

Protect our Environment

—training development environmental requirements

By Dr. Charles Notar

You, as a member of the United States Army, and particularly the Chemical Corps, will be playing a major role in the Department of Army Environmental Master Plan. The plan has four major areas of emphasis—compliance, prevention, restoration, and conservation.

The training community must recognize its important responsibility toward preserving the areas in which we train and operate. The Army has closed or restricted training areas because of failure to observe environmental protection measures. Installations have paid fines for pollution violations, making fewer resources available for training support. Individuals charged or convicted of environmental violations have major adverse effects on their mission accomplishment.

Environmental awareness training is necessary for everyone. It will usually be accomplished at the installation. Environmental schoolhouse training will be limited to tasks, skills, and knowledges associated with critical tasks. Like safety, environmental compliance is both a commander's and a manager's responsibility.

Trainers must coordinate with the local environmental office, typically in the Directorate of Engineering and Housing, and provide input to the integrated natural resource management plan, installation spill prevention and response plan, and other environmental compliance plans.

Trainers must participate in the environmental quality control committee and ensure training operations are conducted in compliance with environmental laws.

Awareness training is one of the key aspects of the trainers' responsibilities. Trainers must be aware of and comply with local environmental restrictions (endangered species protection, oil and hazardous waste disposal, for example). They must integrate environmental awareness into training and training materials where appropriate. Separate lessons on environmental awareness training are taught only if—

- A critical task or a skill or knowledge supporting a critical task was identified by the systems approach to training (SAT) analysis process, or
- A command directive dictates adding such training.

Such directives should be documented in the audit trail to include who gave the directive, when it was directed, and what, if any, was the accompanying rationale.

Most awareness training can be accomplished through such means as orientation briefings, officer/NCO professional development, and command information programs.

Integrate environmental considerations into all phases of the SAT. The following outlines basic guidance as to what should be considered in each SAT phase:

Analysis. Identify all environmental

considerations for each task. See TRADOC Pamphlet 351-13.

Design. Design all training to comply with environment laws. Design training so that it has the least amount of negative impact on the environment while still maintaining realistic training. Use simulations, simulators, and training devices as tools to reduce negative environmental impact. Ensure environmental statements in technical manuals are incorporated into appropriate lesson plans.

Development. Ensure environmental considerations identified during task analysis are incorporated into training materials. During the review/revision cycle of training materials, ensure environmental compliance requirements have been integrated. Coordinate with the local environmental coordinator for technical advice on environmental issues.

In addition to using the local installation environmental office, use the US Army Toxic and Hazardous Materials Agency (USATHAMA) as an environmental consultant. USATHAMA assistance will be provided by the Special Projects Branch of the Environmental Compliance Division. Current points of contact are Mr. Phil Huber and Ms. Susan Thomas, DSN 584-4714 or commercial (301) 672-4714/2427. USATHAMA POC mailing address is ATTN: CETHA-EC-S, Aberdeen Proving Ground, MD 21010-5401.

Implementation. Ensure staff and

faculty are aware of local environmental training restrictions and legal requirements. Ensure trainees are informed of environmental requirements. Ensure trainees comply with environmental legal requirements.

Evaluation. Ensure environmental considerations are being and have been integrated into training and training materials.

Military personnel who handle hazardous waste and materials are required by law to receive specialized training. Handlers or managers of hazardous materials and waste and their supervisors require initial training prior to unsupervised training work, and they need refresher training thereafter. For information on local compliance, contact the local installation environmental coordinator.

Personnel who sign manifests for shipments of hazardous materials or waste over any public highway or by air, rail, or vessel must be certified IAW AR 55-355. See TM 38-250 certification procedures.

Personnel who work with hazardous materials in non-military unique jobs (maintenance operations in maintenance shops and motor pools, for example) require on-time hazardous communication training. Contact the installation safety office for information.

We have talked about the who and why of environmental considerations and given helpful suggestions on where to find information and assistance. Your question now is what is to be considered about the environment? Air pollution abatement, water resource management, noise abatement, natural and cultural resource management, hazardous material handling, hazardous waste handling, and pesticide management are the environmental considerations that every training developer should consider when developing training and training products. While this list is not all in-

clusive, it does cover the areas of TRADOC emphasis. I've defined these considerations and provided examples below. Contact the local environmental coordinator at your installation or the USATHAMA POC for additional information.

Air pollution abatement. Dust or smoke caused by training activities (by-products of activities or machinery, combat cover, for example); smoke and obscurants from testing or training; propellant, explosive, and pyrotechnic materials disposal (explosive ordnance disposal); open burning/open detonation; vehicle maintenance (exhaust emission); utility plant operation (boilers, incinerators); vehicle refurbishing (sanding, welding, spray painting [oil-based or chemical agent resistant coating]).

Water resource management. Waste water treatment plant operations in support of peacetime soldier care. Field water purification systems (training and combat); field sanitation (training during peacetime and combat); discharges or spills to streams during combat or peacetime (fuels, petroleum, oil, and lubricants; sludge disposal; industrial operations (metal plating, spray painting); wetlands disturbance during training, testing, or construction; Army watercraft discharges; construction, dredging or filling in or near waterways.

Noise abatement. Aircraft traffic over public places (peacetime) and during combat training (includes non-Army support), weapons training or testing (ranges), amphibious vehicles, training exercises (noise that identifies soldiers' presence).

Natural and cultural resource management. Archeological sites (historical value during peacetime and tactical value during combat), soil erosion, siltation of streams, endangered plants and animals, area clearing, structure demolition, restora-

tion of sites (tank traps, foxholes), waste disposal from field exercises (meals ready-to-eat containers, commo wire, and so forth) wildlife value in peacetime, tactical value in combat), fire control.

Hazardous material handling. Adverse health effects of materials on soldiers. Combat effectiveness, peacetime performance, and learning affected. Warehouse storage (safety, shelf life), transportation of fuels or chemical for unit operations, usage (parts degreasing, painting, defueling), unit storage, materials selection (nonhazardous for hazardous).

Hazardous Waste Handling. Directed requirements (in support of host nation regulations/agreements). Identification and disposal/reclamation (spent or used chemical), equipment maintenance and rework (motor pools, vehicle rebuild), propellant, explosive, and pyrotechnics materials manufacturing and use (central point for Explosive Ordnance Disposal, load, assemble, and pack operations), research and development, test and evaluation, chemical or fuel analysis laboratory, photography lab, printing, and disposal at site during simulated combat training (petroleum, oils, and lubricants, solvents, batteries).

Pesticide Management. Application of chemical control (rodent and insect control, lawn maintenance) during peacetime and combat.

This short handout is based on General Franks' TRADOC Environmental Ethic dated 21 October 1991 and a memorandum dated 6 September 1991, Subject: Training Development Guidance. An excellent source document for environmental considerations is the US Army Corps of Engineers Commander's Guide to Environmental Management, July 1991, performing organization report number CETHA-EC-TR-91036.