

NATO STANDARD

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**JOINT NATO DOCTRINE FOR
ENVIRONMENTAL PROTECTION
DURING NATO-LED MILITARY
ACTIVITIES**

Edition B Version 1

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NORTH ATLANTIC TREATY ORGANIZATION

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NATO LETTER OF PROMULGATION

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CHAPTER 1	INTRODUCTION
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1.1. PURPOSE

The purpose of this publication is to state NATO environmental doctrine for NATO-led military activities and to provide guidance in environmental planning for all military activities.

1.2. OVERVIEW

While meeting their military mission, NATO Forces should be committed to taking all reasonably achievable measures to protect the environment. To achieve this, commanders must know how NATO-led military activities affect and are affected by the environment. Environmental planning is an essential process to ensure appropriate environmental protection. An Environmental Management System is a useful tool to support the commander in this task.

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CHAPTER 2 ENVIRONMENTAL PLANNING
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2.1. OVERVIEW

1. Environmental planning may identify environmental issues that could be resolved during the planning process. By early consideration of the potential environmental impacts, commanders will become aware of the environmental effects of mission accomplishment while alternatives still exist. With an understanding of applicable environmental laws and regulations, commanders will be able to plan efficiently and act accordingly.

2. Environmental damage may be an inevitable consequence of operations. However environmental planning should minimise these effects without compromising either operational or training requirements. While operational requirements are paramount, it is only by including environmental considerations early in the planning process that an informed decision can be taken about the full consequences of proposed actions.

3. To implement this doctrine, NATO commanders should ensure environmental risk management is integrated into the overall planning for military activities. Environmental risk management is the process of detecting, assessing and controlling risks arising from operational factors together with balancing risk with mission benefits. NATO commanders should consider environmental protection (EP) during each phase of military activities. The risks associated with efforts to protect the environment will be different for each phase and should therefore be considered separately prior to, during and after military activities. Commanders should balance EP against risks to the forces and mission accomplishment.

4. NATO commanders should be aware of differences in the priority given to EP among nations. This may have a significant impact on the scope of environmental planning. In addition, inconsistencies in terminology due to nuances in interpretation are further challenges in the accomplishment of EP within NATO.

2.2. ENVIRONMENTAL PLANNING GUIDELINES FOR MILITARY ACTIVITIES

1. The principal responsibility of all commanders lies in the achievement of their military tasks. Commanders at all levels should follow the guidelines of environmental planning prior to commencing military activities. Commanders should therefore ensure that their planning staffs are properly trained on environmental aspects. Environmental protection may also encompass some aspects of health and safety of the personnel under the commander's responsibility.

2. In order to effectively integrate environmental considerations for NATO-led military activities, commanders should, where practicable, adhere to the following guidelines:

- a. Identify the aspects of the operational activities that could have a potential impact on the environment, including alternatives and

contingencies. Examples of environmental aspects of many operational activities are:

- (1) Handling of POL and other hazardous materials;
 - (2) Production of wastes, including hazardous wastes and waste water;
 - (3) Discharge of emissions to the air by combustion of fuel or leakage of coolants.
- b. Identify the characteristics of the environment that may be impacted by or have an impact on NATO-led military activities:
- (1) General environmental condition of the area;
 - (2) Climate;
 - (3) Water quality, including surface water and groundwater;
 - (4) Air quality;
 - (5) Natural and cultural resources;
 - (6) Presence of endangered species and critical habitats;
 - (7) Presence of birds or bird migration routes.
- c. Identify potential (environmental) impacts caused by military activities, including the impacts of alternatives and contingencies:
- (1) **Water Pollution.** Surface and groundwater pollution may result from releases or spills from human wastes (black water), wash and rinse waters (grey water), erosion and unchecked drainage, amphibious/water-crossing operations, troop construction, and oil and hazardous substance spills, fire-fighting effluent and other releases of (hazardous) materials.
 - (2) **Air Pollution.** Air pollution may be caused by emissions to the air by vehicular, aircraft, and ship exhausts; open air burning; use of pyrotechnics and smoke generators and other releases of hazardous materials.
 - (3) **Soil Pollution.** Soil pollution may be caused by releases or spills to the soil of POL and other hazardous substances, dumping of waste, waste water and other releases of materials.

- (4) Contamination of water, air and/or soil may further be caused by improper control and management of:
 - (a). **Pesticides.** Pesticide contamination could result from the use or spillage of insecticides, herbicides, fungicides, algacides and rodenticides.
 - (b). **Hazardous Waste.** Hazardous waste, if handled incorrectly, can cause pollution and major problems during clean-up and restoration activities during and after a military operation.
 - (c). **Solid Waste.** Generation of solid waste (i.e., construction debris, trash, garbage, etc.) occurs in all military operations.
 - (d). **Medical and Infectious Wastes.** Wastes that may contain pathogens in sufficient number and with sufficient virulence to cause infectious disease in susceptible human hosts.
 - (5) **Noise.** The impact of noise created by military activities, particularly the impact in peacetime, on the civilian population and on wildlife.
 - (6) **Impacts on Wetlands and Biological Diversity in General.** These subjects have been recognised internationally as deserving special protection.
 - (7) **Endangerment of Natural and Cultural Resources.** Impacts to natural and cultural (historic and archaeological) resources should be prevented to the maximum extent possible while still meeting operational imperatives.
- d. Establish an environmental baseline study (EBS) for camps and associated sites at the onset of the operation, and prepare an environmental closeout study (ECS) at handover/transition or closure of each camp or site.
 - e. Ensure an environmental file is maintained for each camp and its associated sites, incorporating all essential EP documentation throughout all operational stages.
 - f. Identify feasible mitigation measures, if applicable, to reduce the risk to the environment and to human health and safety. Consider alternative locations or activities that still achieve the military objective of the training or operation while reducing or eliminating the risk to the environment or human health and safety.

- g. Identify measures for pollution prevention and resource conservation, clean-up and remediation:
 - (1) **Pollution Prevention and Resource Conservation.** The goal of pollution prevention is to prevent pollution by conserving resources, reducing the use of hazardous materials and minimising the release of pollutants to the environment. There are six strategies that the commander can take to conserve resources and to reduce clean-up and remediation requirements:
 - (a) Source reduction - reduction or elimination of the use of hazardous materials and resultant waste streams;
 - (b) Preventive measures. These include activities taken in advance to prevent the development of environmental damages, for example the precautionary use of drip pans and secondary containment equipment or early contracting of hazardous material disposal agents;
 - (c) Re-use - repeated use of the same product;
 - (d) Recycle - renewal of generated use to new products;
 - (e) Treatment - rendering hazardous waste as non-hazardous;
 - (f) Disposal - the last resort.
 - (2) **Clean-up and Remediation.** This includes the identification and clean-up of solid, liquid, and hazardous wastes and the remediation where applicable of other environmental impacts resulting from NATO-led military activities.
- h. Achieve energy efficiency by incorporating best available techniques in the areas of energy supply (including renewable energy technologies) as well as energy management.
- i. Determine what national and/or international environmental laws are applicable to the military activities;
- j. Identify any operational limits or restrictions imposed by applicable environmental regulations or policy.

CHAPTER 3 – ENVIRONMENTAL RISK MANAGEMENT

3.1. ENVIRONMENTAL RISK MANAGEMENT IN MILITARY ACTIVITIES

3.1.1. Exercises

Exercises under peacetime conditions should be conducted in a manner consistent with applicable environmental regulations. The only exceptions to this requirement would be emergency situations that threaten human life or safety. Although limitations may be imposed on assigned forces to meet environmental requirements, appropriate planning may reduce the impact of these limitations. NATO commanders should incorporate dedicated risk management to achieve exercise objectives while minimising adverse environmental impacts.

3.1.2. Operations

The key to environmental risk management is balancing environmental protection (EP) with mission objectives. An operation should be thoroughly planned and executed to minimise unnecessary risks to the environment and human health.

3.2. ENVIRONMENTAL RISK MANAGEMENT FRAMEWORK

The key elements are:

- a. **Commander's Environmental Policy or Guidance.** The commander should provide clear guidance on EP for military activities as early as possible in the planning process.
- b. **Environmental Planning.** An environmental plan should be developed using this guidance, and should be part of the operations plan or exercise directive as a separate annex or appendix. The plan should include provisions for environmental contingencies, a list of the identified risks and prescribed mitigation measures. Evaluation of the plan should be conducted to incorporate any lessons learned in future planning.
- c. **Implementation.** The commander should ensure all personnel are trained and aware of environmental issues. There must be clear assignment of responsibilities and resources where applicable for EP. Units must work with local authorities and the community to identify and resolve problems.
- d. **Checking and Corrective Actions.** Activities should be continuously monitored to ensure consistency with the commander's EP objectives.

Therefore, units must carry out periodic inspections (audits) of sites, monitor any change, and use periodic inspection reports as a basis for the environmental closeout study. For operations for which several rotations are expected, a NATO and/or National oversight mechanism might be required to ensure that issues (such as mitigation measures) identified from the initial bed-down of the operation are followed through until operation closure. It should be ensured that necessary remediation has been carried out.

- e. **After Action Review.** Lessons learned should be reported to enhance future planning.

CHAPTER 4	COMMANDER'S ENVIRONMENTAL RESPONSIBILITIES
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The principal responsibility of all NATO commanders lies in the achievement of their military tasks. It is possible to achieve this and maintain a commitment to environmental protection (EP). Commanders at all levels should:

- a. Demonstrate leadership and awareness in EP and promote environmental awareness in personnel under their command;
- b. Identify and assign clear responsibilities and resources (e.g., funding, personnel and equipment) to meet EP objectives;
- c. Consider environmental impacts in decision making;
- d. Ensure compliance, as far as practicable within the confines of mission accomplishment, with applicable environmental laws and agreements;
- e. Ensure careful use of all natural resources and energy sources/supplies under their control;
- f. Enhance relationships with host nations and neighbouring communities by addressing environmental issues and maintaining appropriate levels of coordination;
- g. Integrate the concept of pollution prevention into all military activities through the promotion of reuse, recycling, materiel and process substitution, improving operating efficiencies and training.

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CHAPTER 5	ENVIRONMENTAL TRAINING AND EDUCATION
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5.1. OVERVIEW

5.1.1. General

Appropriate training and educational materials for environmental protection (EP) should be available to all relevant personnel. Each NATO nation needs to carry out a training needs analysis for their forces and establish guidelines on how this training can be achieved. A training needs analysis should be conducted in accordance with Bi-SC Education and Individual Training Directive 75-7 or national equivalent. Once policy guidelines have been established, detailed environmental training syllabi and typical instructional material can be produced.

5.1.2. NATO Environmental Training

Environmental training should be incorporated within existing training programs in a pragmatic manner. Because environmental training is primarily a national responsibility, NATO nations must be aware that EP requirements may vary among nations. To this end, nations should be encouraged to attend and support the NATO-accredited environmental protection training courses at the NATO School in Oberammergau, Germany and the Military Engineering Centre of Excellence in Ingolstadt, Germany. Other NATO fora play a key role in furthering a common understanding of the relationship between training requirements and the environment.

5.2. ENVIRONMENTAL EDUCATION OBJECTIVES AND OPPORTUNITIES

5.2.1. Environmental Education Objectives

The objectives of environmental education are:

- a. To incorporate EP and energy efficiency/conservation awareness into the military routine of the individual service person's education;
- b. To develop environmental and energy efficiency/conservation awareness as early as possible in the career of all personnel. Career steps should include instruction that matches the increase of responsibility;
- c. To increase awareness in senior commanders of their environmental and energy efficiency/conservation responsibilities.

5.2.2. Environmental Awareness

Commanders should educate their personnel to integrate EP and awareness into routine daily operations. The nature and applicability of training will reflect the recipient's rank and specialisation. Education should be directed towards raising awareness of the need for:

a. **Environmental Protection.**

- (1) Water resource protection (ocean, coastal, surface and groundwater);
- (2) Air and atmosphere quality protection;
- (3) Vegetation and soil protection (includes the protection of forests);
- (4) Noise abatement;
- (5) Landscape quality protection (urban and rural, including litter prevention);
- (6) Natural resources (includes wildlife and habitat protection);
- (7) Correct methods of material and waste management especially of hazardous materials;
- (8) Pollution prevention.

b. **Resource Conservation.**

- (1) Heritage protection (natural and man-made);
- (2) Resource protection in the context of sustainable development:
 - (a) Energy efficiency and conservation;
 - (b) Reduction in the use of non-renewable resources;
 - (c) Waste minimisation and recycling.

c. **Environmental Policy.**

- (1) Domestic environmental policy and the conditions and incidents that brought it into being;

- (2) Host Nation's (HN) environmental policy and the unique concerns of the HN, especially as they differ from those of the troop - contributing nation;
- (3) NATO environmental policy;
- (4) Environmental provisions of applicable international agreements.

5.2.3. Specific Environmental Procedures and Measures

These relate to procedures or measures of a specific nature designed to ensure EP during the performance of duties that need more detailed environmental education, probably given to smaller groups of personnel by functional area or according to their responsibilities. Examples of these duties include engineer construction, aircraft or vehicle maintenance, waste handling at sea and fuel handling.

5.2.4. Supervisory Responsibilities

This area is of particular concern to commanders and their nominated supervisory staff. The need for professional environmental expertise may require ready access to specialised experts/advisors. Particular attention will have to be given to environmental policy and guidance, risk management and planning.

5.2.5. Opportunities for Environmental Education

Environmental education should as much as possible be incorporated into existing training programs. Opportunities include:

- a. **Individual Training.** The basic training courses, Junior Officer courses, and NCO courses may be the right opportunities for the majority of environmental awareness, procedures, and supervisory material;
- b. **Collective Training.** This provides the opportunity for initiatives such as the presentation of standing orders for exercises and training areas, waste handling and pollution prevention. Collective training exercises also provide excellent opportunities to raise EP awareness through the use of environmentally sound deployable equipment such as incinerators and waste treatment systems;
- c. **Continuation Training.** Environmental knowledge and training will need to be continually updated and refresher training provided as legislation and working practices develop.

5.3. CONCLUSION

The approach taken to environmental education will either guarantee its acceptance or ensure its failure. A mixture of approaches employing the concepts of individual responsibility, good military practice, "good neighbour initiatives" and global responsibility will most probably be required.

ANNEX A

RELATED DOCUMENTS

MC 469/1 - NATO Military Principles and Policies for Environmental Protection (EP)

MC 560/1, MC Policy for Military Engineering

AMEPP-series - Allied Maritime Environmental Protection Publication Series

STANAG 2510, Joint NATO Waste Management Requirements during NATO-Led Military Activities, AJEPP-5, Edition A

STANAG 2582, Environmental Protection Best Practices and Standards for Military Camps in NATO Operations, AJEPP-2, Edition A

STANAG 2583, Environmental Management System in NATO Operations, AJEPP-3

STANAG 2594, Best Environmental Protection Practices for Sustainability of Military Training Areas, AJEPP-7, Edition A

STANAG 2982, Essential Field Sanitary Requirements

STANAG 6500, NATO Camp Environmental File During NATO-Led Operations, AJEPP-6, Edition B

STANAG 7102, Environmental Protection Handling Requirements for Petroleum Handling Facilities and Equipment

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ANNEX B

LEXICON OF ACRONYMS

AJEPP	Allied Joint Environmental Protection Publication
AMEPP	Allied Maritime Environmental Protection Publication
EP	Environmental Protection
HN	Host Nation
NATO	North Atlantic Treaty Organisation
NCO	Non – Commissioned Officer
POL	Petroleum, Oils and Lubricants
SC	Strategic Command
STANAG	Standardization Agreement

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