

Environmental Standard Operating Procedure			
Originating Office: Environmental Management Department	Revision: Original	Prepared By: Engineering Division	Approved By: William Moog
File Name: BFP-ESOP	Effective Date: 24 April 2007	Document Owner: Herb Baylon	

Title: Backflow Prevention / Cross Connection

1.0 PURPOSE

The purpose of this Standard Operating Procedure is to provide environmental guidelines for the prevention of cross-contamination of potable water supplies through the use of backflow prevention devices (BFPD).

2.0 APPLICATION

This guidance applies to those individuals working with BFPDs aboard MCAS Miramar.

3.0 REFERENCES

- 40 CFR 141
- Safe Drinking Water Act
- CCR Titles 17 and 22
- Health and Safety Code Section 116525-116595

4.0 PROCEDURE

4.1 Discussion:

A cross-connection is any unprotected actual or potential connection between a public or a user's water system and any other source system through which it is possible to introduce into any part of the potable system a substance other than the potable water with which the system is supplied. Cross-connection can lead to backflow, which is the flow of liquid or gas opposite the intended direction. Backflow preventers protect the entire drinking water supply from contamination. The National Primary Drinking Water regulations set standards for the treatment of potable water including process control, sampling, and permitting.

4.2 Operational Controls:

The following procedures apply:

1. BFPDs must be readily accessible for inspection, testing and maintenance.
2. MCAS Miramar Public Works Division (PWD) S-4 is responsible for ensuring that BFPDs are inspected and tested annually by December 30. When devices are found to be defective, they shall be repaired or replaced. All BFPDs shall be tested, maintained and inspected by state and county certified personnel.
3. BFPDs shall be tested immediately after they are installed, relocated, or repaired and not placed in service unless they are functioning as required.
4. PWD shall notify the water user when testing of BFPDs is needed. The notice shall contain the date when the test must be completed.
5. Cross-connection / shut down testing of potable and recycled water system must be completed by appropriately trained personnel.
6. Trained cross-connection specialist will identify all new construction and or change of use for buildings.
7. Inventory and surveys for backflows will be updated and maintained as required by PWD.
8. Testing and maintenance reports shall be maintained by PWD for a minimum of three years.
9. Turnover folder information must be kept for this Standard Operating Procedure.
10. If there are any specific situations or other concerns not addressed by this procedure, contact PWD.

4.3 Documentation and Record Keeping:

The following records must be maintained for BFPD management:

1. Inventory of BFPDs (not including temporary BFPDs).
2. BFPD Maintenance/Inspection records.
3. Testing and maintenance reports shall be maintained by FMD for a minimum of three years.
4. Inspection and training records.

4.4 Training:

All affected personnel must be trained in this Standard Operating Procedure.

1. Inspectors must complete state and county plumbing certification course.
2. Hazard Communication training.

- 3. General Environmental Awareness training.

4.5 Emergency Response Procedures:

CALL 9-1-1

4.6 Inspection and Corrective Action:

MCAS Miramar PWD is responsible for ensuring that BFPDs are inspected and tested annually by 30 December. FMD shall ensure deficiencies noted during the inspections are corrected immediately. Actions taken to correct each deficiency shall be recorded on the inspection sheet.

Backflow Prevention – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector’s Name:	Signature:

Inspection Items	Yes	No	Comments
1. Is an inventory of BFPDs (not including temporary BFPDs) maintained and available? <i>(H&SC 116530)</i>			
2. Are all BFPDs maintained and inspected by state and county certified personnel? <i>(CCR 17\1\5\1\4\2\7601, 7605(b))</i>			
3. Are BFPDs tested immediately after installation, relocation, or repair and not put into service unless functioning properly? <i>(CCR 17\1\5\1\4\2\7605(d))</i>			
4. Are training and inspection records maintained and available for inspection? <i>(CCR 17)</i>			
5. Are three years of BFPD Maintenance/Inspection records complete and available? <i>(CCR 17\1\5\1\4\2\7605(f))</i>			
6. Are BFPD tested/inspected annually? <i>(CCR 17\1\5\1\4\2\7605(f))</i>			

ADDITIONAL COMMENTS:

CORRECTIVE ACTION TAKEN:

Environmental Compliance Coordinator

Name: _____

Signature: _____

Date: _____

Cross Connection – Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector's Name:	Signature:

Inspection Items	Yes	No	Comments
1. Is an inventory of BFPDs (not including temporary BFPDs) current, maintained and available? (CCR 17\1\5\1\4\1\7584(c))			

2. Are all buildings and or use areas been identified for possible cross-connection? (CCR 17\1\5\1\4\1\7584(b))			
3. Have cross connection / shut down testing been completed? (CCR 22\4\3\5\60316(a))			
4. Are training and inspection records maintained and available for inspection? (CCR 17\1\5\1\4\1\7584(f))			
5. Have any cross-connections been identified?If yes was both potable and recycled water system secured? (CCR 22\4\3\5\60316(a) – identification only)			

ADDITIONAL COMMENTS:

CORRECTIVE ACTION TAKEN:

Environmental Compliance Coordinator

Name: _____

Signature: _____

Date: _____

