ENVIRONMENTAL STANDARD OPERATING PROCEDURE 20

DINING HALL/RESTAURANT OPERATIONS AND GREASE TRAP MANAGEMENT

1. Version, Date. 2, 16 February 2012 (EMS Section)

2. Purpose

a. This Environmental Standard Operating Procedure (ESOP) summarizes the procedures for managing dining hall/restaurant operations, including grease traps, to comply with pollution prevention (P2) policies and responsible environmental stewardship. These procedures do not include non-Marine Corps Community Services (MCCS) commercial food entities (e.g., McDonalds).

b. Procedures that are associated with dining hall/restaurant operations and grease trap management, but are provided as separate ESOPs include: Hazardous Material Storage Area – Hazardous Material Management (ESOP #3); Fuel Storage – Above Ground Storage Tanks (ASTs) (ESOP #11); Fuel Storage – Underground Storage Tanks (USTs) (ESOP #12), and; Compressed Gas Storage (ESOP #21).

3. Applicability

a. Audience. This ESOP is directed towards individuals who perform any of the operations described herein. All personnel aboard Marine Corps Base, Quantico (MCBQ) shall take responsibility to follow the procedures contained within this ESOP.

b. Scope. This procedure applies to dining hall/restaurant operations at MCBQ.

4. Definitions

a. Food waste. Uneaten food and food preparation waste from restaurants and dining halls.

b. Grease trap. A catchment in a drain or waste pipe that prevents grease from entering a sewer system.

c. Bio-diesel. Fuel created from the refinement of vegetable oils and/or animal fats.

5. Responsible Parties. Personnel and locations listed below are responsible for implementing procedures for managing dining hall/restaurant operations and grease traps at MCBQ:

a. G-4, Logistics Division, Food Services Branch (Liversedge Hall)

(1) Bruce Hall

(2) Marine Corps Air Facility, Quantico, Building 2109.

(3) Maxam Hall

(4) O'Bannon Hall

(5) Weapons Training Battalion Mess Hall

(6) Northeast Brig Headquarters

(7) Bobo Hall

b. MCCS, Dining Services

(1) The Clubs at Quantico

(2) Mulligan's Restaurant

(3) MCCS Bowling and Theater Snack Shop

(4) The Basic School, Austin Hall

(5) Breckenridge Hall

(6) Child Development Center

c. Marine Helicopter Squadron One

d. Department of Defense Education Activity Domestic Dependent Elementary and Secondary Schools (DoDEA-DDESS)

(1) Ashurst Elementary School

(2) Burrows Elementary School

(3) Russell Elementary School

(4) Quantico Middle/High School

e. G-5, Natural Resources and Environmental Affairs (NREA) Branch, Spill Program Coordinator (SPC).

6. Procedures. Restaurant/dining hall operations include: the generation of non-recyclable solid waste; industrial wastewater discharge; and, water and electricity use. These aspects have the potential to negatively impact the environment; therefore, the following procedures are implemented to minimize those impacts.

a. Grease Trap Management. Most restaurant/dining hall operations have grease traps. Improper use or lack of maintenance of

grease traps can lead to equipment becoming clogged and overflowing, as well as allowing grease to flow through the equipment and discharge into the sewage system. The following items are proper management practices for grease trap operation:

(1) The EC will appoint shop personnel the responsibility of performing monthly grease trap inspections and records maintenance. Records detailing inspections of grease traps will be maintained for three years and will be made available for inspection by the SPC, NREA Branch. Refer to the Grease Trap Checklist (Attachment 20-1) for further guidance.

(2) Provide routine maintenance on grease traps. To ensure effective operation of the equipment, Virginia Administrative Code (VAC) [9 VAC 25-790-460(E)] requires routine maintenance of all grease traps, including the periodic removal of accumulated oil and grease. The frequency for the removal of oil and grease from grease traps is dependent on the size and amount of grease accumulated at each dining hall/restaurant operation. The monthly inspections will determine the schedule for routine maintenance and removal of oil and grease from the trap.

(3) Do not pour cooking grease from fryers into grease traps. All grease removed from food fryers should be stored in appropriate containers.

(4) Ensure cooking residue is not poured directly into sink drains. Pots, pans, cooking areas and utensils must be wiped prior to washing.

(5) Ensure food waste is discarded in the trash. The garbage disposal should not be used to discard bulk food waste.

b. New Cooking Oil Storage. Cooking oil for use in fryers will be stored in containers they are delivered in. These containers will be located in a secure, dry storage area and will utilize secondary containment as required by Federal Oil Spill Prevention rules (40 Code of Federal Regulations [CFR] 112).

c. Used Cooking Oil Disposal. Used cooking oil from fryer machines is disposed of in one of two methods. MCCS utilizes a contractor to remove cooking oil for processing into bio-diesel. All other organizations store used cooking oil in drums or pods that are removed off-site for disposal.

(1) MCCS personnel shall drain all used cooking oil from fryer machines on an as needed basis. This shall be determined by the amount of use a machine is subject to. Oil is transported in pails or caddies and emptied into contractor-provided totes. These totes are emptied by a contractor on an as needed basis.

(2) All other organizations generating used cooking oil will remove oil from fryers and oil will be stored in drums or other appropriate devises, utilizing secondary containment as required by 40 CFR 112). This also applies to MCCS organizations which do not participate in cooking oil recycling (e.g., MCBQ Bowling Alley).

d. Solid Waste Management. Food service operations generate a large amount of solid waste. Proper storage and routine disposal of this waste is important to prevent storm water contamination and to prevent pest management concerns. The following procedures are intended to mitigate solid waste issues associated with dining hall/restaurant operations.

(1) Close all lids on dumpsters. This prevents precipitation from entering the dumpster, which can pose container problems as well as storm water issues, should the precipitation seep outside the dumpster. This also prevents pests from entering the dumpster.

(2) Ensure food service dumpsters and trash receptacles are emptied weekly, or more often if necessary. Food service dumpsters and trash receptacles provide a potential food source for pests (e.g., rodents, raccoons, feral cats, etc.). Ensuring that food waste is picked up on at least a weekly basis lowers the potential for pest infestation.

(3) All solid waste must be disposed in accordance with the Solid Waste, Hazardous Waste Management, and Storm Water Pollution Prevention Plans.

e. Hazardous Material Management. Various cleaning agents are used in dining hall/restaurant operations, some of which are considered hazardous materials. Procedures for minimizing the risk of personnel exposure to hazardous materials and conditions are provided in Marine Corps Base Order (MCBO) 6280.1B, Handling, Transfer, and Disposal of Hazardous Materials and Hazardous Waste. Proper storage, use, and disposal practices outlined in the base order must be followed.

f. Ensure that industrial sinks have backflow prevention devices connected to the plumbing systems. Sinks that are used to fill mop buckets or containers with hazardous materials should have backflow prevention devices installed to prevent potential cross-contamination should a pressure drop occur across the water system.

g. Procedures addressing the consumption of fuel, electricity, and water, and the preservation of nonrenewable resources are provided in the MCBQ P2 Plan and MCBO 4100.1B, Energy and Water Conservation Program, the Energy Policy Act of 2005 (Public Law 109-58), and Executive Order (EO) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.”

h. Provide proper storage and labeling of compressed gas cylinders. Many dining hall/restaurant operations aboard MCBQ use carbon dioxide (CO_2) cylinders to provide carbonation for beverages. Compressed gas cylinders must be stored properly to ensure they do not present a hazard. They should be secured by chain either to the wall or on a cart with the cap secured unless they are in immediate use. Empty containers should be removed as soon as possible. Refer to ESOP 21 for further information.

7. Inspection and Corrective Action

a. Grease traps will be inspected at least on a monthly basis. Attachment 20-1 will be used to document that an inspection has been conducted. The designated personnel will maintain inspection records for three years.

b. Restaurants and dining halls may contain additional practices where inspections are required. Specific ESOPs related to dining hall/restaurant operation (refer to paragraph 2[b]) provide inspection checklists.

8. Internal Communication. Internal communication requirements vary depending upon the potential impact. Refer to the Solid Waste Management Plan, MCBQ P2 Plan, associated ESOPs, or MCBOs as discussed previously when applicable. When in doubt, contact your Unit Environmental Coordinator (EC) or the NREA Branch.

9. Training/Awareness

a. Similar to internal communication requirements, training requirements vary depending upon the potential impact. Refer to the applicable plan and/or Base Order(s) listed in paragraph 11. When in doubt, contact your Unit EC or the NREA Branch.

b. Per MCO P5090.2A, Table 2-1, practice owners will maintain this ESOP and ensure it is addressed in new and annual employee training.

10. Emergency Preparedness and Response. Dial 911 and report the location and emergency, evacuate as necessary, and implement any response actions per applicable impact (refer to paragraph 6, Procedures).

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

a. 9 VAC 25-790, The Virginia Sewage Collection and Treatment Regulations.

b. ESOP #11, Fuel Storage - AST

c. ESOP #12, Fuel Storage - UST

d. ESOP #21, Compressed Gas.

e. MCBO 4100.1A, Water Conservation Program.

f. MCO P5090.2A, Environmental Compliance and Protection Manual.

g. MCBO 5090.3, the Resource Recovery and Recycling Program.

h. MCBO 6280.1B, Handling, Transfer, and Disposal of Hazardous Materials and Hazardous Waste.

i. MCBQ Solid Waste Management Plan.

j. MCBQ Comprehensive Storm Water Management Action Plan (SWMAP).

12. Document Revision History. The following provides a history of revisions of this SOP:

Revision Number	Date	Revision Made By	Section	Page	Summary of Change and Reason	Signature
2	12/10	JDG	All	All	Added Biodiesel information and other admin changes	GROSE.JOHN.DAVID.1294026394 Digitally signed by GROSE.JOHN.DAVID.1294026394 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USMC, cn=GROSE.JOHN.DAVID.1294026394 Date: 2012.02.16 07:27:37 -05'00'

13. Document Owner. This document has been reviewed and approved by the document owner. Any revisions or future updates to the procedure will be completed by the document owner in coordination with the NREA Branch, EMS Section at 432-0536.

a. Document Owner. NREA Branch, EMS Section.

b. Document Approval. Chair, E^2MS Core Team

Grease Trap Inspection Checklist	
Date:	Time:
Unit/Bldg. #:	Work Center:
Inspector's Rank/Name:	Signature:

Inspection Items	Yes	No	Comments/Corrective Action
1. Are pots, pans, and cooking areas wiped down prior to washing in sink?			
2. Is food waste disposed of directly into the trash instead of the garbage disposal?			
3. Is waste cooking oil from fryers placed into the proper storage container for recycling?			
4. Are wash pans and cooking equipment washed in authorized areas?			
5. Are floor mats cleaned inside over a utility sink? Do not allow rinse water to run directly into a storm drain?			
6. Are grease traps repaired and maintained in accordance with manufacturers' recommendations?			