

MARSHALL COMMUNITY WASTEWATER SYSTEM

Sewer System Management Plan

Biennial Audit Report **April 2024**

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-district>.

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.
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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 preventative operations and maintenance activities? Yes No
8. Are the District's preventative 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 03/27/24
Arti Kundu, Project Manager Date
Environmental Health Services

SSMP Audit Approved by: Gregory Pirie 3/27/24
Gregory Pirie, Legally Responsible Official Date
Deputy Director
Environmental Health Services

SSMP Audit Reviewed by: Norm Hantzsche 3/27/24
Norm Hantzsche, Engineer of Record Date
Questa Engineering Corp

