NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PROPOSED PERMIT FACT SHEET
April 4, 2018

Permittee Name:	American Samoa Power Authority - Utulei Sewage Treatment Plant
Mailing Address:	P.O. Box PPB, Pago Pago, American Samoa 96799
Facility Location:	Tulutulu Point off Route 1, Utulei, Tutuila, American Samoa 96799
Contact Person(s):	William Spitzenberg, Wastewater Manager, (684)-733-3297; williams@aspower.com
NPDES Permit No.:	AS0020001

I. STATUS OF PERMIT

American Samoa Power Authority, also known as ASPA (the "permittee") has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated effluent from the Utulei Sewage Treatment Plant (Utulei STP) to Pago Pago harbor, located near the center of the island of Tutuila, American Samoa. A complete application was submitted on May 1, 2006, and subsequently updated in 2008 and 2016-17. EPA Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act, which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

The permittee is currently discharging under NPDES permit AS0020001 issued on October 9, 2001. Pursuant to 40 CFR 122.21, the terms of the existing permit are administratively extended until the issuance of a new permit. The lengthy time which has passed since the issuance of the previous permit was to allow for implementation of an EPA administrative order which specified major treatment system upgrades and operational changes at the facility.

This permittee has been classified as a major discharger.

II. GENERAL DESCRIPTION OF FACILITY

The Utulei STP is located in the township of Utulei on Tutuila Island, the largest and principal island of American Samoa. Utulei STP is a primary treatment plant that collects and treats wastewater from several nearby residential areas and the downtown area. The service area includes the villages of Faga'alu (including the hospital), Utulei, Fagatogo, Pago Pago (both upper and lower parts of the village), and Atu'u (including the sanitary wastewater from the two local tuna canneries). The service area also includes the villages of Leloaloa, Au'a, and Onesosopo which are not yet connected but were included in the original design of the Harbor Sewer System and the Utulei STP, and for which connection work is ongoing. In the application, the applicant indicated that the wastewater collected from these areas is largely organic and domestic in nature (ASPA 2006). Domestic wastewater includes waste or

wastewater from humans or household operations that is discharged to or otherwise enters the treatment plant (40 CFR 122.2). In the application, the applicant indicated that there are currently no industrial sources of wastewater that flow to the treatment plant and none planned in the near future. The plant currently serves a population of approximately 13,000 people.

The Utulei STP discharges treated effluent directly into Pago Pago Harbor through a 24-inch high-density polyethylene pipe and outfall. The terminus of the outfall is located approximately 954 feet off of Tulutulu Point in outer Pago Pago Harbor at a depth of 150 feet. This places the end of the outfall at 14º 16' 49.44" South latitude and 170º 40' 07.98" West longitude. Figures 1a and 1b identify the locations of the facility and outfall and Figure 2 shows a diagram of the facility. Effluent is discharged horizontally in alternatively opposite directions through a linear multiport diffuser. The diffuser consists of six ports and has a total length of approximately 47 feet, with the ports spaced approximately seven feet apart. The ports have a diameter of 7.75-inches and the average depth of the ports is 145 feet.

The existing outfall and diffuser first began operation in 1996 and were constructed to improve the discharge by enhancing the initial dilution and dispersal of pollutants in the receiving water. The improvements included a 47 foot diffuser with six ports to enhance dilution and mixing within the water column. Sludge from the primary treatment process is transported to the Tafuna STP on the southeastern portion of the island where it is treated by anaerobic digestion and placed in drying beds until landfill disposal. The climate in American Samoa is characterized as the humid tropics with wet weather occurring on a year-round basis. Therefore, no peak dry weather periods occur as observed on other Pacific Islands.

III. DESCRIPTION OF RECEIVING WATER

Utulei STP discharges into the outer portion of Pago Pago Harbor. Pago Pago Harbor is located on the northeastern portion of Tutuila Island in American Samoa and empties into the South Pacific Ocean. In the application, the applicant indicated Pago Pago Harbor has a typical estuarine circulation pattern, with upper layers of water near the mouth of the harbor that move out continuously while lower layers move in. However, the applicant also indicated that, because of the lack of distinct stratification patterns common to estuarine systems, the harbor can be generally characterized as typical open coastal waters. In the application, the applicant indicated that Pago Pago Harbor is not considered a stressed water, as defined in 40 CFR 125.58(z).

IV. DESCRIPTION OF DISCHARGE

The Utulei STP provides primary treatment (30% removal of Biochemical Oxygen Demand, BOD, and Total Suspended Solids, TSS) as well as disinfection before discharge. This is achieved through influent screening, splitting the flow across 4 parallel clarigesters for treatment, then passing the effluent through a newly installed UV disinfection system. Discharge is to an outfall in the ocean-mixed outer Pago Pago Harbor area. The terminus of the outfall is located approximately 954 feet off of Tulutulu Point in outer Pago Pago Harbor at a depth of 150 feet; see Attachment B in the permit, figure 2, for a map of the outfall location.

The use of primary treatment instead of higher-performing secondary treatment was due to the tightly limited resources and support base available in American Samoa. This practice is allowed under the waiver from secondary treatment requirements for ocean discharges ("§301(h) waiver") granted by EPA to the facility when it was initially permitted in 1985 and re-evaluated for renewal with each permit reissuance since that time.

American Samoa water quality standards for various parameters, particularly nutrients and bacteria, have grown more stringent since the facility was initially permitted. Compliance with these increasingly stringent requirements has grown more difficult for the treatment system to achieve. The most recent major refit was the construction of the offshore diffuser in 1996 to increased available dilution. In 2009, EPA issued public notice of tentative decisions to deny renewal of the facility's §301(h) waiver due to inability to consistently meet American Samoa's bacteria and nutrient standards. Information received during the public comment period has led EPA to reconsider this approach.

Revocation of the facility's §301(h) waiver from secondary treatment requirements would not have meaningfully addressed the parameters of concern, namely bacteria and nutrient levels in the discharge, as forcing an upgrade to secondary treatment would expend a great deal of resources on reducing levels of BOD and TSS which are already not a problem for this discharge. Human health and the environment were better served by focusing resources on upgrading the plants to disinfect the wastewater (reducing bacteria directly). Furthermore, American Samoa EPA issued clarifications to its Water Quality Standards which changed the statistical basis on which non-compliance with nutrient limits had been identified, and additional data collection showed that nutrient levels in nearby waters unaffected by the discharge were at similar levels, indicating that the discharge itself was not the cause.

As a result of these insights, EPA issued an Administrative Order on July 27, 2011 stipulating actions and a timeline on which to bring the Utulei STP into compliance which could, if achieved, make renewal of the 301(h) waiver possible. The original timeline for completion of the upgrades was June 30, 2013, however the limited technical base in American Samoa made it impossible to hold to this schedule as no properly bonded contractors were available to perform the work, and EPA is strictly limited in cases of using non-bonded contractors. Upgrades were finally completed in 2015- early 2016 and, after 1 year of data collection with the upgraded treatment system in place, data now show consistent compliance with American Samoa water quality standards. Therefore, EPA is proposing to reissue this permit with the §301(h) waiver from secondary treatment retained and new monitoring (and other) requirements to ensure future compliance with the AS-WQS.

A. Application Discharge Data

As part of the application for permit renewal, the permittee provided data from an analysis of the facility's treated wastewater discharge, shown in Table 1. Because a significant amount of time has passed since the submission of the applications, and the material changes to the treatment system implemented in that time, EPA does not consider data from the original permit application to be representative of the current discharge and therefore has not incorporated them into the more detailed analysis in the sections below.

Table 1. Application Discharge Data.

Parameter	Units	Discharge Data[1]	
		Maximum Daily Discharge	Average Daily Discharge
Flow	MGD	3.42	1.19
pH	Standard Units	6.5 to 8.6 (min-max)	
Biochemical Oxygen Demand, 5-day (BOD_5)	mg/L	94	61.7
Total Suspended Solids (TSS)	mg/L	74	26.4
Ammonia (as N)	mg/L	Monitoring not required under existing permit	
Total Residual Chlorine	mg/L	Monitoring not required under existing permit	
Oil and Grease	mg/L	6.3	5.9

[1] Based on permittee's NPDES renewal application.

B. Recent Discharge Monitoring Report (DMR) Data (2007-2017)

Table 2 provides a summary of effluent limitations and monitoring data based on the facility's most recent 10 years of DMRs (2007 to 2017). The data shows elevated concentrations of ammonia, BOD_5 (mg/L and percent removal), bacteria, and total suspended solids (mg/L and percent removal). All exceedances are discussed further in Part VI.B.4.

Table 2. Discharge Monitoring Report Data for years 2007-2017.

<table>
<tr><th rowspan="2">Parameter</th><th rowspan="2">Units</th><th colspan="3">Current Permit Effluent Limitations</th><th colspan="4">Discharge Monitoring Data</th></tr>
<tr><th>Average Monthly</th><th>Average Weekly</th><th>Maximum Daily</th><th>Highest Average Monthly</th><th>Highest Average Weekly</th><th>Highest Maximum Daily</th><th>Number of Samples</th></tr>
<tr><td>Flow Rate</td><td>MGD</td><td>Monitoring Only</td><td>--</td><td>Monitoring Only</td><td>2.6</td><td>--</td><td>6.1[(1)]</td><td>123</td></tr>
<tr><td>Ammonia (as N)</td><td>mg/L</td><td colspan="7">Monitoring not required under previous permit</td></tr>
<tr><td rowspan="6">Biochemical Oxygen Demand (5-day)</td><td rowspan="3">mg/L</td><td rowspan="3">78.3</td><td rowspan="3">117</td><td rowspan="3">157</td><td colspan="3">Before treatment upgrade</td><td rowspan="6">123</td></tr>
<tr><td>88</td><td>107</td><td>110</td></tr>
<tr><td colspan="3">After treatment upgrade</td></tr>
<tr><td>67</td><td>99</td><td>99</td></tr>
<tr><td rowspan="3">lbs/day</td><td rowspan="3">1085</td><td rowspan="3">1628</td><td rowspan="3">2170</td><td colspan="2">Before treatment upgrade</td><td rowspan="3">--</td></tr>
<tr><td>1423</td><td>3182</td></tr>
<tr><td colspan="2">After treatment upgrade</td></tr>
<tr><td>1023</td><td>1569</td></tr>
<tr><td>Percent Removal</td><td colspan="3">Both the influent and the effluent shall be monitored. The arithmetic mean of the BOD_5 values, by concentration, for effluent samples collected over a calendar month shall not exceed 70 percent of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period (i.e. 30 percent BOD_5 removal).</td><td colspan="3">5.48% due to plant upset in March 2014, 38.8% (minimum) at all other times. Post-upgrade minimum is 46.9% removal over one month, therefore in compliance.</td></tr>
<tr><td>Electrical Conductivity</td><td>µmhos/cm</td><td colspan="7">Monitoring not required under previous permit</td></tr>
<tr><td rowspan="2">Enterococci</td><td rowspan="2">MPN/ 100mL</td><td colspan="7">Note: showing only data collected after installation of the UV disinfection system (March 2016-February 2017) as earlier data are not representative of current system. Numbers in this table reflect the existing 91:1 dilution credit.</td></tr>
<tr><td>35</td><td></td><td>130</td><td>11.7</td><td></td><td>35.8</td><td>60</td></tr>
<tr><td>Nitrate (as N)</td><td>mg/L</td><td colspan="7">Monitoring not required under previous permit</td></tr>
</table>

Parameter	Units	Current Permit Effluent Limitations			Discharge Monitoring Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
Settleable Solids	mL/L	1	--	2	0.2	--	1.1	123
Total Suspended Solids	mg/L	75	113	150	Before treatment upgrade			123
					64	89	--	
					After treatment upgrade			
					47	63	63	
	lbs/day	1377	2065	2754	Before treatment upgrade		--	
					805	1171		
					After treatment upgrade			
					773	1151		
	Percent Removal	Both the influent and the effluent shall be monitored. The arithmetic mean of the TSS values, by concentration, for effluent samples collected over a calendar month shall not exceed 70 percent of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period (i.e. 30 percent TSS removal).			20.0% minimum monthly before treatment upgrades. post-upgrade minimum is 51.6% removal]			
Total Dissolved Solids	mg/L	Monitoring not required under previous permit						
Total Residual Chlorine	mg/L	Monitoring not required under previous permit						
Turbidity[3]	NTU	Monitoring not required under previous permit						
pH	Standard Units	Not < 6.5 SU, Not > 8.6 SU; discharge shall not change pH in receiving water by more than 0.2 SU			6.5 – 7.6 (min-max)			

[1] note that one mistyped report of "11.4 MGD" daily maximum flow , in August 2008, has been revised to 1.4 MGD for this analysis based on corroborating data around that time and the physical impossibility of such flow volumes through the plant as it existed at that time.

V. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

Permit Condition	Previous Permit (2001 – 2006, continued during Administrative Order)	Re-issued permit (2017 – 2022)	Reason for change
Ammonia effluent limit added, and implemented as Ammonia Impact Ratio	The previous permit did not include an Ammonia monitoring requirement or limit; American Samoa Water Quality Standards now require ammonia limits which are dependent on pH and temperature (AS-WQS Appendix A). (i.e. a "floating limit").	Ammonia monitoring and limits have been added to the permit. Compliance with the ammonia effluent limit will be determined using a ratio, called the ammonia impact ratio ("AIR"). The permit limit is set to a value of 1.0. The permittee also must continue to monitor and report ammonia effluent values in addition to the AIR value.	Ammonia limits added to comply with current AS-WQS. AIR provides more flexibility than a specific, fixed effluent concentration and makes determination and reporting of compliance easier than a floating limit
Temperature monitoring	No temperature monitoring required	Temperature monitoring requirement added	Temperature data are required for determining compliance with the AS-WQS ammonia limit
Bacteria limit (Enterococci)	Bacteria were only monitored in the receiving water monitoring program, not directly in the effluent, and no explicit permit limit was set for bacteria.	Enterococci effluent monitoring and effluent limits added	Bacteria were the most consistent source of limit exceedances under the previous permit, and are the problem the new UV disinfection system was designed to address. Direct monitoring of bacteria in the effluent will ensure any problems are quickly identified and corrected.
Receiving Water Monitoring Program updated	The previous permits contained a receiving water monitoring program which did not include Zone of Initial Dilution (ZID) stations	Requirements for the receiving water monitoring program have been updated to include ZID stations	The §301(h) regulations determine compliance with several monitoring parameters at the boundary of the ZID. The existing monitoring program does not collect data at the ZID, and correcting this omission will make it easier for the discharger to track compliance.
Operations and Maintenance reopener provision	The previous permit contained no specific provisions for Operations and Maintenance (O&M)	The new permit includes an explicit reopener provision for addressing O&M deficiencies	Maintenance problems with clarigesters identified by EPA during recent site visits, as well as the high anticipated O&M burden of the UV disinfection system, make this an aspect of

			the treatment plant which requires close attention. EPA has specifically provided for prompt modification of the permit if O&M problems are identified in future.
Best Management Practices (BMPs)	The previous permit contained no specific BMPs	New permit adds an explicit BMP requirement for daily review of UV transmissivity and an absence of solids deposition in the disinfection system	UV disinfection systems are highly reliant on having high UV transmissivity (clear effluent) to work effectively, and the combination of primary treatment with UV disinfection at Utulei STP is unusual in this regard. Therefore, the new permit contains BMPs to require daily logging of the UV transmissivity to identify and correct any problems.
Sanitary Sewer Overflow provisions	The previous permit did not explicitly address sanitary sewer overflows.	The new permit incorporates sanitary sewer overflow restrictions and reporting requirements	Sanitary Sewer Overflow provisions are now a standard part of EPA NPDES permits
Asset Management provisions	The previous permit did not explicitly address asset management.	The new permit incorporates standard asset management requirements for small utilities	Asset management is a proven approach which reduces both accidental discharges and maintenance costs over the long term. The Utulei STP's resource situation and past maintenance challenges make it a good candidate to benefit from EPA's free small-system asset management tool.
Capacity Attainment and Planning provision	The previous permit did not include a notification requirement for dry-weather flows approaching the facility's maximum treatment capacity	The new permit includes a notification requirement for dry-weather flows coming worryingly near the facility's maximum treatment capacity	When dry-weather flows come close to a treatment plant's maximum capacity, expansion of the treatment plant is an eventuality both the discharger and EPA often need to begin planning for. This notification requirement ensures adequate advance notice.
Pollutant Minimization Program / Pollution Prevention Plan requirements	The previous permit did not include a requirement for a pollutant minimization program or pollution prevention plan	The new permit incorporates the standard pollutant minimization program and pollution prevention plan requirements	A pollutant minimization program and pollution prevention plan are now standard elements of EPA-issued NPDES permits for dischargers like the Utulei STP.

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

EPA has developed effluent limitations and monitoring requirements in the permit based on an evaluation of the technology used to treat the pollutant (e.g., "technology-based effluent limits") and the water quality standards applicable to the receiving water (e.g., "water quality-based effluent limits"). EPA has established the most stringent of applicable technology-based or water quality-based standards in the proposed permit, as described below.

A. Applicable Technology-Based Effluent Limitations

Publicly Owned Wastewater Treatment Systems (POTWs)

EPA developed technology-based treatment standards for municipal wastewater treatment plants in accordance with Section 301(b)(1)(B) of the Clean Water Act. As the Utulei STP continues to operate under a §301(h) waiver from secondary treatment requirements, the facility is permitted to discharge primary-treated effluent through its ocean outfall. The minimum levels of effluent quality attainable by primary treatment for Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), and pH, as defined in 40 CFR 125.58(r), are listed below. Mass limits, as required by 40 CFR 122.45(f), are included for BOD_5 and TSS.

These calculations are based on the predicted average plant flow of 3 million gallons per day (MGD) over the 10 years of DMR data analyzed.

BOD_5

Concentration-based Limits

30-day average – 78.3 mg/L
7-day average – 117 mg/L
Daily maximum – 157 mg/L
Removal Efficiency – minimum of 30%

Mass-based Limits

30-day average – (78.3 mg/L)(3 MGD)(8.345 conversion factor) = 1,960 lbs/day
7-day average – (117 mg/L)(3 MGD)(8.345 conversion factor) = 2,929 lbs/day
Daily maximum – (157 mg/L)(3 MGD)(8.345 conversion factor) = 3,930 lbs/day

TSS

Concentration-based Limits

30-day average – 75 mg/L
7-day average – 113 mg/L
Daily maximum – 150 mg/L
Removal efficiency – Minimum of 30%

Mass-based Limits

30-day average – (75 mg/L)(3 MGD)(8.345 conversion factor) = 1,878 lbs/day
7-day average – (113 mg/L)(3 MGD)(8.345 conversion factor) = 2,829 lbs/day
Daily maximum – (150 mg/L)(3 MGD)(8.345 conversion factor) = 3,755 lbs/day

pH

Instantaneous Measurement: 6.0 – 9.0 standard units (S.U.) – superseded by more stringent American Samoa Water Quality Standards, as described below.

Technology-based treatment requirements may be imposed on a case by case basis under Section 402(a)(1) of the Act, to the extent that EPA promulgated effluent limitations are inapplicable (i.e., the regulation allows the permit writer to consider the appropriate technology for the category or class of point sources and any unique factors relating to the applicant) (40 CFR 125.3(c)(2)).

The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids, as specified in the EPA Region IX Policy memo dated May 14, 1979, are listed below:

Settleable Solids
30-day average – 1 mL/L
Daily maximum – 2 mL/L

Therefore, effluent limits for BOD_5, TSS, pH, and Settleable Solids are established in the permit as stated above.

B. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations are required in NPDES permits when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any water quality standard (40 CFR 122.44(d)(1)).

When determining whether an effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion above narrative or numeric criteria, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water (40 CFR 122.44(d)(1)(ii)).

EPA evaluated the reasonable potential to discharge toxic pollutants according to guidance provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD) (Office of Water Enforcement and Permits, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers Manual* (Office of Water, U.S. EPA, December 1996). These factors include:

1. Applicable standards, designated uses and impairments of receiving water
2. Dilution in the receiving water
3. Type of industry
4. History of compliance problems and toxic impacts
5. Existing data on toxic pollutants - Reasonable Potential Analysis

1. Applicable Standards, Designated Uses and Impairments of Receiving Water

The American Samoa Water Quality Standards, Administrative Rule No. 001-2013 (last updated 2013) establish water quality criteria for the following beneficial uses in Pago Pago Harbor, to which the Utulei STP discharges:

(A) Recreational and subsistence fishing except for exclusions as specified under federal regulations such as no take zones;
(B) Boat-launching ramps and designated mooring areas;
(C) Subsistence food gathering; e.g. shellfish harvesting except for exclusions as specified under federal regulations such as no take zones;
(D) Aesthetic enjoyment;
(E) Whole and limited body-contact recreation, e.g. swimming, snorkeling, and scuba diving;
(F) Support and propagation of marine life;
(G) Industrial water supply;
(H) Mari-culture development except for exclusions as specified under federal regulations such as no take zones;
(I) Normal harbor activities; e.g. ship movements, docking, loading and unloading, marine railways and floating drydocks; and
(J) Scientific investigations.

Pago Pago Harbor is listed as impaired according to the CWA Section 303(d) List of Water Quality Limited Segments. Ocean Shorelines in the Pago Pago watershed are listed as impaired for enterococci and the harbor itself is listed for lead, mercury, and PCBs. Note that streams within the same watershed identifier (#24) are additionally listed as impaired for nutrients (TN, TP), turbidity, and Dissolved Oxygen but these additional impairments do not apply to the sea-water segment of the harbor to which the Utulei STP discharges. The only 303(d)-listed pollutant for which the Utulei STP has a potential to be a source is enterococci, and the limits specified in the TMDL are identical to those specified in the American Samoa Water Quality Standards (AS-WQS). Therefore, compliance with AS-WQS for Enterococci will ensure compliance with the requirements of the TMDL.

The receiving water monitoring program for the Utulei STP provides extensive background data on the state of the surrounding waters (areas beyond the influence of the discharge, taken to represent a baseline water quality for the vicinity). Of particular interest is the elevated *average* value for Total Nitrogen, which almost exceeds the American Samoa Water Quality Standards (AS-WQS) regularly despite being collected well beyond the boundary of the area affected by the discharge.

Reference & Farfield stations	DO (mg/L)	pH	Salinity (PSU)	Temp-erature (ºC)	Turbidity (NTU)	TKN (mg/L)	Nitrate + Nitrite (mg/L)	Total Nitrogen (mg/L)	Total Phosph. (mg/L)	Chlor-a (mg/M3 or µg/L)	Entero-coccus	Entero Geo. mean	Secchi Depth (ft)
MIN	4.02	7.97	34.12	26.71	0.09	0.069	0.009	0.0121	0.004	0.22	0	1	25
AVERAGE	6.03	8.19	35.27	28.67	0.25	0.313	0.025	0.338	0.012	0.68	9.54	2.73	48
MAX	7.35	8.34	35.98	30.47	0.61	0.702	0.065	0.722	0.037	2.67	161	8.52	90
AS-WQS (10% DNE)	5.0 (min)	n/a	n/a	n/a	1.0	See Total Nitrogen		0.35	0.06	3.0	130	130	Not < 20

The low minimum Dissolved Oxygen, and high maximum Nitrogen, chlorophyll-*a* and Enterococcus values similarly occurred beyond the area likely to be affected by the discharge, but these single data points are not as significant as the *average* level of nitrogen in ambient waters closely approaching the standard.

2. Dilution in the Receiving Water

The discharge from Outfall 001 is to outer Pago Pago Harbor adjoining the South Pacific Ocean, where regular currents and a diffuser installed approximately 1000 feet offshore at 150 feet deep ensure effective dilution and providing the basis for this 301(h)-modified permit. In accordance with EPA's §301(h) Amended Technical Support Document (ATSD), EPA reviewed the calculation of initial dilution and trapping depth under both the proposed daily average flow and critical flow scenarios provided by the applicant. Based on its review, EPA believes that an average initial dilution and critical initial dilution of 127:1 and 91:1, respectively, are adequately calculated for the purpose of the section 301(h) evaluation. However, because section 301(h) regulations require that the applicant's diffuser be located and designed to provide initial dilution, dispersion, and transport sufficient to ensure compliance with water quality standards at the ZID boundary under *critical conditions* (see 40 CFR 125.62(a)(1)(iv)), EPA evaluated compliance with section 301(h) regulations based only on the critical initial dilution of 91:1. For more information, see the detailed analysis of dilution in the accompanying 2017 Utulei 301(h) Final Decision Document.

3. Type of Industry

Typical pollutants of concern in untreated and treated domestic wastewater such as that discharged by the Utulei STP include ammonia, nitrate, oxygen demand, pathogens (bacteria such as enterococci), temperature, pH, oil and grease, and solids. Chlorine and turbidity may also be of concern due to treatment plant operations. This permit incorporates limits and/or monitoring requirements for all these parameters.

4. History of Compliance Problems and Toxic Impacts

The Utulei STP has historically shown very high levels of enterococci bacteria (over 1400 CFU/100 ml, versus a standard of "Exceed 130 CFU/100 mL in no more than 2% of the samples"); as well as high levels of Nitrogen (over 780 µg/L versus a standard of "Exceed 280 µg/L in no more than 2% of samples"). These elevated levels led directly to EPA's 2009 tentative decision and 2011 administrative order. Toxic impacts were also infrequently measured. However, as described in the 2017 Utulei 301(h) Final Decision Document, each of these concerns has been addressed to EPA's satisfaction:

- Bacteria levels are greatly reduced after the installation of disinfection (averaging less than 11 CFU/100 mL).
- Nitrogen levels have been found to be similarly elevated in the ambient waters (see receiving water data table above) which indicates the high nitrogen levels are not driven by the Utulei STP discharge and likely have multiple on-shore and near-shore sources.
- The suspected toxic impacts were demonstrated to be the consequence of abnormally long sample hold times for transporting the collected samples from American Samoa to a lab on the U.S. mainland. These long (up to 72 hours, where the normal practice is under 12 hours) transit times allowed toxic levels of ammonia to form from organic materials in the sample vessels even though the source samples were not toxic when collected. Even with these confounding effects from the ammonia, results of "toxic" were quite infrequent, suggesting that there is not a problem with toxicity in the effluent itself.

5. Existing Data on Toxic Pollutants

For pollutants with effluent data available, EPA has conducted an analysis of potential to comply with standards based on the dilution available to the discharger from their approved

mixing zone. The projected maximum effluent concentrations were estimated using the 10-year data set (2007-2017). EPA calculated the projected maximum effluent concentration for each pollutant using the following equation:

Projected maximum concentration = C_e ÷ *available dilution (91:1 in this case).*

Where, "C_e" is the reported maximum effluent value.

Summary of Effluent Data Analysis:

Parameter[(1)]	**Number of samples**	**Maximum Observed Concentration**	**Projected Maximum Concentration after 91:1 dilution**	**Most Stringent Water Quality Criterion**	**Statistical Reasonable Potential?**
BOD_5	123	110 mg/L	1.21 mg/L	100 mg/L	N
TSS	123	89 mg/L	0.98 mg/L	75 mg/L	N
Enterococci (post-disinfection data)	60	6867 CFU / 100 mL	75 CFU/100 mL	130 CFU / 100 mL	N
Settleable Solids	123	1.10 ml/L	0.012 ml/L	1 ml/L	N
Total Nitrogen (receiving water)	150	n/a (have direct receiving water data)	Measured 872 µg/L @ ZOM (no ZID data)	130 µg/L	Y
Total Phosphorous (receiving water)	150	n/a (have direct receiving water data)	Measured 37 µg/L @ ZOM (no ZID data)	15 µg/L	Y

(1) For purposes of analysis, parameters measured as Non-Detect are considered to be zeroes. Only parameters with Maximum Observed Concentration >0 are included in this analysis.

C. Rationale for Numeric Effluent Limits and Monitoring

EPA evaluated the typical pollutants expected to be present in the effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality violations, EPA may establish monitoring requirements in the permit. Where monitoring is required, data will be re-evaluated and the permit may be re-opened to incorporate effluent limitations as necessary.

Flow

Maximum flow limit set at the facility's design capacity of 6.0 MGD, to ensure beyond-capacity situations are planned for, monitored, and tracked. Flow rates must be monitored and reported. Monitoring is required continuously with reporting of monthly and weekly averages, and daily maximum flow levels.

BOD_5 and TSS

Limits for BOD_5 and TSS are established for POTWs as described above and are incorporated into the permit. Under 40 CFR Section 122.45(f), mass limits are also required for BOD_5 and TSS. Based on the proposed end-of-permit-term flow of 3.0 MGD, the mass-based limits are also included in the proposed permit.

Ammonia

American Samoa Water Quality Standards (AS-WQS) specify ammonia standards for the receiving water. Treated and untreated domestic wastewater, such as that discharged from the Utulei STP, may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process. USEPA's Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life recommends acute and chronic criteria that are pH and temperature dependent. Due to the potential for ammonia to be present in sanitary wastewater at toxic levels and due to the conversion of ammonia to nitrate, effluent limitations are established for ammonia. Furthermore, ammonia limits are implemented through the Ammonia Impact Ratio worksheet (permit attachments D and E) to enable greater clarity in determining compliance with the pH- and temperature-dependent AS-WQS for Ammonia (also known as a "floating limit").

pH and Temperature

Temperature and pH are parameters necessary for calculation of the applicable AS-WQS requirement for ammonia, and the AS-WQS also specify an acceptable range for pH. Therefore, the permit mandates monitoring of pH and temperature.

Settleable Solids

Limits for Settleable Solids are established for POTWs based on the technology-based effluent limits defined for primary treatment, as described above. Applicable limits are incorporated into the permit.

Oil and Grease

Domestic wastewater may often contain elevated levels of oil and grease from sources including kitchen drains and sanitary wastes. As these constituents can cause harm to marine life and form a problematic oily sheen on the receiving water, limits are set in the permit.

Total Nitrogen and Total Phosphorous

Nitrogen and Phosphorous are nutrients which are often over-abundant in biological wastes like domestic wastewater. Discharging such elevated levels of nutrients to natural waters can lead to the growth of nuisances like algae blooms and other undesirable effects, as well as potentially depleting the dissolved oxygen levels in the receiving water and suffocating marine life. As shown in previous data and in the reasonable potential calculations above, the facility has a potential to discharge elevated levels of nutrients. The permit incorporates limits on total

nutrient discharges from the facility consistent with the AS-WQS. EPA notes that receiving water data for these parameters shows that even samples collected at sites over a mile distant from the outfall, and unlikely to be affected by the discharge, have total nitrogen levels exceeding the AS-WQS (median not-to-exceed and 90% not-to-exceed). Due to the previous permit's lack of an effluent monitoring requirement for nitrogen, it is difficult to ascertain what effect the actual contents of the discharge could have, which further reinforces the need for accurate monitoring of nutrients in the effluent.

Chlorine, total residual

Treatment plants often discharge elevated levels of chlorine if they use the chemical for disinfection. The Utulei STP does not use chlorine for disinfection, therefore the permit does not implement a total chlorine limit.

D. Anti-Backsliding

Section 402(o) of the CWA prohibits the renewal or reissuance of an NPDES permit that contains effluent limits less stringent than those established in the previous permit, except as provided in the statute.

The permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

E. Antidegradation Policy

EPA's antidegradation policy at 40 CFR 131.12 and the AS-WQS at American Samoa administrative rule No. 001-2013 require that existing water uses and the level of water quality necessary to protect the existing uses be maintained.

As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit includes a mixing zone, which has been approved by American Samoa EPA and reviewed by EPA for appropriate protection of the receiving water.

A priority pollutant scan has been conducted of the effluent, demonstrating that most pollutants will be discharged below detection levels. The new permit allows higher mass loadings of BOD and TSS based on projected average flow, but receiving water monitoring data show that existing mass loadings of these parameters have not resulted in a violation of the applicable standards once dilution and ambient levels are accounted for. Furthermore, the waterbody is not listed as an impaired waterbody for these parameters under section 303(d) of the CWA.

Therefore, due to the low levels of toxic pollutants present in the effluent, newly increased level of treatment being obtained, and water quality-based effluent limitations, the discharge is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

VII. NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS

The American Samoa Water Quality Standards contain narrative water quality standards applicable to the receiving water (AS-WQS, §24.0206). Therefore, the permit incorporates applicable narrative water quality standards.

VIII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the proposed permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR 136, unless otherwise specified in the proposed permit. All monitoring data shall be reported on monthly DMRs and submitted quarterly as specified in the proposed permit. All DMRs are to be submitted electronically to EPA using NetDMR.

In addition, the permittee shall continue the successful receiving water monitoring program which has allowed an accurate understanding of the context and effects of the discharge. This monitoring program shall be updated to incorporate permanent ZID stations, as repeatedly recommended by the discharger's consultant in receiving water monitoring reports.

B. Priority Toxic Pollutants Scan

A Priority Toxic Pollutants scan shall be conducted during the fourth year of the five-year permit term to ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with the methods described in the most recent edition of 40 CFR 136, unless otherwise specified in the proposed permit or by EPA. 40 CFR 131.36 provides a complete list of Priority Toxic Pollutants.

C. Whole Effluent Toxicity Testing

The permit establishes testing requirements for chronic toxicity.

Chronic toxicity testing evaluates reduced growth/reproduction at 100 percent effluent. Chronic toxicity is to be reported based on the No Observed Effect Concentration (NOEC). The permittee shall conduct short-term tests with the sand dollar (*Dendraster excentricus*) or the Purple Urchin (*Strongylocentrotus purpuratus*). The presence of chronic toxicity shall be estimated as specified by the methods in the 40 CFR Part 136 as amended on November 19, 2002.

IX. SPECIAL CONDITIONS

A. Biosolids

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR Part 503 are incorporated into the permit. The permit also includes electronic reporting requirements for dischargers who are required to submit biosolids annual reports, which include major POTWs that prepare sewage sludge and other facilities designated as "Class 1 sludge management facilities" (the Utulei STP is classified as a "major" POTW and must submit biosolids reports). Permittees shall submit biosolids annual reports using EPA's NPDES Electronic Reporting Tool ("NeT") by February 19th of the following year.

B. Pretreatment

As described above, there are no industrial facilities discharging to the WWTP. Therefore, there are no pretreatment requirements in this permit.

C. Capacity Attainment and Planning

The permit requires that a written report be filed 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.

D. Development and Implementation of Best Management Practices

Pursuant to 40 CFR 122.44(k)(4), EPA may impose Best Management Practices (BMPs) which are "reasonably necessary…to carry out the purposes of the Act." The pollution prevention requirements or BMPs proposed in the permit operate as technology-based limitations on effluent discharges that reflect the application of Best Available Technology and Best Control Technology. Therefore, the draft permit requires that the permittee develop (or update) and implement a Pollution Prevention Plan with appropriate pollution prevention measures or BMPs designed to prevent pollutants from entering the South Pacific Ocean off Tutuila island and other surface waters while performing normal processing operations at the facility.

The permittee shall develop and implement BMPs that are necessary to control bacteria levels in the discharge, including daily logging of the UV transmissivity in the UV disinfection system and any deposition of solids in that same tank.

E. Development of an Initial Investigation TRE Workplan for Whole Effluent Toxicity

In the event effluent toxicity is triggered from WET test results, the permit requires the permittee to develop and implement a Toxics Reduction Evaluation (TRE) Workplan. For acute toxicity, unacceptable effluent toxicity is found when "Fail" is determined, as indicated by a statistically significant difference between a test sample of 100 percent effluent and a control using a t-test. For chronic toxicity, unacceptable effluent toxicity is found in a single test result greater than 1.6 TU_c, or when any one or more monthly test results in a calculated median value greater than 1.0 TU_c. The draft permit also requires additional toxicity testing if a chronic toxicity monitoring trigger is exceeded. Within 90 days of the permit effective date, the permittee shall prepare and submit a copy of their Initial Investigation TRE Workplan (1-2 pages) for acute and chronic toxicity to EPA for review.

F. Asset Management

40 CFR 122.41(e) requires permittees to properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Asset management planning provides a framework for setting and operating quality assurance procedures and ensuring the permittee has

sufficient financial and technical resources to continually maintain a targeted level of service. Asset management requirements have been established in the permit to ensure compliance with the provisions of 40 CFR 122.41(e).

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

A. Impact to Threatened and Endangered Species

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat.

Terrestrial and freshwater aquatic species are overseen by the U.S. Fish and Wildlife Service ("FWS"). FWS provides the following list of threatened or endangered species in American Samoa, updated in 2015:

Mammals:
- The Pacific Sheath-tailed bat *((Emballonura semicaudata semicaudata)*

Birds:
- The Friendly Ground Dove (*Gallicolumba stairi)*

Snails
- *Eua zebrina*
- *Ostodes strigatus*

Sea Turtles (on-shore)
- The Green sea turtle
- The Hawksbill sea turtle

Marine species are overseen by the National Marine Fisheries Service ("NMFS"). NMFS provides a list of threatened or endangered species in American Samoa as of 2016, including:

Corals:
- *Acropora globiceps*
- *Acropora jacquelineae*
- *Acropora retusa*
- *Acropora speciosa*
- *Euphyllia paradivisa*
- *Isopora crateriformis*

Marine Mammals:
- The Humpback Whale
- The Sperm Whale

- The Sei Whale

Sea Turtles:
- The Green sea turtle
- The Hawksbill sea turtle
- The Leatherback sea turtle
- The Loggerhead sea turtle
- The Olive Ridley sea turtle

Fish:
- The Scalloped Hammerhead shark

Terrestrial and Freshwater species:

Effluent from the facility is discharged 954 feet offshore at a depth of 150 feet to Outer Pago Pago Harbor abutting the Pacific Ocean and is therefore expected to have no effect on terrestrial or aquatic freshwater species.

Marine Species:

The effluent discharged from this facility is characterized as primary-treated, disinfected sanitary wastewater and may discharge up to 6.0 million gallons in a single day, though averaging less than half that value. The permit was written to comply with all applicable water quality standards, established to be protective of all beneficial uses, including propagation and survival of marine organisms. Additional information was considered for each of the following species:

Green, Hawksbill, Leatherback, Loggerhead, and Olive Ridley Sea Turtles:

Although the five species of sea turtles are present in American Samoa to varying degrees, only three have established critical habitat on the island (Green, Hawksbill, and Leatherback). Primary habitat for sea turtles include beaches for nesting, open ocean convergence zones, and coastal areas for benthic feeding. The facility in this permit discharges to deeper water and is not expected to affect these types of habitat. Further, based on a review of recovery plans, EPA is not aware of any scientific information or studies documenting negative effects on sea turtles from these types of ocean discharges. EPA has therefore determined that the listed sea turtle species have no nexus with the ocean discharge beyond speculative incidental contact.

Humpback, Sei, and Sperm Whales:

There have been an extremely limited number of sightings of marine mammals and no critical habitat identified off the coasts of American Samoa. EPA is also not aware of any scientific information or studies documenting negative effects on marine mammals from these types of ocean discharges. EPA has therefore determined that the listed marine mammals have no nexus with the ocean discharge beyond speculative incidental contact.

Scalloped Hammerhead Shark

The largest threats to scalloped hammerhead sharks are targeted fisheries, shark fin trade, and bycatch. Critical habitat has not been identified around American Samoa. EPA is also not aware of any scientific information or studies documenting negative effects on scalloped hammerhead sharks from these types of ocean discharges. EPA has therefore determined that the scalloped hammerhead shark has no nexus with the ocean discharge beyond speculative incidental contact.

Corals (*Acropora globiceps, Acropora jacquelineae, Acropora retusa, Acropora speciosa, Euphyllia paradivisa, and Isopora crateriformis)*

NMFS listed these 6 species as "Threatened" under the ESA in October 2014, and all are known to occur in the waters surrounding American Samoa. Top threats to corals include ocean warming, ocean acidification, dredging, coastal development, coastal point source pollution, agricultural and land use practices, disease, predation, reef fishing, aquarium trade, physical damage from boats and anchors, marine debris, and aquatic invasive species.

The 2011 NMFS Status Review Report issued prior to listing concluded that land-based pollution sources, including treated wastewater discharges, are unlikely to produce extinction at a global scale. Therefore, the focus of this analysis is on any particular risk to corals in the immediate proximity of the discharge.

Of the six species of coral listed for American Samoa, three are reported to occur exclusively at depths less than 12 meters (*Acropora globiceps, Acropora retusa,* and *Isopora crateriformis*). *Euphyllia paradivisa* favors depths of 2 to 25 meters, while *Acropora jacquelineae* spans 10 to 35 meters depth and *Acropora speciosa* 12 to 40 meters. The outfall for the discharge is at 150 feet (about 46 meters) and unlikely to directly affect the shallow species, or the mid-depth *E. paradivisa* which still has a greater than 20 meter depth separation from the discharge point. In the summary sheets for the 2014 listings, the risk factors of ocean warming and acidification are described as particular concerns for the corals with shallow or narrow depth ranges, so the discharge's separation from these species further reduces the level of concern.

Of the two deeper corals remaining, *A. speciosa* has a broad distribution across the Indo-Pacific region and the species' abundance was characterized as "common", including confirmation of communities distant from American Samoa in the Pacific Remote Island Areas (PRIA). Therefore any potential effects in the vicinity of the discharge are unlikely to meaningfully impair the species' survival both in American Samoa, and the broader Pacific. Furthermore, the species' broad depth range, including much shallower waters, ensures that members could still thrive in the area of the discharge.

NOAA-NMFS indicates that *Acropora jacquelineae* is known to occur from the Philippines to the Solomon Islands, but at the time of listing the only confirmed population within US jurisdiction was in American Samoa. *A. jacquelineae* spans numerous habitat types and depths, giving it resilience to localized acute effects, but appears to favor reef slope and back-reef habitats (NOAA 2014). The discharge from this facility is to the narrow, deep mouth of Pago Pago harbor, which experiences relatively strong tidal flows and appears unlikely to be a favored habitat for this species.

For any threatened corals which do exist in sufficiently close proximity to the discharge (including depth) to potentially be affected, the proposed permit remains protective through inclusion of applicable discharge limitations. Wastewater parameters of particular concern for coral habitat include sediment / light occlusion, and nutrient levels which may support algae growth. The proposed permit includes limitations for sediment in the form of total suspended solids, and direct limits for nutrients including nitrogen and phosphorous. These limits implement the AS-WQS for Pago Pago harbor which are designed to be protective of aquatic species in that environment. EPA has therefore determined the outfall may affect, but is not likely to adversely affect, any threatened corals in the vicinity of the outfall.

Conclusion on Potential Impacts to Threatened and Endangered Species

In consideration of the above, EPA believed that the proposed discharge is not likely to affect endangered species in American Samoa.

EPA has forwarded a copy of the draft permit and this fact sheet to FWS and NMFS for review and comment on conclusions concerning the effects of the proposed permit on listed species.

B. Impact to Coastal Zones

The Coastal Zone Management Act (CZMA) requires that Federal activities and licenses, including Federally permitted activities, must be consistent with an approved state Coastal Management Plan (CZMA Sections 307(c)(1) through (3)). Section 307(c) of the CZMA and implementing regulations at 40 CFR 930 prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State (or Territory) Coastal Zone Management program, and the State (or Territory) or its designated agency concurs with the certification.

EPA has solicited input from the implementing agency of the American Samoa Coastal Zone Management program (American Samoa EPA) and is currently awaiting a response.

C. Impact to Essential Fish Habitat

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA) set forth a number of new mandates for the National Marine Fisheries Service, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish species and habitat. The MSA requires Federal agencies to make a determination on Federal actions that may adversely impact Essential Fish Habitat (EFH).

The proposed permit contains technology-based effluent limits and numerical and narrative water quality-based effluent limits as necessary for the protection of applicable aquatic life uses. The proposed permit does not directly discharge to areas of essential fish habitat. Therefore, EPA has determined that the proposed permit will not adversely affect essential fish habitat.

D. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to the NHPA and 36 CFR §800.3(a)(1), EPA is making a determination that issuing this proposed NPDES permit does not

have the potential to affect any historic properties or cultural properties. As a result, Section 106 does not require EPA to undertake additional consulting on this permit issuance.

XI. STANDARD CONDITIONS

A. Reopener Provision

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.

B. Standard Provisions

The permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions, dated July 1, 2001.

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

B. Public Comment Period (40 CFR 124.10)

Notice of the draft permit will be placed in a daily or weekly newspaper within the area affected by the facility or activity, with a minimum of 30 days provided for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

C. Public Hearing (40 CFR 124.12(c))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if EPA determines there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

D. Water Quality Certification Requirements (40 CFR 124.53 and 124.54)

For States, Territories, or Tribes with EPA approved water quality standards, EPA is requesting certification from the affected State, Territory, or Tribe that the proposed permit will meet all applicable water quality standards. Certification under section 401 of the CWA shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law.