



North Coast Regional Water Quality Control Board

ORDER No. R1-2014-0031

WDID No. 1B85017RHUM

DRAFT

WASTE DISCHARGE REQUIREMENTS
FOR
THE SAMOA PACIFIC GROUP, LLC
WASTEWATER TREATMENT FACILITY

HUMBOLDT COUNTY

The following Permittee is subject to waste discharge requirements as set forth in this Order:

Table 1. Permittee Information

Table with 2 columns: Permittee, Name of Facility, Facility Address. Row 1: Samoa Pacific Group, LLC; Row 2: Wastewater Treatment Facility; Row 3: 3 North Bay View Road, Samoa, CA 95564

The discharge by the Town of Samoa Wastewater Treatment Facility (WWTF) from the discharge point(s) identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location Information

Table with 5 columns: Discharge Point, Effluent Description, Discharge Point Latitude, Discharge Point Longitude, Receiving Water. Row 1: 001, Primary-treated wastewater discharged to an unlined impoundment followed by surface infiltration, 40.815092 N, 124.192146 W, Groundwater; Row 2: 002, Advanced secondary-treated and disinfected effluent discharged to subsurface infiltration, 40.814743 N, 124.189990 W, Groundwater

IT IS HEREBY ORDERED, that Order No. R1-2001-62 is rescinded upon the effective date of this Order except for enforcement purposes and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the Permittee shall comply with the requirements in this Order.

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on November 20, 2014.

14_0031_Samoa_WDR

Matthias St. John, Executive Officer

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I. FACILITY INFORMATION

The following Permittee is subject to waste discharge requirements as set forth in this Order:

Table 3. Facility Information

| | |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Permittee | Samoa Pacific Group, LLC |
| Name of Facility | Wastewater Treatment Facility |
| Facility Address | 3 North Bay View Road |
| | Samoa, CA 95564 |
| | Humboldt County |
| Facility Contact, Title, and Phone | Dan Johnson, Partner, 707.822.9000 |
| Mailing Address | 5251 Ericson Way, Arcata, CA 95521 |
| Type of Facility | Wastewater Treatment Facility (WWTF) |
| Facility Design Flow | Western System Average Dry Weather Flow: 7,500 gallons per day (gpd) Average Wet Weather Flow: n/a |
| | Eastern System Average Dry Weather Flow: 17,000 gallons per day Average Wet Weather Flow: 32,000 gallons per day |

II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

- A. Basis and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittee’s application for permit renewal, monitoring data submitted during the term of the Permittee’s previous Order, and other available information. The Fact Sheet (Attachment D) contains facility information, legal authorities, and rationale for Order requirements. Attachments A through D are hereby incorporated into this Order and constitute part of the Findings for this Order.

- B. Background and Facility Description.** The Town of Samoa (Town) is served by two disposal systems; an Eastern System serving 75 homes, the downtown retail area and the Samoa Cookhouse; and a Western System serving 25 homes. Prior to 1985, neither of the treatment and disposal systems was regulated by the Regional Water Board. In 1985, the Western System was upgraded from a pond disposal system to a septic tank and leach field disposal system and Order No. 85-40 was issued to Louisiana Pacific Corporation, the property owner. In 2001, the Regional Water Board issued Order No. R1-2001-62 to the new owner, Samoa Pacific Group, LLC that included both the Eastern and Western Systems. This was the first time that the Eastern System was permitted by the Regional Water Board.

The Eastern System consists of two bark filters atop large septic tanks for treatment. Effluent discharges to an unlined surface impoundment. From the impoundment, effluent discharges to a percolation/infiltration area.

On January 23, 2013 the Permittee submitted a Report of Waste Discharge (ROWD) to upgrade the existing disposal systems. The Permittee is proposing to subdivide and redevelop the Town in two main Phases. Phase 1 of the Master Plan calls for rehabilitating the existing homes and possibly building several new residences while Phase 2 calls for new homes as well as new commercial and industrial business parks. The ROWD states that the bark filters are inoperative and only the septic tanks are functioning, resulting in primary-treated wastewater being sent to an unlined pond for disposal.

This Order requires installation of a new WWTF. As part of the initial phase of construction/redevelopment, the existing Eastern WWTF will be abandoned and a new WWTF installed. The new WWTF will be constructed either: 1) according to the time schedule contained in this Order; 2) concurrent with rehabilitating the first group of existing homes, or; 3) prior to completing any new units.

The new WWTF will consist of septic tanks to remove solids, retrofitting the existing pond with a liner for use as an oxidation pond and equalization basin, followed by recirculating textile filters supplied by Orenco Systems, Inc., disinfection and disposal to land. The new WWTF will treat wastewater to advanced secondary standards. Surface disposal of wastewater to the current percolation area will be halted once a new WWTF is constructed.

The proposed Order includes a time schedule to provide additional information for the WWTF design, supply appurtenant information and conduct groundwater modelling. The scope of this Order includes:

1. Short-term operation of the current WWTF until a new WWTF is constructed.
2. Operations of the new WWTF during Phase 1 of redevelopment.

Current combined flow rates for the Eastern and Western systems are 17,000-25,000 gallons per day as average dry weather flow. This Order does not allow any increase in wastewater flow rates beyond current conditions. Before construction of any new residences and increasing wastewater flow rates, the Permittee will conduct a groundwater modelling study to evaluate the potential impact on groundwater from increased flows and modified effluent limits. Any proposal to increase flow rates over the current conditions will require an amended Report of Waste Discharge and subsequent amendment of the Waste Discharge Requirements. This Order also does not include Phase 2 development. Additional background information, including a description of the existing and proposed facility is included in Attachment D.

- C. California Environmental Quality Act (CEQA).** This project (current operations and Phase 1) is exempt from provision of the California Environmental Quality Act (Public Resources Section 2100 et. seq) because it consists of the operation, repair, maintenance, permitting, leasing, licensing or minor alteration of an existing facility involving no, or negligible, expansion of use under the California Code or Regulations, Title 14, Section

15301. The County of Humboldt certified the Final Master Environmental Impact Report on October 27, 2009 and approved a Local Coastal Plan Amendment on July 17, 2012.

- D. Notification of Interested Parties.** The Regional Water Board has notified the Permittee and interested agencies and persons of its intent to prescribe Waste Discharge Requirements (WDRs) for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
- E. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of wastewater from non-domestic sources, such as recreational vehicle (RV) waste, septage waste, and commercial or industrial waste, is prohibited. Small businesses that are compatible with historic uses within the downtown area may be allowed, conditional upon completing a feasibility study meeting the requirements of Section VIII. GENERAL PROVISIONS, G. This study shall be submitted to, and approved by, the Executive Officer.
- B.** The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.
- C.** Creation of pollution, contamination, or nuisance as defined by Section 13050 of the Water Code is prohibited.
- D.** The discharge of untreated or partially treated waste (receiving a lower level of treatment than described in **Finding II.B**) from anywhere within the treatment, collection or disposal system is prohibited.
- E.** The discharge of waste to land that is not owned by, or under agreement to use by, the Permittee is prohibited.
- F.** The discharge of waste, including sludge or solid waste, at any point not described in Table 2 or authorized by a permit is prohibited.
- G.** The average daily dry weather flow of wastewater to the Western System shall not exceed 7,500 gallons per day. The average daily dry weather flow into the Eastern System in excess of 17,000 gpd, as determined from the lowest consecutive 30-day daily flow, or 32,000 gpd as wet weather flow is prohibited.
- H.** The average daily dry weather flow of waste into the new WWTF, measured as flow into the Orenco AX Max units, in excess of 17,000 gpd, is prohibited. Dry weather flow will be determined from the lowest consecutive 30-day daily flow. Average wet weather flow in excess of 32,000 gpd, as determined for any calendar month, is prohibited.

IV. EFFLUENT LIMITATIONS

A. Interim Effluent Limitations – Discharge Point 001

Until three months after completing installation of the new WWTF, but not later than March 1, 2019, the Eastern System shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location-001 as described in the Monitoring and Reporting Program.

Table 4. Interim Effluent Limitations - Discharge Point 001

| Parameter | Units | Effluent Limitations ¹ | | | | |
|------------------------------------------|-----------|-----------------------------------|----------------|---------------|-----------------------|-----------------------|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L | 50 | -- | 80 | -- | -- |
| Total Suspended Solids | mg/L | 50 | -- | 80 | -- | -- |
| pH | std units | -- | -- | -- | 6.0 | 9.0 |
| Total Nitrogen as N | | 10 | | 15 | | |
| Ammonia | | | | | | |
| Grease and Oil | mg/L | 25 | | 50 | | |

¹ Defined In Section IX. COMPLIANCE DETERMINATION

B. Final Effluent Limitations – Discharge Point 002

Three months after completing installation of the new WWTF, but not later than March 1, 2019, the Permittee shall apply the following effluent limitations. The Permittee shall maintain compliance with the effluent limitations at Discharge Point 002, with compliance measured at Monitoring Location-002 as described in the Monitoring and Reporting Program.

Table 5. Final Effluent Limitations - Discharge Point 002

| Parameter | Units | Effluent Limitations ¹ | | | | |
|------------------------------------------|-----------|-----------------------------------|----------------|---------------|-----------------------|-----------------------|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Biochemical Oxygen Demand (5-day @ 20°C) | mg/L | 15 | -- | 20 | -- | -- |
| Total Nitrogen as N | | 10 | | 15 | | |
| pH | std units | -- | -- | -- | 6.0 | 9.0 |
| Ammonia | mg/L | 1.0 | -- | 1.0 | -- | -- |

| Parameter | Units | Effluent Limitations ¹ | | | | |
|--------------------------|------------|-----------------------------------|----------------|---------------|-----------------------|-----------------------|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Total Coliform Organisms | MPN/100 mL | 23 | -- | 240 | -- | -- |
| Grease and Oil | mg/L | 25 | | 50 | | |

V. DISCHARGE SPECIFICATIONS

- A. Dissolved Oxygen.** Dissolved oxygen levels within the oxidation pond shall be maintained at 1 mg/L or above.
- B. Disinfection Process.** Using a minimum detection limit of 0.1 mg/L there will be no residual chlorine detected at Discharge Point 002.
- C. Objectionable Odor.** Objectionable odor originating at the facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.
- D. Public Contact.** Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or other acceptable alternatives.
- E. Pond Freeboard.** Pond freeboard in the wastewater pond shall never be less than two feet as measured vertically from the water surface to the lowest point of overflow.
- F. Vector Control.** The facility and effluent disposal areas shall be managed to prevent the breeding of mosquitoes.
- G. Solids Handling.** All collected sludge, grease and solid waste shall be removed from screens, sumps, ponds, and tanks as needed to ensure optimal plant operation and disposed of in accordance with **SECTION IV. SOLIDS DISCHARGE SPECIFICATIONS.**

VI. SOLIDS DISCHARGE SPECIFICATIONS

Sludge, as used in this Order, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings, scum, or grease generated during preliminary treatment. Biosolids are sludge that has been treated, tested and shown to be capable of being beneficially used pursuant to Federal and State regulations as a soil amendment for agricultural, silvicultural and land reclamation activities.

- A.** Land application of biosolids is not covered or authorized by this Order. Biosolids that are applied to land within the North Coast Region shall comply with State Water Board Order No. 2004-0012-DWQ (*General Waste Discharge Requirements for the Discharge of Biosolids to Land as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities*) or other permits issued by the Regional Water Board.

- B. Use, storage and disposal of sewage sludge or solid waste shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards contained in 40 CFR 503.
- C. Sixty days in advance of any proposed change in the use, storage, or disposal of, sludge and solid waste from previously approved practices, the Permittee shall submit a proposal to the Executive Officer for approval. The proposal will include the reuse, disposal or storage location, waste characterization, as needed, and handling practices to protect water quality.
- D. Sludge and solid waste storage facilities shall be designed and maintained to prevent washout or inundation from a tsunami, or a storm with a return frequency of 100 years.

VII. RECEIVING WATER LIMITATIONS – GROUNDWATER

- A. The collection, treatment, storage, and disposal of wastewater shall not cause or contribute to a statistically significant degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements and reasonable best management practices, will not violate groundwater quality objectives, or cause impacts to beneficial uses of groundwater.
- B. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of chemical constituents in groundwater that exceed the levels specified in Title 22, Division 4, Chapter 15, Article 4, Section 64435 of the California Code of Regulations or listed in Table 3-2 of the Basin Plan.
- C. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of radionuclides in groundwater in excess of the limits specified in Title 22, Division 4, Chapter 15, Article 5, Section 64443 of the California Code of Regulations.
- D. The collection, treatment, storage, and disposal of wastewater or recycled water shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause a nuisance or adversely affect beneficial uses.
- E. Where the existing or potential beneficial use of groundwater includes domestic and municipal supply (MUN), the collection, treatment, storage and disposal of the treated wastewater shall not cause the median concentration of coliform organisms over any 7-day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters.

VIII. GENERAL PROVISIONS

- A. **Availability.** A copy of this Order and the associated Monitoring and Reporting Program shall be maintained at the facility and be available at all times to operating personnel.

- B. Enforcement.** The Permittee shall implement the project as described in this Order. Violation of any requirements contained in this Order may subject the Permittee to enforcement action, including civil liability, under the Water Code.
- C. Severability.** Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.
- D. Sanitary Sewer and Overflows.** On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs by November 2, 2006. On February 20, 2008, the State Water Board adopted Order No. WQ-2008-0002-EXEC Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.
1. Beginning on December 1, 2017, or the completion date of the new WWTF, the Permittee will replace and repair the existing collection system over a five year period completing twenty percent of the collection system per year.
 2. Within 30 days of CSD formation, the Permittee shall notify the CSD in writing of its responsibility to file for coverage under Order Nos. 2006-0003-DWQ and WQ-2008-0002-EXEC and any future revisions thereto for operation of its wastewater collection system.
 3. The Permittee shall take all feasible steps to halt spills and sanitary sewer overflows (SSOs) as soon as possible. All reasonable steps should be taken to collect spilled material and protect the public from contact with wastes or waste-contaminated soil or surfaces.

The Permittee shall report orally, and in writing, to the Regional Water Board staff all SSOs and unauthorized spills of waste. Spill notification and reporting shall be conducted in accordance with the Monitoring and Reporting Program.

- E. Operation and Maintenance.** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order.

The Permittee shall maintain an updated Operation and Maintenance Manual (O&M Manual) for the facility. The Permittee shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the WWTF. The O&M Manual shall be readily available to operating personnel on-site. The O&M Manual shall include the following:

1. A description of the facility's table of organization showing the number of employees, duties and qualifications, and plant attendance schedules (daily, weekends and

holidays, part-time, etc.). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.

2. A detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation, and equipment.
 3. A description of laboratory and quality assurance procedures.
 4. All process and equipment inspection and maintenance schedules.
 5. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Permittee will be able to comply with requirements of this Order.
 6. A description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.
- F. Change in Discharge.** The Permittee shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge. New or modified structures for the treatment or storage of wastewater or treated effluent shall be constructed in a manner that protects groundwater and surface water. The Permittee shall submit design proposals to the Regional Water Board Executive Officer for review and approval prior to construction and demonstrate that the structures comply with the Water Code and appropriate Sections of Title 27 of the California Code of Regulations. Pond design and operation plan must include features and best management practices (BMPs) to protect groundwater and prevent exceedances of groundwater quality objectives.
- G. Evaluation of Non-Domestic Wastewater.** Ninety days prior to startup of any new business generating non-domestic wastewater, the Permittee will notify the Executive Officer in writing and provide an evaluation to determine if the WWTF may accept the waste stream. The proposal will include a characterization of the waste stream, the WWTF's ability to treat the waste stream, the WWTF's capacity to accept the waste stream, e.g. flow rates increases, and any pretreatment proposed. Upon acceptance by the Executive Officer, the WWTF may accept this waste stream provided approved pretreatment and monitoring are established. This provision is limited to small businesses that were historically present in the downtown with small daily flow rates and is not intended for industrial or commercial waste having characteristics significantly different than domestic wastewater.
- H. Change in Ownership.** In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Permittee, the Permittee shall notify the succeeding owner or operator of existence of this Order, and the status of the Permittee's annual fee account; a copy of which shall be forwarded to the Regional Water Board.
- I. Vested Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the

commission of any act causing injury to persons or property, nor protect the Permittee from liability under federal, state, or local laws, nor create a vested right for the Permittee to continue the waste discharge.

- J. Monitoring and Reporting.** The Permittee shall comply with the Monitoring and Reporting Program in Attachment C and any modifications to these documents as specified by the Regional Water Board Executive Officer. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health shall conform to State Department of Public Health guidelines.
- K. Records Retention.** The Permittee shall maintain records of all monitoring information, including calibration and maintenance records and all strip charts recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer.
- L. Signatory Requirements.** All Report of Waste Discharge applications submitted to the Regional Water Board shall be signed by a principal, Executive Officer, ranking elected official, or responsible corporate officer.
1. For purposes of this provision, a responsible corporate officer means:
 - a. A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
 - b. The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 2. Reports required by this Order and other information requested by the Regional Water Board may be signed by a duly authorized representative provided:
 - a. The authorization is made in writing by a person described in paragraph (a) of this provision;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the entity; and
 - c. The written authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative.

3. Any person signing a document under paragraph (a) or (b) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- M. Inspections.** Permittee shall permit authorized staff of the Regional Water Board the following:
 1. Entrance to the premises in which treatment, collection or management of waste occurs, where an effluent source is located or in which any records required by this Order are kept;
 2. Access to inspect and copy any monitoring equipment or records required for compliance with terms and conditions of this Order; and
 3. Access to sample any discharge or monitoring location associated with the facility.
- N. Noncompliance.** In the event the Permittee is unable to comply with any of the conditions of this Order due to breakdown of waste treatment equipment, accidents caused by human error or negligence, or other causes such as acts of nature, the Permittee shall notify the Regional Water Board Executive Officer by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within five (5) business days of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.
- O. Revision of Requirements.** The Regional Water Board will review this Order periodically and may revise requirements when necessary.
- P. Operator Certification.** Supervisors and operators of wastewater treatment plants shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations, Section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Water Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Health Services where water reclamation is involved.
- Q. Adequate Capacity.** If the Permittee's wastewater treatment plant will reach capacity within 4 years, the Permittee shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a

minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest 30-day flow. The Permittee shall demonstrate that adequate steps are being taken to address the capacity problem. The Permittee shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the WWTF will reach capacity within 4 years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself (Title 23, Cal. Code of Regs, Section 2232).

R. Compliance Schedule. The Permittee shall complete the following tasks by the dates specified. In the event the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in this section, the Permittee may request, in writing, an extension of time from the Regional Water Board, up to 2 years from the specified due date. The extension request shall include justification for the delay and be submitted 60 days prior to the deadline that the Permittee is requesting to extend. An extension may be granted by the Regional Water Board Executive Officer for good cause.

| Action | Date |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <p>A. Wastewater Treatment Facility Design</p> <ol style="list-style-type: none"> 1. Begin collecting flow data from existing WWTF. 2. Submit design of new Wastewater Treatment Facility, and all calculations and supporting information. <ol style="list-style-type: none"> i. Draft Design The design of the WWTF, collection system, and its associated facilities shall include a conceptual sizing, design and location of structures for the entire project including all future phases of development. The conceptual design shall provide triggers for expansion of the WWTF based on flow rates and/or allowable loading rates to the unit processes. Site maps demonstrating that the WWTF and its facilities along with future expansions will be located entirely within lands zoned for such usage shall be provided. ii. Final Design 3. Construction of new WWTF, disposal areas, and retrofit of oxidation pond | <p>December 1, 2014</p> <p>March 1, 2015</p> <p>December 1, 2016</p> |

| Action | Date |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <p>i. Begin Construction Activities</p> | <p>Concurrent with beginning redevelopment of existing homes but no later than September 1, 2017</p> |
| <p>ii. Complete Construction Activities</p> | <p>December 1, 2017</p> |
| <p>B. Submit Soil and Groundwater Management Plan</p> <p>Plan to address construction activities within deed-restricted areas and for routine earth moving activities. Plan to include: delineating the extent of excavation, identify areas of known contamination within or near the construction area, methods to store, remove and dispose of contaminated soils and document concentrations of contamination remaining in-place. Plan to include pre-notification of activities to the Regional Water Board and schedule to provide final as-built report to the Regional Water Board via Geo Tracker.</p> | <p>March 1, 2017</p> |
| <p>C. Pretreatment Program</p> <p>The Permittee shall prepare a source control and pretreatment program. The goal of the program is to ensure that pollutants do not interfere with, pass through, or are incompatible with treatment operations, interfere with the use or disposal of sludge, or pose a health hazard to personnel. The program shall be submitted to the Executive Officer for review and approval. The program will include:</p> <ol style="list-style-type: none"> 1. Description of the necessary legal authorities to monitor and enforce source control standards, restrict discharges of materials to the collection system and inspect and monitor facilities connected to the system. 2. Perform public outreach to educate residential users about the importance of preventing discharges of toxic wastes or waste that may adversely impact the operation of the WWTF. 3. Propose a time line to adopt the legal authorities required to implement the program. | <p>Concurrent with completing construction of new WWTF</p> |
| <p>D. Community Services District</p> <p>Form a CSD by the date specified and provide documentation of formation</p> | <p>June 1, 2016</p> |
| <p>E. Groundwater Monitoring and Modeling Program</p> <ol style="list-style-type: none"> 1. Submit results of groundwater monitoring and groundwater modelling effort. Modelling will evaluate | <p>November 30, 2014</p> |

| Action | Date |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| wastewater disposal rates vs multiple effluent limits and evaluate the effects on groundwater. 2. Submit proposal to install monitoring wells to evaluate water quality upgradient and downgradient of oxidation pond and wastewater disposal areas and: <ul style="list-style-type: none"> i. Propose method to confirm modeling assumptions made w.r.t. aquifer characteristics such as horizontal and vertical flow velocity, gradient and transmissivity. Determine stratigraphy of underlying aquifer. ii. Identify any additional information required relevant to modeling the fate and transport of pollutants from wastewater disposal and impacts to groundwater. | November 30, 2014 |
| 3. Install groundwater monitoring wells. | December 20, 2015 |
| 4. Begin monitoring and data acquisition. | December 20, 2015 |
| 5. Submit initial progress report and every 6 months thereafter. Present groundwater data and aquifer characteristics relevant to modeling efforts. Make recommendations for modification of monitoring or modelling efforts. | March 1, 2015 |

IX. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below.

A. Average Monthly Effluent Limitation (AMEL)

The arithmetic mean of all samples collected in a calendar month, calculated as the sum of all samples in a calendar month divided by the number of samples. If only one sample is collected in a calendar month, that sample result will constitute the monthly average and the daily maximum results for the purpose of determining compliance with effluent limitations.

If the average of sample results taken over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, although the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during

the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee will be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

B. Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily concentration of a pollutant, over a calendar day (or 24-hour period) calculated as the sum of all samples in a day divided by the number of samples. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

If a daily concentration (or when applicable, the median determined by subsection F, below, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Permittee will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

C. Instantaneous Minimum Effluent Limitations

The lowest allowable concentration for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

D. Instantaneous Maximum Effluent Limitations

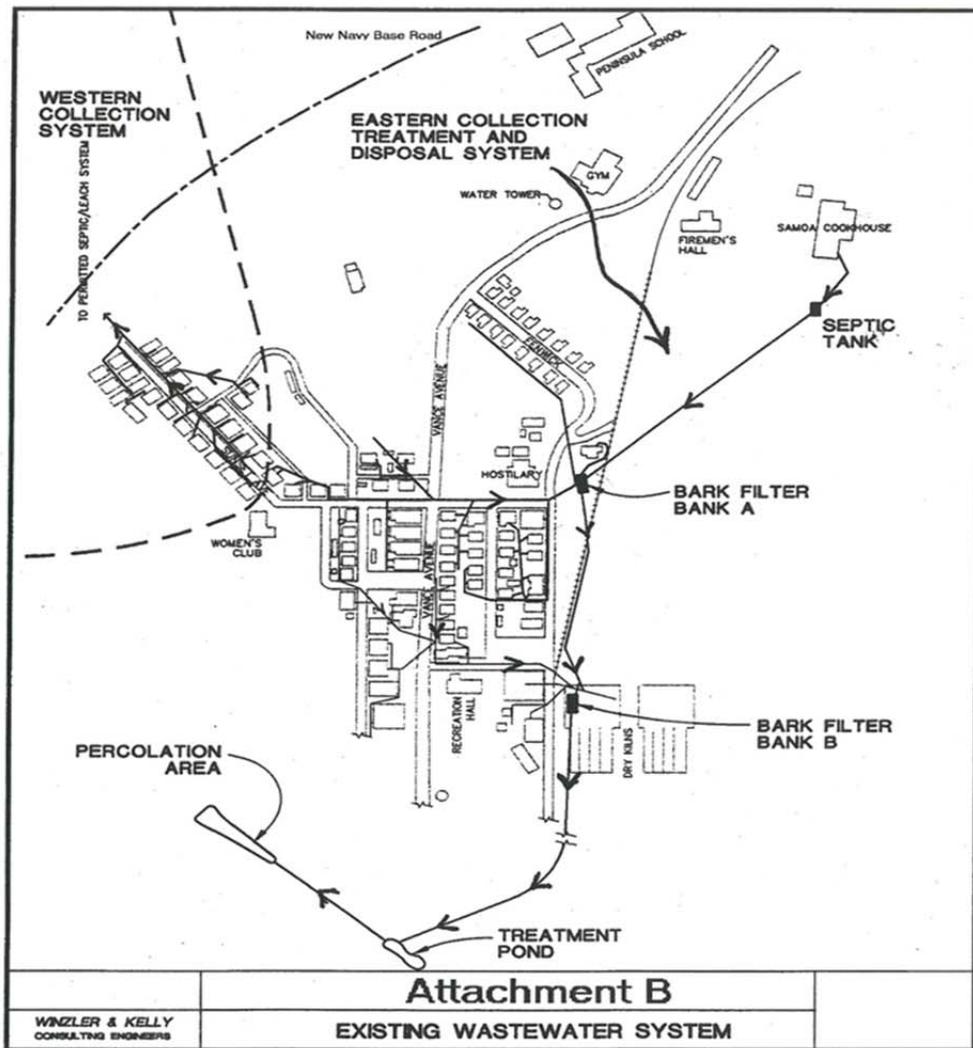
The highest allowable concentration for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

Attachment A - Site Location



Attachment B - Existing Wastewater System



Attachment C – Monitoring and Reporting Program (MRP)

California Water Code Section 13267 authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements that implement the state regulations. Any person failing to furnish technical or monitoring reports or falsifying any information therein is guilty of a misdemeanor, and may be subject to civil liability (Water Code Section 13268).

I. GENERAL MONITORING PROVISIONS

- A. Monitoring points shall not be changed without notification to and the approval of the Regional Water Board or the Executive Officer.
- B. If the Permittee monitors any pollutants more frequently than required by this Monitoring and Reporting Program the results of the monitoring shall be included in the calculations and submitted in the Permittee’s monitoring report.
- C. All monitoring instruments and devices shall be properly maintained and calibrated as necessary to ensure their accuracy. All flow measurement devices shall be calibrated at least once per year.
- D. Laboratories analyzing monitoring samples shall be certified by the Department of Health Services in accordance with the provisions of Water Code Section 13176 and must include quality assurance/quality control data with their reports.
- E. This monitoring program may be modified by the Regional Water Board or the Executive Officer.
- F. All monitoring results shall include complete laboratory data sheets for each analysis and be submitted in conjunction with the monthly SMR.

II. EASTERN SYSTEM MONITORING

- A. Conduct weekly inspections of the oxidation pond and percolation basin. Describe and report any surface runoff from the percolation basin, any ponded areas or unusual conditions.
- B. Monitoring Point 001. Effluent samples from the outfall of the oxidation pond, taken during normal operating conditions, shall be collected and analyzed in accordance with Table C-1:

Table C-1. Eastern System: Effluent Monitoring - Monitoring Point 001

| Parameter | Units | Type of Sample | Frequency |
|------------------------------|-------|----------------|-----------|
| BOD (5-day @ 20°C) | mg/L | Grab | Monthly |
| Total Suspended Solids | mg/L | Grab | Monthly |
| Settleable Solids | mg/L | Grab | Monthly |
| Hydrogen Ion | pH | Grab | Monthly |
| Grease and Oil | mg/L | Grab | Quarterly |
| Total Kjeldahl Nitrogen as N | mg/L | Grab | Monthly |

| Parameter | Units | Type of Sample | Frequency |
|------------------------------------------------------------------------------------|-----------------|----------------|---------------|
| Nitrate as N | mg/L | Grab | Monthly |
| Total Coliform | MPN/100 ml | Grab | Twice Monthly |
| Dissolved Oxygen ¹ | mg/L | Grab | Weekly |
| Discharge Volume ² | Gallons per day | Continuous | Daily |
| Pond Freeboard | Feet/Inches | Observation | Weekly |
| ¹ Dissolved oxygen levels shall be measured within the oxidation pond | | | |
| ² Discharge Volume shall be measured at the inlet to the oxidation pond | | | |

III. WESTERN SYSTEM

- A. Discharge to the leach field(s) shall be recorded continuously and reported as total daily flow.
- B. The Permittee shall monitor the performance of the leach field being used by observing and recording the elevation of the free water surface once per month in observation wells located in the leach field.

IV. NEW WASTEWATER TREATMENT FACILITY

- A. Daily loading rates to the Orenco AX Max filters shall be calculated and reported.
- B. Monitoring Point 002. Upon installation of the Orenco treatment units, effluent shall be sampled after disinfection and prior to discharge to the subsurface infiltration area in accordance with Table C-2.

Table C-2. New WWTF: Effluent Monitoring - Monitoring Point 002

| Parameter | Units | Type of Sample | Frequency |
|----------------------------------------------------------------------------------------------------|-----------------|----------------|-----------|
| BOD (5-day @ 20°C) | mg/L | Grab | Monthly |
| Total Suspended Solids | mg/L | Grab | Monthly |
| Settleable Solids | mg/L | Grab | Weekly |
| Hydrogen Ion | pH | Grab | Weekly |
| Total Kjeldahl Nitrogen as N | mg/L | Grab | Monthly |
| Nitrate as N | mg/L | Grab | Monthly |
| Total Coliform | MPN/100 ml | Grab | Monthly |
| Dissolved Oxygen ¹ | mg/L | Grab | Weekly |
| Discharge Volume ² | Gallons per day | Continuous | Daily |
| Pond Freeboard | Feet/Inches | Observation | Weekly |
| Total Dissolved Phosphorous | mg/L | Grab | Monthly |
| ¹ Dissolved oxygen levels shall be measured within the oxidation pond. | | | |
| ² Measured at the outlet of the Treatment process and at the outlet of the septic tank. | | | |

V. GROUND WATER MONITORING

Ground water monitoring wells shall be monitored as follows:

- A. Depth to water, top of well casing, and water table elevation to surveyed datum. Measurements shall be taken monthly. Data shall be reported in a tabular format.
- B. A ground water gradient map overlaid on a site map shall be prepared and submitted along with direction of flow in degree/minutes format. Ground water velocity shall be calculated and presented.
- C. Water samples shall be obtained in accordance with Table C-3 below.

Table C-3. Monitoring Wells: Sample Parameters and Frequency

| Parameter | Units | Type of Sample | Frequency |
|------------------------------|------------|----------------|-----------|
| BOD (5-day @ 20°C) | mg/L | Grab | Quarterly |
| Hydrogen Ion | pH | Grab | Quarterly |
| Total Kjeldahl Nitrogen as N | mg/L | Grab | Quarterly |
| Nitrate as N | mg/L | Grab | Quarterly |
| Total Coliform | MPN/100 ml | Grab | Quarterly |
| Total Dissolved Phosphorous | mg/L | Grab | Quarterly |
| Total Dissolved Solids | mg/L | Grab | Quarterly |

VI. VISUAL INSPECTIONS

A. General

The Permittee shall record, and report:

1. Facility maintenance activities (such as weed removal and fencing);
2. Spills, repairs and improvements/replacement to the WWTF or appurtenant structures such as grease traps or transmission pipes; and
3. Results from monthly inspections of all equipment associated with wastewater treatment, storage, conveyance and disposal. Record observations, any odors, evidence of surfacing effluent, or other signs of malfunction.

B. Septic Tanks

Sludge and scum levels in all septic tanks shall be measured and recorded annually. Septic tanks shall be pumped when any one of the following conditions exists, or may occur, before the next inspection:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth in the first compartment;

- 2. The scum layer is within three inches of the outlet device; or
- 3. The sludge layer is within eight inches of the outlet device.

C. Grease Traps

Grease traps shall be inspected every six months and pumped as necessary. Results shall be reported as described in Section VII below.

VII. SOLIDS DISPOSAL

- A. The disposition of any collected screenings, sludge, grease and other solid waste, shall be reported as part of the quarterly report. The Permittee shall report the date, quantity, source, type of waste and the disposal location.
- B. Receipts from properly licensed waste hauler(s) shall be submitted in conjunction with monitoring reports. At a minimum, the date of cleaning, the name, address, phone and license number of the contractor and the disposal location shall be reported.
- C. Onsite logs shall be maintained. At a minimum, the date of cleaning, the name, address, phone number and license number of the contractor, and disposal location shall be recorded.

VIII. REPORTING

A. Self-Monitoring Reports (SMRs)

Effective June 2, 2014, all regulatory documents, data, correspondence, or other materials should be submitted to the Regional Water Board via e-mail to NorthCoast@waterboards.ca.gov or on disk (CD or DVD) in a Portable Document Format (PDF) file in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

B. Reporting Frequency

For each monitoring period, a self-monitoring report shall be submitted to the Regional Water Board in accordance with the schedule in Table C-4.

Table C-4. Report Frequency

| Reporting Period | Report Due Date |
|-----------------------------|------------------------|
| January, February, March | May 1 |
| April, May, June | August 1 |
| July, August, September | November 1 |
| October, November, December | February 1 |
| Annual Report | May 1 |

C. Monitoring Reports

The Self Monitoring Reports shall contain the following:

- 1.** All reported data shall be in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Permittee is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Permittee shall electronically submit the data in a tabular format as an attachment.
- 2.** All reports shall include a Letter of Transmittal. The letter should include the following information:
 - a.** Facility: Name, address, Order number, and WDID number;
 - b.** Date of report and monitoring period;
 - c.** Identification of all violations of permit conditions found during the monitoring period;
 - d.** Details of the violations: parameters, magnitude, test results, frequency, and dates;
 - e.** The cause of the violation;
 - f.** Corrective actions taken, or planned, to resolve violations and prevent recurrence, and dates of, or time schedule to implement, corrective action; and
 - g.** Authorized signature and certification statement.

D. Annual Report

By May 1st of each year, the Permittee shall submit an Annual Report. The Annual Report shall include:

- 1.** Monitoring data summaries;
- 2.** A comprehensive discussion of the facility's compliance with all effluent limits, other WDR provisions and corrective actions taken, or proposed;
- 3.** A summary of spill and overflows within the sanitary sewer system;
- 4.** Public participation related to utility functions and formation of a Community Service District;
- 5.** System performance, current flow rates in relation to design capacity, and system improvements or operational modifications planned, or implemented; and
- 6.** A summary of solids disposal and disposal locations.

IX. SPILLS AND OVERFLOW NOTIFICATION

- A.** Report all spills, unauthorized discharges, and sanitary sewer overflow (SSO) equal to or in excess of 1,000 gallons or any size spill or SSO that results in a discharge to a drainage channel or a surface water as follows:

1. As soon as possible, but not later than two (2) hours after becoming aware of the discharge, the Permittee shall notify the Office of Emergency Services¹ (OES). Information to be provided verbally includes:
 - a. Name and contact information of caller;
 - b. Date, time and location of spill occurrence;
 - c. Estimates of spill volume, rate of flow, and spill duration;
 - d. Surface water bodies impacted, if any;
 - e. Cause of spill;
 - f. Cleanup actions taken or repairs made; and
 - g. Responding agencies.
 2. As soon as possible, **but not later than twenty-four (24) hours** after becoming aware of a discharge, the Permittee shall submit to the Regional Water Board a certification that OES and the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas have been notified of the discharge. For the purpose of this requirement, “certification” means an OES certification number and, for the local health department, name of local health staff, department name, phone number and date and time contacted.
 3. **Within five (5) business days**, the Permittee shall submit a written report to the Regional Water Board office. The report must include all available details related to the cause of the spill and corrective action taken or planned to be taken, as well as copies of reports submitted to other agencies.
 - a. Information provided in the verbal notification;
 - b. Other agencies notified by telephone;
 - c. Detailed description of cleanup actions and repairs taken; and
 - d. Description of actions that will be taken to minimize or prevent future spills. In the cover letter of the SMR, the Permittee shall include a brief written summary of the event and any additional details related to the cause or resolution of the event, including, but not limited to results of any water quality monitoring conducted.
- B. All spills, unauthorized discharges, and sanitary sewer overflows (SSOs) less than 1,000 gallons that do not reach a drainage channel or surface water shall be reported as soon as possible, but not **later than twenty-four (24) hours** after becoming aware of the discharge. The Permittee shall provide the applicable information in Section IX.A.1. above.

¹ The contact number for spill reporting for OES is (800) 852-7550. After normal business hours, spill reporting to OES will satisfy the 2 hour notification requirement for the Regional Water Board.

X. REPORT SUBMITTAL

Effective June 2, 2014, all regulatory documents, data, correspondence, or other materials should be submitted to the Regional Water Board via e-mail to NorthCoast@waterboards.ca.gov in lieu of paper-sourced documents. The guidelines for electronic submittal of documents can be found on the Regional Water Board website at <http://www.waterboards.ca.gov/northcoast>.

Documents may also be submitted on disk (CD or DVD) in a Portable Document Format (PDF) file. The Regional Water Board's address is:

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

XI. CERTIFICATION

All reports required by this Monitoring and Reporting Program shall be signed by the owner/operator of the facility or a duly authorized representative of that person. Any person signing a document under this requirement shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Attachment D –Fact Sheet

I. SUMMARY

The Town of Samoa is served by two different treatment and disposal systems. The largest system is in disrepair and discharges primary effluent to an unlined pond in a sand dune environment on the Samoa Spit. The depth to groundwater is unknown and monitoring wells to evaluate the impacts to groundwater have not been installed.

The Permittee is proposing to redevelop the Town in phases. Construction of a new wastewater treatment facility to replace the existing disposal systems would occur as part of the first phase of redevelopment. The existing Eastern System would be decommissioned immediately while the Western System would potentially be abandoned during Phase 1 pending completion of the groundwater modelling study. This represents a significant upgrade to the Town and an improvement to water quality in the area.

The Permittee submitted a Report of Waste Discharge in 2013. Additional information is required and included in the time schedule of this Order. Specifically, the scope of this Order includes a time schedule to design and install the new wastewater treatment facility as part of the initial phase of redevelopment, and require a groundwater study to document existing conditions and evaluate any potential future impacts to groundwater. This evaluation may form the basis for revised effluent limits and antidegradation findings when the Town expands in the future. Interim effluent limits for operations of the existing treatment facility and final effluent limits for the new wastewater treatment facility are included in this Order.

A more detailed description of the facility and rationale for specific provisions of the Order are presented below.

II. FACILITY INFORMATION

A. General Facility Information

The Town of Samoa and its wastewater treatment facilities is currently a single parcel owned by the Permittee. The Town is served by two independent wastewater treatment systems, described in Section B below. In 1985, the Western System was upgraded from a pond disposal system to a septic tank and leach field disposal system and Order No. 85-40 was issued to Louisiana Pacific Corporation, the property owner. In 1999, Simpson Samoa Company, the new property owner, submitted a Report of Waste Discharge (ROWD) reflecting a change in ownership. Prior to the Regional Water Board adopting a revised permit, the property was sold to Samoa Pacific Group, LLC. In 2000, the Samoa Pacific Group, LLC, filed an ROWD to operate the onsite wastewater systems. On June 28, 2001, the Regional Water Board issued Order No. R1-2001-62 to the new owner, (hereinafter Permittee), that included both the Eastern and Western System. This was the first time that the Eastern System had been permitted by the Regional Water Board.

On January 23, 2013, the Permittee submitted an incomplete ROWD presenting a phased redevelopment plan for the Town and construction of a new wastewater treatment facility (WWTF).

B. Existing Wastewater Treatment Facility

The Town of Samoa is served by two disposal systems:

- An Eastern System serving 75 homes, the downtown retail area and the Samoa Cookhouse. Large grease traps have been installed to serve the Cookhouse.
- A Western System which is a standard septic and leach field system serving 25 homes with a flow of 7,500 gallons per day.

Prior to 1985, neither of the treatment and disposal systems was regulated by the Regional Water Board.

The Eastern System consists of two bark filters atop large septic tanks for treatment. The January 2013 Report of Waste Discharge describes the bark filters as defunct. Primary effluent from the septic tanks is discharged to an unlined oxidation pond. The oxidation pond is approximately 25 feet wide by 100 feet long and nine feet deep. Effluent from the oxidation pond flows to a percolation/infiltration area. This area is 30-125 feet wide by 750 feet long. Portions of the percolation area are consistently wet throughout the year. A wetland delineation for the entire parcel has been completed. Findings indicate that the western portions of the infiltration area have been mapped as a dune hollow environment. Clear evidence of wetland hydrology in this area could not be demonstrated and the report states that this area is not Waters of the U.S. The area has been categorized as an Environmentally Sensitive Habitat Area (ESHA). Disposal of wastewater to this area will be halted once the new WWTF is constructed. Disposal of treated wastewater to this area may be allowed in the future as enhancement upon approval of the Coastal Commission.

Attachment A provides a map of the Town. Attachment B provides a flow schematic of the existing Eastern System.

C. Redevelopment Plan and New Wastewater Facilities

The Town of Samoa is a privately-owned undivided parcel of land roughly 171 acres in size.

The Permittee has prepared a Master Redevelopment Plan for the Town of Samoa. The Master Plan calls for subdividing the property and creating individual lots for each residential home, building 154 new homes, creating a 23-lot business park, developing 24 acres for light industrial, and establishing a gas station, a general store and a fire station.

The Master Plan calls for two main phases of development. The first phase includes; 1) construction of a new WWTF sized to accept the waste water from the Eastern and Western Systems, 2) decommissioning the existing Eastern System 3) rehabilitating the existing homes and creating individual lots for each the homes, and 4) pending results ground water modelling study the Permittee may build an 80-unit low income housing

development and decommission the Western System at a future date. Waste water previously discharged to the Western System would then be sent to the new WWTF. Revised Waste Discharge Requirements will be needed at that time to address the increase in flow rates.

The second phase calls for construction of new homes and development of commercial and light industrial areas. On January 23 2013, the Permittee submitted a Report of Waste Discharge proposing a sequence of development for Phases 1 and 2.

This Order incorporates a time schedule to submit additional design information and a groundwater monitoring plan. The scope of this proposed Order includes operation of the existing WWTF on an interim basis until a new WWTF is built. Interim effluent limits, carried forward from the previous Order, are intended for use until the new WWTF is constructed. The Order also presents effluent limitations for the new WWTF during Phase 1 of redevelopment. Rationale for the effluent limits is presented in Section III below.

This Order does not authorize an increase in flow rates over historical flows. The scope of the proposed Order is limited to the discharge of domestic wastewater (with a minor exception). Historically, the downtown area supported a grocery store, gas stations, fire department, small restaurant and a deli. These historical uses are included within this permit conditional upon review of their impact on the capacity of the WWTF with respect to its ability to serve the existing residences and the need for pretreatment of the waste.

Phase II of development is not included in this Order. At this time, implementation of Phase 2 may be 10 years distant. With the addition of industrial and commercial areas, wastewater flow rates and characteristics will change. A re-evaluation of the treatment process and effluent limits will be necessary, and updated WDRs shall be adopted. Re-evaluation of effluent limits in the future will be based, in part, on the groundwater monitoring data gathered during Phase 1, and modeling efforts concerning future impacts to receiving waters.

III. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Total Nitrogen and Nitrate. The Maximum Contaminant Level (MCL) for nitrate is 45 mg/L as nitrate or 10 mg/L expressed as nitrogen. Final effluent limits have been set at a Total Nitrogen concentration of 10 mg/L as Nitrogen. This limit addresses all forms of nitrogen present in the effluent and will prevent the discharge from exceeding the MCL. Biodegradation of nitrogen-containing compounds in the sandy soil column under the disposal field has not been evaluated by the Permittee and no allowance has been granted at this time. The Permittee may provide additional information in the future to reconsider this matter.

This limit will be evaluated as the sum of Total Kjeldhal Nitrogen and Nitrate.

Total Coliform Bacteria. Coliform bacteria are a pollutant of concern in all wastewaters of domestic origin, and the Order establishes final effluent limitations to ensure that water quality objectives in groundwater, as established by Chapter 3 of the Basin Plan, will be maintained.

Settleable Solids. Settleable solids are an indicator of system performance. However, since final disposal of treated waste water will be to land, selecting settleable solids limits derived for surface water discharge is not appropriate. Settleable solids will not be included in the Effluent Limits for that reason but will be retained in the monitoring section as an indicator of system performance. Proper operation of the WWTF is required by **VIII. GENERAL PROVISIONS. E.**

Chlorine Residual. The Basin Plan establishes a narrative water quality objective for taste and odor. Presence of chlorine concentrations in ground water may cause taste and odor issues resulting in nuisance conditions and impact to the beneficial uses of ground water. Therefore, this Order establishes a numerical water quality objective based on application of the narrative standard. Non detectable chlorine concentrations are established as Effluent Limits.

Biochemical Oxygen Demand (BOD₅). BOD is an indicator of the biologically oxidizable compounds present in wastewater and is widely used as an indicator parameter for the effectiveness of wastewater treatment plant operations. The WWTF is designed to treat to advanced secondary standards in order to protect groundwater quality. As such a final effluent limit of 15 mg/L for BOD₅ is established.

Modifications to Final Effluent Limits. The Order requires an evaluation of groundwater impacts. Effluent limits may be modified in the future pending the results of that study.

IV. RATIONALE FOR GENERAL PROVISIONS

A. Minor Exemption for wastewater from non-domestic sources. Since the initial phases of construction focus on rehabilitating the existing homes and possibly construction of a limited number of new units, no commercial or industrial discharges are anticipated and are prohibited. Therefore Section **III. DISCHARGE PROHIBITION, A** prohibits all non-domestic waste streams *unless a business conducts an evaluation of impacts on the WWTF and pretreatment needs. The study shall be provided to, and approved by, the Executive Officer.* This minor exemption to the prohibition is intended to be applied to small businesses or restaurants that have historically been present within the downtown area and that may be re-established within the downtown area during Phase 1. It is not intended to be used for businesses that were historically not present, businesses with high flow rates, or industrial or commercial waste streams with characteristics different than domestic wastewater. Contents of an acceptable evaluation are presented in Section **VIII. GENERAL PROVISIONS, G.**

B. Compliance Schedule. The Order presents a time schedule to complete the ROWD and address outstanding issues :

- 1. Construction of new WWTF.** A time schedule to submit draft and final design details for the new WWTF.
- 2. Soil Management Plan.** Many areas within the Town have been deed restricted due to soil and/or groundwater contamination. Construction of new facilities and sewer laterals may encroach on these areas. To address excavation within areas of known contamination, the general approach within Region 1 requires preparation of a Soil and Groundwater Management Plan detailing how construction, storage and disposal

of contaminated material will be accomplished. The time schedule requires submittal of this Plan before any new construction or excavation begins. Oversight of these excavations will be coordinated with staff from the Regional Water Board's Cleanups Division.

- 3. Evaluation and Protection of Groundwater Resources from Expansion of the WWTF.** The Permittee's Master Plan calls for future expansion of the Town and WWTF. There has been no evaluation regarding the impact to groundwater from the proposed expansion. Before expanding, an evaluation regarding the fate and transport of pollutants and the impacts to groundwater is necessary. This study will determine aquifer characteristics and use modelling to evaluate the impact from various effluent limitations and wastewater flow rates. This study will form the basis for anti-degradation findings related to expansion of the WWTF and further development of the Town.
- 4. Pretreatment Program.** This Order establishes a time schedule that requires the Permittee to prepare a pretreatment and source control program to ensure that pollutants do not interfere with, pass through, or are incompatible with treatment operations, interfere with the use or disposal of sludge, or pose a health hazard to personnel. The pretreatment program will be drafted concurrently with formation of a Community Services District.
- 5. Formation of Community Services District.** The Master Plan calls for creating individual lots for the existing homes along with new development at some future date. Formation of a Community Services District with legal authorities is a necessary step in making the transition from a single, private owner to multiple owners in an unincorporated town. The Permittee is negotiating with local agencies to create, or annex the Town into, a Community Service District. Annexation of the Town into an existing CSD is outside the control of the Permittee and the schedule within the Order represents best estimates as of this date. However, the Permittee has stated that it can form a CSD on its own accord if existing public entities do not annex the Town into an existing agency. Therefore, formation of a CSD by the date provided in this Order is achievable. It is possible that the situation may change in the future. Staff will follow this issue as it develops and if necessary make additional recommendations in the future.

V. FINDINGS

- A. Legal Authorities.** This Order serves as Waste Discharge Requirements (WDRs) for discharges to land issued pursuant to section 13263 of the California Water Code (Water Code). This Order also serves as Reclamation (Recycled Water) Requirements pursuant to section 13523 of the Water Code.
- B. Basin Plan.** The Basin Plan contains implementation plans and policies for protecting waters of the basin. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. As required by Water Code Section 13263(a), these WDRs implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the

Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives (both numeric and narrative) reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code Section 13241.

C. Beneficial Uses. The beneficial uses of the local groundwater are:

| Discharge Location | Receiving Water | Beneficial Use | |
|-----------------------------------------|-----------------|----------------|-------------------------------|
| | Groundwater | | |
| 001 and 002 | E | MUN | Municipal and Domestic Supply |
| | E | IND | Industrial Service Supply |
| | P | PRO | Industrial Process Supply |
| | E | AG | Agricultural Water Supply |
| | -- | | |
| P Potential E Existing | | | |

D. California Water Code. The California Water Code (Water Code) establishes the authority for the Regional Water Board to establish water quality objectives, impose discharge prohibitions, and prescribe waste discharge and reclamation requirements. Water Code Section 13241 requires each regional board to “establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance [...].” The control of pollutants discharged is established through effluent limitations and other requirements in WDR permits. Water Code section 13243 provides that “A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted. Water Code Section 13260 et seq establishes regulations associated with the prescription of waste discharge requirements and Water Code Chapter 7 (Section 13500 et seq) establishes regulations associated with the prescription of reclamation requirements.

It is the Regional Water Board’s intent that this Order shall ensure attainment of water quality standards, applicable water quality objectives, and protection of beneficial uses of receiving waters. This Order therefore requires the Permittee to comply with all prohibitions, effluent limitations, discharge specifications, reclamation specifications, reclamation provisions and requirements, receiving water limitations, standard provisions, and monitoring and reporting requirements.

E. California Code of Regulations (CCR). This project (current operations and Phase 1) consists of the operation of, and repair to, an existing facility which involves minimum change in use beyond that previously existing. Therefore, this project is exempt from provision of the California Environmental Quality Act (Public Resources Section 2100 et. seq) because it consists of the operation, repair, maintenance , permitting, leasing, licensing or minor alteration of an existing facility involving no, or negligible, expansion

of use under the California Code or Regulations, Title 14, Section 15301. The County of Humboldt certified the Final Master Environmental Impact Report on October 27, 2009 and approved a Local Coastal Plan Amendment on July 17, 2012.

- F. Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, the State antidegradation policy. The permitted discharge is consistent with the provisions of State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California.

Staff's evaluation regarding the impacts from construction of a new WWTF finds that the mass loading of BOD₅ and Total Nitrogen will be significantly decreased compared to current conditions, resulting in an overall benefit to the environment. Construction of Phase 2 and additional expansion of the WWTF will not occur without completing a groundwater modelling effort, ensuring compliance with the State's antidegradation policy.

Attachment C of this Order requires ongoing groundwater and effluent monitoring to assess whether concentrations of pollutants have the potential to adversely impact beneficial uses, or significantly increase pollutants in the groundwater.

This Order is consistent with the maximum benefit to people of the State because: (i) it improves operation of wastewater treatment facilities; (ii) reduces the mass emission of pollutants to the environment and, (iii) requires monitoring of potential groundwater impacts.

- G. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097). The Permittee is responsible for meeting all requirements of the applicable Endangered Species Act.
- H. Monitoring and Reporting.** Water Code Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment C. The Executive Officer of the Regional Water Board is delegated the authority to modify the Monitoring and Reporting Program, as determined appropriate to protect water quality.