

Environmental Standard Operating Procedure			
Originating Office: MCAS Miramar Environmental Management Department	Revision: Original	Prepared By: Environmental Management Department	Approved By: William Moog
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Title: Sewers

1.0 PURPOSE

The purpose of this Environmental Standard Operating Procedure (ESOP) is to provide environmental guidelines for the management of lift stations and gravity mains within the sanitary sewer conveyance system.

2.0 APPLICATION

This guidance applies to those individuals working with lift stations and gravity mains at Marine Corps Air Station (MCAS) Miramar.

3.0 References

- MCAS Miramar Industrial User Discharge Permit, Industrial Number 05-1019
- San Diego Municipal Code 64.0500

4.0 PROCEDURE

3.1 Discussion:

MCAS Miramar is classified as a Category 2, Industrial User by the City San Diego, and as such is permitted to discharge wastewater into the City's system. The wastewater conveyance system at MCAS Miramar is composed of approximately 150,000 linear feet of main trunk gravity sewer with approximately 1 mile of sewer laterals. There is several lift stations equipped with pumps to serve areas where gravity fed to sewer is not an option.

Proper maintenance and operation of lift stations is essential to help prevent sanitary sewage overflow. Naval Facilities Engineering Command, South West (NAVFACOM, SW) owns and manages the main trunk sewer lines. MCAS Miramar is responsible for the lateral sewer lines.

Operational Controls:

The following procedures apply:

1. Conduct appropriate training for all personnel.
2. Use Personal Protective Equipment (PPE) including gloves, eye protection, steel-toed boots, and coveralls.
3. Maintain fire extinguishers and First Aid Kits nearby and readily accessible.
4. Inspect, clean, and ensure that all mechanical and electrical equipment (wet wells, pumps, check valves, floats, lights, alarm systems, and electrical motor control equipment) is functioning properly.
5. Document all cleanings, malfunctions, and repairs.
6. Inspect and/or clean all sewer manholes over a 2-year cycle.
7. Inspect and/or clean all other sewer mains over a 4-year cycle.
8. Inspect sewer lines not cleaned by Closed Circuit Television (CCTV) to verify that cleaning may be deferred to the next cleaning cycle.
9. Adjust cleaning cycles if problems such as overflows or odors are encountered.
10. Document all spills or leaks and include the cause and the amount spilt.
11. Clean and neutralize overflows properly.
12. Neutralize and dispose of waste generated from cleanup of overflow.
13. Ensure that training and certification records maintained and available for inspection.

3.2 Documentation and Record Keeping:

The following records must be maintained for:

1. Record the following information for each line of the sewer main:
 - a. Line identification (ID) number
 - b. Date and time of last inspection/cleaning
 - c. Method of inspection/cleaning (e.g., CCTV, camel jet, rodding, etc.)
 - d. Cleaning crew
 - e. Reason for inspection/cleaning (preventative or corrective)
 - f. If cleaning was corrective, did service disruption occur?
 - g. Observations (e.g., roots, grease, mud, etc.)

- h. Further actions necessary
 - i. Maintenance schedule for the line.
2. Inspection and Maintenance Schedules
 3. Sewer Spill Reporting
 - a. Location of release
 - b. Date and Time of release start and end, and when mitigation efforts completed
 - c. Estimated number of persons exposed to the release, estimated volume of release, reason release considered imminent, and where release flowed.
 - d. Efforts made to stop, contain, and cleanup release
 - e. Amount and type of disinfectant applied to mitigate public health risk.
 - f. Cause of release, if known.
 - g. Intensity and duration of rainfall, if any.

3.4 Training:

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

1. Hazard Communication (HazCom) Training.
2. Occupational Safety and Health (OSHA)
3. Confined Space Entry Training.

3.5 Emergency Preparedness and Response Procedures:

1. Upon notification, dispatch sewer investigator to contain, isolate, and shut off spill flow.
2. Sewer investigator may request more personnel, supplies, or equipment.
3. Establish perimeters and control zones with traffic cones, vehicle use, barricades, or natural topography to protect public health, environment, and property.
4. Notify Federal Fire Department if evidence of hazardous substances.
5. Determine location and cause of blockage.

6. Take immediate steps to stop the overflow (relieve blockage, manually operate pump station controls, etc.
7. Determine and follow through with measures for containment.
8. Thoroughly clean overflow sites.

Pumping Station/Force Main– Inspection Checklist	
Date:	Time:
Installation:	Work Center:
Inspector’s Name:	Signature:

Inspection Items	Yes	No	Comments
1. Is training provided for all shop personnel? (29 CFR 1910)			
2. Is PPE (e.g., gloves, eye protection, steel-toed boots, coveralls, etc.) used when performing inspecting and maintaining the sewer system? (29 CFR 1910)			
3. Are fire extinguishers and First Aid Kits nearby and in locations known to personnel? (29 CFR 1910, 40 CFR, AAC 18, MCO P5090.2A)			
4. Is all mechanical and electrical equipment functioning properly?			
5. Are cleaning, malfunctioning equipment, and repair activities reported and documented?			
6. Are all sewer mains inspected and/or cleaned over a 1-year cycle?			
7. Are all sewer manholes inspected and/or cleaned over a 2-year cycle?			
8. Are all other sewer mains inspected and/or cleaned over a 4-year cycle?			
9. Are sewer lines (not cleaned) inspected using			

CCTV?			
10. Are cleaning cycles adjusted if overflows or odors are encountered?			
11. Are system breaks and overflows reported via phone/email same working day or first day after holiday/weekend to Environmental Management Department?			
12. Are all spills or leaks documented with-in 24-hours of incident to include the cause and the amount spilt?			
13. Are overflows properly cleaned up and neutralized?			
14. Are cleanup wastes neutralized and disposed of properly? (29 CFR 1910, 40 CFR, AAC 18, MCO P5090.2A)			
15. Are training and certification records maintained and available for inspection?			

ADDITIONAL COMMENTS:

CORRECTIVE ACTION TAKEN:

Environmental Compliance Coordinator

Name: _____

Signature: _____

Date: _____