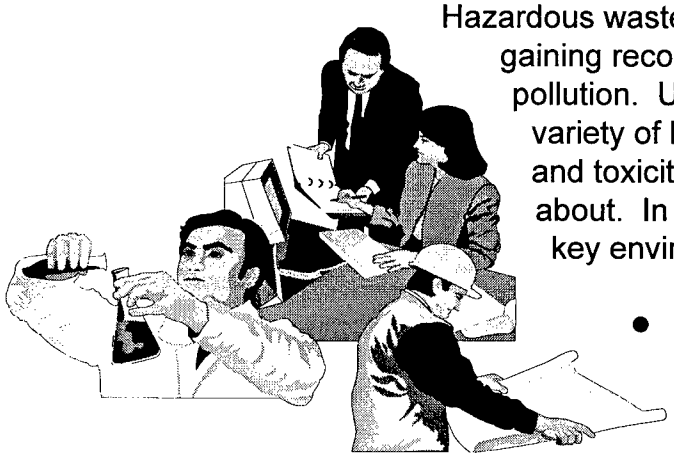
- Establish a HWMP IAW UR 200-1;
- Establish a Hazardous Waste Training Program and ensure proper training for personnel;
- Maintain liaison with the Defense Reutilization and Marketing Office (DRMO) to identify all waste streams and plan for disposal of HW;
- Ensure hazardous waste management for all installation activities including tenant units is IAW UR 200-1 and HN standards;
- Establish a program for hazardous waste minimization (HAZMIN);
- Ensure funding is programmed for annual hazardous waste disposal costs;
- Notify HQ USAREUR immediately of any HN complaints; and
- Ensure Hazardous waste collection / storage facilities are IAW FGS standards.
- Ensure Material Safety Data Sheets are available in both English and Host Nation language.

References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).

Hazardous Waste Minimization

Background



Hazardous waste minimization, or HAZMIN, is rapidly gaining recognition as a method for preventing pollution. USAREUR communities all produce a variety of hazardous wastes. Reducing the volume and toxicity of these wastes is what HAZMIN is all about. In USAREUR, the HAZMIN Program is a key environmental management tool, because:

- Waste minimization is now required by AR 200-1 and UR 200-1;
- Disposal of hazardous waste has been associated with contaminated sites in USAREUR;
- Implementing a HAZMIN program can reduce the costs of hazardous waste disposal and potential future cleanups; and
- Escalating disposal costs in USAREUR have significantly impacted on the total operating costs of a community or installation.

Current Regulations

Several European countries have passed or are in the process of passing legislation regulating waste minimization. These minimization laws, where applicable, will be implemented as part of the FGS.

The USAREUR Program

Objectives...

Supply units and DOL supply points will:

- Reduce the quantity of hazardous waste through process modification, recycling, reuse, materials substitution or equivalent;
- Design, procure, and use materials so that the least amount of waste is generated; and
- Limit the use of hazardous materials to the maximum extent practicable.

Commanders should...

- Establish a HAZMIN program;
- Use non hazardous and non toxic materials when practicable;
- Establish waste monitoring procedures to reduce waste generation; and
- Ensure Pollution Prevention Training is conducted for appropriate personnel, particularly within motor pools and training areas.

References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).

Underground Storage Tanks

Background

USTs have been widely used throughout USAREUR to store petroleum products (POL's), and chemicals. Most of these tanks contain petroleum products (gasoline or oil). During the past decade, many tanks leaked and caused groundwater contamination.

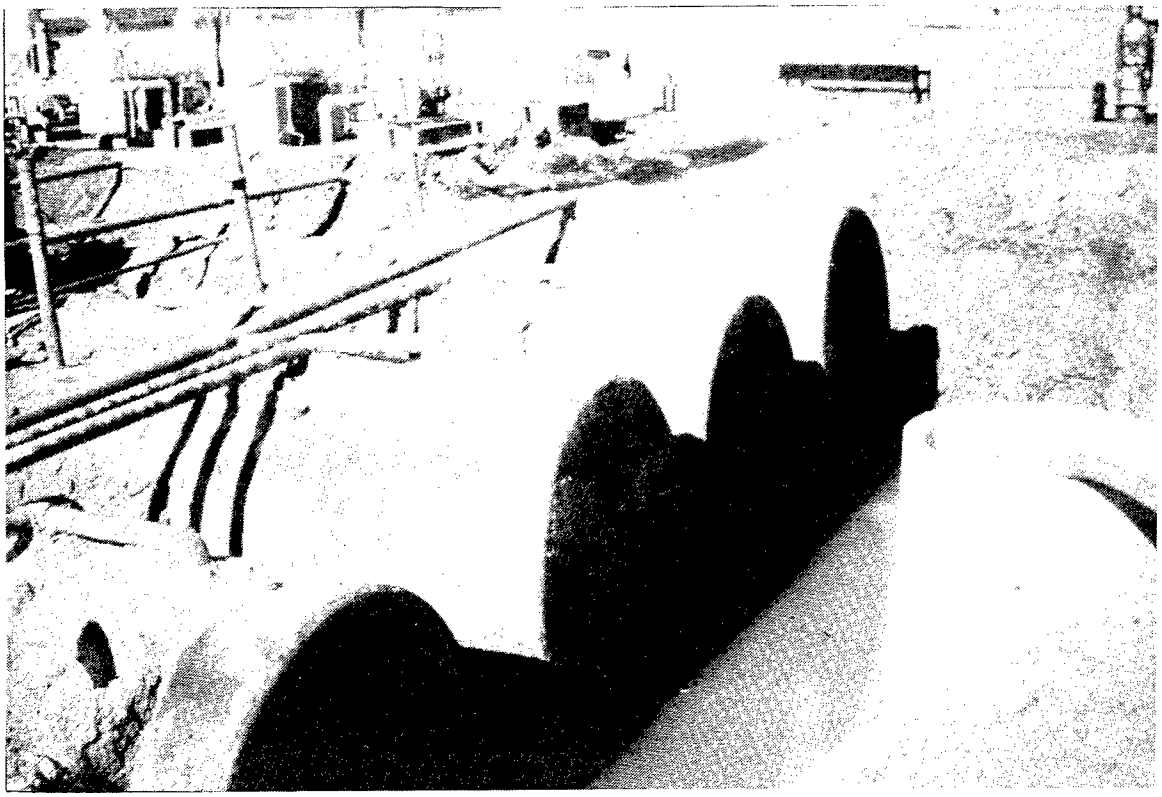
In central Europe, about 90 percent of the drinking water comes from groundwater sources. In the past, leaking above ground storage tanks (ASTs) have often contaminated nearby drinking water sources causing negative public reactions. Note: USTs don't have to be totally underground to be regulated. For example, in Germany, regulated USTs are those which have 10 percent or more of their volume underground (including the piping) and exceed 1,100 gallons capacity.

Current Regulations

UR 200-1 and Chapter 19 of the FGS address UST Management. As a minimum, the following Army standards will be met:

(1) All new and replacement USTs will be double wall construction with an interstitial space.
(2) The structural integrity of all new USTs will be monitored with a leak detection system that will indicate the presence of leaks with an audible alarm and indicator lights.
(3) No UST will be used to store hazardous wastes.
(4) Leaking USTs will be taken out of service, and abandoned USTs will be removed. USTs that are not leaking, may be cleaned and filled with an inert substance.

UR 200-1 further requires installations to maintain a master inventory of USTs and to ensure BSB DEHs keep an up-to-date UST inventory record of UST inspections. Real property records at the ASG should include information on UST maintenance, testing, repair and replacement.



The USAREUR Program

Objectives...

- Inventory all tanks annually;
- Identify all leaking tanks, remove these from service, and take corrective action to minimize surface and sub-surface contamination;
- Comply with FGS Chapter 19.

Commanders should ...

- Ensure community inventory is maintained on all USTs (both single-wall and double-wall);
- Leak test all USTs and initiate corrective action for all leaking tanks;
- Remove all abandoned tanks; and
- Install new tanks that meet standards: are double-wall or have secondary containment; automatic leak detection; and overflow protection.

References

UR 200-1, "USAREUR Environmental Quality Program", Chapter 5, (9 December 1993).

Medical Waste Management

Background

Medical waste management includes:

(1) Handling and disposal of infectious agents (such as a virus or bacteria);
(2) Infectious medical waste (microbiology waste, pathology, human blood, and syringes);
(3) Non infectious/non hazardous medical waste (solid waste created at medical and dental facilities that does not require special management);
(4) Hazardous waste (primarily some lab and/or radiology waste);
(5) Treatment (any method, technique, or process designed to render infectious medical waste non infectious).

The Environmental Health Engineering Division (EHED), Department of Environmental Sciences, U.S. Army Center for Health Promotion and Preventive Medicine -- Europe (USACHPPM-E), will provide environmental engineering consultation, technical guidance, and training for field and contingency operations to ASGs and BSBs and their tenant units.

Current Regulations

The Final Governing Standards for Italy or Germany contain criteria for managing medical waste at DOD medical and dental treatment facilities in the European theater.

The USAREUR Program

Objectives...

- Keep infectious medical waste separated from non infectious medical waste at the point of origin; and
- Transport and store infectious medical waste in a way that minimizes human exposure.

Commanders Should...

- Ensure all mixtures of infectious medical waste and hazardous wastes are treated/handled as infectious hazardous waste;
- Ensure radioactive medical waste is managed IAW UR 200-1 and Service directives;
- Ensure all bags or receptacles used to segregate, transport or store infectious medical waste are clearly marked with the universal biohazard symbol, the word "BIOHAZARD" and identification of the generator, date of generation, and contents; and
- Ensure that all personnel handling infectious medical waste wear appropriate protective apparel or equipment.

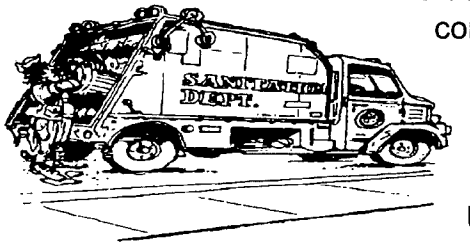
References

UR 200-1, "USAREUR Environmental Quality Program", Chap. 6-8, (9 December 1993).
Final Governing Standards - Chapter 8, Medical Waste Management

Solid Waste Management

Background

Non hazardous solid waste consists of many kinds of waste including solid waste, industrial and commercial "non-hazardous" waste, semi-solid and liquid wastes and all household waste. In USAREUR, almost all of the solid waste generated within communities is disposed in local civilian community landfills or incineration facilities. The cost of disposal at these facilities continues to increase. Shortage of landfill space, HN Solid Waste laws, German laws dealing with packaging materials, and stringent environmental standards for landfills/incinerators are some of the factors increasing the disposal costs of solid waste. USAREUR developed the Separate or Recycle Trash (SORT) Program to meet the new German solid waste laws and to save valuable OMA funds.



Current Regulations

Local municipal governments have the responsibility for managing solid wastes. European municipalities require recyclables, hazardous wastes, and often biological waste to be handled separately from normal refuse. Municipalities encourage (and often require) increased product separation, source reduction, and recycling to reduce the volume of solid waste requiring disposal. Commanders have the responsibility to support participation in the local HN community effort to reduce solid waste.

The USAREUR Program

Objectives...

- Recover and recycle solid waste to the greatest extent possible;
- Participate in HN recycling program where possible; and
- Contract for waste disposal services to include recycling.

Commanders should...

- Establish and execute an active SORT program for waste management and resource recovery;
- Ensure monitoring procedures are used to evaluate effectiveness of program; and
- Reduce amount of waste which requires land fill disposal or incineration.

References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).
AR 420-47, "Solid and Hazardous Waste Management", (7 January 1985).

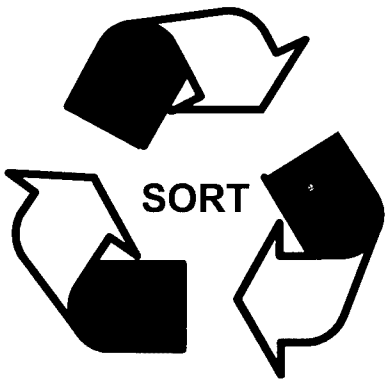
The Separate or Recycle Trash (SORT) Program

Background

Host Nation laws (principally Germany) require waste minimization through reduction of packaging material, use of reusable (returnable) packaging/containers, and recycling of materials no longer needed. At the same time, disposal costs of normal household refuse are escalating. The USAREUR SORT program is focused on trash minimization, recycling, and separate disposal of household hazardous waste (HHW).

Ongoing activities include a media awareness program utilizing radio, T.V. "spots," and news papers. In addition, SORT posters have been disseminated throughout the command. Cooperative support is provided by AAFES and DECA to discontinue use of or reduce styrofoam products; reduce dangerous HHWs; obtain recyclability certification; and to stock recyclable products.

The SORT program will be effective only with continued command support and education activities. In the future, Host Nations (especially in Germany) will continue to monitor U.S. Forces participation. Command interest is required to ensure AAFES, DECA, MWR , and Logistics cooperation to provide technical support and promote buying recycled paper products.



Current Regulations

UR 200-1 and AR 420-47 set forth policies and instructions for establishing and managing recycling programs. By reducing the volume of solid wastes requiring disposal, recycling efforts will significantly reduce base operations costs.

The USAREUR Program

Objectives...

- Reduce waste;
- Increase recycling percentages (glass, paper cardboard, metal cans, plastics, etc.);
- Manage collection and proper disposal of household hazardous waste (HHW);
- Ensure all trash collected is sorted in order to avoid a penalty charge or refusal of the load at landfill/incinerator facilities; and
- Continue to reduce refuse disposal cost.

Commanders should...

- Ensure compliance with local DEH trash separation procedures and HN recycling laws; and
- Ensure information and containers to collect HHW including antifreeze, batteries, lubricants, paints, and polishes.

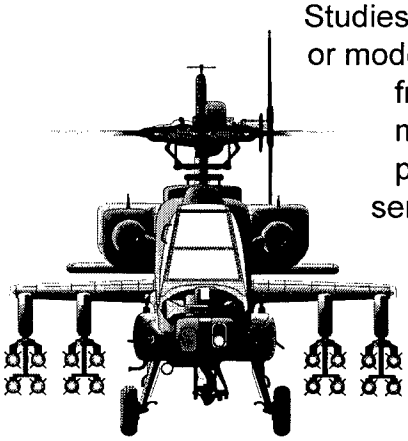
References

UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).
AR 420-47, "Solid and Hazardous Waste Management", (7 January 1985).

Environmental Noise Management

Background

Noise results from sound waves moving through air in the same way water waves travel on an undisturbed pond. Intensity of sound is commonly thought of as loudness and is measured in units called decibels (dB). A zero on the decibel scale represents the lowest limit of human audible perception; the level of normal conversation is approximately 60 dB. The dB scale is logarithmic which implies that as the dB level of sound increases by 10 units, the intensity or energy of the sound increases by a factor of 10. For example, a dB value of 70 represents 10 times the energy of 60 dB.



Studies have shown that long-term exposure to excessive or moderate intensities of noise can damage the high frequency end of human hearing. This accounts for many reports of a constant high-toned ringing. Other physiological changes that occur when the brain senses noise are a dilation of blood vessels, rise in blood pressure, change in heart rhythm, and a rise in the blood cholesterol level. The presence of noise is also associated with psychological stress resulting in headaches, irritability, nervousness, and aggressive behavior.

Current Regulations

Each Host Nation has numerous regulations and standards that may be applicable to U.S. forces under the respective SOFAs. Primary guidance is found in UR 200-1.

The USAREUR Program

Objectives...

- Conduct training, operational activities, and base operations so as to minimize adverse noise effect on HN citizens living near U.S. installations;

- Respect HN customs and ordinances on quiet hours;
- Uphold existing noise related agreements with local HN officials;
- Assess the environmental impact of noise produced by proposed activities;
- Comply with HN environmental noise regulations;
- Minimize environmental noise impacts through engineering, operational controls, siting, and procurement; and
- Reduce interior noise levels through architectural and engineering controls.

Commanders should...

- Ensure a noise management committee has been established;
- Integrate noise issues in planning process, particularly if range firing will occur regularly;
- Uphold existing noise related agreements with local HN officials;
- Obtain noise zone maps from the local county mayor's office or appropriate authorities;
- Support Host Nation in developing land use plans;
- Identify sources of noise creating an impact and budget for resources to lessen this impact;
- Establish a noise complaint procedure; and
- Incorporate noise issues into your EQCC agenda.

References

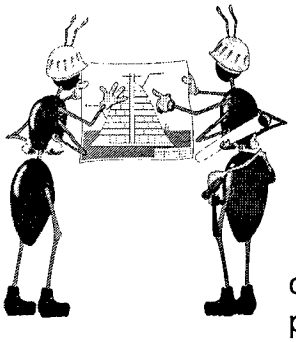
UR 200-1, "USAREUR Environmental Quality Program", Chap. 7.

Pesticides and Pest Management

Background

A pest is any organism (i.e., bird, insect, rodent, bacteria, weed) that adversely affects the well-being of humans and animals; attacks real property, supplies, equipment, or vegetation; or is otherwise considered undesirable.

A pesticide is a substance or mixture of chemical substances including biological agents, that are used to prevent, destroy, repel, or mitigate pests; this includes insecticides, herbicides, fungicides, rodenticides, disinfectants, and plant growth regulators.



Pesticides are usually toxic chemicals that must be stored and handled with care. Depending on their properties and patterns of use, pesticides may leach through soils and contaminate ground water, especially where the water table is close to the surface and soils are highly permeable. It is therefore important to have a plan that considers these possibilities and outlines methods to prevent such problems from occurring.

Integrated Pest Management (IPM), or simply Pest Management, is a comprehensive approach to the prevention, elimination or control of pests. Proper pest management is based on full utilization of our knowledge of the habitat and natural history of a pest, an understanding of the interrelationships between the pest population and the ecosystem, the selection of plantings, building materials or structural designs less prone to pest infestations or damage, and the use of the most appropriate physical, biological, cultural and chemical control techniques.

Pest control responsibility is not limited to the DEH pest control operation. IPM is a coordinated effort which requires the support of facility managers, staff of food service operations, commissaries, child care facilities. Programs such as solid waste management and disposal, janitorial services, facilities maintenance and repair, self-help, etc., must support the total pest suppression effort.

The USAREUR Self-help Pest Management Program allows the occupants of family and soldiers quarters to control minor infestations of nuisance pests by using pest control materials issued through self-help, integrated with non chemical pest control techniques that reduce or eliminate conditions which are conducive to pest harborage.

The USAREUR Program

Objectives...

- Develop and maintain safe and effective programs for pest management at each installation;
- Protect real estate investments from depreciation by pests;
- Control potential disease vectors;
- Prevent damage to natural resources by pests;
- Maintain and improve operating personnel competence and skill through periodic training and testing; and
- Prevent medical or economic pests from being introduced or spread into or throughout USAREUR communities.

Commanders should...

- Ensure that pest management activities are included in your installation's work plan;
- Ensure all restricted use pesticide applications are performed only by or under the direct supervision of a DOD or Host Nation certified pesticide applicator.
- Make maximum use of IPM; to ensure that all activities which may have pest implications (i.e., construction, dining facility operations, kitchen remodeling, food warehouse management, etc.) are incorporated during initial stages;
- Implement a Pest Management Plan approved by the HQ USAREUR entomologist (AEAEN-EH-B);
- Designate a pest management coordinator to ensure that pest management activities are integrated into those activities which may impact pest populations; maintain at least one certified pest control applicator/Quality Assurance Evaluator (QAE);
- Maintain liaison with USAREUR HQ concerning pest investigations proposed by other agencies; and
- Determine the installation position and responsibilities in community-wide pest management regarding quarantine and epidemics.

References

AR 420-76, "Pest Management", (June 1986).
UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).

USAREUR Environmental Restoration

Background

The Army's CONUS Installation Restoration Program (IRP) was established in 1975 to identify, investigate, and cleanup contamination on Army properties. The USAREUR Environmental Restoration program is managed to meet unique requirements in Europe; the parties involved are HN authorities and local USAREUR installations.

Environmental restoration consists of three parts: (1) Assess and Study; (2) Project Design; and (3) Cleanup and Remediation. A Database of USAREUR Contaminated Sites (DUCS) number is assigned for each contaminated site to track site restoration from initial survey through investigation, cleanup, and monitoring. It is important during the restoration project process that all information in the DUCS database is utilized.

The USAREUR Program

Objectives...

- The identification, investigation, and cleanup of contaminated sites. The first priority is to identify and cleanup those sites that present the highest risk to public health;
- Correct other environmental damage which creates an imminent and substantial endangerment to the public health or welfare (such as detection and disposal of unexploded ordinance); and
- Protect health and safety of U.S. and HN personnel, and quality of the environment.

Commanders Should...

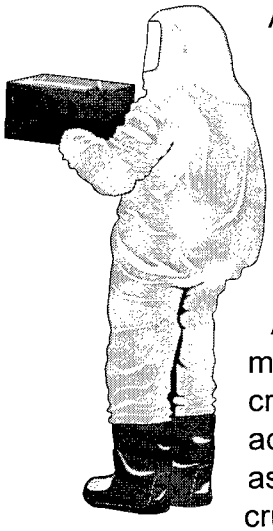
- Ensure that restoration activities are carried out within DA and USAREUR guidance to meet HN standards;
- Report major restoration sites to HQ USAREUR Environmental Office (AEAEN-ENVR);
- Report discovered releases first to HQ USAREUR Environmental Office, then to appropriate regulatory agencies;
- Identify resources needed for compliance to conduct site surveys and laboratory analyses, and execute projects; request project funding through the RCS 1383 report;
- Review recommendations for environmental restoration projects in coordination with the HQ USAREUR Environmental Office;
- Develop and maintain a public affairs information program.

References

UR 200-1, "USAREUR Environmental Quality Program", Chap. 9.

USAREUR Asbestos Program

Background



Asbestos is a group of natural minerals which are heat-resistant and extremely durable but which also separate into strong, very fine fibers. Asbestos has been used in a variety of forms including roofing, siding, thermal, acoustical and decorative purposes, and to insulate boilers, pipes, and many construction materials and appliances.

Asbestos becomes a health hazard when it releases microscopic fibers. These releases can be caused by crumbling, rubbing, vibration, or air currents blowing across the surface, creating what is known as "friable" asbestos. Asbestos containing material that can be crumbled using hand pressure is friable; otherwise it is non-friable.

Once released into the atmosphere, these fibers can remain suspended in the air for long periods of time and can easily lodge in body tissues when inhaled. Inhalation of asbestos fibers is known to cause asbestosis, a chronic disease of the lungs which makes breathing progressively more difficult, and mesothelioma, a cancer of the chest and abdominal membranes.

Current Regulations

US asbestos policy applies only to Department of Defense Dependent Schools (DODDS). Headquarters DODDS manages the program. Local management responsibility is assigned by the regional headquarters, normally the school principal. The DEH is responsible for managing asbestos projects including surveys; EPA certified training for workers IAW DODDS and US statutory requirements, and sampling buildings. UR 200-1 and the FGS apply to all other facilities. In addition, all US installations must comply with HN worker safety regulations.

The USAREUR Program

Objectives...

- Minimize environmental release, and occupational and incidental exposure;
- Exclude asbestos from uses where asbestos free substitutes exist;
- Handle, store, transport, and dispose of asbestos IAW FGS;
- Develop and maintain an inventory of all asbestos in Army structures and determine the potential for human exposure;
- In areas known to have asbestos, implement a maintenance program to minimize and monitor potential exposure until abatement is accomplished;
- Minimize occupational exposure to comply with HN law, Army regulations and FGS through training and the use of personal protective equipment.
- Prepare and maintain an Asbestos Management Plan IAW Army/USAREUR policy.

Commanders should...

- Establish an Installation Asbestos Management Team to prepare and execute the Installation Asbestos Management Plan;
- Develop a standard operating procedure that describes the responsibilities within the Area Support Group (ASG) for asbestos material management;
- Ensure asbestos surveys are performed to establish and maintain an inventory of all asbestos contained in government or leased facilities;
- Ensure master planning documents and drawings are updated to indicate real property containing asbestos;
- Have all personnel working with asbestos entered in the Medical Monitoring Program and Respirator Protection Program (to protect against future legal liability);
- Ensure personnel involved in asbestos management are fully trained;
- Notify USAREUR HQ whenever an asbestos problem is suspected; and
- Ensure all actions involving asbestos in a DODD School are coordinated with DODDS principals and comply with US law.

References

UR 200-1, "USAREUR Environmental Quality Program", Chap. 10 (9 December 1993).
AR 11-34, "The Army Respirator Protection Program", (February 1990).
AR 40-5, "Preventive Medicine", (October 1990).

USAREUR Radon Program

Background

Radon is a colorless and odorless radioactive gas released by the natural degradation of uranium. Radon can be found in high concentrations in soils and rocks containing uranium, granite, shale and phosphate. The only known health effect associated with exposure to elevated levels of radon is an increased risk of developing lung cancer. The risk of developing lung cancer from exposure to radon depends upon the concentration and the duration of exposure. Current evidence also suggests that smokers are at higher risk from radon exposures than nonsmokers.

Radon can occur naturally outdoors in concentrations of 1 picocurie per liter(pCi/L). Although these levels are not considered a health threat, radon can concentrate inside enclosed spaces such as homes or buildings to levels exceeding several hundred pCi/L. Radon gas can typically enter buildings through dirt floors, cracks in concrete floors and walls, floor drains, sumps, joints, and tiny cracks or pores in hollow-block walls.

Current Regulations

There are currently no U.S. laws or HN regulations concerning radon in the home or workplace. However, EPA has recommended that indoor radon exposure levels greater than 200 pCi/L require immediate mitigation actions. The Army's action level is 4 pCi/L.

The USAREUR Program

Objectives...

- Implement the Army Radon Program;
- Implement and update the Army Radon Assessment Plan, to measure and prioritize the radon levels in schools, day care centers, hospitals, housing and other structures;
- Identify all structures with indoor radon levels greater than 4 pCi/L and initiate projects to modify these structures to reduce levels to 4 pCi/L or less; and
- Implement the Army Radon Mitigation Plan with specified deadlines for completing required mitigation.

Commanders should...

- Ensure radon mitigation techniques are incorporated in new construction;
- Develop a database to maintain radon assessment and mitigation data;
- Conduct radon testing on a priority system: Priority one is family and soldier housing, schools, hospitals, and Child Development Centers; Priority two is training centers, facilities with 24 hrs. operation; Priority three is all other buildings occupied 10 hrs./week or more;
- Budget for the measurement of radon in structures and mitigation of elevated levels; and
- Submit a report summarizing progress in the Army Radon Program, to USAREUR HQ (AEAEN-ENVR) at the end of each fiscal year.

References

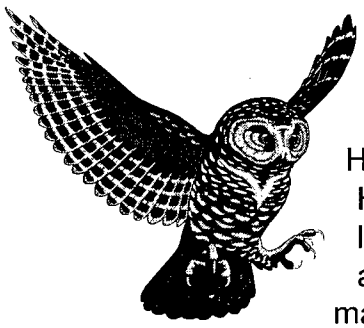
UR 200-1, "USAREUR Environmental Quality Program", Chap. 11 (9 December 1993).

Natural Resources Management

Threatened and Endangered Species Protection Program

Background

The objectives for natural resources management on USAREUR land are to: (1) Minimize or offset construction-related environmental impacts; and (2) Manage major and local training areas (LTAs) by applying sustainable rehabilitation and maintenance concepts.



Presently, USAREUR conducts natural resources management with HN organizations as partners. After implementation of the ITAM program at the Combat and Maneuver Training Center (CMTC) Hohenfels and Grafenwöhr, ITAM is expanding to LTAs. However, not only training areas require professional land management, but also casernes, housing areas and other facilities. A professionally designed and maintained landscape improves the quality of life for soldiers and their families immensely.

Heavier and faster vehicles, longer combat engagement distances, increases in mechanization and combined arms exercises, and the need to maintain realistic training areas require comprehensive land management. The Army in Europe must maintain an effective land base for combat readiness training while promoting good stewardship of the land on which it trains.

Land management plans address soil and water conservation, wetlands and flood plains, grounds maintenance, agricultural uses, fire management, areas of special interest (such as encroachment) and management for multiple use. Land management must also reflect good economics. For instance, costs for maintaining grounds should be minimized by specifying the least amount of

mowed areas and special plantings necessary to accomplish management objectives and by the use of low maintenance species, agricultural outleases, wildlife habitat, and tree plantings.

Integrated Training Area Management (ITAM), designed as a comprehensive approach to land management on all Army installations, includes four major elements:

(1) **Land Condition Trend Analysis** (LCTA) - inventory and monitoring of natural resources, including threatened and endangered species, to document resource conditions and assess the ability of the land to withstand impacts from training and testing;

(2) **Environmental Awareness** - education of officers and enlisted troops to foster protection of the training area land and forests;

(3) **Land Rehabilitation and Maintenance** (LRAM) - revegetation and erosion control to restore the land and enhance testing training realism; and

(4) **Training Requirements Integration** - optimization of land use by integrating mission requirements with the carrying capacity of the land.

ITAM program benefits include:

- Increased training realism;
- Reduced environmental damage and effective land rehabilitation;
- Reduced costs for land management and environmental compliance;
- Enhanced public image of the Army as a conscientious land steward.

Current Regulations

Natural resource management is conducted IAW USAREUR Regulation 200-1, AR 420-74 and recent guidance that transfers proponency for ITAM to ODCSOPS (Training).

The USAREUR Program

Objectives...

- Avoid or minimize adverse mission impacts by integrating training requirements with the capability of the land to support mission activities;
- Actively cooperate with Host Nation organizations in carrying out local land use and conservation projects;
- Develop and implement the necessary programs and plans to maintain and improve environmental quality, aesthetic values and ecological relationships.
- Have qualified natural resource experts in your staff;
- Establish and maintain a close and trustful working relationship with HN forestry officials and other natural resources experts;
- Reduce grounds maintenance costs; and;
- Develop and implement programs for protecting and preserving state and federal threatened and endangered species and their critical habitat.

Commanders Should ...

- Develop and maintain Installations Natural Resources Management Plans at all USAREUR ASGs;
- Cooperate with German requests to allow natural resources surveys on USAREUR land;
- Ensure staffing of professionally trained natural resources or forestry personnel;
- Maintain training areas by implementing Integrated Training Area Management on training lands;
- Avoid land uses which have a detrimental effect on the environment;
- Apply the multiple use concept whenever possible;
- Reduce grounds management to a minimum;
- Reduce amount of mowing, eliminate weeds, increase environmental value of meadows;
- Plan land utilization to avoid adverse effects on threatened and endangered species;
- Conduct installation-wide surveys to identify and document the location of species, their habitats, or support Host Nation Sponsored surveys;
- Request Legacy Program funds to conduct surveys; and

- Support HN activities to reintroduce endangered and beneficial animal and plant species, e.g. bats, grouse, through habitat improvement activities.

References...

AR 420-74, "Natural Resources — Land, Forest and Wildlife Management," (February 1986).
UR 200-1, "USAREUR Environmental Quality Program", (9 December 1993).
AR 200-3.

Forest Management

Background

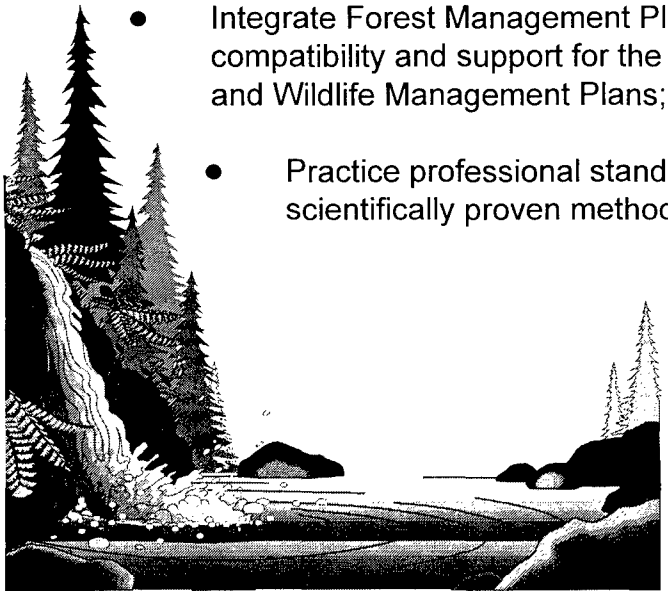
Unlike CONUS installations, USAREUR does not have specific forest management responsibilities. The German government manages the forest, USAREUR cooperates with them as appropriate. All USAREUR activities that take place in and around forests must be managed to limit damage to trees, and to control erosion.

The USAREUR Program

Note: The following applies to Germany, however, the same procedures apply in Italy, Belgium, and the Netherlands for those installations located in or containing a natural park. In any forest or recreation area used by U.S. forces OCONUS, Commanders should be aware of restrictions on tree cutting, and forest management programs.

Objectives...

- Maintain an integrated and ecologically sound forest management program tailored to on-going and proposed mission needs;
- Integrate Forest Management Plans and activities for compatibility and support for the Land, Outdoor Recreation, and Wildlife Management Plans;
- Practice professional standards of silviculture based on scientifically proven methods for timber species managed; and
- Manage the forest vegetation for maximum multiple use benefits.



Commanders should ...

- Establish adequate staffing with appropriately-trained personnel;
- Develop and implement a management plan to maximize multiple-use benefits;
- Ensure proper operating procedures are followed to keep maneuver damage down to a minimum during large-scale maneuvers;
- Develop and maintain a close working relationship with the Host Nation Federal Forest Service;
- Ensure approval for tree cutting is obtained through the Federal Assets Office; Federal Forestry representatives are generally very cooperative in obtaining approvals;
- Coordinate erosion control planting with HN authorities as cost sharing opportunities within training areas; and
- Identify lands available for reforestation projects, as recommended by HN authorities, to reduce long-term maintenance costs.

References

AR 420-74, "Natural Resources — Land, Forest and Wildlife Management,", (February 1986).
UR 200-1, "USAREUR Environmental Quality Program", Chap. 12.

Return of Real Property to Host Nation

Background

On September 18, 1990, the U.S. Secretary of Defense announced the first of scheduled closures of U.S. facilities in Europe, in keeping with planned reductions of U.S. Forces. The majority of these military communities have been closed and the property returned to the Host Nation. Additional bases may be designated for closure based on the changing requirements of U.S. Forces.

Current Regulations

USAREUR OPLAN 4374, Brilliant Exit, Annex E (Environmental) addresses key environmental tasks to be accomplished prior to returning properties to HN authorities; (1) Hazardous materials / hazardous waste disposition; (2) Documentation of environmental condition status of the installation; and (3) Emptying and cleaning POL and other storage tanks; and (4) Removal of ozone depleting substances.

Hazardous waste at facilities being returned to HN must be completely and properly disposed of prior to joint U.S./HN inspection. In addition, return of hazardous materials to the supply system must also be completed by that time. Although returning hazardous materials to supply is not a threat to human health, it can raise logistical problems similar to those of hazardous waste disposal that must be resolved prior to turnover.

In order to comply with Host Nation laws, all above and below ground storage tanks must be emptied, cleaned, and stabilized to ensure no future soil contamination will occur. This is normally the responsibility of the DEH Utilities Division. One additional aspect of preparing for closure is the requirement to remove all Freon, Halon, or other ozone depleting substances from fire suppression systems

and refrigeration equipment. This must be carried out by licensed contractors, not DEH staff or military.

An Environmental Status Report (ESR) will be prepared by the DEH for each installation to be turned over to the HN. The ESR will document the environmental conditions at the installation. The ESR will be developed from known information in DEH files, and not through new studies.

The USAREUR Program

Objectives...

- Eliminate imminent health risks and legal liability resulting from hazardous wastes or highly contaminated sites;
- Return HM to supply system and dispose of HW through the DRMOs;
- Empty, clean, and stabilize storage tanks;
- Prepare an environmental status report (ESR) detailing environmental conditions of the installation;
- Ensure environmental stewardship while inactivating units and preparing installations for return to the HN.

Commanders Should...

- Ensure that unit inactivation implements the environmental policy outline in OPLAN Brilliant Exit and related OPORDER; and
- Coordinate with HQ USAREUR, ATTN: AEAEN-ENVR to provide staff support for ESR preparation at least two months prior to turn-back.

References

UR 200-1, "USAREUR Environmental Quality Program", Chap. 14 (9 December 1993).
Message, SECDEF, 142159Z Dec 93, Subject: DOD Policy and Procedures for the Realignment of Overseas Sites.

Appendix I: Glossary of Environmental Terms and Acronyms

A106 Report
Environmental Requirements Report developed by each installation to document the status of existing environmental projects and identify funding requirements for future projects. Part of the OMB A-106 process.

Acid Rain
Acidified precipitation resulting in acidification of lakes and destruction of forests; believed to be caused by emissions from vehicles and burning fossil fuels.

AEC
Army Environmental Center, Aberdeen Proving Grounds, MD

AFN
Armed Forces Network

AHERA
Asbestos Hazard Emergency Response Act (1986). Act requiring studies to determine the extent of danger to human health from asbestos in public and commercial buildings.

ALMC
U.S. Army Logistics Management College

AMC
U.S. Army Materiel Command

AR
Army Regulation

Asbestos
A group of natural minerals that tend to separate into strong, heat-resistant fibers. Used as an insulator, it is a suspected carcinogen.

BAT
Best available technology

BMP
Best Management Practice; a "common sense" approach when dealing with a known process. It takes into account operating and process conditions by minimizing the impact on the environment and human health.

BRAC
Base Realignment and Closure

CERL
U.S. Army Construction Engineering Laboratory

CETAE
U.S. Army Engineer District, Europe

CFCs
Chlorofluorocarbons; a family of fully halogenated hydrocarbons containing fluorine and chlorine. These substances are environmentally harmful because they deplete the earth's stratospheric ozone layer.

CFR
Code of Federal Regulations

Chlorine
Chemical used in water purification for removal of bacteria.

COB
Command Operating Budget

Conservation
Wise use and management of natural resources to provide the best public benefits and continued productivity for present and future generations.

CONUS
Continental United States. From an environmental standpoint CONUS refers to any land over which the EPA has jurisdiction. This includes Alaska, Hawaii, Puerto Rico, Guam and the Virgin Islands.

CRREL
U.S. Army Cold Regions Research Engineering Laboratory

CSCP
Community Spill Contingency Plan. Document detailing resources and procedures for cleanup of spills of oil and hazardous substances.

Cyanide
A highly poisonous, carbon-nitrogen compound.

dB
Decibel. Measure of loudness or intensity of sound.

DEH
Directorate of Engineering and Housing.

DERP
Defense Environmental Restoration Program. General program for environmental cleanup of DOD facilities.

Dioxin
A highly toxic chlorinated compound often associated with certain herbicides and pesticides but also found in other items such as bleached paper products.

Discharge
Term describing any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a substance.

Disposal
The discharge or placement of any solid waste or hazardous waste into or on any land or water.

DOD
Department of Defense

DODDS
Department of Defense Dependents Schools

DRMR-E
Defense Reutilization and Marketing Region, Europe

DRMO
Defense Reutilization and Marketing Office

DSN
Defense Switch Network

DUCS
Database of USAREUR Contaminated Sites

EA
Environmental Assessment. A study to determine if significant environmental impacts are expected from a proposed action.

ECA
Environmental Compliance Assessment. Also referred to as an environmental audit or environmental program review (EPR). Involves a multi-media examination of an installations environmental program to identify possible compliance deficiencies.

ECAP
Environmental Compliance Achievement Program. An umbrella program that integrates the five basic steps required to achieve and maintain environmental compliance: training; planning and programming; resourcing; assessing; and correcting deficiencies. It does not include DERP.

ECAS
Environmental Compliance Assessment System. This system involves the use of ECAs to identify deficiencies and the incorporation of all environmental projects designed to address those deficiencies in the 1383 Report. It also includes designing Management Plans and implementing "fixes" for identified deficiencies.

EIS
Environmental Impact Statement. A report that describes the environmental consequences of proposed actions.

EPR
Environmental Program Requirements Report (A106) (formerly 1383 Report).

Emission Standard
Permissible limit of air emissions established by Federal, state, and local authorities.

ESR
Environmental Status Report. A report required at USAREUR that describes the environmental status of the installation prior to base closure.

EQCC
Environmental Quality Control Council

Endangered Species
Those species which are in danger of extinction throughout all or a significant portion of their range.

EPA
U.S. Environmental Protection Agency.

FAO
Federal Assets Office (Germany)

FR
Federal Register. A daily Federal publication that formally documents proposed and promulgated (final) regulations.

FIFRA
Federal Insecticide, Fungicide and Rodenticide Act (1972). This Act regulates the licensing or registration of pesticides.

Friable Asbestos
Asbestos which can be crumbled in the hand; creates a health hazard due to release of microscopic fibers.

FY
Fiscal Year

GOCO
Government-owned, Contractor-operated

GOSC
General Officers Steering Committee

Groundwater
Water contained in underground reserves or aquifers.

Halons
A family of fully halogenated hydrocarbons containing bromines. These substances are environmentally harmful because they deplete the earth's stratospheric ozone layer.

Hazardous Materials
Chemicals that have been determined by the Secretary of Transportation to present risks to safety, health, and property during handling, storage, or transportation.

Hazardous Substance
An element, compound, or mixture that when discharged in any quantity, onto land or water, poses an imminent and substantial threat to public health and welfare.

Hazardous Waste
Waste that because of its quantity, concentration, or characteristics may pose a substantial hazard to human health or the environment.

HAZCOMM
Hazard Communication. The responsibilities of managers concerning possible hazards in the workplace and notification of hazards and necessary precautions to their employees.

HAZMIN
Hazardous Waste Minimization.

HCF
Health Care Facility

HQDA
Headquarters, Department of the Army

HWMP
Hazardous Waste Management Plan

IAG
Inter-agency Agreement

I&M
Inspection and Maintenance

ICUZ
Installation Compatible Use Zone. Program identifying the compatibility of on-post and off-post land uses with noise sources.

Incineration
Disposal of waste materials through controlled burning.

IOSC
Installation On-scene Coordinator

IPM
Integrated Pest Management

IR
Installation Restoration

IRA
Interim Response Action

IRP
Installation Restoration Program

IRT
Installation Response Team

ITAM
Integrated Training Area Management

Leachate
Liquid material produced when surface water or groundwater contacts solid waste; typically generated at landfills.

MACOM
Major Army Command

MCL
Maximum Contaminant Level. The allowable level of certain organic and inorganic constituents in drinking water.

MOA
Memorandum of Agreement

MOU
Memorandum of Understanding

Monitoring
The sampling or measurement of a contaminant by analytical means.

MSDS
Material Safety Data Sheet. Information sheets describing the potential hazards, chemical or physical properties, and health effects of a substance.

Multiple Use
The use of natural resources for the best combination of purposes to meet the needs of the military and the public.

Nitrates
Essential soil nutrients, yet can also be pollutants.

Non hazardous Solid Waste
Generally, solid wastes which pose no significant threat to human health or the environment. Examples are household trash and office waste.

O&M
Operation and Maintenance

OCONUS
Outside the Continental United States. From an environmental standpoint refers to activities on land that are not in the jurisdiction of the EPA (i.e., Europe, Korea, Japan).

OMB
Office of Management and Budget

On-Scene Coordinator
Federal official in charge of removal efforts at hazardous substance discharge sites.

OFD
Ober Finanz Direction (Regional Office of Ministry of Finance)

OSHA
Occupational Safety and Health Administration. Federal agency responsible for regulating worker safety. It establishes guidelines and training requirements for workers at hazardous waste sites.

PAO
Public Affairs Office(r)

PA/SI
Preliminary Assessment/Site Inspection. First phase of the IRP, designed to identify potential sites with hazardous waste contamination.

PCBs
Polychlorinated Biphenyls. Toxic, halogenated organic compounds which are not easily degraded in the environment.

pCi/L
Picocurie per liter. Unit of measurement for radioactive materials in air; used for measurement of radon concentrations in buildings.

Pesticide
Any product that kills or controls pests.

pH
A measure of a liquid's acid/base properties.

POM
Program Operating Memorandum

PMP
Pest Management Plan

Primary Standards
Standards related to the protection of public health.

Public Health or Welfare
All factors affecting human health and the natural environment.

PVNTMED
Preventive Medicine Activity

QAE
Quality Assurance Evaluator

RA
Remedial Action. Third phase of cleanup of a hazardous waste site under the IRP.

R&D
Research and development.

Radioactive Material
Any material that spontaneously emits ionizing radiation.

Radionuclide
A radioactive nucleus of a compound or element.

Radon
A colorless, odorless, radioactive by-product from the natural degradation of uranium.

RAP
Remedial Action Plan. Strategy for correcting a site or operation which is not in compliance with regulatory requirements.

REC
Record of Environmental Consideration

RCS
Report Control Symbol

Recycling
The process by which recovered materials are transformed into new or usable products.

Regional Response Center
The Federal regional site that controls pollution emergency response activities.

Remediation
Cleanup of a toxic/hazardous waste site.

RI/FS
Remedial Investigation/Feasibility Study. Second phase of the IRP where the nature and extent of contamination of a hazardous waste site are determined and cleanup strategies are analyzed.

Secondary Standards
Standards not directly related to human health. They are related to aesthetics, smell and beauty.

Solidification
A process of stabilizing waste materials to prevent migration of contaminants.

Solvent
A liquid capable of dissolving solids or other liquids.

SOFA
Status of Forces Agreement

SPCCP
Spill Prevention, Control and Countermeasures Plan. Document which inventories oil and hazardous substance storage and provides procedures used to prevent spills and releases of these products.

Sulfate
Naturally occurring inorganic constituent found in soils and groundwater.

Surface Water
Water contained in rivers, streams, etc.

TB
Technical Bulletin

TG
Technical Guide

TM
Technical Manual

Threatened Species
Those species which are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Toxic Pollutant
Pollutants, which after discharge and upon exposure, will cause adverse health effects.

TSCA
Toxic Substances Control Act of 1976. Regulates PCBs, CFCs, asbestos; requires testing of chemical substances entering the environment and regulating releases where necessary.

TWA
Time Weighted Average

UMC
USAREUR Major Command

USACHPPM
U.S. Army Center for Health Promotion and Preventive Medicine

USAEHSC
U.S. Army Engineering and Housing Support Center

USD(A)
Under Secretary of Defense for Acquisition

USAREUR
U.S. Army Europe

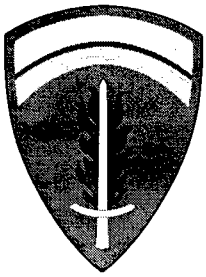
USACE
U.S. Army Corps of Engineers

UST
Underground Storage Tank. Below- or in-ground tank, storing oil or hazardous substances, regulated under RCRA.

WES
U.S. Army Waterways Experiment Station

Wetlands
Collective term for marshes, swamps and similar areas that develop between open water and dry land.

WPZ
Water Protection Zone



Appendix II: Commander's Environmental POC List:

Environmental Coordinator:

Phone:

Legal Advisor:

Phone:

Public Affairs Officer:

Phone:

Preventive Medicine Officer:

Phone:

Land Manager:

Phone:

Natural Resources Manager:

Phone:

Safety Officer:

Phone:

My Support Agency Representatives:

Army Center for Health Promotion and Preventive Medicine (ACHPPM) (formerly 10th MedLab)

Name:

Phone:

USAREUR, ODCSENGR, and Directorate

Name:

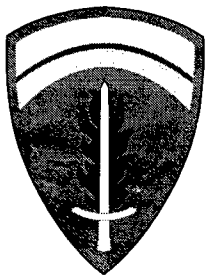
Phone:

U.S. Army Corps of Engineers Europe Center (EUC)

Name:

Phone:

My Reference Notes:



Appendix III: List of Environmental Program Related Regulations

UR 200-1, USAREUR Environmental Quality Management

AR 200-1/DA PAM 200-2, Environmental Management

AR 210-20: Installation Master Planning

AR 405-10: Real Estate

AR 415-10/415-15: Military Construction

AR 420-46: Water and Sewage

AR 420-49: Fuel Storage, Distribution and Dispensation

AR 420-74: Natural Resources

AR 420-76: Pest Management

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This guide is intended to provide information to USAREUR Commanders at all levels about their responsibilities in environmental management. It discusses the need to meet Host Nation Environmental Laws and Regulations as required by the Final Governing Standards. The guide also identifies an environmental management team and encourages Commanders to make full use of this team to ensure environmental compliance.

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