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HEADQUARTERS  
DEPARTMENT OF THE ARMY**

**CONCEPTS AND EQUIPMENT  
OF PETROLEUM  
OPERATIONS**

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## CONCEPTS AND EQUIPMENT OF PETROLEUM OPERATIONS

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## PREFACE

This manual is a guide for commanders, staff officers, supervisors, and other personnel concerned with petroleum concepts, equipment, and operations.

This manual is a consolidation of FMs 10-18, 10-20, 10-68, 10-69, 10-70-1, and 10-71. This manual is divided into four parts. Part One describes general considerations of petroleum operations to include environmental protection, safety, and accountability. Part Two describes bulk petroleum distribution systems. Part Three describes Army aircraft refueling operations. Part Four describes petroleum handling equipment as well as Class III supply point operations. This manual is oriented toward tactical field operations and deals with the responsibilities of both management and operator personnel. It can be used in conventional and NBC warfare. However, this manual cannot be cited as an authority for requisitions. Requisitions must be based on authority such as tables of allowances or TOEs.

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Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

## **PART ONE**

### **GENERAL CONSIDERATIONS**

The three chapters in this part give general considerations for all petroleum operations in the areas of environmental protection, safety, and accountability. This includes general guidelines for conducting any type of aviation-related activities, to include refueling operations. The rest of the chapters in the book give specific considerations in these areas related to various types of petroleum operations. Anyone involved in planning, evaluating, or conducting petroleum operations should be thoroughly familiar with the contents of these three chapters. They should routinely refamiliarize themselves with them, as well as the other chapters in the book pertaining to the type of operation with which they are involved.

## CHAPTER 1

### PETROLEUM UNIT ENVIRONMENTAL RESPONSIBILITIES

*“The Army environmental vision is to be a national leader in environmental and natural resource responsibilities for present and future generations as an integral part of our mission.”*

#### SCOPE OF ENVIRONMENTAL RESPONSIBILITY

We must take care of the environment (that is, practice environmental stewardship). The definition of stewardship is taking care of property while also caring about the rights of others. We must plan our operations without harming the environment. Good environmental stewardship lets leaders take care of soldiers and their families. It also saves resources vital to combat readiness.

The Army has the huge task of reducing the environmental impact on its installations and units throughout the United States and the world. Within CONUS, the Army owns 20 million acres of land (an area about half the size of Virginia). This shows the vastness of this task. Each area of our daily operation has some effect on the environment.

The Army is renewing its emphasis on taking care of the environment. Petroleum and water units by their nature have a huge impact on the environment. It is critical for the leaders and soldiers in these units to follow safe, legal environmental practices. By doing so, they protect their health and the health of those around them. They also prevent long term environmental damage that can lead to fines and other legal actions.

#### ENVIRONMENTAL PROTECTION STEWARDSHIP GOALS AND REQUIREMENTS

The Army no longer just complies with laws, they want to be a leader in environmental protection. To do this, the Army has set goals and requirements for its leaders to follow.

##### Goals

- Make sure operations comply with standards. Do not receive a notice of violation or a fine for not following local, state, and federal environmental regulations.
- Clean up installations. Begin restoring all contaminated sites by 2000.
- Prevent future pollution. Reduce all hazardous waste and toxic releases.
- Integrate NEPA procedures into all operations.
- Protect natural and cultural resources.

##### Requirements

All Army actions require an appraisal be done on potential environmental impacts of said action. All key Army decision makers and planners are required to attend NEPA training.

#### ROLE OF ENVIRONMENTAL STEWARDSHIP IN LEADERSHIP

A leader who cares for the environment also cares for his people. He does this by reducing or eliminating undue health risks. He saves resources (soldiers or money) vital to his mission. He keeps training areas in excellent condition for training far into the future. He preserves cultural artifacts for study by future generations. Also, he teaches the basic moral duty of soldiers to protect and preserve the United States of America and its allies.