

Environmental Standard Operating Procedure (ESOP)

Originating Office: Natural Resources Environmental Affairs (NREA) Office	Revision: 2 December 2016	Prepared By: NREA, Subject Matter Expert (SME)
File Name: POT-ESOP	Document Owner: NREA	

Title: Potable Water General

1.0 PURPOSE

The purpose of this ESOP is to provide environmental guidelines for the management of potable water.

2.0 APPLICATION

This guidance applies to those individuals managing, collecting, storing, and distributing potable water aboard the Marine Corps Air Ground Combat Center (MCAGCC).

3.0 REFERENCES

- MCO 5090.2A
- Safe Drinking Water Act
- Clean Water Act
- California Water Code
- CCR Title 22
- American Water Works Associated Standards
- **State Water Resources Control Board (SWRCB) Division of Drinking Water Permit**
- **California Department of Health Service (CA DHS) Report Health and Safety Code (H&SC)**
- **MCAGCC Drinking Water Vulnerability Assessment, May 2007**
- **MCAGCC Emergency Drinking Water Response Plan (ERP)**

Documents that are controlled by MCAGCC in accordance with *EMP-12, Document Control*, are shown in **bold**.

4.0 PROCEDURE

4.1 Discussion:

Groundwater that supplies the MCAGCC is known as the Surprise Spring Aquifer, a sub-basin of the Twentynine Palms Groundwater Basin, and is the sole source of potable water delivered only to consumers within the confines of the MCAGCC military facility. Proper management of well fields, pumping equipment, transmission/mainlines, valves, storage reservoirs, and disinfection systems are critical to ensure safe drinking water.

4.2 Operational Controls:

The following procedures apply:

1. Ensure all wells and pumps are operational and report any wells which are non-operational to NREA Water Resources Manager at 760-830-7883.
2. Ensure all repair and maintenance needs are identified and executed.
3. Ensure water valves are exercised on an annual basis.
4. Ensure leaks and breakages are identified and repaired in accordance with all applicable regulations.
5. Inspect and maintain tank cathodic protection systems in accordance with manufactures recommendations.
6. Ensure the disinfection system is operating properly at all times and initiate repairs immediately.
7. In accordance with permit and operational SOP's, ensure chlorine residual is maintained at proper levels throughout the distribution system to prevent positive bacteriological results.
8. Conduct and document flushing of dead ends in accordance with regulations and operational SOP's.
9. Maintain records of water flows and water usage in accordance with permits and operational SOP's.
10. Ensure all personnel are familiar with emergency procedures and points of contact identified in the Drinking Water Emergency Response Plan.
11. Inspect potable water system on a daily basis and initiate repairs immediately.
12. A turnover folder containing this ESOP and other pertinent environmental information shall be maintained and passed down from Environmental Compliance Coordinator (ECC) to ECC replacement.
13. If there are specific situations or other concerns not addressed by this procedure, contact MCAGCC NREA, Water Resources Office (760-830-7883).

4.3 Documentation and Record Keeping:

The following records must be maintained for potable water system management:

1. Inspection and training records.
2. A logbook documenting inspections.
3. Service and repair records for potable water system.
4. Flow and usage data logs.

4.4 Training:

All affected personnel must be trained in this ESOP and the following:

1. As applicable, utility operators will maintain proper level State Distribution Certification.
2. General Environmental Awareness training.

4.5 Emergency Preparedness and Response Procedures:

Refer to Combat Center Order 5090.5C, ICOP for MCAGCC and MCAGCC Drinking Water System Emergency Response Plan

4.6 Inspection and Corrective Action:

The Water Treatment Supervisor will appoint personnel to perform weekly inspections. The site supervisor shall ensure deficiencies noted during the weekly inspections are corrected immediately. Actions taken to correct each deficiency shall be recorded on the weekly inspection sheet. Designated personnel shall conduct weekly inspections.

ECC/Unit Inspection Checklist - Potable Water	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Are all wells and pumps operational?			
2. Are all repair and maintenance needs identified?			
3. Are all valves exercised annually?			
4. Are leaks and breakages identified and repaired?			
5. Are cathodic protection systems inspected and maintained?			
6. Is the disinfection system operating properly?			
7. Is proper chlorine residual being maintained within the distribution system?			
8. Is required flushing of dead ends conducted?			
9. Are records of water flows and water usage maintained and available for inspection?			
10. Is the supervisory controls and data acquisition (SCADA) system operational?			
11. Are all personnel familiar with emergency procedures and points of contact and actions?			
12. Are training and inspection records maintained and available for inspection?			
13. Are sampling results/records on file and readily available?			

ADDITIONAL COMMENTS:

CORRECTIVE ACTION TAKEN:

Environmental Compliance Coordinator

Name: _____
Signature: _____
Date: _____