

# **MARSHALL COMMUNITY WASTEWATER SYSTEM**

## **Sewer System Management Plan**

**Biennial Audit Report**  
**April 2022**

The purpose of the Sewer System Management Plan (SSMP) Audit is to evaluate the effectiveness of the Marshall Community Wastewater System's SSMP and to identify whether updates are needed. This document was designed to meet the requirements of State Water Resources Control Board Order No. 2006-0003-DWQ as revised by Order No. WQ 2013-0058-EXEC. These orders call for an internal SSMP audited every two years that is appropriate to the size of sanitary sewer overflows (SSO.) The SSMP must also be updated every five years. When significant updates are made, the SSMP will go to the Marin County Board of Supervisors for re-certification.

Documentation of SSMP audits are kept on file at the Environmental Health Services offices and maintained by the Environmental Health Services Project Manager. An indication is made in the California Integrated Water Quality System (CIWQS) database that the audit was completed. Audits are also posted on-line at the Marshall Community Wastewater website: <https://www.marincounty.org/depts/cd/divisions/environmental-health-services/marshall-wastewater-zone>.

### **System Overview**

The Marshall Community Wastewater Treatment System (Facility) serves approximately 50 homes and a few commercial properties in the community of Marshall, located along the eastern shoreline of Tomales Bay. The Facility is owned and operated by Marin County under the auspices of the Marshall Onsite Wastewater Disposal Zone (Zone). Governance is by the Marin County Board of Supervisors acting as District Directors.

The Facility includes wastewater collection, treatment, and subsurface disposal of effluent. Wastewater is collected from septic tanks serving and located at individual residential and commercial properties, conveyed by approximately two miles of 2 to 3-inch pressurized pipelines to a community treatment system, and then discharged to a community leachfield. The community collection line parallels State Route 1 along the eastern side of Tomales Bay. The system has been designed for a wastewater flow of approximately 15,000 gallons per day.

Phase 1 began operation in 2008 and runs approximately one mile to the north of the community treatment site. Phase 2 came on-line in 2016 and runs one mile south of the community wastewater site. With the Phase 2 expansion, a SSMP became required. The SSMP was certified by the Marin County Board of Supervisors on March 15, 2016. An audit of the SSMP is required every two years, with an update of the SSMP to be performed every five years.

### **Sanitary Overflow History**

There have been no sanitary overflows since the system began service. See Attachment 1 – Collection System Operation Report generated from the CIWQS database that is based on the monthly no-spill certification.

---

---

**Current Audit Revisions to 2018 Marshall Community Wastewater System SSMP:**

- **Element IV:** Operation and Maintenance was updated to reflect current contractor information.
- 

The questions below follow the audit template provided by the State Water Resources Control Board and refer to the text of the SSMP Elements of the Marshall Community Wastewater System.

**ELEMENT 1. GOALS**

1. Are the goals stated in the SSMP still appropriate and accurate? Yes  No

**ELEMENT 2. ORGANIZATION**

2. Is the SSMP up-to-date with organization and staffing contact information? Yes  No

**ELEMENT 3. LEGAL AUTHORITY**

3. Does the SSMP reference up-to-date information about legal authority? Yes  No
4. Does Marin County have sufficient legal authority to control sewer use and maintenance? Yes  No

**ELEMENT 4. OPERATIONS AND MAINTENANCE PROGRAM****4.a Map of the Sanitary Sewer System**

5. Does the SSMP reference up-to-date information about maps? Yes  No
6. Are collection system maps complete, up-to-date, and sufficiently detailed? Yes  No

**4.b Preventative Maintenance Program**

7. Does the SSMP contain up-to-date information about preventive operations and maintenance activities? Yes  No
8. Are the District's preventive maintenance activities sufficient and effective in reducing and preventing SSOs and blockages? Yes  No

**4.c Rehabilitation and Replacement Plan**

9. Does the SSMP contain up-to-date information about the rehabilitation and replacement program? *Not applicable at this time.* NA  No
10. Does the SSMP contain up-to-date information about Closed Circuit Television (CCTV) inspections? *Not applicable given size of system.* NA  No

- 11. Are scheduled inspections and the condition assessment system effective in identifying, prioritizing, and addressing deficiencies? Yes  No
- 12. Does the Capital Improvement Plan (CIP) address prioritized projects for collection system assets? *Not applicable for the new system.* NA  No

**4.d Training**

The system is managed by subcontractor with the necessary training. There is no District staff performing operation or maintenance functions.

- 13. Does the SSMP contain up-to-date information about existing training programs? NA  No
- 14. Do supervisors believe their staff are sufficiently trained? NA  No
- 15. Are staff satisfied with the training opportunities and support offered to them? NA  No

**4.e Equipment and Replacement Part Inventories**

- 16. Does the SSMP reference up-to-date information about equipment and replacement part inventories? *Not applicable at this time.* NA  No

**ELEMENT 5. DESIGN AND PERFORMANCE PROVISIONS**

- 17. Does the SSMP contain up-to-date information about design and construction standards? Yes  No

**ELEMENT 6. SSO & BACKUP RESPONSE PLAN**

- 18. Does the SSMP contain an up-to-date version of SSO Response Plan? Yes  No
- 19. Is the Response Plan effective in handling SSOs? Yes  No

**ELEMENT 7. FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM**

- 20. Does the SSMP reference or contain up-to-date information about the District's FOG control program? Yes  No
- 21. Is the current FOG program effective in documenting and controlling FOG sources? Yes  No
- 22. Are all public outreach materials for the FOG program current? We routinely remind property owners to avoid putting fats, oils, and grease down the drain. Yes  No

**ELEMENT 8. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN**

Average flows to the treatment plan have been about 25% of design capacity during the past two years of operation. Further, regulations governing the formation of the District effectively limit growth within the wastewater system service area so as not to exceed the design capacity.

23. Does the SSMP reference or contain up-to-date information about the District's capacity assessment activities and documentation? Yes  No
24. Is the District's sufficiently addressing hydraulic deficiencies? Yes  No

**ELEMENT 9. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS**

In addition to SSO history, compliance with the Facility's General Waste Discharge Order WQ 2014-0153-DWQ is the key performance measure of the system. Annual reports discuss the system's performance and record of compliance. If non-compliance is identified, corrective actions are taken or planned to bring the discharge into full compliance.

25. Does the SSMP reference up-to-date information about the District's data collection and organization (e.g. use of CMMS, performance indicators, etc.)? Yes  No
26. Is the District's data collection and organization sufficient to evaluate the effectiveness of the SSMP? Yes  No

**ELEMENT 10. SSMP PROGRAM AUDITS**

27. Will this SSMP Audit be completed by every two years starting in 2016 when the system was completed? Yes  No

**ELEMENT 11. COMMUNICATION PROGRAM**

28. Is the District's website up-to-date, including information related to providing an opportunity for public input on the SSMP? Yes  No

**Evaluate Effectiveness of the SSMP**

The primary performance measure for the effectiveness of the SSMP is the number of SSOs. As noted above there have been no SSOs during the past two years. The systems operation and maintenance program and SSMP are effective in preventing SSOs.

As called for in the Marshall Community Wastewater Treatment System general waste discharge requirements (Order WQ 2014-0153-DWQ), further evaluation of the system's effectiveness is provided in the Facility's quarterly and annual reports.

**Description of Scheduled Updates/Changes to the SSMP**

An audit of the SSMP is required every two years, with an update of the SSMP to be performed every five years.

**Directions:** *The following items shall be verified in each SSMP audit and update:*

- Verify current operation and maintenance contact information.
- Compare actual flow into the system with design capacity of 14,640 gpd.

**SSMP Audit Approval:**

SSMP Audit prepared by: Arti Kundu 4/28/22  
Arti Kundu, Project Manager Date  
Environmental Health Services

SSMP Audit Approved by: Gregory Pirie 4/25/22  
Gregory Pirie, Legally Responsible Official Date  
Deputy Director  
Environmental Health Services

SSMP Audit Reviewed by: Norm Hantzsche 4/21/22  
Norm Hantzsche, Engineer of Record Date  
Questa Engineering Corp