

101-FR8-9004
Monitor Gaging of Bulk Petroleum Products
Status: Approved

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

Destruction Notice: None

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 ensuring personnel follow the correct procedures when gaging petroleum products. You have been given a petroleum storage tank, tanker, or collapsible bag with product that needs to be gaged. Personnel have access to the appropriate measuring equipment required for the type of storage tank or collapsible bag being gaged. You have access to the unit standing operating procedure (SOP) and all applicable references to include ATP 4-43, DA Pam 710-2-1, and DA Pam 710-2-2. This task should not be trained in MOPP 4.

Standard: Ensure personnel follow the correct gaging procedures to include calculating the net quantity of product at 60 degrees Fahrenheit (15 degrees Celsius).

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

DANGER
None

WARNING
Petroleum, Oil and Lubricants (POL) handlers must be well trained and supervised to prevent catastrophic injury to both personnel and equipment, especially in storage and transfer operations. When monitoring or coordinating fuel operations, ensure static discharge grounding procedures are rigorously applied and all appropriate safety precautions are adhered to.

CAUTION
None

Remarks: None

Notes: None

Performance Steps

1. Verify a risk assessment has been completed and controls implemented.
2. Ensure personnel follow gaging procedures outlined in ATP 4-43, TB 10-5430-253-13, DA PAM 710-2-1, and DA PAM 710-2-2.
 - a. Allow enough time for water, solids, and bubbles to settle after adding fresh stocks to a storage tank.
 - b. Select the proper equipment based on the type of storage tank or collapsible bag being gaged.
 - c. Gage the storage tank, truck, or collapsible bag.
 - d. Measure for bottom sediment and water to determine the actual amount of product.
 - e. Gage bulk storage tanks before and after any receipt, issue, or transfer operation.
 - f. Gage new or recently filled tanks daily until it appears the tanks are not leaking.
 - g. Take all readings to the nearest 1/8 inch.
 - h. Repeat gaging until two readings are the same.
 - i. Take product temperature immediately before, during, and after gauging volumes of 3,500 gallons or more so that volume correction to 60 degrees Fahrenheit can be performed.
3. Ensure gaging information is recorded on DA Form 3853-1.
4. Ensure gaging operations are suspended during electrical storms.
5. Verify all volume calculations are corrected to 60 degrees Fahrenheit.
6. Ensure all safety procedures are followed.
 - a. Conduct periodic site inspections for adherence to program directives.
 - b. Ensure subordinates follow all safety precautions and warnings.
7. Ensure Environmental Protection Program procedures are followed.

(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. Verified a risk assessment has been completed and controls implemented.			
2. Ensured personnel followed proper gaging procedures outlined in ATP 4-43, TB 10-5430-253-13, DA PAM 710-2-1, and DA PAM 710-2-2.			
3. Ensured gaging information was recorded on DA Form 3853-1.			
4. Ensured gaging operations were suspended during electrical storms.			
5. Verified all volume calculations were corrected to 60 degrees Fahrenheit.			
6. Ensured all safety procedures were followed.			
7. Ensured Environmental Protection Program procedures were followed.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	AR 710-2	SUPPLY POLICY BELOW THE NATIONAL LEVEL	Yes	No
	ATP 4-43	Petroleum Supply Operations	Yes	No
	DA PAM 710-2-1	Using Unit Supply System (Manual Procedures)(Standalone Pub)	No	No
	DA PAM 710-2-2	Supply Support Activity Supply System: Manual Procedures	No	No
	DOD 4140.25-M	DOD Management of Bulk Petroleum Products, Natural Gas and Coal Volumes I - IV	Yes	No
	TB 10-5430-253-13	Technical Bulletin for Collapsible Fabric Fuel Tanks	Yes	No

TADSS : None

Equipment Items (LIN):

LIN	Name
W02115	Sampling and Gaging Kit: Petroleum Military Specification Document Type

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