

## **SECONDARY CONTAINMENT RAINWATER MANAGEMENT**

1. Version, Date. 1, 1 April 2012
2. Purpose. This Environmental Standard Operating Procedure (ESOP) summarizes the procedures utilized for draining accumulated rainwater from secondary containment structures associated with aboveground storage tanks (ASTs) at Marine Corps Base, Quantico (MCBQ). These procedures are implemented to ensure compliance with Federal and State regulations and also to minimize the potential for an accidental release of petroleum, oil, and lubricants (POLs) into a navigable water of the United States.
3. Applicability
  - a. Audience. This ESOP is directed towards individuals who perform any of the operations described herein. All personnel aboard MCBQ shall take responsibility to follow the procedures contained within this ESOP.
  - b. Scope
    - (1) The ESOP pertains to all regulated ASTs that utilize a dike or berm as secondary containment. Applicable ASTs are listed in Attachment 30-1.
    - (2) This ESOP focuses on procedures for draining accumulated rainwater from AST secondary containment structures. Refer to Fuel Storage - ASTs (ESOP #11) for procedures utilized when storing fuels in ASTs.
    - (3) Under Federal regulation (40 CFR 112), frequent inspection of ASTs must be conducted to check for discharges or accumulation of oil inside a diked area. Also required are inspections of diked areas prior to drainage to ensure that no POLs or contaminated rainwater will reach navigable waters
4. Definitions. The following definitions are provided to support this procedure:
  - a. Aboveground Storage Tank (AST). A regulated container that is more than 90 percent above the surface of the ground and used for the storage of POLs.
  - c. Conveyance. A means or route of transporting fluids, such as oil, fuel, or liquid chemicals.
  - d. Dike/berm. A type of secondary containment structure which is an embankment or enclosure designed to contain a liquid.

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e. Harmful Discharge. A release of product that may be harmful to human health, welfare, or the environment.

f. Secondary Containment. An impermeable barrier placed around or underneath a storage container that will hold a minimum of 110 percent of the vessel's contents in case of an accidental spill or leak.

g. Integrated Spill Management Plan. Installation plan covering the release of hazardous substances (including POLs and other petroleum substances), as defined in the Clean Water Act and subsequent amendments.

5. Responsible Parties. Personnel described listed below are responsible for implementing procedures described in this ESOP.

a. Primary/Alternate Tank Inspector. Includes commands, tenants, or organizations with ASTs containing fuel at their facility and Primary and Alternate Tank Inspectors.

b. Command Environmental Coordinators (ECs).

c. G-5, Natural Resources and Environmental Affairs(NREA) Branch, Environmental Compliance Section.

6. Procedures (Instructions for Operational Control)

a. The Primary/Alternate Tank Inspector will verify that all secondary containment structures have manual valves with an open-and-closed design. The Primary/Alternate Tank Inspector will regularly check valves to ensure they open and close correctly.

b. The Primary/Alternate Tank Inspector will inspect the secondary containment structure(s) on a frequent basis (at a minimum, an inspection will be completed after each precipitation event) to identify accumulation of rainwater, oil, or oil-contaminated water.

c. Following significant storm events, the Primary/Alternate Tank Inspector will inspect the secondary containment structure for rainwater accumulation and overflow.

d. If rainwater has accumulated in the secondary containment, the Primary/Alternate Tank Inspector will visually inspect the water. The type of inspection depends on the contents of the tank.

(1) If the tank contains a petroleum based product the secondary containment will be visually inspected for the presence of a sheen or petroleum in the rainwater. Under no circumstances should rainwater with a visible oily sheen be released from the containment area.

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(a) In the event a sheen is observed, the Primary/Alternate Tank Inspector must contact the Command EC. The Command EC will contact the NREA Branch, Environmental Compliance Section to determine the source of the oily sheen and to assess the disposal options.

(b) If no visible sheen is present in the containment, the Primary/Alternate Tank Inspector may drain the rainwater, provided that the water does not have a conveyance to reach state waters. If the drained rainwater could potentially reach state waters, the Primary/Alternate Tank Inspector must coordinate with the Command EC and the NREA Branch, Water Programs Manager to determine disposal options. Drainage from secondary containment structures can be completed by using drain valves, manually activated pumps, or ejectors.

(2) If a tank contains hazardous materials other than petroleum-based products, the secondary containment will be inspected based on the contents of the tank. The type of inspection will be determined by the NREA Branch, Environmental Compliance Section.

e. Drain valves must be closed and locked after drainage. If drainage valves are left open, hazardous substances, in addition to rainwater, may reach soil and groundwater.

f. All rainwater discharged from secondary containment structures must be documented and kept on file by the Primary/Alternate Tank Inspector. A sample log for documenting releases from containment areas is found in Attachment 30-2.

### 7. Inspections and Corrective Actions

a. In compliance with 40 CFR 112.8, containment structures for ASTs must be inspected on a frequent basis (at a minimum, an inspection will be completed after each precipitation event) for the accumulation of oil and for the general integrity of the containment area.

b. Any sheen that is identified in a containment structure must be reported immediately to the Command EC, who will work with the NREA Branch to address the situation.

### 8. Internal Communication

a. If a significant rainfall event occurs causing rainwater to overflow out of the secondary containment, the Primary/Alternate Tank Inspector must contact the Command EC and NREA Branch, Environmental Compliance Section to obtain guidance and/or coordinate the implementation of corrective actions.

b. In the event an oily sheen is observed, the Primary/Alternate Tank Inspector must contact the Command EC and the NREA Branch, Water

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Programs Manager to determine the source of the oily sheen and to assess the disposal options.

c. If the Primary/Alternate Tank Inspector(s) are absent, the AST Owner/Operator is responsible for finding replacement inspectors. The NREA Branch, Tank Program Manager must be notified in order to arrange appropriate tank training for the new inspectors (see paragraph 9).

### 9. Training/Awareness

a. Due to the environmental and personal safety risks associated with AST operations, the Primary/Alternate Tank Inspectors will complete the following training requirements:

- (1) Hazard Communication Standard (HAZCOM)
- (2) Basic Spill Prevention, Control, and Countermeasure (SPCC)
- (3) First Responder Awareness Level
- (4) First Responder Operations Level
- (5) Equipment Deployment Exercise

b. The NREA Branch, Environmental Management System (EMS) Section provides, facilitates or implements training for the target audience identified in paragraph 3.a.

c. On-the-job training is provided by the NREA Branch, Tank Program Manager on an as needed basis.

10. References and Related Documents. The following references are relevant to this procedure:

- a. MCBQ Integrated Spill Management Plan (ISMP).
- b. ESOP #11, Fuel Storage - ASTs.
- c. 40 CFR 110 - Oil Pollution.
- d. 40 CFR 112 - Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities.
- e. MCBQ Comprehensive Storm Water Management Action Plan (SWMAP).

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11. Document Revision History. The following provides a history of revisions of this ESOP:

Revision Number	Date	Revision Made By	Section	Page	Summary of Change and Reason	Signature

12. Document Owner. This document has been reviewed and approved by the practice owners. Should the practice change, resulting in a need to modify this ESOP, practice owners will notify the NREA Branch, EMS Section at (703) 432-0536.

a. Document Owner. NREA Branch, Environmental Compliance Section, Water Program Manager.

b. Document Approval. Chair, EMS Implementation Team



**Attachment 30-1:  
ASTs with Secondary Containment Structures**

<b>Tank Number</b>	<b>Capacity (gallons)</b>	<b>Contents</b>	<b>Location</b>
2080	500	Used Oil	Auto Hobby Shop
2101	500	Used Oil	HMX-1 Admin
2112	500	Used Oil	HMX-1 GSE
2130	500	Used Oil	Larsen Gym Building
3230A	125	Used Oil	Raids & Recon
3254C	500	Used Oil	FMS Building
5103	500	Used Oil	MCAF
24009D	500	Used Oil	Track Vehicle Maintenance Facility
24009E	500	Used Oil	Track Vehicle Maintenance Facility
27002D	250	Used Oil	Guad Maintenance Facility
27054	500	Used Oil	Construction Equipment Repair Facility
27210B	500	Used Oil	WTBN
27263A	75,000	#2 Fuel Oil	Fuel Farm
27263B	75,000	#2 Fuel Oil	Fuel Farm
27263C	75,000	JP-8	Fuel Farm
27263D	25,000	Diesel	Fuel Farm
27263E	25,000	Diesel	Fuel Farm
27263F	75,000	JP-8	Fuel Farm
27263G	12,500	Gasoline	Fuel Farm
27263H	12,500	Gasoline	Fuel Farm
28000B	500	Used Oil	MCSC Engineer Test Site
TC-1	500	JP-8	MCAF Test Cell
TC-2	500	JP-8	MCAF Test Cell
TC-3	500	JP-8	MCAF Test Cell





