Environmental Standard Operating Procedures (ESOP)

TITLE: ESOP 9.102 | MANAGEMENT OF OIL-WATER SEPARATORS (OWS) AND POLLUTION ABATEMENT FACILITIES

PURPOSE: This Environmental Standard Operating Procedure (ESOP) establishes the procedures for the management of pollution abatement facilities. Pollution abatement facilities consist of oil-water separators (OWS) and their associated influent sources. These facilities must be routinely monitored to ensure proper operation and usage. Pollution abatement facilities primarily collect rinsate (run-off) from vehicle wash racks, some maintenance garage floor drains, and fuel unloading areas. Without proper oversight, these systems may malfunction and discharge oil to the Base's Wastewater Treatment Plant (WWTP) or to a storm water drainage system. It is imperative that operating personnel or persons having cognizance over the facility's usage implement the procedures provided in this ESOP to comply with environmental regulatory requirements in the Clean Water Act (CWA) and National Pollutant Discharge Elimination System (NPDES) permit. This ESOP must be placed into the unit's Environmental Hazardous Waste/Hazardous Material Operations (EHW/HM Ops) Binder.

<u>APPLICABILITY:</u> 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.

Garrison operations at MCASNR will coordinate with the Environmental Affairs Division (EAD) 449-5997, MCASNR. Servicing of OWS systems at MCASNR will be coordinated through EAD, MCASNR.

<u>RESPONSIBILITY:</u> All organizations or personnel with pollution abatement facilities associated with their unit operations.

PROCEDURE:

1. Prohibited Activities:

- a. The direct disposal of oils, fuels, hazardous materials (HM), or hazardous waste (HW) into the pollution abatement facility is STRICTLY PROHIBITED.
- b. No cans, sticks, leaves, oil filters, rags, brushes, litter, or other foreign objects may be discarded on or into the pollution abatement facility.
- c. Do not use or discard solvents on wash racks or in floor drains. Floor drains are designed for incidental spills or leaks and are not intended for direct discharges of wastes. Cleaning agents and detergents used on wash racks must be approved and listed on the unit's applicable work center Authorized Use List (AUL).

- d. Floor sweepings and dry sweep should not be washed down the floor drain. Any spill requiring dry sweep shall be swept and disposed of appropriately before washing down the racks.
- e. Pollution abatement facilities should not be blocked and immediate unrestricted access should be available.
- f. Vehicle washing is not authorized for fleet vehicles or other car washing operations unless it is conducted on an approved wash rack which is tied to an OWS system. Only government owned, commercial, or tactical equipment and vehicles will be washed on approved wash racks tied to an OWS system.
- 2. <u>Daily Inspections:</u> The unit Environmental Compliance Officer (ECO), Alternate ECO (AECO) or assigned personnel operating the facility are responsible for inspecting the unit's pollution abatement facilities each operational day.
- a. Documentation of the inspections must be maintained utilizing Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.91/31, titled "Monitoring Log for Oil Pollution Abatement Facilities OWS Daily Inspection". The form can be downloaded from the EMD website at https://www.lejeune.marines.mil/Portals/27/Documents/EMD/HW-MM/OWS_Daily_Inspection_Form.pdf and is included with this order as Attachment (1).
 - b. The inspection process includes checks for:
 - i. Cracks or other structural damage;
 - ii. Oil spills around the facility;
 - iii. Direct discharges of oil, used oil, fuel and/or used fuel;
 - iv. Foreign objects/debris (cans, bottles, sticks, rags, etc.);
 - v. System clogging or OWS bypass; and
 - vi. Post-indicator valves (PIV) closure and locking.
- 3. <u>Daily Maintenance/Housekeeping:</u> The importance of daily maintenance at these facilities is imperative. The efficiency of the facility will be greatly reduced if not given the proper attention. Any sound maintenance program should start with good housekeeping. The components of facility housekeeping are detailed below.
- a. <u>Policing:</u> Ensure that all grass adjacent to the facility is cut and that trash and other debris are removed on a regular basis. Remove any foreign objects/debris observed in the pollution abatement facility by using a dip net. UNDER NO CIRCUMSTANCES ARE PERSONNEL ALLOWED TO ENTER THE OWS OR OTHER SYSTEM COMPONENTS IN ORDER TO RETRIEVE DEBRIS. These systems qualify as permit-required confined spaces and require special training and equipment to enter. Mechanical maintenance on pollution abatement facilities is prohibited at the unit level. Contact MCIEAST MCB CAMLEJ Public Works

Division (PWD) for assistance with mechanical maintenance. If an immediate problem arises with the system, call EMD/Resource Conservation Recovery Section (RCRS) at 451-5264. Any problems should be annotated on Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.91/31, titled "Monitoring Log for Oil Pollution Abatement Facilities OWS Daily Inspection".

- b. <u>Vehicle Management:</u> Whenever possible, vehicles should be parked on an impervious surface (i.e., concrete or asphalt) to avoid the discharge of HM into the environment. Maintenance operations should always be conducted on impervious surfaces and it is recommended that wet maintenance be conducted inside the maintenance facility. Prior to using the wash apron, excess grit should be removed, prior to vehicle washing.
- c. <u>Wash Aprons:</u> Properly dispose of all absorbents prior to washing down the concrete wash apron. Concrete wash aprons should be washed and hosed down daily in order to keep the aprons neat and orderly. Pressure washers are highly recommended. Only correctly sized water hoses may be utilized on the wash racks. Only detergents approved and listed on the unit's applicable work center AUL may be utilized for washing. Any spills that occur must be cleaned up using an absorbent prior to hosing down. Ensure that any wash water is directed to the OWS.
- d. <u>Grit Chambers:</u> Grit chambers are designed to collect runoff from wash aprons and to capture any sand, grit or large solids prior to entering downstream structures (i.e., OWS). It is important that the grit chambers be checked daily to ensure that solids are not accumulating to such an extent that grit could be further transmitted through the pollution abatement facility. The grating which covers the top of the grit chamber and allows the surface drainage to enter the structure must remain in place as designed and be kept free of heavy accumulations of solids, such as rags, leaves, etc.
- e. <u>Storm Water Bypass:</u> Daily, the storm water bypass must be inspected to see if there are any visible signs of oily discharge. Any deficiencies noted should be immediately reported to EMD/RCRS at 451-5264.
- 4. Servicing and Maintenance Requests: An OWS that is operating properly will greatly reduce the potential for hazardous substances to flow directly into the Base WWTP where, if not removed from the treatment effluent; the substance will be discharged to the New River and its associated tributaries. The WWTP is permitted and therefore has limitations that cannot be exceeded. When an OWS facility bypasses, the oils and grease will enter the WWTP and may affect the proper treatment of the effluent. Most problems can be avoided by monitoring the system daily and ensuring that it is serviced on a regular basis.
- a. Oil that accumulates and floats on the surface of the OWS must be periodically removed. The oil should not be allowed to collect to such an extent that it is discharged from the OWS through a bypass chamber or through the wastewater distribution system.
- b. Personnel from RCRS service most of the OWS and grit chambers on a regular basis in order to keep it skimmed before the oil is emulsified. Unit personnel should record on Form MCIEAST-MCB CAMLEJ/G-F/EMD/5090.91/31,

titled "Monitoring Log for Oil Pollution Abatement Facilities OWS Daily Inspection" when RCRS performs this function.

- c. When the thickness of the oil floating on top of the OWS becomes approximately 2 inches, the operating personnel should request service for the facility by filling out the MCIEAST-MCB CAMLEJ/G-F/EMD/14 Service Request form found at https://www.lejeune.marines.mil/Portals/27/Documents/EMD/HW-MM/MCBCL%20I-E%20EMD%2014%20(MCB%20Camp%20Lejeune%20Work%20Request).pdf and email it to Lejeune_PAS@usmc.mil. To determine if 2 inches of oil is present, the surface must be disturbed by utilizing a pole or other device to agitate any petroleum, oils, and lubricants (POL).
- d. If oil appears to be bypassing the system, immediately cease operations and contact EMD/RCRS at 451-5246.
- e. If repairs are required to address structural or mechanical damage to any part of the pollution abatement facility, please contact EMD/RCRS prior to initiating a work ticket through PWD/Operations Section. PWD/Operations Section's work reception phone number is 451-3001.

5. 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.

REFERENCES:

- a. Resource Conservation and Recovery Act (RCRA)
- b. Clean Water Act (CWA)
- c. MCO 5090.2, Environmental Compliance and Protection Program, Vol. 1-21

- d. MCIEAST-MCB CAMLEJO 5090.4, Environmental Compliance Evaluation Program Aboard MCB CAMLEJ
- e. MCIEAST MCB CAMLEJ and MCAS New River Storm Water Pollution Prevention Plan

DEFINITIONS:

- a. <u>Discharge of Oil</u> Discharges that violate applicable water quality standards or cause a film or sheen upon, or discoloration of, the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shores.
- b. <u>Oil-Water Separator</u> A waste management unit, generally a tank, that is used to separate oil or organics from water. A separator consists of not only the separation unit but also the fore bay and other separator basins, skimmers, grit chambers, and bar screens.
- c. Pollution Abatement Facility Any equipment, plant, treatment works, structure, machinery, apparatus or land, or any combination thereof, acquired, used, constructed or operated for the storage, collection, reduction, recycling, reclamation, disposal, separation or treatment of water or wastes, or for the final disposal or residues resulting from the treatment of water or wastes.
- d. <u>Used Oil</u> Any oil that has been refined from crude oil or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Animal and vegetable oils are excluded from this definition.

Record of Revision

Revision Number	Date	Summary of Change	Signature
UPDATE	XXXX2020	UPDATE FORMATTING AND CONTENT	X.X. XXXX ECB/EMD

Reporting Requirement: DD-5090-03

MONITORING LOG FOR OIL POLLUTION ABATEMENT FACILITIES OWS Daily Inspection

	MONTH:	_
JNIT:	BUILDING NUMBER:	

DAY	PERSON	TIME	IS OWS FREE	IS THERE LESS	IS THE PIV	IF DEBRIS	WAS A SERVICE	TICKET	COMMENT/PERSON
INSPECTED	CONDUCTING		OF DEBRIS?	THAN 2" OF OIL	CLOSED?	PRESENT WAS	TICKET	NUMBER	CONTACTED FOR
4	INSPECTION			ON TOP?	(IF APPLICABLE)	IT REMOVED?	REQUIRED?		TICKET NUMBER
1			YES NO	YES NO	YES NO	YES NO	YES NO		
2			YES NO	YES NO	YES NO	YES NO	YES NO		
3			YES NO	YES NO	YES NO	YES NO	YES NO		
4			YES NO	YES NO	YES NO	YES NO	YES NO		
5			YES NO	YES NO	YES NO	YES NO	YES NO		
6			YES NO	YES NO	YES NO	YES NO	YES NO		
7			YES NO	YES NO	YES NO	YES NO	YES NO		
8			YES NO	YES NO	YES NO	YES NO	YES NO		
9			YES NO	YES NO	YES NO	YES NO	YES NO		
10			YES NO	YES NO	YES NO	YES NO	YES NO		
11			YES NO	YES NO	YES NO	YES NO	YES NO		
12			YES NO	YES NO	YES NO	YES NO	YES NO		
13			YES NO	YES NO	YES NO	YES NO	YES NO		
14			YES NO	YES NO	YES NO	YES NO	YES NO		
15			YES NO	YES NO	YES NO	YES NO	YES NO		
16			YES NO	YES NO	YES NO	YES NO	YES NO		
17			YES NO	YES NO	YES NO	YES NO	YES NO		
18			YES NO	YES NO	YES NO	YES NO	YES NO		
19			YES NO	YES NO	YES NO	YES NO	YES NO		
20			YES NO	YES NO	YES NO	YES NO	YES NO		
21			YES NO	YES NO	YES NO	YES NO	YES NO		
22			YES NO	YES NO	YES NO	YES NO	YES NO		
23			YES NO	YES NO	YES NO	YES NO	YES NO		
24			YES NO	YES NO	YES NO	YES NO	YES NO		
25			YES NO	YES NO	YES NO	YES NO	YES NO		
26			YES NO	YES NO	YES NO	YES NO	YES NO		
27			YES NO	YES NO	YES NO	YES NO	YES NO		
28			YES NO	YES NO	YES NO	YES NO	YES NO		
29			YES NO	YES NO	YES NO	YES NO	YES NO		
30			YES NO	YES NO	YES NO	YES NO	YES NO		
31			YES NO	YES NO	YES NO	YES NO	YES NO		

MCIEAST-MCB CAMP LEJEUNE SERVICE REQUEST

REQUEST Identification	
Request Number:	Entered By:
Request Number:	Entered By:
Branch:	Entry Date:
Second Request:	
UNIT IDENTIFICATION	
Major Command:	Building:
Unit Name:	Phone Number:
Unit Point of Contact:	RCRS Commodity:
SERVICE DOCUMENTATION	
Date Inspected:	Inspected By:
Date Picked Up:	Picked Up By:
Vehicle Used:	Amount Picked Up: Unit:
FAC/STORAGE:	Chlor-n-oil ppm:
ADMIN NOTES:	
DRIVER NOTES:	

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 **QUANITY 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 REACH WITHIN 100' OF SURFACE WATER? REACH WITHIN 1500' OF A WATER SUPPLY WELL? ENTER A WATERWAY? GO OFF BASE? DID THE SPILL (CHECK ONE) YES NO YES NO YES NO YES 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 **PHONE** E-MAIL

ENVIRONMENTAL PERSONNEL TRAINING RECORD					
EMPLOYEE NAM	E:				
EMPLOYEE UNIT	:				
JOB TITLE/DESC	RIPTION:				
DATE ASSIGNED	:				
DATE RECORD C	CLOSED/ARCHIVED:				
DATE	DESCRIPTION OF TRAINING	NAME OF COMPANY OF TRAINER	TRAINING HOURS		
Cianatura		Date			
oignature.	(Assigned Individual)	Date:			
Signature:	(ECO or Supervisor)	Date:			
	(2000.000)				

Reset Form

Print Form

MCIEAST-MCB CAMLEJ/G-F/EMD/5090.9/27

(12/12)

PREVIOUS EDITIONS ARE OBSOLETE

ADOBE 9.0