#### 101-FR8-9006 Determine Location of Petroleum Pump Stations, Terminals, and Supply Points. Status: Approved

Destruction Notice: None

Distribution Restriction: Approved for public release; distribution is unlimited.

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Fort Lee, VA foreign disclosure officer. This training product can be used

to instruct international military students from all approved countries without restrictions.

**Condition:** You are a Petroleum and Water Officer responsible for determining the location of pump stations, terminals, and supply points. Higher headquarters (HQ) has assigned you an area of operations, but you must choose your site within the area. You have access to higher headquarters (HQ) operations plan (OPLAN) and/or operation order (OPORD), unit standing operating procedures (SOP), status reports, maps, overlays, and all applicable references to include ATP 4-43.

Operational environment (OE) variables and actors such as infrastructure, physical environment, and time, must be considered. Threat capabilities cover a full spectrum including information gathering, hostile force sympathizers, and terrorist activities. This task should not be trained in MOPP 4.

**Standard:** The placement of the pump stations, terminals, and supply points optimizes the flow of petroleum products to support the mission. The sites must reflect the following considerations: tactical situation, mission, cover and concealment, terrain, road nets, distance between sources, and distribution point.

### Special Condition: None

Safety Risk: Low

MOPP 4: Never

**Task Statements** 

#### Cue: None

	DANGER	
None		

# WARNING

None

# CAUTION

None

#### Remarks: None

Notes: None

# Performance Steps

1. Review higher HQ OPLAN/OPORD to determine the type of operation (Joint, Multinational, etc.) and area of operations.

2. Locate tank farms in the area that they will service.

3. Select tank farms close to the location of Class III supply points and transportation routes.

4. Select sites that are in easy-to-defend and non-congested areas.

5. Place tank farms in areas where runoff will drain away from installations, troop centralized areas, and forests.

6. Choose tank farm sites which furnish the minimum required suction pressure by gravity flow from the outlet of the lowest tank to the intake of the pipeline pumping station.

7. Select sites on sloping terrain with adequate natural cover and concealment.

8. Place tanks on undisturbed or compacted soil to obtain adequate support.

9. Determine required pressure and flow rates between pumping stations.

10. Determine flow requirements.

11. Locate pump stations using hydraulic gradient.

12. Ensure pump stations have a minimum suction pressure of 20 pounds per square inch.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the soldier GO if all steps are passed. Score the soldier NO GO if any steps are failed. If the soldier scores a NO GO, show what was done wrong and how to do it correctly.

**Evaluation Preparation:** At the test site provide all materials that are relevant to the task to include those mentioned in the condition statement.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Determined the type of operation and area of operations.			
2. Located tank farms in the area that they will service.			
3. Selected tank farms close to the location of Class III supply points and transportation routes.			
4. Selected sites that are in easy-to-defend and non-congested areas.			
5. Placed tank farms in areas where runoff will drain away from installations, troop centralized areas, and forests.			
6. Selected tank farm sites which furnish the minimum required suction pressure by gravity flow from the outlet of the lowest tank to the intake of the pipeline pumping station.			
7. Selected sites on sloping terrain with adequate natural cover and concealment.			
8. Placed tanks on undisturbed or compacted soil to obtain adequate support.			
9. Determined required pressure and flow rates between pumping stations.			
10. Determined flow requirements.			
11. Located pump stations using the hydraulic gradient.			
12. Ensured pump stations have a minimum suction pressure of 20 pounds per square inch.			

# Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 4-43	Petroleum Supply Operations	No	No

TADSS : None

Equipment Items (LIN): None

#### Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
No materiel items specified				

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None

#### ICTL Data :

ICTL Title	Personnel Type	MOS Data
Petroleum and Water Officer ICTL (CMDT Appr 6 Mar 2014)	Officer	AOC: 90A, Rank: CPT, SI: R8, LIC: YY