UNITED STATES MARINE CORPS
Utilities Instruction Company
Marine Corps Engineer School
PSC Box 20069
Camp Lejeune, North Carolina 28542-0069

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STUDENT HANDOUT

DEVELOPMENT OF A WATER POINT

Terminal Learning Objective: Provided a water point site, area map, field report, aerial photographs, water reconnaissance report, schedule of recommended site improvements, equipment and personnel requirements, and the references identify the necessary requirements to develop a water point. The water point will be developed so that enough water for using units will be produced, the water point will have sufficient space for trucks to move to and from the water source, the water point will have sufficient drainage so that the area does not become flooded, and the water point and hygiene equipment will be adequately concealed and guarded to reduce the chance of enemy attack per the references. (1171.03.02)

Enabling Learning Objectives:

1. Provided a list of development considerations, without the aid of references, identify the correct development consideration in accordance with FM 10-52-1. (1171.03.02a)

2. Provided a list of site improvements, without the aid of references, identify the correct improvements in accordance with FM 10-52-1. (1171.03.02a)

BODY:

1. Developing a water point:

a. A water source developed for military use is called a water point. The purpose for the development of a water point is to increase the quality and quantity of water, as well as making it more readily available for treatment and distribution.

b. The following objectives should be directed toward the development of a water point:

(1) Increase the quantity of potable water available.

(2) Improve the quality of water produced.

(3) Lessen distribution problems.

(4) Decrease maintenance requirements.

(5) Improve security.

(6) Improve living condition of water point personnel.

2. Plans for water point development:

a. Proper planning is essential to the orderly development of a water point and should be foremost in the minds of reconnaissance and supervisory personnel. When possible, planners should select the site requiring the least improvement. They also should give priority to removing obstacles that limit operations.

b. There are a two development considerations which apply to the development of a water point. They are discussed below:

(1) Order:

(a) The problems encountered at each site and tactical situation determine the order for improvements at water points. As planners, you should give priority to those conditions which are necessary to establish the water point.

(b) For example, in jungle terrain where water is readily available and cover and concealment are good, but routes of communications are poor and the enemy is present, consider distribution facilities and security first.

(2) Extent:

(a) The extent to which a water point is developed depends mainly on time, labor, personnel, and materials available. At forward deployed sites, develop enough water to supply potable water to using units. However, in the rear area, the extent of development will vary with the size of the water point, the problems to overcome, and the permanency of the installation.

3. Site improvement considerations:

a. Drainage:

(1) The importance for providing good drainage can't be overemphasized. Wastewater from treatment units, leakage from storage tanks, and spillage from distribution units may cause the area to become so wet and muddy, that it will render the water point inoperable.

(2) During the winter months water may freeze, causing a serious safety hazard for personnel and equipment. Avoid such conditions by having good drainage at each site. Always direct drainage downstream from the purification, storage, and distribution operations.

b. Storage Facilities: Should be large enough to meet daily water peak demand. This will eliminate long waits at the water point by consumers and ensure sufficient quantities of water is available for mission requirements.

c. Road Networks:

(1) A satisfactory water point must be accessible to vehicles and personnel. If vehicles cannot get to the point of distribution, the water point no longer serves it's purpose.

(2) The load capacity of roads should be sufficient to withstand the heaviest vehicles under all weather conditions. Locate the water point on improved roads whenever possible but avoid main supply routes. A good road net should include the following provisions:

1 Turnouts and Turnarounds: Turnout may be the widened section of the main road or a new one-way road past the water point. The type used depends on labor and the equipment available.

2 Traffic Signs: The route to the water point should be well marked, visibly clear, with posted signs at all critical points within two miles of the water point.

3 Checkpoints: Set up checkpoints at the entrance and exits of the water point. Give personnel entering the area a safety brief. Use the checkpoints not only to control traffic but also to monitor the issue of water.

d. Camouflage:

(1) Camouflage misleads the enemy by misrepresenting the true identity of an installation, an activity, or an item of equipment. The water point may not be within the boundaries of a base cluster which, as a result, imposes a special problem of security.

(2) The best means of reducing the chances of attack is to deny the enemy the information concerning the location of the water points. This can be done by the maximum use of camouflage netting.

e. Bivouac: Conveniently locate water supply personnel with respect to the water point. Select a bivouac area for water supply personnel and security forces. In selecting a site, consider security, sanitation, and comfort of the troops. This will facilitate the arrangement of shifts and make personnel readily available in case of emergencies.

f. Security:

(1) Troop morale, welfare, and health depend on a reliable source of potable water. Therefore, commanders must take measures to provide security for water points. A lack of security could result in complete loss of a water point; or the enemy could contaminate storage and distribution facilities, thus disabling or killing those who drink the water.

(2) Communication channels to the water points should be kept open. Keep personnel informed of the tactical situation. Provide

shelters to protect personnel from the effects of NBC if at all possible.

REFERENCES:

FM 10-52-1