

Chapter 4

Water and Field Services

Section I of this chapter introduces some basic water purification and distribution policy and procedures. Section II describes the three common field services of food service, shower & laundry, and mortuary affairs.

SECTION I WATER

4-1. **RESPONSIBILITIES.** The battalion S4 has staff responsibility for potable water supply. The S4 estimates daily water requirements for the battalion and any assigned or attached units. The requirements are consolidated and submitted to the battalion's supporting element. Commanders and logistics staff planners at all levels should use the OPLOG Planner to determine water requirements.

4-2. **INDIVIDUAL WATER REQUIREMENTS.** Individual water requirements are affected by climate, work intensity, NBC environments, and availability and extent of field services. Factors to consider are explained below.

- **Drinking Water.** Drinking water is needed to prevent dehydration. All drinking water must be potable. Under hot conditions, water is required to prevent heat injuries, such as cramps, exhaustion, and stroke. Water consumption will increase for that portion of the force operating under MOPP 3 or MOPP 4 conditions depending on the climate.
- **Hygiene.** Soldiers need water for personal hygiene. This water must be potable. This includes hand washing, sponge baths, brushing teeth, and shaving.
- **Shower and Laundry.** The shower and laundry site must have an ample supply of clean water, which can be nonpotable. The water must be as free from impurities as possible. The Office of the Surgeon General recommends, from a health maintenance standpoint, a

minimum of one shower and one change of uniform per soldier per week. This meets minimum health standard requirements. However, from a morale standpoint, commanders may desire more frequent shower and laundry services. Logistics planners must be aware of the impacts on both force structure and water consumption associated with providing central hygiene support above The Surgeon General established minimum.

- **Food Service.** Water is needed for meal preparation and kitchen sanitation. This water must be potable. Heat and serve UGRs require 0.5 gallon per meal. The use of disposable eating utensils as part of the MRE and UGR reduces the amount of water required.
- **Medical Operations.** Medical use varies with combat intensity, weather, number and severity of casualties treated, number and type of medical facilities, and evacuation policies. Use only potable water for medical use. Water used in medical operations is that which is required to perform the 14-patient care activities associated with aid station, dispensary, and hospital functions.

4-3. **EQUIPMENT CARE REQUIREMENTS.** Water use for the care of equipment depends on the amount and type of equipment. Potable water is not required.

- **Vehicle Maintenance.** To replace their coolants, vehicles need water. This water may need to be filtered of salt and foreign material. Potable water is not required. Calculate the requirement by totaling the radiator capacities of all unit vehicles, or use the per-vehicle estimate of 0.5 to 1 gallon. This depends on a temperate or hot climate.
- **Aircraft.** Water used in aircraft maintenance is that which is required to perform the daily maintenance operations. There is no requirement for potable water; however, fresh water is recommended to avoid corrosion. Weekly wash down of aircraft and phased maintenance aircraft cleaning generate the largest water consumption requirements for aircraft.

4-4. **OTHER SUPPORT REQUIREMENTS.** Water use for support requirements varies with the tactical situation, type of battlefield, and combat intensity.

- **Engineer Operations.** The terrain and type of construction affect engineer water use. Engineers use water to make concrete, roads, airfields, pipelines, drilling wells, operating quarries, and asphalt

plants. If the water is scarce, it cannot be used for dust control for roads and quarries. Fresh water is required for pipeline testing and desired for most other missions since salt water may cause corrosion or reduce material strength. TRADOC Pam 525-11, Net engineer Construction Water Requirements, provides some planning estimates.

- **NBC Decontamination Operations.** The frequency, intensity, and location of chemical attacks affect water requirements for decontamination. Decontamination sections need 12.4 gallons for biological and radiological decontamination of an individual, 100 gallons for operational equipment decontamination, and 450 gallons for thorough decontamination of a major end item. Potable water is not required.
- **Mortuary Affairs.** Water usage depends on the fatality rate. Potable water is not required, but must be free of dirt and disinfected. Mortuary Affairs Specialists (MOS 92M) not only use water for personal hygiene, preparing remains, cleaning equipment and vehicles, but to decontaminate remains when required.

4-5. **WATER SUPPLY PROCEDURES.** Water supply companies set up and operate bulk storage and distribution facilities in the corps and EAC. Water points are set up as close to the using unit as possible. Usually water is delivered with Class I. If possible, water points are collocated with Class I supply points. The HHC commander or support platoon leader coordinates with the supporting FSB to pick up water from the MSB water supply point. Depending on water sources, a water point can be a purification or supply point or both. Water purification teams produce potable water. The most forward water points are in the BSA even if they are points requiring water to be transported to them. Transportation medium truck companies line haul potable water in tankers or collapsible fabric tanks. If required, a GS water supply system may be established. Using units use their own transportation and water trailers to get their water. However, water supply units can provide some water to units unable to help themselves. The MSB S&S company purifies water and, if necessary, distributes it either directly to the users or into collapsible fabric tanks. Do not use potable water containers or tanks for nonpotable water or for Class III items. Supporting DISCOM supply units run forward water points. Before water sources are used for potable purposes, preventive medicine personnel must check them, and the command surgeon must approve them. Quality surveillance of potable water supplies at the company level and below is the responsibility of each unit's field sanitation team. Division and higher preventive medicine personnel monitor all other potable water supplies. In the corps rear and EAC, the nondivisional DS supply company provides DS water support on an area basis. The water section operates supply points established at approved water sources. The DS supply company can establish mobile supply points and provide limited unit distribution. In regions lacking sufficient water resources, GS water supply units provide water. They pump, de-mineralize, purify, store, test, and transport water to water points. Engineer units drill

needed wells. Each vehicle should carry water cans to be refilled or exchanged during Class I resupply and LOGPAC operations. More details on water operations are in FM 10-52.

SECTION II FIELD SERVICES

4-6. **FIELD FEEDING.** The Army field feeding system is based on consolidating feeding resources. Battalions may consolidate field feeding at battalion headquarters level using the MKT or perform decentralized feeding at the unit level using the KCLFF-E. The food service section prepares UGRs. When consolidated operations are being performed, the food is packed in insulated containers and sent forward with the LOGPAC to each company. Unit personnel, under the supervision of the first sergeant help the cooks serve meals. The insulated containers are returned for reuse. Units in the rear areas of brigade and higher echelons are fed similarly by their battalions or by unit kitchens assigned to feed specific units or personnel. For more details on Army field feeding, see FM 10-23.

4-7. **SHOWER, LAUNDRY, AND CLOTHING REPAIR.** SLCR sections originate from the company base of the field service company, DS. SLCR sections are sent to supported units when scheduled by the platoon headquarters. Each section can provide shower, laundry, limited clothing repair, and delousing services at separate locations. Each section can support 3,500 soldiers per week. These sections provide services at the supported unit's request. Operational areas should be located at or near a plentiful water source, or arrangements should be made for delivery from the supporting water point. If there is doubt about the available water source, coordinate through the field services company with the battalion operations officer or through the supported unit to get preventive medicine soldiers to test the water. Supported units will be requested to help in site setup and to guard valuables. The field services company provides services to divisional and nondivisional personnel from the corps forward area to the forward line of troops.

4-8. **MORTUARY AFFAIRS.** Mortuary affairs operations have a direct impact on the morale of soldiers and the public. Mortuary affairs support is provided throughout the TO on DS and GS levels. Mortuary affairs in a TO include searching, recovering, tentatively identifying, and evacuating remains and their personal effects through the TO to CONUS, and subsequently to the person authorized to direct disposition, and the person eligible to receive effects for final disposition.

- **Responsibilities.** Commanders of all units are responsible for the search, recovery, tentative identification, and evacuation of remains and PE to a MACP. Remains include but are not limited to members of

the unit, other services, and other remains that may be found in the commander's area of responsibility. Remains must be evacuated at the first opportunity. Commanders must ensure that search, recovery, and evacuation operations are conducted respectfully.

- **Search and Recovery.** When remains are recovered, all personal effects and identification media must be safeguarded and kept with the remains. All personal effects, portions of remains, and identification media not found on remains, must be kept separate and noted as to the location of these items. Ensure the DD Form 1380 is secured to the remains. If there is not a DD Form 1380, have medical personnel prepare one prior to evacuation. When evacuating remains, ensure they are shrouded and kept from view. The remains are shrouded with any suitable material such as a human remains pouch, poncho, or poncho liner. The remains are then evacuated to the nearest mortuary affairs collection point.

- **Isolated Interment.** Isolated interment (formerly known as emergency burial) of remains should only be conducted as a last resort when the tactical situation does not allow evacuation or when remains are NBC-contaminated and cannot be decontaminated. The geographic combatant commander must approve the isolated interment. More details on isolated interments are in JTTP 4-06.

- **Casualty Reporting.** Unit commanders are responsible for casualty reporting. They are to report casualties according to AR 600-8-1, Chapter 6.

- **Personal Effects.** Unit commanders must ensure that property left in unit, hospital, or rear storage areas by persons deceased, missing, missing in action, or captured by the enemy are collected, safeguarded, inventoried, and shipped to the effects depot.

4-9. **FORCE PROVIDER.** Force Provider is a complete, containerized, highly deployable bare-base system that is engineered to provide climate-controlled billeting; dining; shower; latrine; laundry; and morale, welfare and recreation facilities in modules designed to support battalion-sized units (550 soldiers each). It is packaged with utility systems, including water storage and distribution, fuel storage and distribution, wastewater storage, and power generation and distribution capabilities. Force Provider's basic building block is the TEMPER, which comes with external forced air heating and cooling systems. Force Provider missions include providing rest and refit for combat-weary soldiers, supporting theater reception, and acting as an intermediate staging base or as a base or redeployment camp for humanitarian assistance, disaster relief, and peacekeeping operations. Force Provider is NOT designed for use as a supply point to resupply units.