Exhibit 16

November 18, 2019 American Samoa Power Authority
NPDES Permit No. AS00200001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. AS0020001

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

Discharger Name	American Samoa Power Authority
Discharger Address	P.O. Box PPB
	Pago Pago, American Samoa 96799
Facility Name	Utulei Sewage Treatment Plant ("STP") and Collection System.
Facility Location	Tulutulu Point, Utulei, Pago Pago, Tutuila 96799
Address	American Samoa
Facility Rating	Major

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Treated Domestic	14° 16' 59.6" S		Outer Pago Pago
	Wastewater			Harbor

This permit was issued on:	November 18, 2019
This permit shall become effective on:	January 1 st , 2020
Permit reapplication due no later than:	July 4 th , 2024
This permit shall expire at midnight on:	December 31st, 2024

In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.

Signed this	 November	, 2019, for the Regional Administrator.
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		Tomás Torres, Director
		Water Division

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Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

- 1. Effluent Limits Outfall Number 001
 The discharger is authorized to discharge treated domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 1. The discharger shall monitor both the effluent and influent to evaluate compliance, specifically for parameters with a "% removal" requirement (BOD₅ and TSS).
- 2. The discharge of pollutants at any point other than the outfall number specifically authorized in this permit is prohibited.
- 3. With the exception of discharges to an officially granted Zone of Mixing of pollutants for which that discharge has been specifically authorized, the discharge shall be treated and controlled to ensure all of the following narrative standards are met in the receiving waters, in accordance with section §24.0206 of the latest approved American Samoa Water Quality Standards (ASWQS, available as American Samoa Administrative Rule 001-2013):
 - a. They [the receiving waters] shall be substantially free from materials attributable to sewage, industrial wastes, or other activities of man that will produce objectionable color, odor, or taste, either of itself or in combinations, or in the biota, or that will produce visible turbidity or settle to form objectionable deposits;
 - b. They shall be substantially free from visible floating materials, grease, oil, scum, foam, and other floating material attributable to sewage, industrial wastes, or other activities of man;
 - c. They shall be substantially free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or other activities of man which may be toxic to humans, other animals, plants, and aquatic life or produce undesirable aquatic life;
 - d. The temperature shall not deviate more than 1.5 degrees Fahrenheit from conditions which would occur naturally and shall not fluctuate more than 1 degree Fahrenheit on an hourly basis or exceed 85 degree Fahrenheit due to the influence of other than natural causes;

e. Toxic Substances:

(1) All Embayments [which includes Pago Pago Harbor], Open Coastal Waters and Ocean Waters Except as may be allowed by the Environmental Quality Commission within a Zone of Mixing (ASWQS §24.0207), the concentration of toxic pollutants shall not exceed the more stringent of the aquatic life criteria for marine waters or the human health concentration criteria for consumption of organisms found in EPA's National Recommended Water Quality Criteria 2002,

EPA-822-R-02-047 or the most recent version of the National Recommended Water Quality Criteria.

- f. The following additional toxic standards shall apply:
 - (1) Total Mercury: In addition to the methyl mercury criteria for human health from the EPA 2002 publication, the water column concentration of mercury shall not exceed $0.05~\mu g/l$.
 - (2) Total Residual Chlorine: Total residual chlorine in any ambient water shall not exceed 11 micrograms per liter for fresh water and 7.5 micrograms per liter for marine waters.

B. Effluent Limits and Monitoring Requirements – Outfall Number 001

Table 1. Effluent Limits and Monitoring Requirements

Table 1. Elliucht Ellin	Maximum Allowable Discharge Limits			Monitoring		
Parameter	Concentration and Loading			g	Requirements ⁽²⁾	
r at attleter	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow rate	(1)	(1)	(1)	MGD	Continuous	Continuous
Temperature	(1)	-	(1)	°C	Weekly ⁽³⁾	Grab
Oil and grease, total recoverable	10	1	15	mg/L	Monthly	Grab
Settleable Solids	1.0		2.0	ml/L	Monthly	Grab
рН	all times,	Within the range of 6.5 to 8.6 at all times, and within 0.2 pH units of the value which would occur naturally.			Weekly ⁽³⁾	Grab
	78.3	117	157	mg/L		24-hour
Biochemical oxygen	1,960	2,929	3,930	lbs/day		
demand (5-day)	The average monthly percent removal shall not be less than 30 percent (4)			%	Weekly	composite
	75	113	150	mg/L		
	1,878	2,829	3,755	lbs/day		24-hour
Total suspended solids	The average monthly percent removal shall not be less than 30 percent. (4)			%	Weekly	composite
Ammonia, total (as N)	(1)	_	(1)	mg/L	Monthly	Grab
Ammonia Impact Ratio	$1.0^{(5)}$		$1.0^{(5)}$	Ratio	Monthly	Calculated
Enterococci	3,185	_	11,830	CFU /100 mL	Monthly	Grab
Nitrogen, total (as N)	18,200	_	45,000	μg/L	Monthly	24-hour composite

	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements ⁽²⁾	
Parameter	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Phosphorous, Total	2,730	_	8,190	μg/L	Monthly	24-hour composite
Chronic Toxicity (WET) S. purpuratus, Method 1008.0 WB33L			Pass (0) ⁽⁶⁾	Pass (0) or Fail (1), TST	Annually	24-hour composite
Chronic Toxicity (WET) D. excentricus, Method 1008.0 WB33N			Pass (0) ⁽⁶⁾	Pass (0) or Fail (1), TST	Annually	24-hour composite
Priority Pollutant Scan ⁽⁷⁾	_	_	(1)	μg/L	Once during 4 th year of permit term	Grab

- (1) No effluent limits are set at this time, but monitoring and reporting is required.
- (2) At minimum, at least one sample per every year must be taken concurrent with the annual whole effluent toxicity monitoring.
- (3) During sampling events where Ammonia data are collected, Temperature and pH samples readings to be taken at the same time as the ammonia sample is collected, and then used with the table in Attachment E to determine the Ammonia Impact Ratio as described in (5) below. Note that Saltwater ammonia standards apply because the receiving water (Pago Pago Harbor) is salt water.
- (4) Both the influent and the effluent shall be monitored and reported. The average monthly effluent concentration of Biochemical Oxygen Demand (5-day) and Total Suspended Solids shall not exceed 70 percent of the average monthly influent concentration collected at the same time.
- (5) The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia value in the effluent and the applicable ammonia standard from Appendix A in the American Samoa Water Quality Standards (AS-WQS). Attachment E to this permit presents the applicable AS-WQS standards table, adjusted for the approved dilution factor for this permit. See Attachment D for a sample log to help calculate and record the AIR values. The AIR is the ammonia effluent limit and must be reported in the Discharge Monitoring Reports (DMRs) in addition to the ammonia, pH, and temperature values.
- (6) The permittee shall report Pass "0" or Fail "1" for the coded parameter. For each toxicity test conducted during the reporting period for the month, Pass "0" constitutes rejection (i.e., statistical fail) and Fail "1" constitutes non-rejection (i.e., statistical pass) of the Test of Significant Toxicity (TST) null hypothesis (H₀) at the required IWC: IWC mean response (1.09 % effluent) ≤ 0.75 × Control mean response. This is determined by following the instructions in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A. For each toxicity test reported as Pass "0" or Fail "1", the permittee shall report the <u>associated</u> value for "Percent (%) Effect" for the coded parameter, calculated as: % Effect = [(Control mean response − IWC mean response) ÷ Control mean response] × 100.

(7) See attachment F for list of priority pollutants. For a listing of all priority toxic pollutants see 40 CFR 131.36. Priority pollutant scan should be conducted concurrently with a scheduled Whole Effluent Toxicity test.

C. Sampling

- 1. Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge.
- 2. Samples shall be taken at the following locations:
 - a. Influent samples shall be taken after the last addition to the collection system and prior to in-plant return flow and the first treatment process, where representative samples can be obtained.
 - b. Effluent samples shall be taken after in-plant return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.
- 3. For intermittent discharges, the Permittee shall monitor on the first day of discharge. The Permittee is not required to monitor in excess of the minimum frequency required in Table 1. If there is no discharge, the Permittee is not required to monitor influent or effluent.

D. General Monitoring and Reporting

- 1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in this permit, the Permittee shall utilize 40 CFR 136 test methods with Method Detection Limits and Measurement Limits that are lower than the effluent limits in this permit. For parameters without an effluent limit, the Permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant or the amount of the pollutant is high enough that the method detects and quantifies the level of pollutant in the discharge. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the Permittee shall utilize the test method with the lowest MDL or ML. In this context, the Permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure "total recoverable metal", except as provided under 40 CFR 122.45(c).
- 2. As an attachment to the first Discharge Monitoring Report (DMR), the Permittee shall submit, for all parameters with monitoring requirements specified in this permit:
 - a. The test method number or title and published MDL or ML;
 - b. The preparation procedure used by the laboratory;

- c. The laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 136;
- d. The standard deviation (S) from the laboratory's MDL study;
- e. The number of replicate analyses (n) used to compute the laboratory's MDL; and
- f. The laboratory's lowest calibration standard.

As part of each DMR submittal, the Permittee shall notify EPA of any changes to the laboratory's test methods, MDLs, MLs, or calibration standards. If there are any changes to the laboratory's test methods, MDLs, MLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent DMR submittal.

- 3. The Permittee shall develop a Quality Assurance ("QA") Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. The QA Manual shall be developed (or updated) within 90 days of permit issuance. At a minimum, the QA Manual shall include the following:
 - a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;
 - b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control ("QC") samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
 - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and
 - d. Discussion of how the Permittee will perform data review, report results, and resolve data quality issues and identify limits on the use of data.
- 4. Throughout all field collection and laboratory analyses of samples, the Permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the Permittee shall ensure that the laboratory has a QA Manual on file. A copy of the Permittee's QA Manual shall be retained on the Permittee's

- premises and available for review by regulatory authorities upon request. The Permittee shall review its QA Manual annually and revise it, as appropriate.
- 5. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:
 - a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or *NODI (B)*, if the maximum value of all analytical results is less than the laboratory's MDL.

b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI* (*Q*), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or *NODI* (*B*), if the maximum value of all analytical results is less than the laboratory's MDL.

c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report:

The *average value* of all analytical results where 0 (zero) is substituted for *NODI* (*B*) and the laboratory's MDL is substituted for *NODI* (*Q*).

- 6. In addition to information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.
- 7. The Permittee shall electronically submit Discharge Monitoring Reports and Biosolids/Sewage Sludge Reports using NetDMR (http://www.epa.gov/netdmr) and NeT (http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact), respectively.

- 8. DMRs shall be submitted by the 28th day of the month following the previous reporting period. For example, under quarterly submission, the three DMR forms for January, February, and March are due on April 28th. Annual and quarterly monitoring must be conducted starting in the first complete quarter or year following permit issuance. Reporting for annual monitoring is due on January 28th of the following year. A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the Permittee shall submit a DMR indicating no discharge as required.
- 9. The Permittee shall also submit an electronic or paper Discharge Monitoring Report to American Samoa EPA. Paper DMR forms shall be mailed to:

American Samoa EPA P.O. Box PPA Pago Pago, American Samoa 96799 attn: Fa'amao O. Asalele Jr.

E. Receiving Water Monitoring

- 1. The Permittee shall continue to conduct the established receiving water monitoring program (i.e., water column monitoring) in Pago Pago Harbor, as described below.
- 2. During the first sampling survey, the Permittee shall verify the locations (latitude and longitude) and depths of all monitoring stations currently in use and compare those locations with the locations previously identified to EPA (see table on this page in E.4, below). The Permitee shall submit this information with the first Semi-Annual water column monitoring report to USEPA Region 9 and American Samoa EPA (AS-EPA) for approval.
- 3. To verify compliance at the Zone of Initial Dilution (ZID), where §301(h) of the Clean Water Act specifies that compliance must be determined, the discharger shall begin monitoring at not less than two (2) ZID stations, located 150 feet from the nearest point on the outfall diffuser at suitable locations which lie up-current and down-current from the diffuser during typical conditions in the harbor.
- 4. The Permittee shall continue data collection at the existing receiving water monitoring stations, identified as:

Table 2: existing Receiving Water Monitoring stations

Stations		Location	
U	Diffuser Midpoint station	Latitude: 14.2824° S Longitude: 170.6755° W	
A1		Latitude: 14.2833° S Longitude: 170.6745° W	

B1	Zone of Mixing (ZOM) stations	Latitude: 14.2848° S Longitude: 170.6736° W
С		Latitude: 14.2794° S Longitude: 170.6803° W
16	Farfield Stations	Latitude: 14.2814° S Longitude: 170.6726° W
18		Latitude: 14.2853° S Longitude: 170.6735° W
FF	Offshore Farfield Station	Latitude: 14.3144° S Longitude: 170.6661° W
5	Reference station	Latitude: 14.2950° S Longitude: 170.6690° W

- 5. This permit may be reopened and modified to include an alternative receiving water monitoring program if the Permittee submits, and EPA approves, an alternative monitoring program.
- 6. The discharger shall conduct semi-annual receiving water quality monitoring for the following parameters at all monitoring stations in the program:

Table 3: Receiving Water Monitoring parameters and details

Table 3. Receive	ing water i	vionitoring p	parameters and	uctaiis	
Parameter	Units	Stations	Monitoring	Sampling	Sample Type /
		Monitored	Frequency	Depths (m)	Method
Temperature	°C	All	Semi-Annually (March, August)	1m, mid- depth, and 1m above bottom	Field Sensor (e.g. CDT)
Salinity	PSU	"	"	"	Field Sensor
Dissolved Oxygen	mg/L	دد	٠.	دد	Field Sensor
рН	Standard Units	cc	cc	cc	Field Sensor (pH meter)
Turbidity	NTU	"	دد	"	Bench Meter or Field Sensor
Light Penetration	ft	66	٠,	66	Secchi disk
Total Phosphorous	(μg/L as P)	دد			Lab Sample (EPA 353.3)
Total Nitrogen	(μg/L as N)		٠.		Lab Sample (EPA 353.2 + EPA 351.2)
Chlorophyll a	(µg/L)	"	"	"	Lab Sample
Ammonia	mg/L as NH ₃	دد			Lab Sample (EPA 350.1)
Enterococci	CFU / 100 mL	دد		"	Lab Sample (AS-EPA)

Note: pH and Temperature data collection must occur concurrently with sampling for Ammonia, as the AS-WQS ammonia standards depend on that information to determine compliance

7. Receiving water monitoring shall be conducted for all monitoring periods during which the plant is operational and during which there is any discharge to Pago Pago Harbor and the waters surrounding Outfall Number 001. Monitoring is required

unless the Plant is not discharging for the entire duration of the day/month/etc. period which the monitoring would represent. Samples shall be collected at sites up-current and down-current sufficiently far from the discharge to establish ambient values ("Reference" and "Far-field" stations as described under the receiving water monitoring plan of the previous permit and applicable provisions of EPA administrative order CWA-309(1)-11-017). Samples shall also be taken at the perimeter of the regulatory Zone of Initial Dilution (ZID) and at the site of the outfall itself. These sites shall be sampled as close together in time as possible. Sampling for parameters that are influenced by temperature or pH (i.e., Ammonia) shall be conducted once during the time period between noon and sunset to ensure critical (most stringent) conditions are reflected, which for ammonia would mean high ambient water temperatures and (if pH is expected to vary significantly) high pH. If sampling between noon and sunset is not feasible, discharger shall specify the time of collection for each sample and provide an explanation for why the data is representative of critical (worst-case) conditions for ammonia when submitting semiannual receiving water data. All individual measurement values shall be reported as an attachment to the DMR form via the e-reporting system netDMR. Additional method guidance for water monitoring (e.g., volunteer, EMAP, etc.) may be found at: https://www.epa.gov/cwa-methods.

8. Discharger shall prepare a revised sampling plan, including at least 2 permanent ZID stations in addition to the existing stations listed above. This revised sampling plan shall include a description of the sampling locations (e.g., distance from the outfall, seafloor depth, local currents etc.) and may be coordinated and jointly-prepared with the monitoring plans of other facilities discharging into Pago Pago. This revised sampling plan shall be submitted to EPA for review and approval within 180 days of the permit effective date.

Part II. SPECIAL CONDITIONS

A. Permit Reopener(s)

- 1. In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.
- 2. This permit may be modified by EPA specifically to address any deficiencies in operations and maintenance ("O&M") of the treatment system, including but not limited to operation and maintenance of the newly installed disinfection system and existing clarigesters, or the management of flow volumes within the collection and treatment system, all of which have the potential to cause or contribute to a violation of permit limits or applicable water quality standards.

3. In accordance with 40 CFR 122.44(c), EPA may promptly modify or revoke and reissue any permit issued to a treatment works treating domestic sewage (including "sludge only facilities") to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA, if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

B. Twenty-four Hour Reporting of Noncompliance

1. The Permittee shall report any noncompliance which may endanger human health or the environment. The Permittee is required to provide an oral report by directly speaking with an EPA and American Samoa EPA (AS-EPA) staff person within 24 hours from the time the Permittee becomes aware of the noncompliance. If the Permittee is unsuccessful in reaching a staff person, the Permittee shall provide notification by 9 a.m. on the first business day following the noncompliance. The Permittee shall notify EPA and AS-EPA at the following telephone numbers:

U.S. Environmental Protection Agency Wastewater Enforcement Section (ENF-3-1) (415) 947-4179

American Samoa EPA (684) 633-2304 attn: Fa'amao O. Asalele Jr., <faamao.asalele@epa.as.gov> OR, if unavailable, attn: Jewel Potoae <jewel.tuiasosopo@epa.as.gov>

The Permittee shall follow up with a written submission within five days of the date the Permittee becomes aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- 2. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - a. Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).
 - b. Any upset which exceeds any effluent limit in the permit.
 - c. Violation of a maximum daily discharge limit for any of the pollutants listed by the director in the permit to be reported within 24 hours (see 40 CFR 122.44(g)).

3. EPA may waive the written report in writing on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

C. Chronic Whole Effluent Toxicity (WET) Requirements

1. The chronic toxicity Instream Waste Concentration (IWC) required for the authorized POTW facility discharge point is expressed as 1.09 **percent (%) effluent** (i.e., 1/(D+1) × 100, where D is the dilution ratio of 91:1 and rounding to two decimal places). The toxicity laboratory making the IWC for chronic toxicity testing shall use 1 part effluent to S-1 parts dilutant for a total of S parts.

Table 4. POTW Facility-specific Chronic Toxicity IWC.

POTW Facility Name and Discharge Point	Dilution Ratio	Required Chronic Toxicity Instream Waste Concentration (IWC) in % Effluent
Utulei Sewage Treatment Plant, Outfall 001	1 to 91	1.09%

2. Monitoring Frequency

Toxicity test samples shall be collected for the authorized discharge point at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained). Using the test species, WET method, and monitoring frequency specified in Part I, Table 1, the permittee shall conduct toxicity testing on 24-hour composite effluent samples. A split of each effluent sample for toxicity testing shall be analyzed for all other monitored parameters (conventional, non-conventional, and priority toxic pollutants), at the minimum frequency of analysis specified by the effluent monitoring program.

3. Test Species and WET Methods

For the Utulei Sewage Treatment Plant, which discharges to marine waters, test species and short-term WET methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and applicable water quality standards; also see 40 CFR 122.41(j)(4) and 122.44(d)(1)(iv) and 40 CFR 122.21(j)(5)(viii) for POTWs. As required by Part I, Table 1 of this permit, the permittee shall conduct static non-renewal toxicity tests with the purple sea urchin, *Strongylocentrotus purpuratus*, or sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0); monitoring is conditional in that only one of these two test species must be monitored during the reporting month.

- If Purple Sea Urchin are not available because it is out of season for their spawning, it would be appropriate to perform toxicity testing using only sand dollars.
- If Sand Dollars are out of season for spawning, it would be appropriate to perform toxicity testing using only Purple Sea Urchins.
- At times when both species are available for testing, it would be most appropriate to test using the species for which the most tests have been conducted to provide the most consistent data set —typically this would be the urchin.

4. Chronic WET Limit or Non-limit WET Trigger

See Part I, Table 1, for the WET limit for this discharge. If Part I, Table 1, does not have a WET limit, then the non-limit WET trigger for the discharge is—for any one chronic toxicity test—rejection of the TST null hypothesis (H_o) at the required IWC:

IWC mean response $(1.09 \% \text{ effluent}) \le 0.75 \times \text{Control mean response}$.

For reporting, Pass "0" constitutes rejection (i.e., statistical fail) and Fail "1" constitutes non-rejection (i.e., statistical pass) of the TST null hypothesis at the required IWC. Rejection or non-rejection of the TST null hypothesis is determined by following the instructions in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A.

5. Quality Assurance

- a. Quality assurance measures, instructions, and other recommendations and requirements are found in the chronic test methods manual previously referenced. Additional requirements are specified below.
- b. Pacific Island Territory NPDES permittees and WET sample hold time. The WET methods manual hold time for NPDES samples used for WET testing begins when the 24-hour composite sampling period is completed, or the last grab sample in a series of grab samples is taken. It ends at the first time of sample use (initiation of WET test). 40 CFR 136.3(e) states that the WET method's 36-hour hold time cannot be exceeded unless a variance of up to 72-hours is authorized by EPA. In a June 29, 2015 inter-office memorandum, EPA Region 9 has authorized a hold time variance of up to 72-hours applicable only to Pacific Island Territory permittees which ship the NPDES sample to the continental U.S. for WET testing, with conditions. The 2015 memorandum is a WET requirement of this permit (Attachment G).
- c. The discharge is subject to a determination of rejection or non-rejection of the TST null hypothesis (H_o) from a chronic toxicity test at the required IWC. For statistical flowchart and procedures using the TST statistical approach see

Appendix A of *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). For the TST statistical approach, the associated value for "Percent (%) Effect" at the required IWC is calculated as: % Effect = [(Control mean response – IWC mean response) ÷ Control mean response] × 100.

- d. Effluent dilution water and control water should be prepared and used as specified in the applicable WET methods manual. If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.
- e. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).
- f. If either the reference toxicant or effluent toxicity test does not meet the Test Acceptability Criteria in the WET method, then the permittee shall resample and retest within 14 days.
- g. When preparing samples for toxicity testing, in addition to the required monitoring for conductivity, etc., it is recommended that total alkalinity and total hardness be measured in the undiluted effluent, receiving water, dilution water, and culture water, following the WET methods manual.
- h. Removed Toxicants (chlorine, ammonia). If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority. pH drift during the toxicity test may contribute to artifactual toxicity when ammonia (or other pH-dependent toxicants, e.g., metals) are present; ammonia shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

6. Initial Investigation TRE Work Plan

Within 90 days of the permit effective date, the Permittee shall prepare and submit to the permitting authority a copy of its Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) for review. This plan shall include steps the Permittee intends to follow if toxicity is measured above the WET limit (or WET trigger) and should include the following, at minimum:

a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

- b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.
- c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

7. Accelerated Toxicity Testing and TRE/TIE Process

- a. If a toxicity test result is reported as Fail "1", then the permittee shall conduct the following the accelerated toxicity testing and TRE/TIE process.
- b. If the WET limit (or WET trigger) is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the permittee shall conduct one additional toxicity test using the same species and WET method. This toxicity test shall begin within 14 days of receipt of a test result exceeding the WET limit (or WET trigger). If the additional toxicity test does not exceed the WET limit (or WET trigger), then the permittee may return to the regular testing frequency.
- c. If the WET limit (or WET trigger) is exceeded and the source of toxicity is not known, then the permittee shall conduct four additional toxicity tests using the same test species and WET method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days of receipt of a test result exceeding the WET limit (or WET trigger). If none of the additional toxicity tests exceed the WET limit (or WET trigger), then the permittee may return to the regular testing frequency.
- d. If one of the additional toxicity tests (in paragraphs 7.a or 7.b) exceeds the WET limit (or WET trigger), then, within 14 days of receipt of this test result, the permittee shall initiate a TRE using—according to the type of treatment facility—EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999), or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.
- e. The permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and WET method and, as guidance, EPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity

(EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996).

8. Reporting of Toxicity Monitoring Results on Monthly DMR

a. If no toxicity test monitoring for the month is required and toxicity monitoring is not conducted, then the permittee shall report "NODI(9)" (i.e., Conditional Monitoring – Not Required for This Period) on the DMR form. Nevertheless, all toxicity tests conducted during the month, whether or not monitoring is required, must be reported as described below.

For the WET limit (or WET trigger), the toxicity test result analyzed using the TST statistical approach shall be reported as Pass "0" or Fail "1" on the DMR form.

If more than one toxicity test is conducted during the month, then those Pass "0" or Fail "1" results shall be reported <u>attached to</u> the DMR form, except that a Fail "1" result of any one of all the toxicity tests conducted during the month shall be reported <u>on</u> the DMR form.

For each chronic toxicity test reported as Pass "0" or Fail "1", the permittee shall report the <u>associated</u> value for "Percent (%) Effect" calculated as: % Effect = [(Control mean response – IWC mean response) ÷ Control mean response] × 100.

The permittee shall submit the <u>full laboratory report</u> for all toxicity testing as an attachment to the DMR for the month in which the toxicity tests are conducted. The laboratory report for toxicity shall contain: all toxicity test results (raw data and statistical analyses) for each effluent and related reference toxicant tested; chain-of custody; the dates of sample collection and initiation of each toxicity test; all results for other effluent parameters monitored concurrently with the effluent toxicity tests via split samples; and schedule and progress reports on TRE/TIE investigations.

To assist in reviewing within test variability, control charting by the toxicity laboratory is recommended. Each laboratory report for toxicity attached to the DMR shall include both tabular and graphical control charting information for the WET method/test species control coefficient of variation, control standard deviation, and control mean for the last 12 months of toxicity tests conducted by the laboratory. This information is reported to facilitate the review of toxicity test results and the laboratory's performance of the WET method by the permittee and permitting authority.

b. The permittee shall notify the permitting authority in writing within 14 days of exceedance of the WET limit (or WET trigger). This notification shall describe actions the permittee has taken (or will take) to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

9. Permit Reopener for Toxicity

In accordance with 40 CFR 122 and 124, this permit may be modified to include effluent limits or permit conditions to address toxicity (acute and/or chronic) in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to toxicity.

D. Best Management Practices and Pollution Prevention

The Permitee shall ensure that treatment technologies which depend on each other are managed with an awareness of those dependencies, as a matter of Best Management Practices (BMP). The specific BMP requirement here is in addition to complying with the Asset Management and Planning provisions in Part II sections H and I; and Part III (Pollution Prevention Plan), below.

As an example of a treatment process which is dependent on the effectiveness of an earlier step in the treatment system, the UV disinfection system at the Utulei STP cannot effectively neutralize bacteria unless the water flowing from the clarigesters earlier in the Plant is sufficiently clear and transparent (low enough solids level) for UV light to penetrate and reach bacteria throughout the chamber. This is measured using the parameter UV Transmissivity.

The Permitee shall implement the following BMPs to monitor and assure reliable performance by the UV disinfection system:

- The discharger shall maintain a log of UV transmissivity measurements in the UV treatment system, taken at least once per day, and these logs shall be submitted to EPA as an electronic attachment to the netDMR data submissions covering the same time period.
- The treatment system shall be managed such that there is no visible settling of solids within the UV bulb chambers, which shall be determined and logged by the discharger at the same time each day that the UV Transmissivity reading is collected.

The design specifications for the Utulei UV treatment system specify a minimum UV Transmissivity of 40.6 in order for the system to function effectively. Therefore, the discharger shall take prompt corrective action on any day where the UV transmissivity falls below a value of 42, and shall submit to EPA a description of the corrective action taken on any given day where the UV Transmissivity at Utulei STP falls below this value.

After the first full year of the permit term, if there is no evidence of degradation in UV system performance, EPA may consider a reduction in the frequency of the logging specified in this BMP as a modification to the permit.

E. Biosolids

"Biosolids" means non-hazardous sewage sludge, as defined in 40 CFR 503.9. Sewage sludge that is hazardous, as defined in 40 CFR 261, must be disposed of in accordance with the Resource Conservation and Recovery Act.

1. General Requirements

- a. All biosolids generated by the Permittee shall be used or disposed of in compliance with the applicable portions of:
 - (1) 40 CFR 503 for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated;
 - (2) 40 CFR 258 for biosolids disposed of in a municipal solid waste landfill (with other material);
 - (3) 40 CFR 257 for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

40 CFR 503, Subpart B (land application) sets requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. 40 CFR 503, Subpart C (surface disposal) sets requirements for biosolids that are placed on the land for the purpose of disposal.

The Permittee is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Permittee uses or disposes of the biosolids, itself, or transfers the biosolids to another party for further treatment, use, or disposal. The Permittee is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under these rules.

- b. Duty to mitigate: The Permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- c. No biosolids shall be allowed to enter wetlands or other waters of the United States.
- d. Biosolids treatment, storage, use, or disposal shall not contaminate groundwater.
- e. Biosolids treatment, storage, use, or disposal shall not create a nuisance such as objectionable odors or flies.
- f. The Permittee shall assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the

biosolids contained. All haulers must have spill clean-up procedures. Trucks hauling biosolids that are not classified as Class A, as defined at 40 CFR 503.32(a), shall be cleaned as necessary after loading and after unloading so as to have no biosolids on the exterior of the truck body or wheels. Trucks hauling biosolids that are not Class A shall be tarped. Trucks hauling biosolids that are not Class A may not be used for hauling food or feed crops after unloading the biosolids, unless the Permittee submits, for EPA approval, a hauling description of how trucks will be thoroughly cleaned prior to adding food or feed.

- g. If biosolids are stored over two years from the time they are generated, then the Permittee must ensure compliance with all surface disposal requirements under 40 CFR 503, Subpart C, or must submit a written notification to EPA and AS-EPA with the information under 40 CFR 503.20(b) demonstrating the need for longer temporary storage. During temporary storage (of any length of time) for biosolids that are not Class A, whether on the facility site or off-site, adequate procedures must be taken to restrict public access and access by domestic animals.
- h. Any biosolids treatment, disposal, or storage site shall have facilities adequate to: divert surface runoff from adjacent areas, protect the site boundaries from erosion, and prevent any conditions that would cause drainage from the materials at the site to escape from the site. Adequate protection is defined as protection from at least a 100-year storm event and from the highest tidal stage that may occur.
- i. There shall be adequate screening at the Plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8" are removed.

2. Inspection and Entry

The EPA, AS-EPA, or an authorized representative thereof, upon presentation of credentials, shall be allowed by the Permittee, directly or through contractual arrangements with their biosolids management contractors, to:

- a. Enter upon all premises where biosolids produced by the Permittee are treated, stored, used, or disposed of, either by the Permittee or another party to whom the Permittee transfers the biosolids for treatment, storage, use, or disposal;
- b. Have access to and copy any records that must be kept under the conditions of this permit or 40 CFR 503, by the Permittee or another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal; and
- c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the Permittee or another party to whom the Permittee transfers the biosolids for treatment, use, or disposal.

3. Monitoring

- a. Biosolids shall be monitored for the following constituents, at the frequency specified in paragraph 3.b: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia-nitrogen, and total solids. This monitoring shall be conducted using the methods *in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA publication SW-846), as required in 40 CFR 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is".
- b. The constituents in paragraph 3.a shall be monitored at the following frequency, based on the volume of sewage solids generated per year:

rubic of Biosonius monitoring i equency requirements						
Volume Generated (dry metric tons per year)	Monitoring Frequency *					
>0 - <290	Once per year					
290 - <1,500	Four times per year					
1,500 - <15,000	Six times per year					
≥15,000	12 times per year					

Table 5: Biosolids monitoring frequency requirements

c. Class 1 facilities (facilities with pretreatment programs or other facilities designated as Class 1 by the Regional Administrator) and Federal facilities with >5 MGD influent flow shall sample biosolids twice per year for pollutants listed under CWA section 307(a), using best practicable detection limits.

4. Pathogen and Vector Control

Prior to land application, the Permittee shall demonstrate that biosolids meet Class A or Class B pathogen reduction levels using one of the alternatives listed under 40 CFR 503.32.

a. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B pathogen reduction levels or shall ensure that the site is

^{*} If biosolids are removed for use or disposal on a routine basis, then monitoring should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period of time prior to use or disposal, then monitoring may occur either at regular intervals, or prior to use or disposal corresponding to tonnage accumulated during the period of storage.

covered at the end of each operating day. If pathogen reduction is demonstrated using a Process to Significantly/Further Reduce Pathogens, then the Permittee shall maintain daily records of the operating parameters used to achieve this reduction.

If pathogen reduction is demonstrated by testing for fecal coliform and/or other pathogens, then samples must be drawn at the frequency described in paragraph 3.b, above. If Class B pathogen reduction levels are demonstrated using fecal coliform, then at least seven grab samples must be drawn during each sampling event and a geometric mean calculated from these seven samples.

The following sample holding times between sample collection and sample analysis shall not be exceeded: fecal coliform - 24 hours when cooled to 4 °C if composted, mesophillically digested, or aerobically digested, 6 hours otherwise; Salmonella sp. - 24 hours when cooled to 4 °C; enteric viruses - 2 weeks when frozen; helminth ova - one month when cooled to 4 °C.

b. For biosolids that are land applied or placed in a surface disposal site, the Permittee shall track and keep records of the operational parameters used to achieve the Vector Attraction Reduction requirements in 40 CFR 503.33(b).

5. Groundwater

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), then a qualified groundwater scientist shall develop a groundwater monitoring program for the site or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

6. Landfill Disposal

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (Method Number 9095 in SW-846) at the frequency indicated in paragraph 3.b, above, or more often if necessary, to demonstrate that there are no free liquids.

7. Notification and Reporting

- a. The Permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:
 - (1) Notification of noncompliance: The Permittee shall notify EPA and AS-EPA of any noncompliance within 24 hours, if the noncompliance may seriously endanger health or the environment. For other instances of noncompliance, the Permittee shall notify EPA and AS-EPA, in writing, within five working days of becoming aware of the circumstances. The Permittee shall require their biosolids management contractors to notify EPA and AS-EPA of any noncompliance within these same timeframes.

- (2) Interstate notification: If biosolids are shipped to another State, Tribal Lands, or Territory, then the Permittee shall send a 60-day prior notice of the shipment to permitting authorities in the receiving State, Tribal Lands, or Territory, and EPA Regional Office.
- (3) Land Application: Prior to using any biosolids from this facility (other than composted biosolids) at a new or previously unreported site, the Permittee shall notify EPA and AS-EPA. The notification shall include: a description and topographic map of the proposed site(s), names and addresses of the applier and site owner, and a list of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates, and determination of agronomic rates.

If any biosolids within a given monitoring period do not meet the pollutant limits for metals under 40 CFR 503.13, then the Permittee (or its contractor) must pre-notify EPA and determine the cumulative metals loading to date at that site, as required in 40 CFR 503.12.

The Permittee shall notify the applier of 40 CFR 503-requirements that are applicable to the applier, including applier certification that management practices, site restrictions, and vector attraction reduction requirements have been met. The Permittee shall require the applier to certify at the end of 38 months following the application of Class B biosolids, that the harvesting restrictions in effect for up to 38 months have been met.

- (4) Surface Disposal: Prior to disposal of biosolids at a new or previously unreported site, the Permittee shall notify EPA and AS-EPA. The notice shall include: a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any State or local permits. The notice shall describe procedures for ensuring restricted public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan, or a description of why groundwater monitoring is not required.
- b. The Permittee shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and AS-EPA by February 19 of each year for the period covering the previous calendar year. This report shall include:
 - (1) The amount of biosolids generated that year and the amount of biosolids accumulated from previous years, in dry metric tons.
 - (2) Results of all pollutant monitoring required in the Monitoring section, above, reported on a 100% dry weight basis.
 - (3) Demonstrations and certifications of pathogen reduction methods and vector attraction reduction methods, as required in 40 CFR 503.17 and 503.27.

- (4) Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, or disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and the tonnages delivered to each.
- (5) For land application sites, the following information must be submitted by the Permittee, unless the Permittee requires its biosolids management contractors to report this information directly to the EPA Region 9 Biosolids Coordinator:
 - The locations of land application sites used that calendar year (with field names and numbers), size of each field applied to, applier, and site owner; the volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, and calculated plant available nitrogen; the crop planted, date of planting, and date of harvesting; for biosolids exceeding 40 CFR 503.13 Table 3 pollutant concentrations, the locations of sites where applied and cumulative metals loading at that site to date; certifications of management practices in 40 CFR 503.14 and certifications of site restrictions in 40 CFR 503.17(b)(6).
- (6) For surface disposal sites: The locations of sites, site operator, site owner, and size of parcel on which disposed; the results of any required groundwater monitoring; certifications of management practices in 40 CFR 503.24; and for closed sites, the date of site closure and certifications of management practices for the three years following site closure.
- (7) All reports shall be submitted to:

Regional Biosolids Coordinator U.S. Environmental Protection Agency Region 9

via the online tool NeT (http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact),

and copies submitted to

American Samoa EPA P.O. Box PPA Pago Pago, AS 96799 (684) 633-2304 24-hour emergency line

24-hour emergency line: (684) 733 6149

ask for: Jewel Potoae jewel.tuiasosopo@epa.as.gov

OR, if unavailable,

ask for: Fa'amao O. Asalele Jr., faamao.asalele@epa.as.gov

F. Pretreatment

1. Under 40 CFR 125.66(d)(1), the Permittee must implement a public education program designed to minimize the entrance of nonindustrial toxic pollutants into the Utulei STP, the Permittee shall continue to implement its approved Nonindustrial Source Control Program. Copies of all public educational materials designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into the Utulei STP from the period covering the previous calendar year shall be submitted with the semi-annual water column monitoring report due January 28th to USEPA Region 9 and AS-EPA, or as an attachment to an electronic DMR submitted at that time.

G. Sanitary Sewer Overflows

- 1. A Sanitary Sewer Overflow (SSO) is an overflow, spill, release, or diversion of wastewater from a sanitary sewer collection system designed to carry only sewage and prior to reaching the treatment plant. Sanitary sewer overflows include a) overflows or releases of wastewater that reach waters of the US, b) overflows or releases of wastewater that do not reach waters of the US, and c) wastewater backups into buildings that are caused by blockages or flow conditions in a sanitary sewer other a building lateral. SSOs are generally caused by high volumes of infiltration and inflow (I/I), pipe blockages, pipe breaks, power failure, and insufficient system capacity.
- 2. All Sanitary Sewer Overflows are prohibited.
- 3. The Permittee shall report all SSOs. The Permittee shall submit with its DMRs, the following information for each SSO that occurs during the reporting period covered by the respective DMR:
 - a. The cause of the SSO;
 - b. Duration and volume (estimate, if unknown);
 - c. Description of the source (e.g., manhole cover, pump station, etc.);
 - d. Type of collection system that overflowed (i.e., combined or separate);
 - e. Location by street address, or any other appropriate method providing a location;
 - f. Date and time of SSO; including time that ASPA staff first became aware of the SSO and the time responders arrived on-site;
 - g. The destination of the SSO, e.g., surface water body (direct), surface water body (via municipal separate storm sewer system), or land. The Permittee shall submit a USGS map or copy thereof with the location of the SSO, the flow path, and the destination marked; and

h. Corrective action taken and steps taken or planned to eliminate reoccurrence of SSOs.

The Permittee shall refer to Part II.B (Twenty-four-hour reporting of noncompliance) of this permit which contains information about reporting any noncompliance that may endanger human health or the environment. Part II.B applies to SSOs. Submittal or reporting of any of this information does not provide relief from any subsequent enforcement actions for unpermitted discharges to waters of the United States.

H. Asset Management

The Permittee shall develop an asset management program ("AMP") to cover the treatment plant and collection system.

- 1. The Permittee shall procure, populate, and utilize asset management and/or work order management software within two years of permit issuance. The software shall:
 - a. Inventory all critical assets and assets valued over \$5,000 into a single database. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:
 - (1) Name and identification number.
 - (2) Location (GPS coordinate or equivalent identifier).
 - (3) Current performance/condition.
 - (4) Purchase and installation date.
 - (5) Purchase price.
 - (6) Replacement cost.
 - b. Automate work order production and tracking.
 - c. Catalogue all daily, weekly, monthly, annual and other regular maintenance tasks.
- 2. The Permittee shall submit to EPA a description of its selected AMP system and status of its implementation within two years of permit issuance.
- 3. The Permittee may be deemed in compliance with the above asset management provisions by fully implementing EPA's Check Up Program for Small Systems ("CUPPS") Asset Management Tool, which is available at no cost from (https://www.epa.gov/dwcapacity/information-check-program-small-systems-cupss-asset-management-tool).

I. Capacity Attainment and Planning

1. The Permittee shall file a written report within ninety (90) days if the average dry weather wastewater treatment flow for any month exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities.

Part III. STANDARD CONDITIONS

The Permittee shall comply with all EPA Region 9 Standard Conditions below.

A. All NPDES Permits

In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

1. Duty to comply; at 40 CFR 122.41(a).

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- a. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$54,833 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such

sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of note more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative civil penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$21,393 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$53,484. Penalties for Class II violations are not to exceed \$21,393 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$267,415. Values are subject to change in accordance with federal rules.
- 2. Duty to reapply; at 40 CFR 122.41(b).

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. Any Permittee with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.

3. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate; at 40 CFR 122.41(d).

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance; at 40 CFR 122.41(e).

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and

appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit actions; at 40 CFR 122.41(f).

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property rights; at 40 CFR 122.41(g).

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to provide information; at 40 CFR 122.41(h).

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

9. Inspection and entry; at 40 CFR 122.41(i).

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.
- 10. Monitoring and records; at 40 CFR 122.41(j).

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed
 - (4) The individuals(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.
- e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
- 11. Signatory requirement; at 40 CFR 122.41(k).
 - a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.) All permit applications shall be signed as follows:

(1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this section;
 - (2) 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 well field,

superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

- (3) The written authorization is submitted to the Director.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraph (a) or (b) of this section 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."
- e. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

12. Reporting requirements; at 40 CFR 122.41(1).

- a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to

- pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
- (3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)
 - (1) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new Permittee and incorporate such other requirements as may be necessary under CWA.
 - (2) Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new Permittee if:
 - (A) The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
 - (B) The notice includes a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (C) The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016, all reports and forms submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR 127.
- (2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- f. Twenty-four-hour reporting.
 - (1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020, all reports related to combined sewer

overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127.

- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (i) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g).)
 - (ii) Any upset which exceeds any effluent limitation in the permit.
 - (iii)Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g).)
- (3) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(6)(ii) of this section if the oral report has been received within 24 hours.
- g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(1)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (1)(6) of this section.
- h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
- 13. Bypass; at 40 CFR 122.41(m).
 - a. Definitions.
 - (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 40 CFR 122.41(m)(3) and (m)(4) of this section.

c. Notice.

- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
- (3) As of December 21, 2020 all notices submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3(including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
 - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (iii) The Permittee submitted notices as required under paragraph (m)(3) of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

14. Upset; at 40 CFR 122.41(n).

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent cause by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The Permittee submitted notice of the upset as required in paragraph (1)(6)(ii)(B) of this section (24-hour notice).
 - (4) The Permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Reopener Clause; at 40 CFR 122.44(c).

For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

16. Minor modifications of permits; at 40 CFR 122.63.

Upon the consent of the Permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 40 CFR 124. Any permit modification not processed as a minor modification under this section must be made for cause and with 40 CFR 124 draft permit and public notice as required in 40 CFR 122.62. Minor modifications may only:

- a. Correct typographical errors;
- b. Require more frequent monitoring or reporting by the Permittee;
- c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
- d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Director.
- e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR 122.29.
- f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- g. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.
- 17. Termination of permits; at 40 CFR 122.64.
 - a. The following are causes for terminating a permit during its term, or for denying a permit renewal application:
 - (1) Noncompliance by the Permittee with any conditions of the permit;
 - (2) The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time;

- (3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- (4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

18. Availability of Reports; pursuant to CWA section 308

Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential.

19. Removed Substances; pursuant to CWA section 301

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials entering waters of the U.S.

20. Severability; pursuant to CWA section 512

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

21. Civil and Criminal Liability; pursuant to CWA section 309

Except as provided in permit conditions on "Bypass" and "Upset", nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.

22. Oil and Hazardous Substances Liability; pursuant to CWA section 311

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of the CWA.

23. State, Tribe, or Territory Law; pursuant to CWA section 510

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA section 510.

B. Specific Categories of NPDES Permits

In accordance with 40 CFR 122.42, the following conditions, in addition to those set forth at 40 CFR 122.41, apply to all NPDES permits within the category specified below and are expressly incorporated into this permit.

- 1. Publicly owned treatment works; at 40 CFR 122.42(b).
 - a. All POTWs must provide adequate notice to the Director of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 and 306 of the CWA if it were directly discharging those pollutants; and
 - (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
 - b. The following condition has been established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act. Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261-33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

Attachment A: Definitions

- 1. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 2. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 3. "Best Management Practices" or "BMPs" are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
- 4. A "composite" sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
- 5. A "daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. 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 average measurement of the pollutant over the day.
- 6. A "daily maximum allowable effluent limitation" means the highest allowable "daily discharge."
- 7. A "DMR" is a "Discharge Monitoring Report" that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the Permittee.
- 8. A "grab" sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
- 9. The "method detection limit" or "MDL" is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is distinguishable from the method blank results, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.
- 10. The "minimum level" or "ML" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA's draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:
 - a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 - b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of $(1, 2, \text{ or } 5) \times 10n$, where n is zero or an integer. (For example, if an MDL is $2.5 \,\mu\text{g/l}$, then the calculated ML is: $2.5 \,\mu\text{g/l} \times 3.18 = 7.95 \,\mu\text{g/l}$. The

multiple of (1, 2, or 5) x 10n nearest to 7.95 is 1 x 101 = 10 μ g/l, so the calculated ML, rounded to the nearest whole number, is 10 μ g/l.)

- 11. A "NODI(B)" means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory's MDL.
- 12. A "NODI(Q)" means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the ML.

Attachment B: Location Map



Figure 1: Map of Tutuila Island, American Samoa. Utulei STP is the northernmost of the two treatment plants on the main island, indicated by a red dot



Figure 2: Map of Utulei STP and outfall (locations in green). Reprinted from discharger's 2018 submission of revised outfall coordinates. Diffuser location did not change, but use of old coordinate system (NAD 27) led to inaccurate (red) position relative to physical coastlines.

Attachment C: Wastewater Flow Schematic

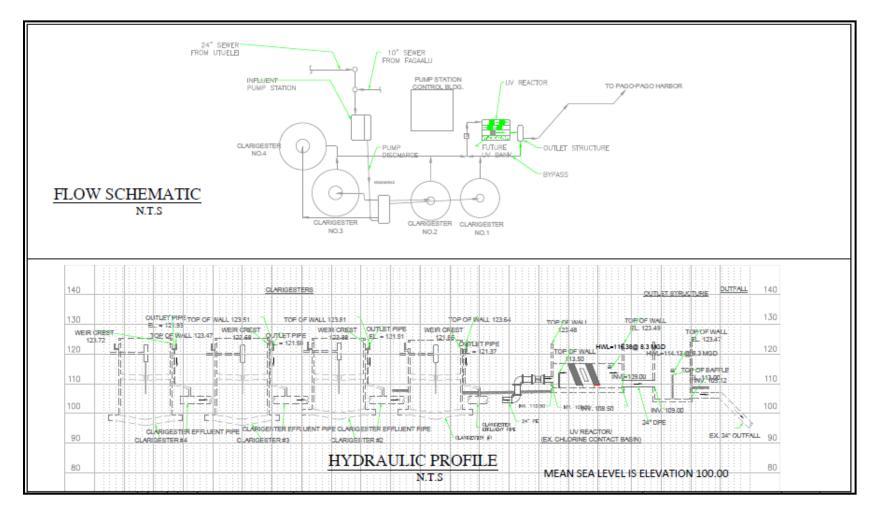


Figure 1 - Diagram of Utulei STP's wastewater treatment system. Reprinted from the 2017 engineering update to the section 301(h)-modified NPDES permit renewal application.

Attachment D: Ammonia Impact Ratio Data Log

A	В	C	D	E	F
Date of Sample	Ammonia Concentration in Effluent (mg/L as N)	Effluent Temperature (° C)	Effluent pH (standard pH units)	Ammonia Objective with Dilution. (look up objective in Attachment E, using data from columns C and D)	Ammonia Impact Ratio (AIR) (divide Column B by Column E, B÷E)
					1 . 1

Please copy and complete for each quarter of each year for the permit term, as directed in the monitoring requirements table. Permittee may sample more frequently and should record any additional results. Attach any additional pages as necessary.

Attachment E. pH-Dependent Ammonia (as N) Objectives with Dilution.

Note: values in tables are expressed as milligrams of N per Liter (mg/L N). These tables convert the salt-water standards presented as American Samoa Water Quality Standards, 2013 Revision, Appendix A, into different units (Ammonia-as-N from the original Ammonia-as-NH₃, using the multiplier of 0.822 specified in Appendix A). Additionally, the limits presented in these tables incorporate the dilution factor of 91:1 authorized in this permit. Note that the American Samoa standard assumes a salinity of 30g/kg.

Olle-Hour Ave	rage Limits (use in place o	i dany maxim		
Temperature (°C) ▶	25°C	30°C	35°C		
<u>pH</u>	Objective with 91:1 Dilution,				
	as mg/L N				
7.8	590.9	403.9	276.8		
8.0	374.0	261.8	187.0		
8.2	246.8	172.0	127.2		
8.4	157.1	119.7	82.3		
8.6	104 7	82.3	60.6		

Table I: One-Hour Average Limits (use in place of daily maximum limit)

8.6 | 104.7 | 82.3 | 60.6 | Based on American Samoa Water Quality Standards (2013), Appendix A, section "Water Quality Criteria for Ammonia in Saltwater (Acute)"

Permitee may choose to interpolate values (linear interpolation) for temperatures between the three listed in the AS-WQS (25°C, 30°C, 35°C), or may simply choose to enter the lower number in column D of the Ammonia Impact Ratio log above (Attachment D).

<u>Four-Day Ave</u>	rage Limits (use in place of	i monthly ave		
Temperature (°C) ►	25°C	30°C	35°C		
<u>pH</u>	Objective with 91:1 Dilution,				
	<u>as mg/L N</u>				
7.8	89.8	60.6	41.9		
8.0	56.1	39.6	27.7		
8.2	37.4	25.4	18.7		
8.4	23.2	17.2	12.7		
8.6	16.5	12.0	9.0		

Table II: Four-Day Average Limits (use in place of monthly average limit)

Based on American Samoa Water Quality Standards (2013), Appendix A, section "Water Quality Criteria for Ammonia in Saltwater (Chronic)"

Permitee may choose to interpolate values (linear interpolation) for temperatures between the three listed in the AS-WQS (25°C, 30°C, 35°C), or may simply choose to enter the lower number in column D of the Ammonia Impact Ratio log above (Attachment D).

Attachment F: List of Priority Pollutants

Priority Pollutants are a set of chemical pollutants for which EPA has developed analytical methods. The Permittee shall test for all priority pollutants in: 40 CFR Part 423, Appendix A. For reference, the 126 priority pollutants at time of issuance include:

- 1. Acenaphthene
- 2. Acrolein
- 3. Acrylonitrile
- 4. Benzene
- 5. Benzidine
- 6. Carbon tetrachloride
- 7. Chlorobenzene
- 8. 1,2,4-trichlorobenzene
- 9. Hexachlorobenzene
- 10. 1,2-dichloroethane
- 11. 1,1,1-trichloreothane
- 12. Hexachloroethane
- 13. 1,1-dichloroethane
- 14. 1,1,2-trichloroethane
- 15. 1,1,2,2-tetrachloroethane
- 16. Chloroethane
- 17. (Removed)
- 18. Bis(2-chloroethyl) ether
- 19. 2-chloroethyl vinyl ethers
- 20. 2-chloronaphthalene
- 21. 2,4,6-trichlorophenol
- 22. Parachlorometa cresol
- 23. Chloroform
- 24. 2-chlorophenol
- 25. 1,2-dichlorobenzene
- 26. 1.3-dichlorobenzene
- 27. 1,4-dichlorobenzene
- 28. 3,3-dichlorobenzidine
- 29. 1,1-dichloroethylene
- 30. 1,2-trans-dichloroethylene
- 31. 2,4-dichlorophenol
- 32. 1,2-dichloropropane
- 33. 1,3-dichloropropylene
- 34. 2,4-dimethylphenol
- 35. 2,4-dinitrotoluene
- 36. 2,6-dinitrotoluene
- 37. 1,2-diphenylhydrazine

- 38. Ethylbenzene
- 39. Fluoranthene
- 40. 4-chlorophenyl phenyl ether
- 41. 4-bromophenyl phenyl ether
- 42. Bis(2-chloroisopropyl) ether
- 43. Bis(2-chloroethoxy) methane
- 44. Methylene chloride
- 45. Methyl chloride
- 46. Methyl bromide
- 47. Bromoform
- 48. Dichlorobromomethane
- 49. (Removed)
- 50. (Removed)
- 51. Chlorodibromomethane
- 52. Hexachlorobutadiene
- 53. Hexachlorocyclopentadiene
- 54. Isophorone
- 55. Naphthalene
- 56. Nitrobenzene
- 57. 2-nitrophenol
- 58. 4-nitrophenol
- 59. 2,4-dinitrophenol
- 60. 4,6-dinitro-o-cresol
- 61. N-nitrosodimethylamine
- 62. N-nitrosodiphenylamine
- 63. N-nitrosodi-n-propylamine
- 64. Pentachlorophenol
- 65. Phenol
- 66. Bis(2-ethylhexyl) phthalate
- 67. Butyl benzyl phthalate
- 68. Di-N-Butyl Phthalate
- 69. Di-n-octyl phthalate
- 70. Diethyl Phthalate
- 71. Dimethyl phthalate
- 72. Benzo(a) anthracene
- 73. Benzo(a) pyrene
- 74. Benzo(b) fluoranthene

- 75. Benzo(k) fluoranthene
- 76. Chrysene
- 77. Acenaphthylene
- 78. Anthracene
- 79. Benzo(ghi) perylene
- 80. Fluorene
- 81. Phenanthrene
- 82. Dibenzo(a,h) anthracene
- 83. Indeno (1,2,3-cd) pyrene
- 84. Pyrene
- 85. Tetrachloroethylene
- 86. Toluene
- 87. Trichloroethylene
- 88. Vinyl chloride
- 89. Aldrin
- 90. Dieldrin
- 91. Chlordane
- 92. 4,4-DDT
- 93. 4,4-DDE
- 94. 4,4-DDD
- 95. Alpha-endosulfan
- 96. Beta-endosulfan
- 97. Endosulfan sulfate
- 98. Endrin
- 99. Endrin aldehyde
- 100. Heptachlor
- 101. Heptachlor epoxide
- 102. Alpha-BHC
- 103. Beta-BHC
- 104. Gamma-BHC
- 105. Delta-BHC
- 106. PCB-1242 (Arochlor 1242)
- 107. PCB-1254 (Arochlor 1254)
- 108. PCB-1221 (Arochlor 1221)
- 109. PCB-1232 (Arochlor 1232)
- 110. PCB-1248 (Arochlor 1248)
- 111. PCB-1260 (Arochlor 1260)
- 112. PCB-1016 (Arochlor 1016)
- 113. Toxaphene
- 114. Antimony
- 115. Arsenic
- 116. Asbestos
- 117. Beryllium
- 118. Cadmium

- 119. Chromium
- 120. Copper
- 121. Cyanide, Total
- 122. Lead
- 123. Mercury
- 124. Nickel
- 125. Selenium
- 126. Silver
- 127. Thallium
- 128. Zinc
- 129. 2,3,7,8-TCDD

Attachment G: 2015 Memorandum on Pacific Island Territory sample hold times for Toxicity testing (WET)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

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75 Hawthorne Street
San Francisco, CA 94105-3901

JUN 29 2015

MEMORANDUM

SUBJECT: Sample Hold Time for Whole Effluent Toxicity Testing in Pacific Island

Territories

FROM: Jamie Marincola, Acting Manager

NPDES Permits Office

Region IX

TO: John McCarroll, Manager

Pacific Islands Office

Region IX

Whole Effluent Toxicity (WET) testing consist of exposing living aquatic organisms (plants, vertebrates and invertebrates) to a sample of wastewater, usually a facility's effluent discharge, and measuring its effects on the organisms' ability to survive, grow and reproduce. Many National Pollutant Discharge Elimination System (NPDES) permittees have WET testing requirements in their permits.

40 CFR 136.3(e) states that the optimal hold time for WET testing samples is 36 hours; however a variance is available to extend hold time up to 72 hours between sample collection and first use of sample. In the Pacific Island Territories, facilities are limited in the availability of laboratories to receive and perform WET testing within the 36 hour timeframe. Specifically, samples which must be shipped to the continental U.S. are unlikely to arrive in accordance with optimal hold times. Therefore, for purposes of NPDES compliance, **Pacific Island Territories permittees that ship WET samples to the continental U.S. shall be allowed up to 72 hours between sample collection and first use of sample.** Sample shipment must continue to meet requirements in 40 CFR 136.3, Table II, including preservation of the sample at less than or equal to 6 °C and use of sufficient ice to ensure ice is still present when the samples arrive at the laboratory. This variance does not apply to samples shipped to Hawaii, where sample hold times must not exceed 36 hours.

Permittees shall ensure samples arrive to testing facilities as quickly as possible. EPA recommends that permittees use freight forwarders to expedite samples through customs.

Freight forwarders have the ability to shepherd samples from commercial airline cargo through customs and then proceed with shipping via overnight delivery service. Using such a service helps ensure that samples arrive as soon as possible.

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