

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
April 16, 2020

ITEM: 5

SUBJECT: Public Hearing on adoption of Order No. R1-2020-0005, proposed Waste Discharge Requirements for the Peninsula Community Services District and Samoa Pacific Group (Permittees) Town of Samoa Wastewater Treatment Facility, WDID No. 1B85017RHUM, NPDES No. CA1000001 (Justin McSmith)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2020-0005 (Proposed Permit). The Proposed Permit will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The Town of Samoa (Town) is located on the Samoa Peninsula in Humboldt County, California. The Town is currently permitted under Waste Discharge Requirement (WDR) Order No. R1-2001-62 (2001 WDR) that permits discharge of treated effluent to land. Currently, wastewater within the Town of Samoa originates from 93 occupied residences, the Samoa Cookhouse Restaurant, a post office, hostelry, museum, the Samoa Woman's Club, and the Samoa Elementary School. Wastewater from these sources flows into one of three wastewater collection treatment and disposal systems: the Eastern System, Western System, and School System.

The School System is an individual onsite wastewater treatment system that will be connected to the new wastewater treatment plant during Phase One of the Upgrade Project, discussed below. The Eastern System serves much of the town, including the Samoa Cookhouse Restaurant, Samoa Woman's Club, hostelry, and 68 of the occupied residences. The Eastern System currently consists of three septic tanks and two bark filters (the bark filters are no longer operational) distributed in the collection system that discharge into an equalization and treatment pond. The pond is followed by a percolation basin located near the ridge top on the western edge of Humboldt Bay, just north of the western side of the Samoa Bridge. The discharge point of this system is within the Humboldt Bay watershed.

The Western System serves approximately 25 occupied residences on the west side of the ridge line of the peninsula. The Western System discharges wastewater through a 15,000-gallon septic tank to a leach-trench system in the sand dunes northwest of New Navy Base Road.

The Town and current treatment facilities are currently owned by Samoa Pacific Group (SPG). SPG's purchase of the Town in 2001 included 65 acres of land and all the structures in Samoa. SPG purchased an additional 150 acres of land in September 2001 for the construction of a three-phase development project. The three-phased development project as described in the [Town of Samoa Master Plan](#) (Master Plan) is to reconfigure existing property lines to provide a variety of land uses including additional single-family residential and multi-family affordable housing; commercial properties, both coastal dependent and recreational; and a business park.

Phase I of the Master Plan, which is scheduled to be completed during the term of the Proposed Permit, will include construction of the new wastewater treatment facility (Facility), phased construction of a new wastewater collection system, and subsequent removal of the existing Western, Eastern and School wastewater collection systems.

The Master Plan indicates that the flows currently treated and disposed of separately by two separate collection systems, referred to as the Eastern and Western systems, will be consolidated into one new collection system and conveyed to the new Facility. In addition to the construction of the new wastewater treatment facility and associated collection system, Phase I of the Master Plan proposes to upgrade nine dilapidated residences within the existing service area and construct an 84-unit multi-family housing unit. Following completion of Phase I of the Master Plan, the Permittees anticipate the Facility will serve a residential population of approximately 510 in addition to the existing commercial sources.

Phase II of the Master Plan will construct 105 new single-family residential units and 62 multi-family units. Phase III of the Master Plan involves the construction of a business park along with additional coastal-dependent industrial development.

Phase III proposes to allocate approximately 35.2 acres for industrial/coastal-dependent businesses and construct an 18.6-acre business park. The timing of the completion of these phases will be market driven but is anticipated to be after the term of the Proposed Permit.

The Permittees are developing a new collection system and treatment plant that provides secondary treatment and discharges to the Pacific Ocean. The Facility is designed to provide secondary wastewater treatment for an average dry weather flow of 52,800 gallons per day and a peak daily wet weather flow of 75,600 gallons per day, which corresponds to the maximum projected flows from the completion of all phases of the Master Plan development project.

The Facility will consist of primary settling with filtration and flow equalization, pre-anoxic tanks, filtration and recirculation through advanced packed bed media filters, up-flow filtration/denitrification, polishing packed bed media filters, and ultraviolet light (UV) disinfection. The resulting disinfected secondary treated effluent will be discharged to the Pacific Ocean through Discharge Point 001. The outfall to the Pacific Ocean is through a common outfall that is owned and operated by the Humboldt Bay Harbor

District and located 1.25 miles offshore. The Town has entered into a lease agreement with the Harbor District for use of the outfall.

DISCUSSION: The California Coastal Commission, in its permit issued to SPG for the development project, requires that a public entity operate and maintain the new wastewater facility. On May 15, 2017, Samoa Peninsula Fire Protection District (SPFPD) applied to Local Agency Formation Commission (LAFCO) requesting the reorganization of SPFPD into a Community Services District, called the Peninsula Community Services District (PCSD), to operate and maintain the new facility. LAFCO approved the formation of the PCSD on March 31, 2020. PCSD together with SPG (Permittees) will operate the Facility, a publicly owned treatment works.

The Proposed Permit replaces the 2001 WDR and includes requirements applicable to NPDES permits discharging to the Pacific Ocean. The Proposed Permit includes technology based effluent limitations for BOD, TSS, total coliform, pH, settleable solids, turbidity, and oil and grease. In addition, the Proposed Permit includes enterococci monitoring for compliance with the Statewide Bacteria Provisions and a requirement to conduct a Biological Survey in the receiving water to determine potential impacts to beneficial uses from the discharge. The Proposed Permit also includes a requirement to prepare and implement a Disaster Preparedness Assessment Report and Action Plan that is being required of all NPDES Permittees in the North Coast Region.

Since the Proposed Permit is a new NPDES Permit and the old WDRs did not include California Ocean Plan (Ocean Plan) monitoring requirements, the Permittees will be required to monitor Facility effluent during the permit term for Ocean Plan priority pollutants, chronic toxicity, ammonia and the parameters listed above. That monitoring data will be used in a Reasonable Potential Analysis (RPA) to determine if the Facility effluent exceeds water quality criteria. If the RPA shows reasonable potential to exceed applicable water quality criteria, then water quality-based effluent limitations will be issued in the next permit term.

A copy of the Draft Permit was posted on the Regional Water Board website and was available for public comment from January 7, 2020 to February 8, 2020. The Permittees, the California Coastal Commission, the Humboldt Bay Harbor District, and Kent Sawatsky submitted timely comments on the Draft Permit. On March 3, 2020, Regional Water Board staff had a phone call with the Permittees to discuss their comment letters. After the conference call, SPG re-submitted their comment letter with revisions based on clarifications provided during the conference call. Many of the comments provided were rescinded based on a clearer understanding of what the Proposed Permit will require.

Comments that resulted in changes to the Proposed Permit included a request to include a decommissioning plan and pond restoration plan for the old wastewater treatment facility, a request to increase the level of seal level rise to be analyzed in the Disaster Preparedness Assessment Report and Action Plan, clarifying language to be

inserted into the Biological Survey to allow cooperation with the Humboldt Bay Harbor District, a request that the PCSD be formed before the Proposed Permit is adopted, and a request for the inclusion of an ocean outfall inspection to ensure structural integrity of the discharge pipe.

SPG also submitted new design documents as part of the comment submittal that removed the original equalization pond and anoxic pond in favor of five 50,000-gallon equalization and settling tanks. Additionally, the UV disinfection system has been upgraded from the UV Pure Hallett 30 to the UV Pure Hallett 1000 for longer lamp life and larger system capacity. There were no changes to the Proposed Permit based on the new design of the treatment system.

A full explanation of the comments and Staff responses is provided in the attached Response to Comments document. Staff anticipates that the Proposed Permit will be uncontested.

RECOMMENDATIONS: Adopt Order No. R1-2020-0005, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order No. R1-2020-0005
2. Comments Provided on Order No. R1-2020-0005
3. Staff Response to Written Comments
4. Public Notice