ATTACHMENT K - PENINSULA COMMUNITY SERVICES DISTRICT INDIVIDUAL REQUIREMENTS

1. FACILITY INFORMATION

1.1. The Samoa Pacific Group is the owner and Peninsula Community Services District (hereinafter Permittees) is the operator of the Town of Samoa Wastewater Treatment Facility (hereinafter Facility), a Publicly-Owned Treatment Works (POTW). The following table summarizes administrative information related to the facility.

Table K-1. Facility Information

WDID	1B85017RHUM
Permittee	Samoa Pacific Group and Peninsula Community Services District
Name of Facility	Wastewater Treatment Facility
Facility Address	3 North Bay View Road Samoa, CA 95564 Humboldt County
Facility Contact, Title and Phone	Daniel Unea, Facility Operator, (707) 599-4951
Authorized Person to Sign and Submit Reports	Dan Johnson, Owner, (707) 822-9000 Troy Nicolini, CSD General Manager, (707) 496-5959
Mailing Address	5251 Ericson Way, Arcata, CA 95521 (SPG) 1982 Gass St, Fairhaven, CA 95564 (CSD)
Billing Address	Same as Mailing Address
Type of Facility	POTW
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	No
Recycled Water Production Authorized	No
Land Discharge Authorized	No
Facility Permitted Flow	0.0528 mgd (average dry weather flow) 0.0756 mgd (peak wet weather flow)
Facility Design Flow	0.0528 mgd (average dry weather flow) 0.0756 mgd (peak wet weather flow)
Permitted Initial Dilution Factor (Dm)	115:1

Instream Waste Concentration	0.87 %
Watershed	Eureka Plain
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean Waters

2. FACILITY DESCRIPTION

The Town of Samoa is located on the Samoa Peninsula in Humboldt County, California. 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 Permittees are planning a three-phased development project as described in the Town of Samoa Master Plan (Master Plan) 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 this Order, will include phased construction of a new wastewater collection system, and subsequent removal of the existing wastewater collection systems, and bark filters.

Phase I 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.

2.1. Description of Wastewater and Biosolids Treatment and Controls

The Facility provides secondary wastewater treatment for an average dry weather flow of 0.0528 mgd and a peak daily wet weather flow of 0.0756 mgd, which corresponds to the maximum projected flows from Phase III of the Master Plan development project. The Facility consists of an equalization/pre-anoxic tank, two primary settling tanks, five Ax-max filtration units and UV disinfection using UV Pure Hallett 1000 system.

Sludge generated during the treatment process will be pumped and hauled to a dewatering facility to be combined with biosolids from other municipal facilities and dewatered. Dried biosolids will be hauled from the dewatering facility to a Class B landfill for disposal.

In addition to the treatment system discussed above, an alternative treatment system is being proposed to provide treatment for towns on the Samoa Peninsula that include Fairhaven and Finntown. This alternative system would replace the current treatment system but retain the current system to use as a back-up under certain circumstances.

2.2. Discharge Points and Receiving Waters

Secondary treated wastewater will be discharged at Discharge Point 001 at 40° 49' 10" N latitude and 124° 13' 32" W longitude to the Pacific Ocean. The Humboldt Bay Harbor District (Harbor District) owns and maintains the 48-inch diameter outfall line that terminates approximately 1.5 miles off-shore.

This outfall was formerly owned by Freshwater Pulp (formerly Evergreen Pulp, formerly Samoa Pacific Cellulose, LLC). The Harbor District acquired the outfall during a property acquisition of Freshwater Tissue/Freshwater Pulp property in August 2013. The Permittees have entered into a lease agreement with the Harbor District that allows the Permittees access to the outfall for Facility operations.

2.3. Compliance Summary

On September 10, 2024, the Regional Water Board issued Administrative Civil Liability Complaint (Invitation to Settle) for 17 violations of effluent limitations for enterococci and total coliform in Order No. R1-2024-0049. The Invitation to Settle assessed a penalty of $33,000 for these violations.

2.4. Planned Changes

The PCSD is planning on expanding its sewer collection system to include the towns of Fairhaven and Finntown. The CSD is also considering updating treatment technologies to better handle the additional flows from these locations. PCSD has gone through the CEQA process for this expansion and will submit details of expansion in the coming month.

3. REASONABLE POTENTIAL ANALYSIS (RPA)

Procedures for performing an RPA are described in section 5.3.3.1 of the Fact Sheet. A summary of the RPA results is included in Table K-2 below. The RPA for the effluent was conducted using effluent monitoring data generated from Ocean Plan Table 3 parameter monitoring and routine monitoring events conducted between January 2021 through December 2025.

Table K-2. Facility RPA Summary

Pollutant	Units	Qualifier	MEC [1]	No. Samples	No. ND [2]	Co [3]	Cs [4]	X-obs [5]	Endpoint [6]
Arsenic	µg/L	<	0.45	1	1	8	3	3.0	3
Cadmium	µg/L	<	0.15	1	1	1	0	0.0013	3
Chromium VI	µg/L	=	0.11	1	0	2	0	0.0009	3
Copper	µg/L	=	55.1	1	0	3	2	2.5	3
Lead	µg/L	<	0.25	1	1	2	0	0.0022	3
Mercury	µg/L	<	0.030	1	1	0.04	0.0005	0.0008	3
Nickel	µg/L	=	2.85	1	0	5	0	0.0246	3
Selenium	µg/L	<	1.5	1	1	15	0	0.0129	3
Silver	µg/L	<	0.2	1	1	0.7	0.16	0.16	3
Zinc	µg/L	=	57.7	1	0	20	8	8.4	3
Cyanide	µg/L	=	1.4	1	0	1	0	0.012	3
Ammonia (as N)	µg/L	=	21,000	78	0	600	0	181.0	2
HCH	µg/L	<	0.014	1	1	0.004	0	0.0001	3
Antimony	µg/L	<	0.75	1	1	1,200	0	0.0074	3
Bis(2-chloroethoxy) methane	µg/L	<	4.8	1	1	4.4	0	0.0475	3
Bis(2-chloroisopropyl) ether	µg/L	<	0.047	1	1	1,200	0	0.0005	3
Chromium (III)	µg/L	=	0.92	1	0	190,000	0	0.0091	3
Di-n-butyl Phthalate	µg/L	<	0.73	1	1	3,500	0	0.0072	3
Dichlorobenzenes	µg/L	<	1	5	5	5,100	0	<0.0333	3

Pollutant	Units	Qualifier	MEC [1]	No. Samples	No. ND [2]	Co [3]	Cs [4]	X-obs [5]	Endpoint [6]
4,6-dinitro-2-methylphenol	µg/L	<	35	1	1	220	0	0.3465	3
2,4-dinitrophenol	µg/L	<	6.4	1	1	4	0	0.0634	3
Fluoranthene	µg/L	<	0.036	1	1	15	0	0.0004	3
Hexachlorocyclopentadiene	µg/L	<	22	1	1	58	0	0.2178	3
Aldrin	µg/L	<	0056	1	1	0.000022	0	<0.0002	3
Benzidine	µg/L	<	25	1	1	0.000069	0	<1.8334	3
Bis(2-chloroethyl) Ether	µg/L	<	0.047	1	1	0.045	0	<0.9333	3
Bis(2-ethlyhexyl) Phthalate	µg/L	<	1.2	1	1	3.5	0	0.0119	3
Chlordane	µg/L	<	0.12	1	1	0.000023	0	<0.0017	3
DDT	µg/L	<	0.0036	1	1	0.00017	0	0.00004	3
1,4-Dichlorobenzene	µg/L	<	4.1	1	1	18	0	0.0406	3
3,3'-Dichlorobenzidine	µg/L	<	0.058	1	1	0.0081	0	<0.9333	3
Dieldrin	µg/L	<	0.0028	1	1	0.00004	0	<0.0002	3
2,4-Dinitrotoluene	µg/L	<	0.25	1	1	2.6	0	<0.3667	3
1,2-Diphenylhydrazine	µg/L	<	4	1	1	0.16	0	<0.3667	3
Heptachlor	µg/L	<	0.008	1	1	0.00005	0	0.00008	3
Heptachlor Epoxide	µg/L	<	0.005	1	1	0.00021	0	<0.0003	3
Hexachlorobenzene	µg/L	<	0.016	1	1	14	0	<0.3667	3
Hexachlorobutadiene	µg/L	<	22	1	1	2.5	0	<0.3667	3
Hexachloroethane	µg/L	<	0.032	1	1	730	0	<0.3667	3
Isophorone	µg/L	<	4.2	1	1	730	0	<0.3667	3

Pollutant	Units	Qualifier	MEC [1]	No. Samples	No. ND [2]	Co [3]	Cs [4]	X-obs [5]	Endpoint [6]
N-Nitrosodimethylamine	µg/L	<	34	1	1	7.3	0	<0.3667	3
N-Nitrosodi-N-Propylamine	µg/L	<	5.6	1	1	0.38	0	<0.3667	3
N-Nitrosodiphenylamine	µg/L	<	3.4	1	1	2.5	0	<0.3667	3
Toxaphene	µg/L	<	0.4	12	12	0.00021	0	<0.0100	3
2,4,6-Trichlorophenol	µg/L	<	0.06	5	5	0.29	0	<0.3667	3

Table Notes

1. MEC = Maximum Effluent Concentration
2. ND = Non-Detected
3. Co = The concentration (water quality objective) to be met at the completion of initial dilution (from Table 3 of the 2019 Ocean Plan).
4. Cs = The background seawater concentrations (from Table 5 of the 2019 Ocean Plan).
5. X-obs = The maximum concentration after complete mixing, calculated according to Step 4 of Appendix VI of the Ocean Plan using the permitted dilution ratio (Dm) of 50 as follows: X-obs = (Ce + Dm * Cs)/(Dm + 1), unless otherwise noted.
6. RPA Results:

   Endpoint 1 = An effluent limitation must be developed for the pollutant. Monitoring is required.

   Endpoint 2 = An effluent limitation is not required for the pollutant. Monitoring may be required as appropriate.

   Endpoint 3 = RPA is inconclusive. Less than 3 detects or greater than 80% ND.

3.1. **Water Quality-Based Effluent Limitations**

Based on results of the RPA, performed in accordance with methods of the Ocean Plan for discharges to the Pacific Ocean, the Regional Water Board is not establishing WQBELs for any additional Ocean Plan Table 3 pollutants.

3.2. **Facility Specific Effluent Limitation Summary**

Effluent limitations applicable to the Town of Samoa Wastewater Treatment Facility, for discharges from Discharge Points 001 (Monitoring Location EFF-001) are as follows:

Table K-3. Facility Specific Effluent Limitations – Discharge Point EFF-001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Six-Month Median
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	mg/L	30	45	--	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--	--
pH	s.u.	--	--	--	6.0	9.0	--
Oil and Grease	mg/L	25	40	--	--	75	--
Ammonia Nitrogen, Total (as N)	mg/L	--	--	278	--	696	70
Settleable Solids	mL/L	1.0	1.5	--	--	3.0	--
Turbidity	NTU	75	100	--	--	225	--

1.1.1.

3.2.1. **Percent Removal:** The average monthly percent removal of BOD_5 and total suspended solids shall not be less than 85 percent. Percent removal shall be determined from the monthly average value of influent wastewater concentration in comparison to the monthly average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Locations INF-001 and EFF-001, respectively.

3.2.2. **Disinfection.** Disinfected effluent discharged from the Facility through Discharge Point 001 to the Pacific Ocean shall not contain bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-001:

3.2.2.1. **Enterococci**

3.2.2.1.1. The 6-week rolling geometric mean of enterococci shall not exceed 30 colony forming units (CFU) per 100 mL; and

3.2.2.1.2. Not more than 10 percent of the samples collected in a calendar month exceed an MPN of 110 per 100 mL.

3.2.2.2. **Total Coliform Bacteria**

3.2.2.2.1. The median value of total coliform bacteria shall not exceed an MPN of 70 per 100 mL in a calendar month; and

3.2.2.2.2. Not more than 10 percent of the samples collected in a calendar month exceed an MPN of 230 per 100 mL.

3.2.2.3. **Fecal Coliform**

The 30-day geometric mean of fecal coliform density not to exceed 200 per 100 mL;

No sample shall exceed an MPN of 400 per 100 mL.

3.2.3. **Whole Effluent Toxicity (WET)**

There are two types of WET tests – acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. The in-stream waste concentration for chronic toxicity for the Permittees is 0.87 percent effluent.

Compliance with the accelerated monitoring and TRE provisions shall constitute compliance with the chronic aquatic toxicity requirements, as specified in the MRP (Attachment E, sections 5.1 and 5.2).

4. **RECYCLED WATER PRODUCTION**

The Town of Samoa Wastewater Treatment Plant is not authorized to discharge to land under this General Order.

5. **LAND DISCHARGE SPECIFICATIONS**

The Town of Samoa Wastewater Treatment Plant is not authorized to discharge to land under this General Order.