FM 10-67-2
HEADQUARTERS
DEPARTMENT OF THE ARMY

PETROLEUM LABORATORY TESTING AND OPERATIONS

DISTRIBUTION RESTRICTION:

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

Field Manual
No. 10-67-2

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 2 April 1997

PETROLEUM LABORATORY TESTING AND OPERATIONS

Table of Contents

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes FM 10-70, 9 May 1983, and FM 10-72, 11 August 1986.

PREFACE

Purpose and Scope

This manual is a guide for commanders, staff officers, and other personnel concerned with planning, organizing, and carrying out petroleum QS testing in a theater of operations.

The doctrine in this manual concerns operations in a tactical theater and may not relate directly to normal peacetime garrison operations. Doctrine for the development and operation of theater petroleum testing facilities is discussed separately for an improved and unimproved theater of operations. The systems described are applicable to both conventional, and NBC warfare.

This manual is a consolidation of FMs 10-70 and 10-72. It addresses certain environmental issues to be considered in planning petroleum laboratory operations. It provides information concerning the types of petroleum products, and their uses by the military; petroleum quality; the various laboratories and test kits available for implementing quality surveillance in the theater; and the deployment and establishment of these facilities. The final chapters of this manual address basic chemistry used in the laboratory, along with the properties of petroleum, testing methods; samplers and sampling procedures; and general petroleum laboratory operations. This manual is not intended to be the only source of information on the operation of petroleum testing facilities. It does not cover individual items of testing equipment and their maintenance or the internal operation of testing facilities. In addition to this manual, it is necessary to have publications such as those listed in the references in order to provide an adequate petroleum QS program.

User Information

The proponent of this publication is HQ USATRADOC. You are encouraged to submit recommended changes and comments to improve this manual. Make sure you key your comments to the exact page, paragraph, and line of the text in which the change is recommended. Provide reasons for each comment to ensure understanding and complete evaluation. Write your comments on a DA Form 2028 (Recommended Changes to Publications and Blank Forms) or in a letter, and send them to

Training Directorate
Quartermaster Training Division
ATTN ATCL AQ
801 Lee Avenue
Fort Lee, VA 23801-1713

Unless otherwise stated, whenever the masculine gender is used, both men and women are included.

CHAPTER 1

ENVIRONMENTAL RESPONSIBILITIES

Section I. Environmental Protection Stewardship

The Army environmental vision is to be a national leader in environmental and natural resource stewardship 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 protection 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 protection stewardship lets leaders take care of soldiers and their families. It also saves resources vital to combat readiness. The Army's environmental concerns include the following.

- The Army has the huge task of reducing the environmental impact on its installations and units throughout the US 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 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

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 for its leaders. These goals include:

- Compliance. Ensure that all Army sites (CONUS, OCONUS) attain and sustain compliance in the face of changing requirements.
- Restoration. Clean up contaminated sites as quickly as resources permit to protect human health and environment.
- Prevention. Adopt and implement integration management approaches, procedures, and operations in all Army mission areas to minimize all environmental contamination and pollution. Do not receive a notice or violation or a fine for not following local, state, and federal environmental regulations.
- Conservation. Conserve, protect, and enhance environmental, natural and cultural resources, using all practical means consistent with missions, so that present and future generations may use and enjoy them.
- Planning. Consider the environment in the planning and decision making process, and initiate environmental planning early in the mission.
- NEPA. Integrate all NEPA procedures into operations.