

Environmental Standard Operating Procedures (ESOP)

TITLE: ESOP 7.0 | PETROLEUM AND NON-PETROLEUM TANK DELIVERY OPERATIONS

PURPOSE: This Environmental Standard Operating Procedure (ESOP) establishes responsibilities pertaining to delivery operations of petroleum and non-petroleum to underground storage tanks (USTs) and aboveground storage tanks (ASTs). This ESOP outlines the necessary steps required to minimize the potential releases of hazardous substances to the environment and establishes a strong oil spill response plan. All hazardous substance spills are required to be reported to 911 as well as the unit's Environmental Compliance Officer (ECO). All applicable units and/or personnel will ensure that fuel transfer operations are constantly monitored to prevent overfills associated with petroleum and non-petroleum deliveries. **This ESOP must be placed into the unit's Environmental Hazardous Waste/Hazardous Material Operations (EHW/HM Ops) Binder.**

APPLICABILITY: This ESOP applies to all organizations organic to or tenanted aboard Marine Corps Installations East - Marine Corps Base Camp Lejeune (MCIEAST - MCB CAMLEJ), Marine Corps Air Station New River (MCASNR) and those in transit or otherwise temporarily resident because of training or mobilization.

RESPONSIBILITY: All organizations or personnel responsible for the daily operation of any AST or UST.

PROCEDURE:

1. Loading and Unloading Operations:

a. Prior to loading the ASTs or USTs, ensure the tank is free of water, dirt, and foreign debris.

b. The driver, fuel tank operator, or attendant of any tanker shall not remain in the vehicle but shall maintain vigilance and authority over the vehicle during the loading or unloading process. UST or AST operators must ensure that releases due to spillage or overfill do not occur.

c. The UST or AST operator must ensure that the volume available in the tank is greater than the volume of product to be transferred prior to the transfer process, and that the transfer operation is monitored constantly to prevent overfill or spillage.

d. The UST or AST operator must ensure that all deliveries are monitored and logged to include date of fuel delivery, UST or AST operator name, driver name, and any spills that may occur during unloading.

2. Weeder Root Monitoring Systems:

a. Regulated UST systems and some of the AST systems are equipped with a TLS350 Weeder Root monitoring console. The in-tank inventory will provide readings for "ullage" and "90% ullage". The 90% ullage is the amount of fuel that will fill the tank to 90% capacity. It is this 90% ullage level that

the UST or AST operator will use as a target threshold to ensure that tank overfills do not occur.

b. The Veeder Root TLS350 console will trigger an audible alarm with a yellow warning light when a tank is filled over the 90% ullage level. The UST or AST operator will provide an individual to monitor the TLS350 console during fueling operations so that they may inform the fuel truck operator when or if the product reaches 90% ullage.

c. Alarms are to be reported to Environmental Management Division (EMD)/Resource Conservation and Recovery Section (RCRS) at (910) 451-5264 and recorded on Form MCIEAST-MCBCAMLEJ/G-F/EMD/31, "Weekly/Monthly Storage Tank System Inspection Checklist". This form can be found at https://www.lejeune.marines.mil/Portals/27/Documents/EMD/MCIEAST-MCBCAMLEJ_G-F_EMD_31_STI_Weekly_Monthly_Inspection.pdf. Completed MCIEAST-MCBCAMLEJ/G-F/EMD/31 forms must be filed in the unit's EHW/HM Ops Binder.

3. Manual Tank Monitoring:

a. If the Veeder Root System is inoperable, or there is no monitoring system available, the UST or AST operator will manually determine the tank level by utilizing a measuring stick. This information should be recorded on the MCIEAST-MCBCAMLEJ/G-F/EMD/31 Weekly/Monthly Form and filed in the unit level EHW/HM Ops Binder.

b. The mechanical measuring devices (i.e. clock gauges) or other automatic gauging systems on the storage tanks can be used to determine the 90% ullage level provided the devices are working properly. Using the appropriate strapping chart or calibration chart, the operator will determine the 90% ullage level before the fuel tanker operator begins delivery. Calibration charts are located in the unit UST Management Binder.

4. Spill Reporting and Response Requirements:

a. All units are required to have a Unit Level Contingency Plan (ULCP) per Marine Corps Installations East - Marine Corps Base Camp Lejeune Order (MCIEAST-MCB CAMLEJO) 5090.4. Ensure the ULCP contains policies and procedures for the control and prevention of oil and hazardous material spills. The ULCP must be posted prominently.

b. Any releases or spills that occur in and around the area of responsibility must be reported immediately to the Base Fire and Emergency Services Division (FESD) by dialing 911. A Spill Report, Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.91/18, must be completed and forwarded to the command Environmental Compliance Coordinator (ECC) via the unit ECO or Alternate Environmental Compliance Officer (AECO). A copy of the completed Spill Report must also be maintained in the unit EHW/HM Ops Binder. Forms can be obtained by the unit ECO or command ECC and may also be downloaded at <https://www.lejeune.marines.mil/Portals/27/Documents/EMD/HW-MM/UNIT%20LEVEL%20SPILL%20FORM.pdf>.

c. Units must stock appropriate amounts of spill containment and control equipment onsite for use in the event of a spill.

d. Signs are to be posted in the vicinity of the used oil, off spec fuel, used antifreeze, hazardous material, or pollution abatement facilities that will indicate the following information:

**IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL
CALL FIRE and EMERGENCY SERVICES DIVISION AT 911
NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY**

The sign must have yellow background and black lettering. Information to purchase the signs can be acquired from the cognizant ECC.

TRAINING: Unit personnel shall be trained on all provisions of this ESOP. All training must be requested through unit ECO or AECOs -> ECC-> EMD/Environmental Compliance Branch (ECB)

a. Unit commanders shall ensure that personnel who perform operations such as vehicle maintenance, fueling, or washing are properly trained in the operation and maintenance of pollution abatement facilities. Personnel shall be trained on the environmental impact of oil and HM spills, and prevention of such incidents.

b. EM 101 - Initial Hazardous Material and Hazardous Waste Training - Required for all ECOs, AECOs, ECCs, and AST Operators

c. EM 102 - Refresher Hazardous Material and Hazardous Waste Training - Required annually for all ECOs, AECOs, ECCs, and AST Operators who have received EM 101

d. EM 103 - HM Transportation for Drivers - Required annually for all ECOs, AECOs, ECCs, and AST Operators

e. EM 104 - ECO/ECC Training Class - Required annually for ECOs, AECOs, and ECCs

f. EM 105 - UST and Veeder-Root Training - Required for all Marine Corps Community Services (MCCS) ECOs, AECOs, ECCs, and MCCS UST operators

g. EM 106 - Air Quality Training - Required for all ECOs, AECOs, ECCs, and Air Emission Source Operators

h. EM 107 - AST and Spill Prevention Control and Countermeasures (SPCC) Training - Required for all ECOs, AECOs, ECCs, and AST operators

i. EM 108 - PAF/OWS Training - Required for all ECOs, AECOs, ECCs, PAF, and OWS operators

j. Shop-Level Training Modules - Modules which involve various environmental media topics applicable to shop level personnel.

k. Computer-Based Training (CBT) - Numerous CBTs are provided within the Environmental Learning Management System (eLMS) for military & civilian Marines to utilize to improve their environmental knowledge. These CBTs can be accessed at <https://www.marinenet.usmc.mil/marinenet/Courses/Catalog.aspx>

1. Training should be documented in the individuals' training record using Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.9/27. This form can be found at [https://www.lejeune.marines.mil/Portals/27/Documents/EMD/MCIEAST-MCB_CAMLEJ_G-F_EMD_5090.9_27_\(Environmental_Personnel_Training_Record\).pdf](https://www.lejeune.marines.mil/Portals/27/Documents/EMD/MCIEAST-MCB_CAMLEJ_G-F_EMD_5090.9_27_(Environmental_Personnel_Training_Record).pdf).

REFERENCES:

- a. 40 C.F.R. Part 112.7, *General Requirements for Spill Prevention, Control, and Countermeasure Plans*
- b. 40 C.F.R. Part 280, *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)*
- c. 15A NCAC 02N, *Underground Storage Tanks*
- d. MCO 5090.2, *Environmental Compliance Protection Program, Vol. 1-21*
- e. MCIEAST-MCB CAMLEJO 5090.18, *Management of Underground Storage Tanks*
- f. MCIEAST-MCB CAMLEJO 5090.91, *Used Oil or Used Fuel and Pollution Abatement Facility Management*
- g. MCIEAST-MCB CAMLEJ *Petroleum Storage Tank Management Plan*

DEFINITIONS:

- a. Spill - Uncontrolled loss of an HM from its containment.
- b. Ullage - Refers to the amount of head-space available in the tank. Typically, USTs and ASTs are not filled to capacity so that room is allowed for expansion of the product.
- c. UST or AST Operator - Any military or civilian personnel who have control of, or have responsibility for, the daily operation of the UST or AST systems.

Record of Revision

Revision Number	Date	Summary of Change	Signature
UPDATE	06012014	UPDATE FORMATTING AND CONTENT	<i>S.J. AZOK</i> ECB/EMD
UPDATE	06012018	UPDATE CONTENT	<i>M.C. TAYLOR</i> ECB/EMD
UPDATE	XXXX2020	UPDATE FORMATTING AND CONTENT	<i>X.X. XXXX</i> ECB/EMD

WEEKLY/MONTHLY STORAGE TANK SYSTEM INSPECTION CHECKLIST

Date: _____ Inspector: _____
 Tank ID: _____ Location: _____ Tank Size: _____ Content: _____

Item	Task	Tank ID:	Tank ID:	Tank ID:	Comments
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1.0 Tank Containment

1.1 Containment Structure	Check for water, debris, cracks or fire hazard	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
1.2 Primary Tank	Check for water	N/A			**
1.3 Containment drain valves	Operable and in a closed position	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
1.4 Pathways and Entry	Clear and gates/doors operable	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	

2.0 Leak Detection

2.1 Tank	Visible signs of leakage	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
2.2 Secondary Containment	Rainwater present in containment	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
	Visible signs of leakage	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
	Sheen or Product?	<input type="checkbox"/> Sheen <input type="checkbox"/> Product	<input type="checkbox"/> Sheen <input type="checkbox"/> Product	<input type="checkbox"/> Sheen <input type="checkbox"/> Product	
	Treatment employed (describe in comments)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Containment drained	Time Opened: _____ Time Closed: _____	Time Opened: _____ Time Closed: _____	Time Opened: _____ Time Closed: _____	
2.3 Surrounding Soil	Visible signs of leakage	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
2.4 Interstice	Visible signs of leakage	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	

3.0 Tank Equipment

3.1 Valves	a. Check for leaks	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
	b. Tank drain valves must be kept locked	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
3.2 Spill Containment boxes on fill pipe	a. Inspect for debris residue, and water in box and remove.	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
	b. Drain valves must be operable and closed.	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A	
3.3 Liquid level equipment	a. Both visual and mechanical devices must inspected for physical damage.	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
	b. Check that the device is easily readable.	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
3.4 Overfill Equipment	a. If equipped with a "test" button, activate the audible horn or light to confirm operation. This could be battery powered. Replace the battery if needed.	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
	b. If overfill valve is equipped with a mechanical test mechanism, actuate the mechanism to confirm operation.	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
3.5 Piping Connections.	Check for leaks, corrosion and damage	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	

4.0 Tank Attachments and Appurtenances

4.1 Ladder and Platform Structure	Secure with no sign of severe corrosion or damage	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
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5.0 Other Conditions

5.1 Are there other conditions that should be addressed for the continued safe operation or that may affect the site spill prevention plan?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
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* Designates an item in non-conformance/unsatisfactory status; provide action in comment section to resolve problem and notify Environmental Protection Specialist if any significant deficiencies are identified.

** In accordance with Section 3.2 of the SPCC Plan (Environmental Equivalence), inspection for water in the primary tank will be conducted annually and recorded on the STI SP001 Annual Inspection Checklist.

MCIEAST-MCB CAMP LEJEUNE SPILL REPORT

SHADED AREAS ARE FOR RCRS USE ONLY

TITLE/LOCATION

DATE TIME

RESPONSE NAME/UNIT:

SPILL CATEGORY (SELECT ONE) HAZMAT HAZWASTE POL WASTEWATER OTHER

PRODUCT SPILLED

QUANTITY SPILLED

LATITUDE LONGITUDE

HOW WAS SPILL DISCOVERED

SOURCE OF THE SPILL

CAUSE OF THE SPILL

MISSION IMPACT

WERE SAMPLES TAKEN (CHECK ONE) YES NO

ANALYSES REQUESTED / PERFORMED ON SAMPLES

DID THE SPILL (CHECK ONE)	ENTER A WATERWAY?	REACH WITHIN 100' OF SURFACE WATER?	REACH WITHIN 1500' OF A WATER SUPPLY WELL?	GO OFF BASE?
<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO

HOW WAS THE SPILL CONTAINED?

WHAT DANGERS DID THE SPILL PRESENT?

WHAT WERE THE ENVIRONMENTAL IMPACTS?

WHAT RECOVERY EFFORTS WERE USED?

IF OIL SPILLED, WHAT PERCENT WAS RECOVERED?

HOW WERE RESIDUALS DISPOSED OF?

WEATHER CONDITIONS?

REPORTABLE SPILL? (CHECK ONE) YES NO WAS A REGULATORY AGENCY CONTACTED: YES NO

AGENCY NAME (IF) NCDEQ NCDEQ REPORT# NCDEM NCDEM REPORT#

REGULATORY DRIVER

NRC NOTIFIED YES NO NRC INCIDENT NUMBER:

WHAT MEASURES WERE PUT IN PLACE TO PREVENT RECURRENCE?

ADDITIONAL INFORMATION OR COMMENTS

SPILL POC E-MAIL PHONE

ENVIRONMENTAL PERSONNEL TRAINING RECORD

EMPLOYEE NAME:

EMPLOYEE UNIT:

JOB TITLE/DESCRIPTION:

DATE ASSIGNED:

DATE RECORD CLOSED/ARCHIVED:

DATE	DESCRIPTION OF TRAINING	NAME OF COMPANY OF TRAINER	TRAINING HOURS

Signature: _____
 (Assigned Individual)

Date: _____

Signature: _____
 (ECO or Supervisor)

Date: _____

Reset Form

Print Form