ENVIRONMENTAL STANDARD OPERATING PROCEDURE 31

CAR WASH MANAGEMENT

- 1. Version, Date. 1, 6 June 2012 (EMS)
- 2. <u>Purpose</u>. This Environmental Standard Operating Procedure (ESOP) summarizes the procedures used for managing fundraising car washes and minimizing their impact on water bodies at Marine Corps Base, Quantico (MCBQ).

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. Outdoor car washing may result in a discharge of water to storm drains, that is potentially contaminated with gasoline, oil, residues from exhaust fumes, and detergents. The water discharged into storm drains eventually reaches rivers, streams, creeks, and wetlands where it has the potential to impact human health and the environment. This ESOP covers the procedures for minimizing the impacts of car washing. Related ESOPs also exist that address this information: Billeting (Barracks) (ESOP #9) and Oil and Water Separators (ESOP #15).
- 4. <u>Definitions</u>. The following definitions are provided to support these procedures:
- a. Pervious/porous surfaces. Surfaces that allow the movement of water and air to lower levels of soil below.
- b. Waste water. Any water that has been adversely affected in quality.
- c. Storm drain. Structure designed to drain excess rain and groundwater from paved streets, parking lots, sidewalks, and roofs.
- d. Sewer drain. Transports sewage through cities and other inhabited areas to sewage treatment plants to protect public health and prevent disease. Sewage is treated to control water pollution before discharge to water bodies.
- e. Phosphate. An inorganic chemical that has historically been one of the main ingredients in detergents. Phosphates have harmful effects on the health of rivers, lakes, streams, and other fresh waters because higher than normal phosphate levels allow algae in the water to grow faster than would naturally occur. Increased algae

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populations are a detriment to water quality due to increased turbidity and decreased oxygen levels.

- f. Emulsification. The suspension of one liquid in another, for example, oil in water. An example of a detergent that creates this effect is the Dawn brand of detergent, "it cuts through grease," i.e., through emulsification.
- 5. <u>Responsible Parties</u>. Personnel listed below are responsible for implementing the procedures described in this ESOP:
- a. G-5 Installation and Environment Division, Natural Resources and Environmental Affairs (NREA) Branch, Environmental Compliance Section, Water Programs Manager.
 - b. Marine Corps Community Services (MCCS), Operations Analyst.
 - c. Charitable organization conducting car washes.
 - d. Base personnel conducting personal car washing.
- 6. <u>Procedures for Conducting Personal Car Washes and Conducting</u> Fundraising Car Washes (Instructions for Operational Control)
- a. General car washing procedures must be adhered to by all individuals washing their personally-owned vehicles aboard MCBQ.
- (1) Approved areas for personal car washes include local self-serve or commercial car wash facilities and any other areas equipped with an oil water separator (OWS). A listing of these areas is provided in the Oil and Water Separators ESOP. The benefit of using commercial car wash facilities is that waste water is reused or drained into sewer systems and is treated before it is discharged into the environment.
- (2) In the event commercial car wash facilities are not available, grassy areas and other pervious or porous surfaces (e.g., gravel) may be approved. The benefit of using pervious or porous surfaces is that waste water can be absorbed and neutralized in soil instead of flowing directly into storm drains or open water bodies.
- (3) Individuals must purchase and use a biodegradable, phosphate-free detergent (e.g., Simple Green's Car Wash, Gliptone's Wash 'n Glow, or Citrus Breeze Cleaner). Contact the NREA Branch, Water Programs Manager, at 784-4030, if you have questions about approved/non-approved detergents. Detergents that are not approved for use can cause the emulsification of oil and grease, inhibiting the OWS from working properly and creating the potential for a release to the storm or sewage systems. The NREA Branch, Water Programs Manager must be notified if any unauthorized detergents are released into the storm water or sanitary sewage system.

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- (4) Ensure detergents are used in accordance with manufacturer's instructions.
- (5) Ensure water is conserved during car washing. This may be accomplished by using hoses equipped with shut-off nozzles or only utilizing water when needed (i.e., no free flowing water).
- (6) Prevent waste water from entering the storm water system by placing a rubber mat or cover on storm drains.
- b. Fundraising car washes performed by charitable organizations must comply with the procedures listed above. The following actions must also be completed:
- (1) The NREA Branch, Water Programs Manager must monitor, track, and annually report all fundraising car washes aboard MCBQ. Three or less car washes are allowed per month.
- (2) The charitable organization must schedule the car wash with the Marine Corps Community Services (MCCS), at 784-5805, and the NREA Branch, Water Programs Manager, at 784-4030. The only area approved for fundraising car washes is the front parking lot of the Quantico Marine Federal Credit Union.
- (3) The NREA Branch, Water Programs Manager will issue a permit and a car wash report form to the charitable organization, indicating the car wash has been approved. The organization must retain the permit on-site during the car wash. Following the car wash, the permit must be returned to the NREA Branch, Water Programs Manager with the required information on the completed car wash report form.

7. Inspections and Corrective Actions

- a. An NREA representative may inspect a car wash event to ensure the procedures in this ESOP are being followed.
- b. If the NREA representative concludes that the procedures are not being followed properly, the car wash will be stopped until corrective actions are taken.

8. Internal Communication

- a. Car wash brochures will be provided to the charitable organization by the NREA Branch, Water Programs Manager. The charitable organization is responsible for distributing brochures to every customer when their car is washed.
- b. Additional car wash information is available on the NREA website: http://www.quantico.usmc.mil/activities/?Section=NREA.
- 9. <u>Training/Awareness</u>. The NREA Branch, Water Programs Manager provides general awareness training to the charitable organization.

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- 10. <u>References and Related Documents</u>. The following references are relevant to this procedure:
- a. MCBQ Comprehensive Storm Water Management Action Plan (CSWMAP).
- b. The Federal Water Pollution Control Amendments of 1972 (i.e., Clean Water Act) and subsequent amendments.
 - c. ESOP #9, Billeting (Barracks).
 - d. ESOP #15, Oil and Water Separators.
- 12. <u>Document Revision History</u>. The following table provides a history of revisions of this ESOP:

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

- 13. <u>Document Owner</u>. 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, Environmental Management System Section at 432-0525.
- a. Document Owner. NREA Branch, Environmental Compliance Section, Water Programs Manager.
 - b. Document Approval. Chair, E²MS Implementation Team.