Response to Written Comments

Draft Waste Discharge Requirements

Order No. R1-2020-0005

National Pollutant Discharge Elimination System (NPDES)

for the Peninsula Community Services District and Samoa Pacific Group Town of

Samoa Wastewater Treatment Facility

Regional Water Quality Control Board, North Coast Region

April 16, 2020

Comment Letters Received

The deadline for submittal of public comments regarding draft Waste Discharge Requirements for Order No. R1-2020-0005, National Pollutant Discharge Elimination System Permit (Draft Permit) for the Peninsula Community Services District and Samoa Pacific Group (Permittees) Wastewater Treatment Facility (Facility) was February 8, 2020. The Permittees, Costal Commission, Humboldt Bay Harbor District and one public commenter provided timely comments. No other comments were received during the public comment period.

Regional Water Board staff met with Samoa Pacific Group on March 2, 2020 to discuss the Permittee's comments. Samoa Pacific Group re-submitted comments on March 3, 2020 and their amended comments are shown below the original comment. Regional Water Board staff have provided responses to Permittee's amended comments.

In this document, the comments are summarized by each individual commenter, followed by the Regional Water Board staff response. Text to be added is identified by <u>underline</u> and text to be deleted is identified by <u>strike-through</u> in this document. The term "Draft Permit" refers to the version of the permit that was sent out for public comment. The term "Proposed Permit" refers to the version of the permit that has been modified in response to comments and is being presented to the North Coast Regional Water Quality Control Board (Regional Water Board) for consideration.

Samoa Pacific Group (SPG) Comments

Comment SPG1: Page F-16 to F-17 reference a dilution study which states that a dilution rate of 115:1 is appropriate and that a dilution rate of greater than 100:1 could be achieved with flow rates of up to 40 MGD. The flow produced by the Samoa Facility is 0.13% of this 40 MGD number. Based on the Samoa Flows we request that any and all monitoring and references thereto related to the outfall discharge point D-001 be removed from the permit, including studies, etc. because the Samoa treated and disinfected effluent does not pose a threat to water quality at the receiving water.

Especially given that the discharge point is more than 1.5 miles off the shoreline. The outfall has other users and is seeking additional users in the future. The Harbor District is assessing a fee related to the use of the outfall from all users, and should be solely responsible for the operation, monitoring and maintenance of that facility as a "stand alone entity." It's our understanding that the Harbor District will utilize the fees collected to operate, permit, monitor, report, and maintain the outfall consistent with it's own NPDES permit.

Amended Comment: Based on our conversation and clarification of the location of point D-001 it's our understanding that now that we will be conducting influent and effluent monitoring within the boundaries of the WWTP site, and that pertaining to this concern, we are not responsible for any "combine sewer effluent monitoring at SSMH #5 or down stream of that point. With this understanding, we withdraw this comment #1.

Response SPG1: All dischargers are responsible for assuring that facility discharges comply with narrative and numeric water quality standards and for protecting the beneficial uses of receiving waters. In accordance of Section 122.48 of 40 Code of Federal Regulations (CFR) and Water Code Section 13383, monitoring of the influent and effluent from the Facility is required to determine compliance with prohibitions and effluent limitations established in the Proposed Permit. 40 CFR Section 122.44 requires that permits include both technology-based and water quality-based effluent limitations and standards to attain and maintain applicable numeric and narrative water quality criteria to protect beneficial uses of receiving waters where a reasonable potential to exceed those criteria exists. Because the discharge from the Facility has a reasonable potential to exceed certain water quality criteria, the Permittees are required to monitor for the constituents listed in the Monitoring and Reporting Program (MRP) in Attachment E of the Proposed Permit.

No changes were made to the Draft Permit in response to this comment.

Comment SPG2: Where are Discharge Point 001 and Monitoring Location EFF-001, INF-001 for monitoring exactly? We assume that EFF-001 and INF-001 are located at the head works and tail works of the WWTP within the confines of the treatment plant area. Please confirm.

Amended Comment: Based on conference call [with Regional Water Board staff] March 2, 2020, we understand that the monitoring locations will be suggested/determined by the operators/designer and approved by the board, so thus our concern, was that these locations were predetermined and were outside of the boundaries of the treatment plant. This NOT, being the case, we withdraw this comment #2.

Response SPG2: The current monitoring locations listed in Table E-1 of the Proposed Permit are shown below.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	Influent wastewater prior to treatment and following all significant input of waste to the treatment system and consisting of wastewater from the collection system.
	INT-001	Location for monitoring ultraviolet light (UV) radiation dose and UV transmittance of the UV disinfection system.
001	EFF-001	A location where representative samples of the treated wastewater to be discharged to the Pacific Ocean at Discharge Point 001 can be collected at a point after treatment, including UV disinfection, and prior to manhole 5 and commingling with wastewater discharges from other facilities in the Humboldt Bay Harbor District's outfall line.
	BIO-001	A representative sample of the sludge or biosolids generated when removed for disposal.

The monitoring locations are kept general because the Permittee has yet to construct the Facility and representative monitoring locations will be established upon final construction of the Facility. INF-001 shall be established where all collection system lines enter the headworks of the Facility to accurately characterize the strength of the influent entering the Facility. EFF-001 shall be a location where representative samples can be taken after all treatment process have occurred and prior to discharge to manhole 5.

Comment SPG2 has been withdrawn by the Samoa Pacific Group. No changes were made to the Draft Permit in response to this comment.

Comment SPG3: There are numerous references to the Ocean Plan and Receiving Water Limitations monitoring, reporting and ongoing studies and monitoring. Section V. Page 9. We believe this entire section is appropriate for the Harbor District, but not the Samoa Facility. There are references that there is a combined effluent at SM#5 from other sources and that the Peninsula CSD facility (Samoa WWTF), will "participate" in some of the studies etc. We request that any and all references to the Ocean Plan as they pertain to monitoring and reporting requirements to the Samoa Facility be modified at to placing the responsibility of monitoring and reporting with the Harbor District, and that ALL the Samoa requirements be confined specifically to their effluent quality and quantity delivered to SM#5 which would be monitored and reported within the confines of the WWTP site prior to discharge to the pump station which transports treated effluent to the delivery point to the Harbor District.

Amended Comment: Stated within the previous comments, it was clarified that the effluent produced by the Samoa Facility will be monitored, regulated and tested within the WWTP boundaries at locations to be determined, so the Peninsula CSD and Samoa Pacific Group will not be tasked with the measurement and monitoring of any combined effluent. That notwithstanding, it's also understood that the Harbor District will be conducting monitoring of the outfall diffuser effluent under a separate permit, and that the Peninsula CSD anticipates participating their "fair share" towards the cost or as will

be determined by a lease agreement between the Harbor District and the Pennsula CSD.

Response SPG3: Receiving Water Limitations are established in all NPDES permits to protect the beneficial uses of the receiving water that accepts treated effluent. CWA Section 303 requires states to adopt water quality standards where they are necessary to protect beneficial uses. The Proposed Permit contains receiving water limitations for discharges to the Pacific Ocean based on the Ocean Plan numeric and narrative water quality objectives. The Permittees are required to monitor receiving waters to determine compliance with the Ocean Plan water guality objectives. Additionally, the Proposed Permit requires the Permittees to conduct a Biological Survey to determine the level of impact of the discharge on the biological community in the proximity of the Ocean Outfall. This survey, in addition to other receiving water monitoring, may be performed in cooperation with the Humboldt Bay Harbor District and other dischargers who are discharging to the Pacific Ocean via the Ocean Outfall. The Permittees are required to conduct receiving water monitoring and report results to the Regional Water Board. Humboldt Bay Harbor District, the Permittees, and other Ocean Outfall dischargers may enter into an agreement to share the costs associated with receiving water monitoring and reporting requirements.

No changes were made to the Draft Permit in response to this comment.

Comment SPG4: Page 18 5b. Source Control and Pre Treatment Provisions - The Samoa facility is not authorized to accept any outside effluent. This is an annual report required and is an expense and requirement that, at this time, does not add to protecting the environment. We request this section be modified to state that "if and when" the system receives any outside or industrial or commercial users, that it will implement said regulations, and eliminate the annual reporting until said users connect to the system. Additionally, it's likely that the Peninsula CSD will require such discharges to its influent to pretreat and monitor prior to allowing connection to the treatment plant and in that case, a modified reporting could be supplied on a case by case basis as a "pass through" from the discharger.

Amended Comment: It's our understanding that this "annual report" will be to report there is simply no outside effluent entering the facility until such a time that the Peninsula CSD may allow some degree of outside effluent. However, if and when this happens the CSD will have influent requirements by internal ordinance such that any outside effluent does not "upset" the treatment plant. At that time the district would work with the Water Board on the additional mitigation and monitoring, and acknowledges the need for an annual report. With this understanding, we would request comment #4 be withdrawn.

Response SPG4: Source control and pretreatment requirements are established in the Proposed Permit to prevent treatment process upsets, interference and pass through that could result from discharges of toxic materials from industries to the collection system. This is standard language established for minor NDPES facilities that do not meet the five million gallons per day threshold for a robust pretreatment program. This

language is included for minor dischargers to ensure that discharge to the Facility complies with the <u>40 CFR 403 General Pretreatment Requirements for Existing and</u> <u>New Sources of Pollutants</u>. The Permittees must comply with 40 CFR 403 requirements if it opts to accept industrial wastes into the Facility. Section VI.C.5.b of the Proposed Permit have been amended to ensure that the Permittees notify the Regional Water Board prior to acceptance of any industrial waste discharges into the Facility. Additionally, the Permittees must submit a pretreatment program for Regional Water Board review and approval prior to accepting any industrial waste discharges (see California Coastal Commission Comments Section, Response 4 for amended language).

Comment SPG4 has been withdrawn by the Samoa Pacific Group. No changes were made to the Draft Permit in response to this comment.

Comment SPG5: Given the discharge at full buildout is (.13%) of the 40 MGD, is there any way to provide some sort of "dilution credit" to these effluent limits, reporting and monitoring requirements?

Amended Comment: We understand from our conversation that dilution credit cannot be given for technology based treatment.

Response SPG5: The Facility effluent is required to meet technology-based effluent limitations. A dilution credit cannot be granted to a discharge in the calculation of a technology-based effluent limitation but may be granted to a discharge in the calculation of a water quality-based effluent limitation. The amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation. The amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation. The amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation is determined through conducting a mixing zone study or modeling of the discharge and receiving water. The Proposed Permit currently has a dilution of 115:1. The amount of dilution provided may be updated in subsequent permits based on new information.

Water quality-based effluent limitations must be established for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard. The need to establish water quality-based effluent limitations will be determined based on the results of a reasonable potential analysis using discharge data collected during this permit term. Thus, water-quality based effluent limitations will not be established if at all until the next permit term.

No changes were made to the Draft Permit in response to this comment.

Comment SPG6: Page E3 F. Discharge Monitoring Report Quality Assurance - We request this be removed from this permit as we believe it would be completed by the Harbor District.

Amended Comment: We understand this to be the standard monthly reporting requirements, please withdraw comment # 6.

Response SPG6: In accordance with Section 308 of the Clean Water Act, U.S. EPA requires all major and select minor NPDES facilities to participate in the DMR-QA Study

Program, which evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits.

The Proposed Permit provides the Permittees the option to submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or contract laboratories in lieu of analyzing a DMR-QA sample as part of the DMR-QA Study.

Comment SPG6 has been withdrawn by the Samoa Pacific Group. No changes were made to the Draft Permit in response to this comment.

Comment SPG7: Table E-1. References EFF-001 and places it at the SM#5, where there is a co-mingling of effluent from other sources. We request that EFF-001 be located at the WWTF on site and only include monitoring and reporting of the Samoa treated effluent.

Amended Comment: Based on our conference call, we understand that EFF-001 will be determined by the designer and operators and will monitor only effluent produced directly from the Peninsula CSD WWTP. With this understanding please withdraw comment #7.

Response SPG7: As stated in response 2, EFF-001 is a representative sample of the Permittees' effluent after all treatment processes and prior to discharge into manhole 5.

Comment SPG7 has been withdrawn by the Samoa Pacific Group. No changes were made to the Draft Permit in response to this comment.

Comment SPG8: Table E-2. Requests 24-hour composite samples for BOD an TSS. We request this be modified to single event grab samples, as this places an undue and additional burden on the small facility for O&M. Perhaps the dilution credit could apply here.

Amended Comment: We understand for a technology-based system this requirement shall remain.

Response SPG8: Composite sampling is required for BOD and TSS in the Proposed Permit. The Permittees are required to conduct composite sampling to ensure that a sample representative of the effluent can be collected to determine compliance with technology-based effluent limitations. A single grab sample is unreliable as a representative sample of a waste stream because it only represents a single point in time, potentially missing significant discharge events or measuring a momentary effluent condition that is not representative of the waste stream.

No changes were made to the Draft Permit in response to this comment.

Comment SPG9: Table E-3. References the same composite samples for effluent as above, and we request it be modified to be a grab sample. Table E-3 also has monitoring of Ocean Plan Table Pollutants and Chronic Toxicity. We request these be

removed as we believe these to be Harbor District responsibility coupled with our dilution ratio consideration.

Amended Comment: We understand for a technology-based system this requirement shall remain.

Response SPG9: The Permittees are required to conduct composite sampling to ensure that a sample representative of the effluent can be collected to determine compliance with water quality standards for toxicity and priority pollutants. See Response SPG8.

No changes were made to the Draft Permit in response to this comment.

Comment SPG10: Section V. Attachment E - Whole Effluent Toxicity Testing - We request this entire section be removed from the permit as it relates to a discharge into the ocean, and would be administered by the owner of the outfall line, the Harbor District, and that Samoa Facility is contracting with the Harbor District and responsible for delivery of an effluent quality to SM#5. This requirement placed on the Samoa Facility when its contribution is 0.13% is disproportionate to its contribution.

Amended Comment: Based on conference call, it's understood that the Peninsula CSD will participate at some level as defined by the harbor district lease, more than likely through the payment of lease fees to be a participant with the Whole Effluent Toxicity Testing requirement, or as may otherwise be agreed to and defined by both parties.

Response SPG10: See Response SPG3, above.

No changes were made to the Draft Permit in response to this comment.

Comment SPG11: Section IX. Attachment E - Other Monitoring Requirements - We request that "continuous monitoring of the UV transmittance" either be removed from these requirements, and that the district be allowed to provide evidence that a proper dose is delivered, and provide weekly transmittance data.

Amended Comment: We understand for a technology-based system this requirement shall remain.

Response SPG11: Continuous monitoring of UV transmittance ensures that the UV design is operated at the level that will ensure compliance with bacteria effluent limitations. Intermittent monitoring will not be able to provide assurance that the UV disinfection system is operating effectively at all times.

No changes were made to the Draft Permit in response to this comment.

Comment SPG12: Section IX. Attachment E - Other Monitoring Requirements - B. Biological Survey - We request this be eliminated from the permit as we believe this is a Harbor District responsibility for reasons previously stated. Amended Comment: Based on conference call, it's understood that the Peninsula CSD will participate at some level as defined by the harbor district lease, more than likely through the payment of lease fees to be a participant with the Biological Survey requirement, or as may otherwise be agreed to and defined by both parties.

Response SPG12: See Response SPG3, above.

No changes were made to the Draft Permit in response to this comment.

Comment SPG13: Section X. Attachment E, D. Table E-5, Reporting Requirements -We request this table and the required reports be removed from this permit except for the Disaster Preparedness Report and the Adequate Capacity Technical Report. We request this be eliminated from the permit as we believe this is a Harbor District responsibility for reasons previously stated.

Amended Comment: Based on our understanding, this table is a federal requirement, however many of these items may or may not apply depending on the Chronic Toxicity of effluent. The requirement of reporting within this table will remain.

Response SPG13: See Response 3. Table E-5 in Attachment E is a summary of all reports required in the Proposed Permit and imposes no additional requirements upon the Permittees.

No changes were made to the Draft Permit in response to this comment.

Comment SPG14: Section X. Attachment E 2. Annual Report - We request this annual report be eliminated in lieu of a requirement that updates to the facility management, contacts, etc. will be included already as a part of the monthly reporting requirement and those changes can easily be tracked elsewhere under other reporting activities.

Amended Comment: Based on our understanding from the conf. call we understand this to be a "standardized document" that gets completed and filed online and it will remain. We request comment #14 be withdrawn.

Response SPG14: Section X.2. of the MRP requires the submittal of an Annual Report that summarizes the monitoring data and disposal records from the previous year, includes a discussion on the compliance or non-compliance with effluent limitations, documents names and responsibilities of all persons employed, includes contact information for the Facility and a statement certifying when monitoring instruments were last calibrated.

In addition, the Annual Report provides an opportunity for the Permittees to summarize and present their compliance for the year, to identify changes in personnel for the year, and to provide additional information that is not required in the monthly self-monitoring report submittals, including but not limited to Source Control Activity reporting, Sludge Handling and Disposal reporting and storm water reporting. Comment SPG14 has been withdrawn by the Samoa Pacific Group. No changes were made to the Draft Permit in response to this comment.

Comment SPG15: Attachment F Facility Description - states that the Samoa School is not part of this permit, however, the developers have been requested to attach the school to the new system and we were planning on this activity as part of Phase I. It can be eliminated if the Water Board wants to confirm that it cannot be a part of this permit. Please Confirm.

Amended Comment: This connection to be placed in future phases.

Response SPG15: Section F.II of the Proposed Permit has been modified as follows:

"The Samoa school wastewater system treatment is an individual onsite wastewater treatment system (OWTS) and is independent of the town, is not covered by this Permit will be connected to the new wastewater treatment plant during Phase One of the upgrade project."

Comment SPG16: Also, facility description references the Eastern System discharge into the percolation basin as being located in the "mud flats." We believe this in inaccurate. The percolation basin is not located in the mud flats, rather it's near the ridge top and discharges to underlying sand and groundwater.

Amended Comment: Reference was duly noted.

Response SPG16: Section F.II. of the Proposed Permit has been modified as follows:

"The pond is followed by a percolation basin located <u>near the ridge top in mud flats</u> on the western edge of Humboldt Bay, just north of the Western side of the Samoa Bridge."

Comment SPG17: Attachment F A. Description of Wastewater and Biosolids Treatment and Controls, 1. Describes the treatment elements included in the treatment plant. These have been updated since the decision was made to discharge effluent to the Ocean Outfall. See Attached Updated Site Plan Diagram which describes the treatment plant.

Amended Comment: Referenced the attached site plan and will be forwarding updated WWTP design with this email, along with a construction schedule.

Response SPG17: The referenced email in comment SPG17 above is the follow-up email that SPG sent on March 3, 2020. SPG submitted a new Facility design in their original comment letter on February 7, 2020. The new design was inadvertently overlooked by Regional Water Board staff until the revised comment letter was submitted on March 3, 2020, which is the email referred to in comment SPG17 above.

Accordingly, the Facility Description in section II.A.1 of the Fact Sheet has been modified to include a revised Facility design description (see below in underline). In addition, Attachment C (Flow Schematic) was updated to reflect recent changes to the

Facility design. These modifications to the Facility design description do not result in any necessary revisions to the requirements of the Proposed Permit.

On March 3, 2020, the Permittees submitted a new Facility design that no longer includes the equalization pond and the pre-anoxic pond. To provide flow equalization for the new Facility, five 50,000-gallon fiberglass settling tanks are to be installed and operated in series. Wastewater treatment provided by the pre-anoxic pond specified in the original design will now occur in two 50,000-gallon pre-anoxic tanks, where primary treated effluent will be blended with recirculated filtered effluent from the AX-Max filtration units to provide denitrification. Orenco Bio-tube filters will be attached to the outlets of the settling tanks to further remove solids prior to wastewater entering the preanoxic tanks.

<u>Secondary treatment is performed using Orenco AX-Max textile filtration units as</u> proposed in the original design. 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.

Comment SPG18: Attachment F B. Discharge Points and Receiving Waters, refers to Discharge Point 001 being in the ocean outfall pipeline diffuser. We request the Samoa Discharge point 001 be conterminous with our requested EFF-001 to be located at the outfall leaving the Samoa WWTF, prior to entering the Harbor District SM#5, for the reasons stated earlier herein.

Amended Comment: Confirmed that monitoring points to be determined on the WWTP site.

Response SPG18: The final discharge location, to surface waters (Pacific Ocean), is the Ocean Outfall, which is named for identification purposes in the Proposed Permit as Discharge Point 001. EFF-001 is the monitoring location that the Permittees will select at a later date to determine compliance with the Proposed Permit. The Section F.II.B. of the Proposed Permit states that the outfall is owned by the Humboldt Bay Harbor District and that the Permittees have a lease agreement to discharge via the Ocean Outfall.

No changes have been made to the Proposed Permit based on Comment SPG18.

Comment SPG19: Attachment F page F-15 - references a more stringent requirement of percent removal 85% vs 75% that's required by the Ocean Plan. Due to the dilution ratio we request to be held to the 75% removal percent.

Response SPG19: While Table 4 of the Ocean Plan establishes a 75 percent removal of suspended solids from the influent stream before discharge wastewaters to the ocean, the federal regulations 40 CFR Part 133.102 establishes secondary treatment requirements. 85 percent is a federal standard required for all secondary treatment systems. Since the Facility is a new wastewater treatment plant, it should be designed to meet the minimum secondary treatment standards established in 40 CFR Part 133.102.

No changes were made to the Proposed Permit in response to Comment SPG19.

Comment SPG20: Attachment F pages F-15 to F-39 - mostly deal with the receiving water being the Ocean and requirements, studies, reporting, monitoring and testing related to discharge from the ocean outfall diffuser. We requested earlier and several times herein for our discharge location NOT to be considered the diffuser or even SM#5, reasons already stated. If granted this modification to the permit, then these pages would no longer apply to the Samoa Facility, and would be applicable to the ownership, and maintenance of the outfall line.

Amended Comment: From conference call we understand that any and all mitigation and monitoring and testing will be limited to the WWTP site facility and influent and effluent related only to this particular treatment plant. No monitoring of combined sewer effluent to be done by the Peninsula CSD.

Response SPG20: Refer to responses SPG1, SPG3, SPG5 and SPG10 above for further explanations on why compliance with effluent limitations and monitoring are required by the Permittees.

No changes have been made to the Proposed Permit in response to Comment SPG20.

Samoa Peninsula Community Services District (PCSD) Comments

Comment PCSD1: Page 1, Table 1 Permittee Information & Table F-1 Facility Information.

It would be preferable to have the Peninsula CSD as the sole permittee for the Town of Samoa Wastewater Treatment Facility (WWTF); permit information/contacts to be updated accordingly. Also, a Peninsula CSD representative should be identified in Table F-1 as 'Authorized person to Sign and Submit Reports.'

Response PCSD1: The Regional Water Board recognizes that the Peninsula Community Services District (PCSD) will be the owner and operator of the new treatment facility for the Town of Samoa. However, Samoa Pacific Group (SPG) is also responsible for proper operation of the facility. SPG is constructing the new facility in phases and will be adding additional connections throughout the life of the Proposed Permit. As SPG continues to exercise control over the facility and its operation, Regional Water Board staff believe that it is important to have both entities as copermittees for this permit term.

While it is appropriate to name SPG as a co-permittee in this permit term, this determination can be reevaluated during the next permit term based on whether SPG's ongoing responsibilities for the facility and discharges changes. Table F-1 has been amended to add Troy Nicolini as an authorized person to sign and submit reports and Daniel Unea as the new wastewater treatment plant operator.

Comment PCSD2: Section VI.C.5.c.vii. Special Provisions, Page 21.

Solids and sludge treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion and prevent drainage from the treatment and storage site. Adequate protection is defined as protection from a design storm with a 100-year recurrence interval and 24-hour duration.

How will condition compliance be determined? Please define adequate protection with specifics.

Response PCSD2: The Facility will not treat or store sludge on site. The Permittees plans to have sludge removed from the Facility by Steve's Septic Service and disposed of at Steve's Septic Service site.

Compliance with Section VI.C.5.c.vii of the Proposed Permit will be determined based on the level of sludge treatment and design and management of the storage sites such that runoff that discharges to surface waters does not negatively impacts designated beneficial uses. Adequate protection is the ability to contain all solids and sludge leachate on-site and ensuring that leachate does not discharge from the Facility during a 100-year recurrence interval and 24-hour duration rain event.

No changes were made to the Draft Permit in response to this comment.

Comment PCSD3: Section VI.C.7. Compliance Schedule Task 7, Page 23

Sufficient emergency capacity and/or containment of effluent, emergency energy supply and backup pumping capacity to continue to operate the Facility for a minimum of 72 hours in the event of severed outside power.

Please confirm an independently powered on-site generator will suffice for backup pumping capacity.

Response PCSD3: An on-site generator is sufficient if it can provide enough power to the Facility to ensure continued operation of the Facility for a minimum of 72 hours of severed outside power. An independently powered generator can be used to satisfy this requirement.

No changes were made to the Draft Permit in response to this comment.

Comment PCSD4: Section IV.C.5. of the Fact Sheet Test of Significant Toxicity

This Order requires the Permittees to conduct a screening test using at least one vertebrate, invertebrate, and plant species. After the screening test is completed, monitoring can be reduced to the most sensitive species.

Identify or give examples for all three: vertebrate, invertebrate and plant species.

Response PCSD4: Section V.A.4. of the MRP lists the test species for chronic marine testing. They include the topsmelt, the purple urchin or sand dollar, and the giant kelp.

No changes were made to the Draft Permit in response to this comment.

Comment PCSD5: Section IV.D.2.a. of the Fact Sheet, Page F-27

This Order may be reopened to include effluent limitations for ammonia and any parameters that indicate reasonable potential to cause or contribute to an exceedance of a water quality objective.

Please remove "any," define parameters more specifically and give examples.

Response PCSD5: A parameter is any constituent that is tested for during the permit term that shows a reasonable potential to exceed a water quality objective set forth in section II of the Ocean Plan. This is typically done during permit renewal when reasonable potential analysis is performed with monitoring data collected during the permit term to determine if any new WQBELs need to be established. Consequently, the word "any" was not removed since depending on the monitoring results, effluent limitations may be established for any monitored constituent.

No changes were made to the Draft Permit in response to this comment.

Comment PCSD6: Section IV.B.2.a of the Fact Sheet, Page F-32

This Order requires the Permittees to submit a Disaster Preparedness Assessment Report and Action Plan. The Permittees may complete the Disaster Preparedness Assessment Report and Action Plan as part of a collaborative effort with DG Fairhaven Power, LLC and any additional dischargers that utilize the ocean outfall.

Request this provision be removed as only effluent treated to RWQCB standards will be discharged via the Peninsula CSD lease agreement with the Humboldt Bay Harbor Recreation and Conservation District.

Response PCSD6: The Disaster Preparedness Assessment Report and Action Plan (Plan) is a requirement for all new and reissued North Coast Regional Water Board NPDES permits. The Plan is required to ensure that wastewater operations are not disturbed by natural disasters, extreme weather events, sea level rise and shifting precipitation patterns.

The Plan is also important to ensure standard operating procedures (SOPs) for Facility staff are ready in the event of an emergency situation (i.e., Fire, Flood, Earthquake, loss of power). This will ensure that the Facility will be able to provide continuous operation.

Additionally, with the location of the Facility close to the Pacific Ocean, the analysis of Sea Level Rise (SLR) is needed to ensure that the Facility will be able to operate under changing climate conditions including but not limited to sea level rise. See section VI.B.2.a of the Fact Sheet in the Proposed Permit for a more detailed explanation.

No changes were made to the Draft Permit in response to this comment.

California Coastal Commission (CCC) Comments

Comment CCC1: MRP requirements (page 13 and including Attachment E).

Consider whether the permit should require monitoring and reporting for the functionality and structural integrity of the ocean outfall line. We understand that the ocean outfall line is owned by an entity that is separate and apart from the permit applicant and it's unclear if such requirements are included in the draft permit. To adequately protect water quality, marine resources, and commercial and recreational uses of the marine environment, the Regional Water Board should include a mechanism to ensure that the discharge for which it is authorizing WDRs under this permit properly diffuses and discharges through the ocean outfall line as intended.

Response CCC1: Regional Water Board staff agrees that there is a need to evaluate the structural integrity and functionality of the ocean outfall. It is the intent of the Regional Water Board to establish separate monitoring and reporting requirements through issuance of an order pursuant to California Water Code Section 13383 and 13267 to the Humboldt Bay Harbor District (HBHD), owner of the Ocean Outfall. The order will require HBHD to regularly inspect the Ocean Outfall to ensure the integrity and dilution of the discharge pipe and the protection of Beneficial Uses in the area surrounding the discharge.

No changes were made to the Draft Permit in response to this comment.

Comment CCC2: Disaster Preparedness Assessment Report and Action Plan (pages 13-14).

As mentioned above, we appreciate that the proposed draft permit addresses some of the Local Coastal Plan (LCP)-specified requirements for the new WWTF, such as the requirements to address [Sea Level Rise] SLR and to provide sufficient emergency capacity and/or containment of effluent, emergency energy supply, and backup pumping capacity to operate the WWTF for a minimum of 72 hours in the event of severed outside power. The SLR requirements of the LCP for the Town of Samoa, which were first certified by the Commission in 2011, specify that the WWTF must be sited and designed to function effectively considering at least 5.3 feet of SLR. At that

time, the best available science on SLR projected that 5.3 feet was the extreme SLR scenario predicted for the year 2100¹.

The State of California has since undertaken additional significant research to understand how much SLR to expect over this century and to anticipate the likely impacts of such SLR. In 2017, a working group of the Ocean Protection Council's (OPC) Science Advisory Team released "Rising Seas in California: An Update on Sea-Level Rise Science." This report synthesized recent evolving research on SLR science, including a discussion of probabilistic SLR projections as well as the potential for rapid ice loss leading to extreme SLR. This science synthesis was integrated into the OPC's "State of California Sea-Level Rise Guidance 2018 Update" (State SLR Guidance). This guidance document provides statewide recommendations for state agencies and other stakeholders to follow when analyzing SLR in association with projects. Notably, the guidance provides a set of regional projections recommended for use when assessing potential SLR vulnerabilities for a project. Taken together, the Rising Seas report and State SLR Guidance account for the current best available science on SLR for the State of California.

The State SLR Guidance provides SLR projections for 12 tide gauges in the state and recommends using the projections for the gauge closest to the project site. In this case, the North Spit tide gauge at Humboldt Bay is the applicable gauge. The amount of SLR projected at the North Spit tide gauge for the year 2100 ranges from 4.1 feet (under the "low-risk aversion" scenario) to 7.6 feet (under the "medium high risk aversion" scenario) to 10.9 feet [under the "extreme risk aversion" (H++) scenario²]. Thus, the current best available science on SLR predicts significantly higher SLR scenarios that predicted (e.g., 10.9 feet by 2100 rather than 5.3 feet as required by the LCP).

The statewide guidance advocates for a precautionary approach to SLR adaptation planning, especially for development (such as major critical infrastructure, such as a WWTF) that has a relatively low capacity to adapt to risks of tidal flooding and where the consequences of the development being subjected to tidal flooding in the future would be severe. Therefore, the Regional Water Board should consider whether it is appropriate to require the Disaster Preparedness Assessment Report and Action Plan to address SLR consistent with the statewide guidance on SLR, which goes beyond the LCP requirements, as discussed above.

¹ Including, but not limited to, the 2007 4th Assessment Report by the Intergovernmental Panel on Climate Change (IPCC), the California Energy Commission's Public Interest Energy Research Climate Change Research Program, and the State Coastal Conservancy interim SLR rates developed pursuant to Executive Order S-13-08.

² The OPC projections are based on different scenarios related to future emissions and concentrations of greenhouse gases, aerosols, and other climate drivers. As recommended by the OPC guidance, for the year 2100, the "low risk aversion" scenario is derived from taking the upper range of the 66% probability range for "RCP-8.5," which is the "Representative Concentration Pathway" that assumes there will be no significant efforts to reduce emissions globally. The "medium-high risk aversion" projection is derived from the upper range of the 0.5% probability range for RCP-8.5. The "extreme risk aversion" projection is based on presumed ice sheet loss in Greenland and the Antarctic.

Response CCC2: Regional Water Board staff appreciate CCC's comments and your agency's expertise with regard to sea level rise (SLR). The Draft Permit includes the requirement to analyze the effects of 5.3 feet of SLR during the permit term. This coincides with the 5.1 foot of SLR high emissions 1 in 20 chance from the OPC document mentioned above. The 5.1 foot (5% probability) of SLR in 2100 is well after the life cycle of the proposed wastewater treatment plant (WWTP). A typical design life of infrastructure for a WWTP is approximately 40 years. According to the Table on page 48 of the Rising Seas in California: An Update on Sea-Level Rise Science the 5% probability SLR in 2060 is projected to be 2.2 feet.

The Facility is currently being constructed on a site that protects the WWTP from the projected 2.2 feet of SLR. The Permittees will analyze the effects of at least 5.3 feet of SLR on the infrastructure during the Proposed Permit term. Discussions of SLR adaptation and options for eventual pull back or abandonment of the Facility will continue during the Proposed Permit term as well as the upcoming permit terms.

No changes were made to the Draft Permit in response to this comment.

Comment CCC3: Construction, Operation, and Maintenance Specifications (pages 16-18).

a. If appropriate, add requirements specifying minimum qualifications for the staff that will be authorized to operate the WWTF.

b. This section requires submittal of an O&M Manual to the Regional Water Board by April 1, 2021. As we understand it, the specified date may occur after the date that the WWTF is actually operational and in service. We suggest requiring submittal and approval of the O&M prior to allowing use/operation of the facility so that a manual is in place for the full duration of the facility operation.

c. As discussed above in #1, the ocean outfall line is owned by an entity that is separate and apart from the permit applicant. However, it's important that the outfall line is properly inspected and maintained to ensure adequate protection of water quality, marine resources, and commercial and recreational uses of the marine environment from potential impacts of the discharge for which the Regional Water Board is authorizing WDRs under this permit. We therefore ask the Regional Water Board to consider whether the permit should require standards for maintenance of the outfall line within its scope.

Response CCC3:

a. Section VI.C.5.d. of the Proposed Permit specifies operator certification requirements. Specifically, the section states:

"Supervisors and operators of municipal wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with California Code of Regulations (CCR), title 23, section 3680."

The State Water Board's <u>Office of Operator Certification</u> will approve any licensing of operators at the Facility. The Facility will require a Chief Plant Operator (CPO) as well as a Designated Operator in Charge (DOIC) as required by the Office of Operator Certification.

No changes were made to the Draft Permit in response to this comment.

b. The Operation and Maintenance (O&M) manual will be required to be submitted to the Regional Water Board 30 days prior to discharge from the new Facility.

Section VI.C.4.b of the Proposed Permit has been modified as follows, "The Permittees shall submit the O&M Manual to the Regional Water Board April **1, 2021 30 days prior to first discharge**, and update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility."

c. See Response CCC1. Future outfall monitoring for HBHD will require, at a minimum, that all ports for the diffuser be clear of sand and operating efficiently, all zinc anodes be inspected and replaced as needed and a schedule to evaluate the integrity of the outfall pipe not just the diffuser ports.

No changes were made to the Draft Permit in response to this comment.

Comment CCC4: Source Control and Pretreatment Provisions (pages 19 – 20)

This section appears to allow for the discharge of industrial wastes to the WWTF, subject to certain requirements that are further specified. As we understand it, at this time there are no industrial operations within the STMP area that would be discharging to the facility, at least not in the near-term. To ensure that the WDRs will not inadvertently be exceeded by the addition of non-pre-treated industrial waste to the WWTF, consider whether the permit should outright prohibit the discharge of industrial waste to the WWTF without pre-treatment or without further review and approval of the Regional Water Board.

Response CCC4: Section VI.C.5.b (Source Control and Pretreatment Provisions) of the Proposed Permit has been revised to require the Permittees to notify the Regional Water Board prior to accepting industrial waste into the Facility. Additionally, this section has been revised to require the Permittees to submit an amended ROWD and pretreatment program for Regional Water Board review and approval prior to accepting industrial wastes that trigger pretreatment requirements. The Proposed Permit includes amended requirements for the Permittees to notify the Regional Water Board in the event that a categorical industrial user (CIU) or significant industrial user (SIU) begins discharging to the Facility and to submit a pretreatment program for Regional Water Board review and approval. Specifically, Section VI.C.5.b.ii has been amended to state:

- ii. In the event that the Permittees identifies industrial wastes subject to regulation under the NPDES Pretreatment Program being discharged to the wastewater treatment plant, or the Regional Water Board or its Executive Officer determines that circumstances warrant pretreatment requirements in order to prevent interference [40 C.F.R. §403.3(j)] with the wastewater treatment facility or Pass Through [40 C.F.R. §403.3(n)], then:
 - (a) The Permittees shall notify the Regional Water Board within 30 60 days prior after there are to allowing industrial waste discharges that trigger the pretreatment requirements to enter the Facility;
 - (b) The Permittees shall submit a revised ROWD and the pretreatment program in accordance with for the Regional Water Board's review and approval as soon as possible, <u>but</u> no less than **30 days** prior to accepting industrial waste discharges <u>but not more than one year after the</u> <u>Permittees' notification to the Regional Water Board of the</u> need for pretreatment requirements being triggered;
 - (c) The Permittees shall enforce the federal categorical pretreatment standards on all categorical industrial users (CIUs);
 - (d) The Permittees shall notify each CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 C.F.R. part 400-699). The Permittees may develop more stringent, technology-based local limits if it can show cause; and
 - (e) The Permittees shall notify the Regional Water Board if any CIU violates its discharge effluent limits.

Comment CCC5: Compliance Schedules (pages 22-23).

a. Task 1 requires the facility to be incorporated into the Peninsula Community Serviced District prior to commencement of the first discharge. Does "first discharge" refer to discharge to the ocean outfall line or discharge to the WWTF? We suggest a different and more specific due date may be appropriate, such as "Within 180 days and before first discharge to WWTF commences" or similar language. b. Task 4 requires existing private septic systems to be removed or remediated and otherwise properly abandoned within 180 days of connection of the subject residences to the Facility. Does this task include the existing primary system (pond)? What are the referenced Regional Water Board requirements? Should submittal of a Restoration Plan/Remediation Plan be required for the existing pond system? To the extent Task 4 doesn't clearly address/specify all requirements and due dates for all existing systems and facilities to be replaced by the new WWTF, we recommend adding task descriptions and due dates to address the appropriate removal-remediation-abandonment requirements of all existing facilities and systems.

c. Consider whether it's appropriate to add a task and due dates related to the phasing of the WWTF as the facility expands with the subdivision/ development of the town and with the addition of commercial and industrial wastes and pre-treatment discharges to be added to the system over time.

Response CCC5:

a. "First discharge" refers to discharge of the Facility effluent to the Ocean Outfall. Based on additional information provided by the Peninsula Community Services District (PCSD) via email on March 27, 2020, Task 1 of the compliance schedule in the Proposed Permit has been amended to require that the PCSD and SPG enter into an asset transfer and transition services agreement to transfer assets to the newly formed PCSD before the Facility can discharge to the Ocean Outfall. The Permittees shall not discharge treated effluent from the Facility to manhole 5 until the asset transfer and transition services agreement is signed by SPG and the PCSD.

The Proposed Permit will not be adopted unless the formation of PCSD is approved by the Local Agency Formation Commission (LAFCO).

LAFCO approved the reorganization of the Samoa Peninsula Fire Protection District into the Peninsula Community Services District (PCSD) in 2017. The PCSD was formed on March 31, 2020. Therefore, no changes were made to the Draft Permit in response to this comment.

- b.
- 1. The current primary system, which consists of an equalization and treatment pond that is proposed to be decommissioned and removed.
- 2. The primary treatment system of the new Facility will not include the pond. It will consist of five 50,000-gallon equalization and settling tanks.
- 3. The requirement requiring abandonment of the OWTS is located in section VI.C.4.d of the Proposed Permit (page 18).
- 4. The requirement for the PCSD to submit and implement a pond restoration plan, if the pond is determined to be Waters of the US or

Waters of the State, is located in section VI.C.4.d of the Propose Permit (page 18).

The following language (shown in underline) has been inserted into section VI.C.4.d (page 18) of the Proposed Permit in response to Comment 5.b from the California Coastal Commission:

Old Facility Decommission Plan and Report. The Permittees shall submit a work plan to the Regional Water Board by June 1, 2020, that includes the schedule and details for the decommissioning all elements of the previous facility. The work plan shall also evaluate and determine if any elements of the existing facility, such as the existing equalization and treatment ponds, are State or Federal jurisdictional waters and identity all necessary permits regulatory requirements prior to any impact occurring. The work plan must be approved by the Regional Board Executive Officer prior to any decommissioning work. A final report shall be submitted to the Regional Water Board upon completion of the decommissioning and removal of the old facility. The report shall provide detailed information on how each portion of the old facility was decommissioned, the date each component was decommissioned, and the results of any restoration performed on the old facility.

c. The Proposed Permit has been drafted for full build-out of phase III of the Facility. The Permittee is planning to begin construction of phase II in the next three years, but it will be market driven and is difficult to set a date for completion. Phase III is likely to be completed during the next permit term.

No changes were made to the Draft Permit in response to this comment.

Kent Sawatzky (KS) Comments

Comment KS1: The greatest concern that many of us have is the status of the Peninsula Community Services District. As I understand it, it is required to be in place "before first discharge commences". We would recommend the Peninsula Community Services District be in place prior to the issuance of any permits within your jurisdiction. (Please put the horse before the cart).

Response KS1: he formation of the PCSD was approved on March 31, 2020.

No changes were made to the Draft Permit in response to this comment.

Comment KS2: The Samoa Corporation should be required to pay into the District based upon the anticipated total buildout of the project. (Public perception is that the intent of Samoa Corporation is to build minimum units, a treatment system, split and sell the existing housing, and then cut and run, therefore leaving an infeasible district). As an alternative, some form of bond to enable funding the district may be considered.

Response KS2: The Financial Plan submitted on behalf of PCSD shows that PCSD will be able to operate on the revenue collected from its tax base.

No changes were made to the Draft Permit in response to this comment.

Humboldt Bay Harbor District (HBHD) Comments

Comment HBHD1: Section IV.A.1.c.i, Page 6 and Section VI.C.3.c.i.(a) of the Fact Sheet, Page F-20

Final Effluent Limitations for Enterococci. In Attachment F, Section IV.C.3.c.i(a), Page F-20, the facility's outfall is identified as being 650 feet offshore requiring implementation of Water Contact Standards including enterococci (applicable to discharges within 1,000 feet of the shoreline or the 30-foot depth contour, whichever is closer). The facility's outfall is located between 1.25 and 1.5 miles offshore at a depth of approximately 80 feet; a 0.25 mile-long diffuser is the discharge location at the end of the 1.5 mile-long outfall pipe. The discharge is, therefore, a minimum of 6,600 feet from the shoreline, well outside of the 1,000-foot buffer and below the 30-foot depth contour. **Comment: reference to the location of the outfall should be corrected and/or the requirement for the facility to meet water contact standards should be removed**.

Response HBHD1: Section IV.C.3.c.i.(a) of the Fact Sheet has been modified as follows:

"The Facility's outfall is located 650 feet <u>1.25 miles</u> offshore and public access to offshore areas surrounding the Facility's outfall is open and unrestricted."

Comment HBHD2: Section VI.C.2.a. Disaster Preparedness Assessment Report and Action Plan, Page 14

Final report due date is listed as 8/1/2023 whereas DG Fairhaven Order No. R1-2018-0013 requires submittal of a Climate Change Readiness Study Plan (containing a similar description) by 8/1/2022. The final paragraph of this section indicates that the Permittees may work together with DG Fairhaven and the Harbor District to prepare a Joint Disaster Preparedness Assessment Report and Action Plan. **Comment: The Harbor District requests that future joint effort due dates between multiple Permittees be coordinated on the same dates.**

Response HBHD2: Regional Water Board staff will work to ensure that future joint efforts be coordinated with the same due dates. It is difficult to line up due dates for some permits when they are drafted years apart and still allow all Permittees enough time to draft and/or coordinate reports.

No changes were made to the Draft Permit in response to this comment.

Comment HBHD3: Section IX.B. Biological Survey, Page E-11

Biological Survey. The Harbor District requests that the same statement from the last paragraph of Section VI.C.2.a (see previous comment) be added to the beginning of this section: "The Humboldt Bay Harbor District is pursuing a plan that would combine three separately permitted NPDES waste streams through the outfall at Discharge Point 001. Currently, the DG Fairhaven Power Facility is permitted to discharge wastewater through the same ocean outfall at Discharge Point 001."

Response HBHD3: Section IX.B of the MRP has been amended to add the recommended language below:

<u>The Humboldt Bay Harbor District is pursuing a plan that would combine three</u> <u>separately permitted NPDES waste streams through the outfall at Discharge Point 001.</u> <u>Currently, the DG Fairhaven Power Facility is permitted to discharge wastewater</u> <u>through the same ocean outfall at Discharge Point 001</u>.